



April 2010

NEPA/SEPA Final Environmental Impact Statement VOLUME I

East Lake Sammamish Master Plan Trail

Prepared for:

Federal Highway Administration,
Washington State Department of Transportation, and
King County Facilities Management Division







EAST LAKE SAMMAMISH MASTER PLAN TRAIL

King County, Washington

FINAL ENVIRONMENTAL IMPACT STATEMENT (EIS)

Submitted pursuant to the National Environmental Policy Act 42 U.S.C. 4332(2)(c), 49 U.S.C. 303, 49 U.S.C. 1651 Sec. 4(f), 16 U.S.C. 470 Sec. 106, and the Washington State Environmental Policy Act RCW 43.21c.

Submitted by

U.S. Department of Transportation, Federal Highway Administration, Washington Division Washington State Department of Transportation King County Facilities Management Division

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Abstract

The Federal Highway Administration proposes to develop a pedestrian/equestrian trail along approximately 11 miles of former Burlington Northern Santa Fe (BNSF) railroad corridor on the east side of Lake Sammamish. The trail would extend from Gilman Boulevard in the City of Issaquah north to the Bear Creek Trail in the City of Redmond. Portions of the railroad corridor have already been developed into an Interim Use Trail, which has been evaluated in previous environmental documents. This Final Environmental Impact Statement (EIS) evaluates alternatives for developing the existing Interim Use Trail into a permanent, Master Plan Trail. This document addresses the potential social, economic, and environmental impacts associated with the proposal.

Comments on the Draft EIS were due by December19, 2006, and sent to Gina Auld, King County Facilities Management Division at the address above. This Final EIS includes the comments received on the Draft EIS and responses to those comments (see Chapter 11).



Persons with disabilities may request this information be prepared and supplied in alternate forms by calling 206-389-2839.

Persons with hearing impairment may call 1-800-833-6388 (TTY relay service).

Title VI Notice to Public

King County hereby gives public notice that it is the policy of the County to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and the related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, sex, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.

A federal agency may publish a notice in the Federal Register, pursuant to 23 USC §139(1), indicating that one or more federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those federal agency actions will be barred unless such claims are filed within 180 days after the date of publication of the notice, or within such shorter time period as is specified in the federal laws pursuant to which judicial review of federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by federal laws governing such claims will apply.



Facilities Management Division Kathy Brown, Division Director

Department of Executive Services 500 Fourth Avenue, Room 800 Seattle, WA 98104

Phone: (206) 296-0630 Fax: (206) 205-5070

April 2010.



Dear Citizen:

The King County Facilities Management Division proposes to develop an alternative transportation corridor and recreation trail along approximately 11 miles of former railroad corridor on the east side of Lake Sammamish. The trail would extend from Gilman Boulevard in the City of Issaquah north to the Bear Creek Trail in the City of Redmond. The railroad corridor has already been developed into an Interim Use Trail, which was evaluated in previous environmental documents. The proposal is to develop the existing Interim Use Trail into a permanent, Master Plan Trail. The Master Plan Trail would be a multi-use trail, with both paved and soft surfaces to accommodate pedestrians, non-motorized wheeled vehicles, and in some areas equestrians. The Master Plan Trail would be located in the same general corridor as the existing Interim Use Trail.

The Draft EIS on the Master Plan Trail was issued on October 20, 2006. The Draft EIS analyzed in detail the characteristics, probable significant impacts, and mitigation measures for the five Master Plan Trail alternatives. Issuance of the Draft EIS was followed by a sixty-day public comment period that included a public hearing. Five government agencies and 165 individuals or groups provided written comments in addition to oral testimony. King County considered all of the comments submitted in preparing the enclosed Final EIS. The Final EIS describes the Master Plan Trail proposal; identifies potential environmental impacts of the alternatives; and identifies reasonable mitigation measures to reduce and, in some cases, eliminate the identified impacts. The Final EIS also includes King County's responses to comments, including changes made in the EIS as a result of those comments.

King County has determined that the preferred alternative is the Corridor Alternative because it best meets King County's purpose and need of (1) providing an alternative transportation corridor between major business centers, (2) providing non-motorized recreational trails to support the growing population, and (3) providing connections between other existing regional trails.

The East Lake Sammamish Trail has been partially funded by the federal Transportation Efficiency Act (TEA-21) and the County will apply for additional federal transportation funds in the future. Because of the federal funding, the environmental impacts of the project must be evaluated under both state and federal laws. King County and the Federal Highway Administration (FHWA) prepared this EIS for the Master Plan Trail in compliance with both the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA).

Following the circulation of the Final EIS, the FHWA will issue a NEPA Record of Decision, and King County will issue a SEPA Notice of Action Taken. At that time and subject to all other permits and approvals, King County will move forward with the advertisement and construction of the Master Plan Trail.

Thank you for your participation in this important proposal before the citizens of King County.

Sincerely,

Kathy Brown, Director

King County Facilities Management Division

Responsible Official

Project Title: East Lake Sammamish Master Plan Trail, King County and Cities of Issaquah, Sammamish and Redmond, Washington

Location and Description of Proposed Alternatives: The King County Facilities Management Division proposes to develop an alternative transportation corridor and recreation trail along approximately 11 miles of former railroad corridor on the east side of Lake Sammamish. The trail would extend from Gilman Boulevard in the City of Issaquah north to the Bear Creek Trail in the City of Redmond. Portions of the railroad corridor have already been developed into an Interim Use Trail, which has been evaluated in previous environmental documents. Copies of the previous documents, along with project history, can be found on King County's website: www.kingcounty.gov/eastlakesammamishtrail. Construction of the Interim Use Trail was completed in April 2006. This Draft-Environmental Impact Statement (EIS) evaluateds alternatives for developing the existing Interim Use Trail into a permanentlong-term, Master Plan Trail. Alternatives evaluated in the EIS include:

- Corridor Alternative: A Master Plan Trail The Corridor Alternative (the Preferred Alternative) would be located within the former railroad right of way. The majority of the trail would encompass the existing Interim Use Trail, with the trail leaving the Interim Use Trail only in those places where trail safety would be improved by doing so. The trail would accommodate pedestrians, wheeled uses, and equestrians (in the Redmond segment only) use on paved and adjacent or separated soft surfaces. This alternative includes vehicular parking and restrooms.
- East Alternatives (A and B): The East Alternatives would use the former railroad right of way in certain segments and transition to the roadway shoulder of East Lake Sammamish Parkway in several areas. The trail would transition to the roadway shoulder to avoid several driveway/public roadway intersections, approximately 1.7 miles of divided properties between SE 33rd and roughly the 1400 block of East Lake Sammamish Parkway SE, and sensitive areas. The transition to the roadway would be at a gradient that is acceptable under the Americans with Disabilities Act (ADA). High-speed bicycle use would remain in the bike lanes on the roadway. These alternatives include vehicular parking and restrooms. For the East A Alternative, where the alignment for the multi-use (i.e., paved) trail leaves the Interim Use Trail, equestrians (in the Redmond segment only) and pedestrians use would continue on the existing Interim Use Trail. For the East B Alternative, these portions of the Interim Use Trail would be closed to all users. In these areas, pedestrians and equestrians would be routed away from the Interim Use Trail along with non-motorized vehicles.
- Continuation of the Interim Use Trail Alternative: The existing 10.6-mile Interim Use Trail would be continued beyond the currently authorized 2015 expiration date. The Interim Use Trail is a gravel trail, 8 to 12 feet wide. Equestrian use is not permitted on the existing Interim Use Trail but would be considered in the Redmond segment as part of this alternative. The existing Interim Use Trail would be extended north over Bear Creek. This alternative includes the addition of vehicular parking and restrooms.
- **No Action Alternative:** King County would continue to operate the existing Interim Use Trail through 2015, at which time the permitted operation of the trail would expire in the absence of additional environmental review. The trail would be decommissioned and closed to public use in 2015.

Proposed Implementation Date: Construction is anticipated to begin in 2009-2010 and occur over several years. Construction sequencing and phasing will be based upon funding availability.

Proponent: Federal Highway Administration, Washington State Department of Transportation, and King County Division of Facilities Management

NEPA Lead Agency: Federal Highway Administration (FHWA)

NEPA Responsible Official:

Daniel M. Mathis Federal Highway Administration Washington Division

NEPA Lead Agency Contact Person:

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SEPA Lead Agency: King County Division of Facilities Management

SEPA Responsible Official:

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SEPA Lead Agency Contact Person:

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Permits and Approvals

Telephone: (206) 263-7281

NOAA Fisheries/U.S. Fish and Wildlife Service

Federal Endangered Species Act Section 7 Compliance Consultation

U.S. Army Corps of Engineers

Section 404 Permit

Washington State Department of Ecology

Section 401 Water Quality Certification

National Pollutant Discharge Elimination System (NPDES) Permit

Washington State Department of Fish and Wildlife

Hydraulic Project Approval

Washington State Department of Archaeology and Historic Preservation

Section 106 of the National Preservation Act

Cities of Issaquah, Sammamish, Redmond

Right of Way Permit

Shoreline Substantial Development Permit

Clearing and Grading Permit

Public Agency Utility Exception Permit

Building Permit

Administrative Design and Planning (City of Issaquah only)

EIS Authors and Principal Contributors:

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Issue Date of Draft EIS: October 20, 2006

Due Date for Comments: December 19, 2006

Date of Public Hearing: November 9, 2006

Date of Final EIS: April 2010

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Subsequent Environmental Review: A biological assessment will be was prepared and submitted to the appropriate regulatory agencies for review, pursuant to Section 7(c) of the Endangered Species Act.

Letters of agency concurrence are provided in Volume III, Appendix I. Copies of the Biological Assessment can be obtained from King County Facilities Management Division. Consultation under

ESA Adolfson-Associates, Inc.

21312 30th Drive SE, Suite 110

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HWA GeoSciences, Inc.

Lynnwood, WA 98036

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5309 Shilshole Avenue NW, Suite 200

19730 64th Avenue West, Suite 200

Section 106 of the Federal Historic Preservation Act <u>will bewas</u> conducted for the project. <u>Copies of correspondence and signed Programmatic Agreement are provided in Volume III, Appendix H.</u>

Anticipated Date of Final Lead Agency Action: Fall 2007 2010

To Obtain a Copy of the Draft EIS: Copies of the Draft and Final EISs and Technical Appendices are available for review at the King County Facilities Management Division, King County Administration Building, Room 320, 500 Fourth Avenue, Seattle, WA 98104.

Printed copies of the <u>Draft-Final EIS</u> can be purchased from Olympic Reprographics for the cost of reproduction. Documents can be obtained by contacting Robert Stiteler at (206) 373-7043. Costs of the documents are listed below:

Volume 1 (including a CD-ROM of Volume 2 Plan Sheets, Volume 3 Technical Appendices, and Discipline Reports) \$65

Volume 2 Plan Sheets \$45

Volume 3 Technical Appendices \$50

CD-ROMs of the <u>Draft-Final EIS</u> and Technical Appendices are also available at the reproduction cost of \$1.50 per CD-ROM (Volumes 1, 2, 3, and Discipline Reports). Individuals can contact Cat Hicks, King County Department of Executive Services at (206) 296-1822.

In addition, you may download project documents, including the Final EIS, and get general project information at the project website: www.kingcounty.gov/eastlakesammamishtrail

Location of Background Information: Background information is located at King County Facilities Management Division, and at the following public libraries: Bellevue Regional Library, Issaquah Library, Sammamish Library, Redmond Library, and Seattle Public Library. Information is also available on the internet at www.kingcounty.gov/eastlakesammamishtrail

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Volume II – Plan Sheets (bound separately):

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Volume III – Technical Appendices (bound separately):

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Appendix C – Wildlife and Vegetation Technical Report

Appendix D – Fish and Fish Habitat Technical Report

Appendix E – Commercial Businesses in Vicinity of Master Plan Trail

Appendix F – Visual Quality and Aesthetics Technical Report

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Discipline Reports (bound separately):

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Purpose and Contents of this Summary

The primary function of the East Lake Sammamish Trail environmental impact statement (EIS) is to help the lead agencies—the Federal Highway Administration (FHWA) and King County Department of Executive Services, Facilities Management Division (KCFMD)—make informed choices among reasonable alternatives for a permanent long-term East Lake Sammamish Master Plan Trail. This summary provides key information from the EIS, describing how the alternatives compare in terms of consistency with the project's purpose and need, and potential environmental impacts.

This summary begins with a description of the project, including the purpose and need for the East Lake Sammamish Trail. The major features of the trail and alternatives being considered are described. The impacts associated with each alternative are then compared, focusing on major impacts and differences among the alternatives. These impacts are evaluated during the decision making process to select a preferred alternative. Subsequent sections briefly discuss areas of controversy associated with the project and the permits that will be required to implement the project.

Introduction to the Project

Where is the project located?

The 11-mile trail would start at Gilman Boulevard in Issaquah and end near Bear Creek in Redmond (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)).

What is the purpose of the project?

The purpose of the proposed project is to design and construct an alternative non-motorized transportation corridor and a multi-use recreational trail along the former Burlington-Northern Santa Fe railroad corridor on the east side of Lake Sammamish. The trail would provide access to recreation, employment, and retail centers in the Cities of Redmond, Sammamish, and Issaquah and complete a link in the King County regional trails system. The trail is intended to safely accommodate a variety of user groups such as bicyclists, pedestrians, runners, wheelchair users (including those with motorized wheelchairs), in-line skaters, and equestrians, and different ages and skill levels within those groups.

Why is the project needed?

The need for the project is driven by several factors including: (1) the regional need for alternative transportation corridors between major business centers, (2) the need for non-motorized recreational trails to support a growing population, and (3) the need to make connections among other existing and planned trails. Figures 3.7-1 (pg 3.7-3) and 3.7-2 (pg 3.7-4) illustrate existing and planned trails in the project vicinity. The trail would provide an option for commuters on local roadways and provide another link between business centers. The continuing increase in population has put pressure on existing recreational facilities in the area. A trail is needed that will accommodate the full range of potential trail users, such as walkers,

runners, wheelchair users, bicyclists, in-line skaters, and equestrians of all ages and skill levels. Links to existing and planned trails are possible along the 11-mile trail corridor.

Who is leading the project?

The Federal Highway Administration (FHWA), the Washington State Department of Transportation (WSDOT), and King County Department of Executive Services, Facilities Management Division (KCFMD) are leading the project. As a County-proposed project with federal funding, the project must comply with both the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA). KCFMD is the lead agency for SEPA. FHWA is the lead agency for NEPA.

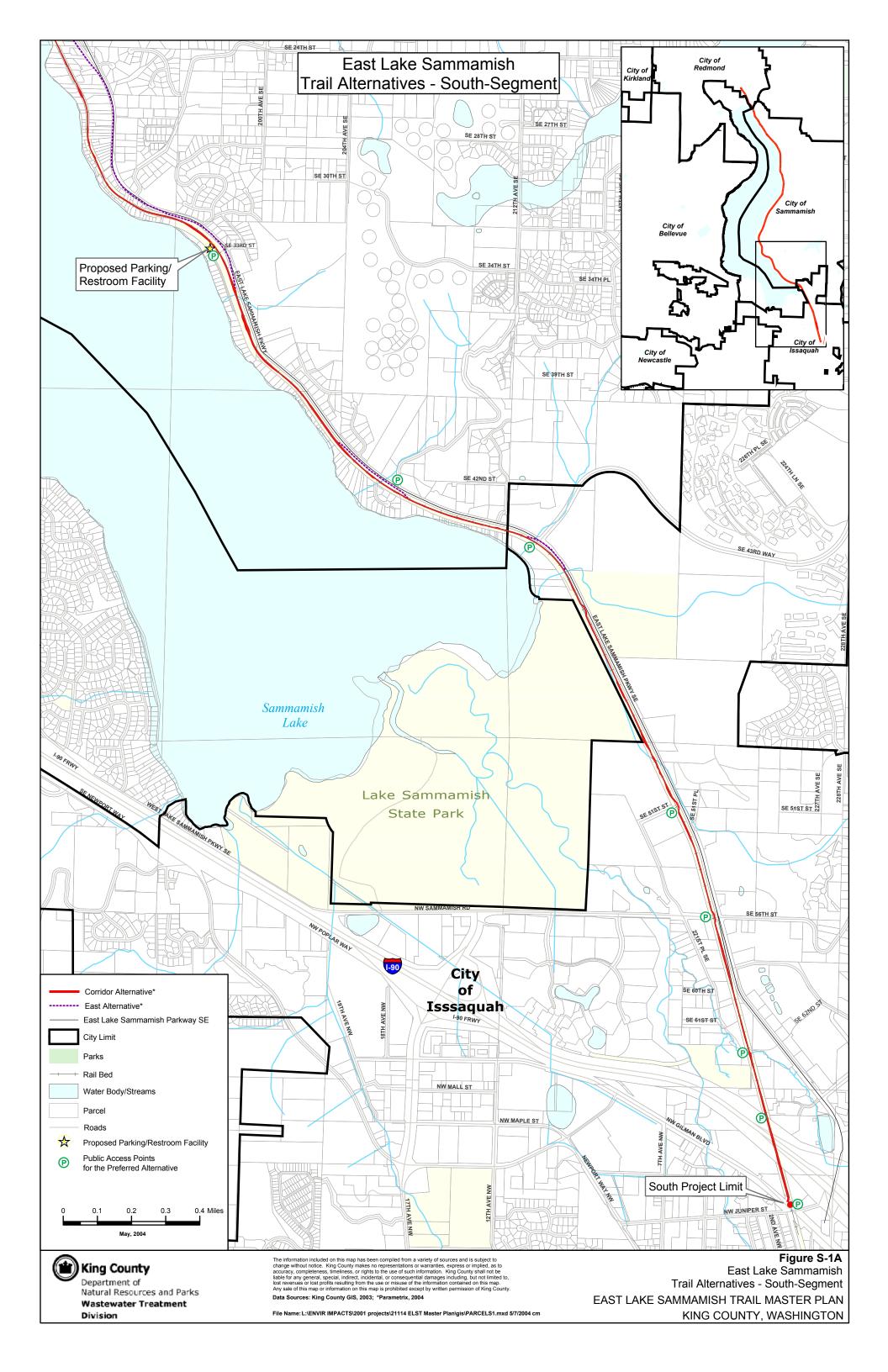
Who will decide where the trail will be located and what it will look like?

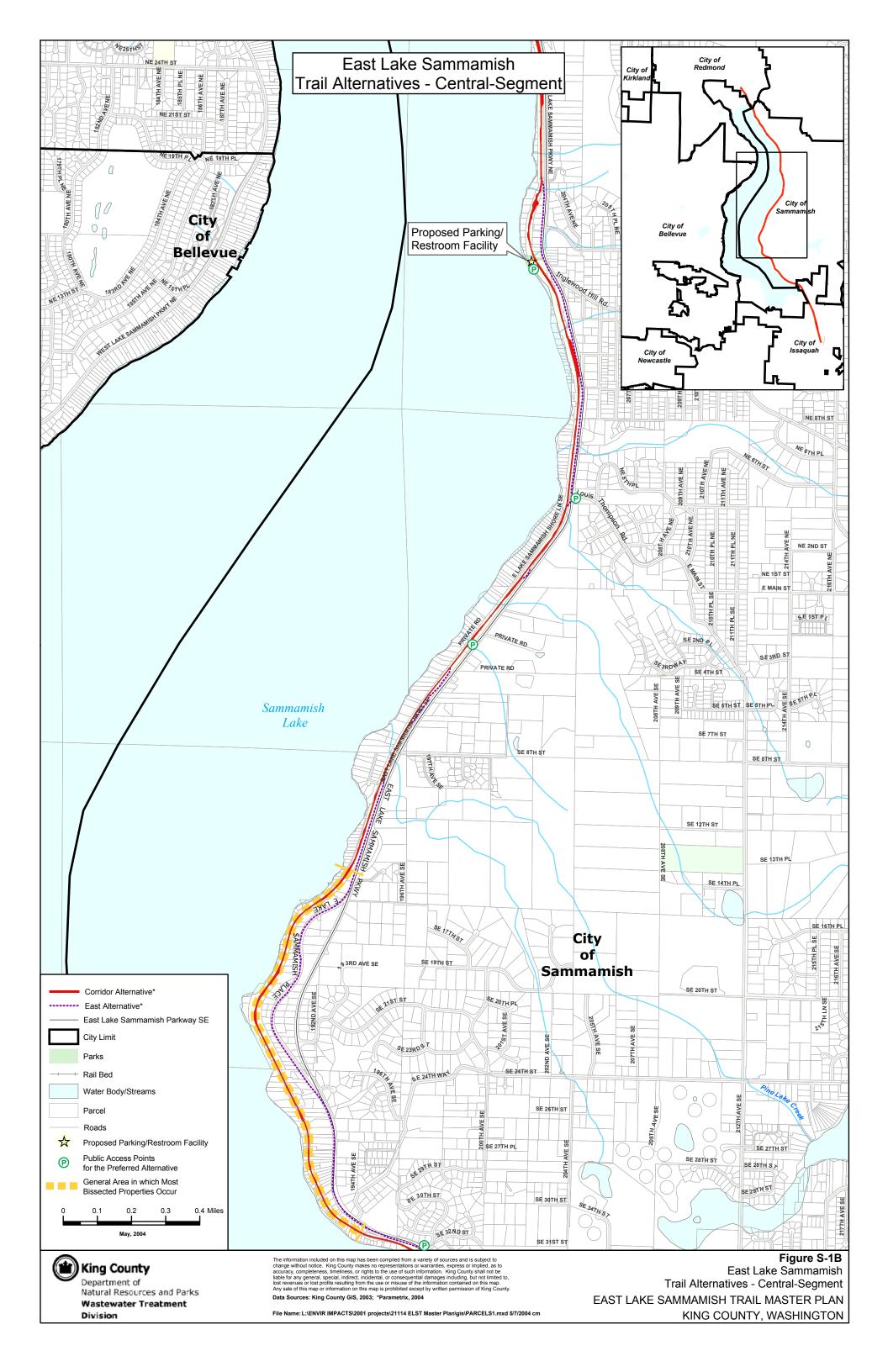
King County and FHWA will make the decision regarding trail alignment and configuration based on the Draft EIS evaluations of the alternatives, including cost considerations, and comments received on the Draft EIS. A-This Final EIS will be prepared to provides the results of those evaluations and comments received. The final decision will be contained in the federal Record of Decision (ROD) issued by FHWA following the Final EIS.

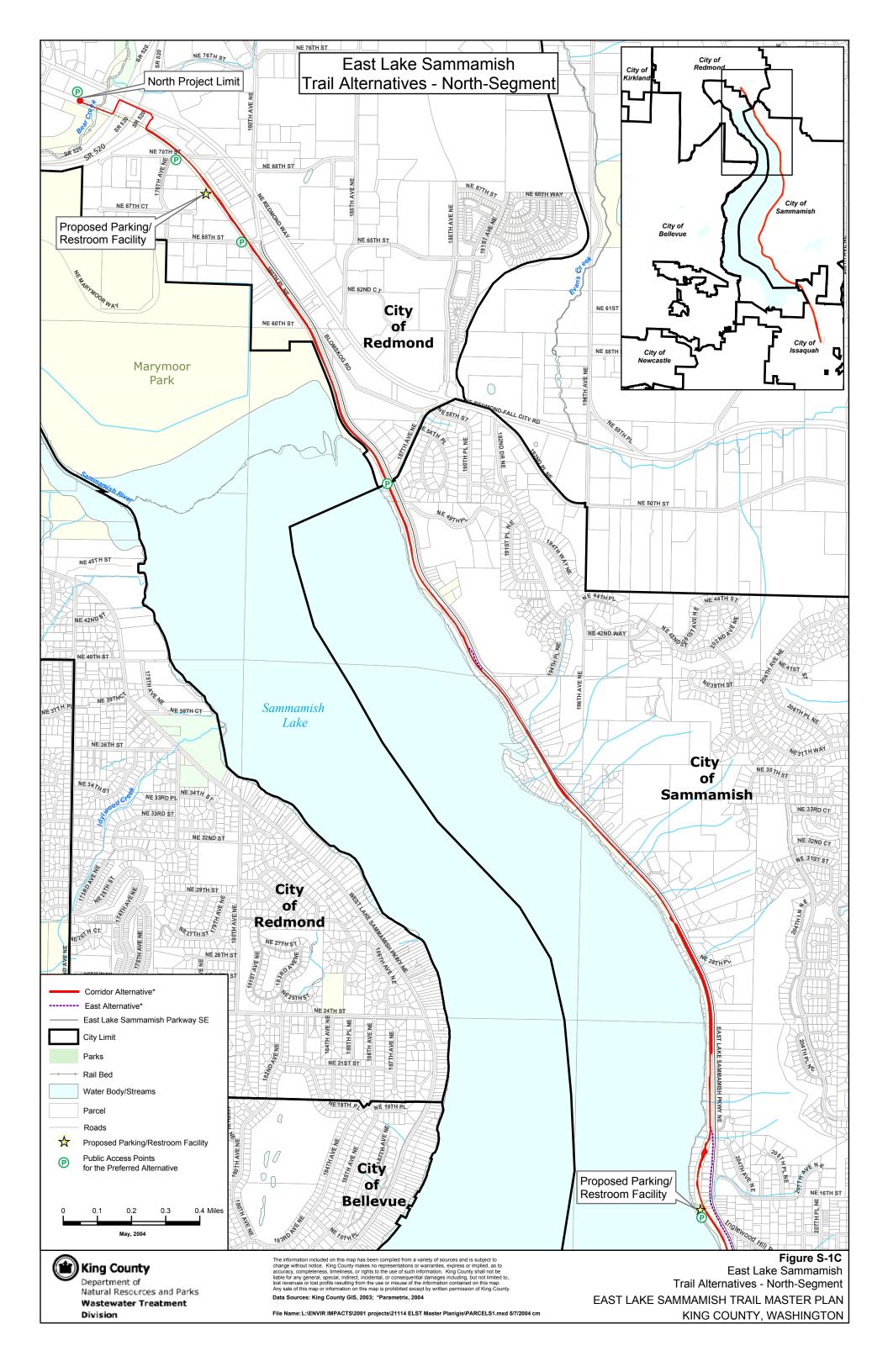
How did the rail corridor become available for use as a trail?

Railroads operated along this corridor from 1885 to 1996. In 1996, the Burlington-Northern/Sante Fe Railroad (BNSF) ceased 100 years of operations along this rail corridor. The Cascade Land Conservancy purchased the active railroad corridor from BNSF in April 1997. In 1997, King County and the Land Conservancy requested that the Surface Transportation Board (Board) grant interim trail use/railbanking status to this corridor. Railbanking allows the development of unused railroad corridors as recreational trails, such that the corridors are preserved for potential reestablishment of railroad use, should the need arise.

The application to railbank the corridor was approved in August 1998 and a federal "Notice of Interim Trail Use" was issued. The Land Conservancy sold the railbanked corridor to King County in September 1998. The County purchased the corridor with the intention of developing it into the East Lake Sammamish Trail. In December 2000, the King County Council approved construction of an Interim Use Trail along the railroad corridor.







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How is the corridor currently being used?

Portions of the corridor have been developed as the East Lake Sammamish Interim Use Trail. The Interim Use Trail is a 10.6-mile gravel trail, varying from 8 to 12 feet wide. The Interim Use Trail was constructed to allow public use of the railbanked trail corridor, protect natural resources and human safety, and fulfill railbanking requirements until the planning for a permanent trail could be completed and the permanent trail developed. Operation of the Interim Use Trail will expire in 2015; the trail would be decommissioned and closed to the public in 2015.

All permits necessary to construct the Interim Use Trail within the Cities of Redmond and Issaquah were obtained, and construction of the Interim Use Trail in these cities was completed in

early 2004. Construction of the remaining segment of Interim Use Trail in the City of Sammamish began September 19, 2005, and was completed in March 2006. Constructed portions of the trail are open for pedestrian and bicycle use; equestrian use is not permitted on the Interim Use Trail. The term "corridor" is used to describe the former railroad right of way. The term "railbed" is used in instances where physical studies or analyses were conducted prior to the construction of the Interim Use Trail.



Figure S-2. Photo of Interim Use Trail

A representative photograph of the current use of the corridor is provided in Figure S-2 above.

What are the major features of the proposed Master Plan Trail?

The project would develop the existing Interim Use Trail into a permanent long-term Master Plan Trail. The basic features of the Master Plan Trail include:

- For most Build Alternatives, the installation of permanent trail surfacing, including a combination of asphalt paving, soft surface shoulders for pedestrians (and equestrians in the Redmond segment only), and vegetated buffer;
- New <u>accessible</u> restroom facilities, with drinking fountains, at two locations along the trail corridor;
- New parking facilities, with accessible parking spaces, at three locations along the trail corridor:
- Traffic control measures (signage) where the trail crosses private driveways or roadways;
- A stormwater management system to control runoff from the trail and parking areas;

- Retaining walls where needed to support slopes and reduce embankment area;
- Improvements <u>within County-owned right-of-way</u> such as sidewalks and crosswalks at public access points;
- Litter receptacles, doggy litter bag boxes, and trail etiquette signs;
- Fencing to provide for trail user safety and identify and protect sensitive natural areas; and
- Bollards at trail crossings to prevent unauthorized vehicles from driving onto the trail.

Features would vary depending on the alternative; see the next section for details.

Trail Alternatives

What alternatives are were evaluated in this the Draft EIS?

Theis Draft-EIS evaluateds the following alternatives for developing a permanentlong-term, Master Plan Trail:

- Corridor Alternative: A Master Plan Trail The Corridor Alternative would be located within the former railroad right of way (referred to as the "corridor") currently developed as the Interim Use Trail. The majority of the trail would encompass the existing Interim Use Trail (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)). The trail would accommodate pedestrians, wheeled uses, and equestrian use (in Redmond segment only) use on paved and adjacent or separated soft surfaces. This alternative includes vehicular parking and restrooms.
- East A Alternative: The East A Alternative would use the existing Interim Use Trail in certain segments and transition to the roadway shoulder at an Americans with Disabilities Act (ADA)-acceptable gradient for driveway/public roadway intersections, along 1.7 miles of divided properties between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE, to avoid sensitive areas, and in other locations (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)). Where the alignment for the paved portion of the multi-use trail leaves the Interim Use Trail, pedestrians and equestrians (in Redmond segment only) use-would continue on the Interim Use Trail. This alternative assumes that the local jurisdictions will retain bike lanes on East Lake Sammamish Parkway for high-speed bicycle use. This alternative includes vehicular parking and restrooms.
- East B Alternative: The East B Alternative would be identical to the East A Alternative except that there would be no equestrian or pedestrian use on the existing Interim Use Trail in some segments (Figures S1-A (pg S-3), S1-B (pg S-4), and S1-C (pg S-5)). Where the trail transitions to the roadway shoulder, the existing Interim Use Trail on the railbed would be closed and no trail access would be permitted on the railbed. In these areas, pedestrians and equestrians would be routed away from the corridor along with the paved portion of the trail. Pedestrians, equestrians (Redmond segment only), and bicycles use would continue on the paved trail adjacent to the roadway in these areas. High-speed bicycle use would remain in the bike lanes on the roadway. This alternative includes vehicular parking and restrooms.
- Continuation of the Interim Use Trail Alternative: The existing Interim Use Trail would be continued beyond the currently approved 2015 expiration date. Equestrian use is not permitted on the existing Interim Use Trail but would be considered as part of this alternative. The existing Interim Use Trail would be extended at the northern terminus, across Bear Creek

and connecting to the Bear Creek Trail. This alternative includes vehicular parking and restrooms.

• No Action Alternative: King County would continue to operate the existing Interim Use Trail through 2015, at which time the permitted operation of the trail would expire in the absence of additional environmental review and King County Council action. The trail would be decommissioned and closed to public use in 2015.

How does the trail relate to the existing rights of way?

The railbanked corridor encompasses the public right of way and is 100 to 200 feet wide over 91 percent of the proposed trail length. The railbed is 8 to 12 feet wide and is located within a portion of the corridor. Figure S-3 (pg S-10) conceptually illustrates the scale of the trail in comparison to the right of way. The figure is intended to show the scale of the trail relative to the King County and road rights of way. The location of trail with respect to these rights of way varies throughout the length of the project.

Do the alternatives meet the purpose and need for the East Lake Sammamish Trail?

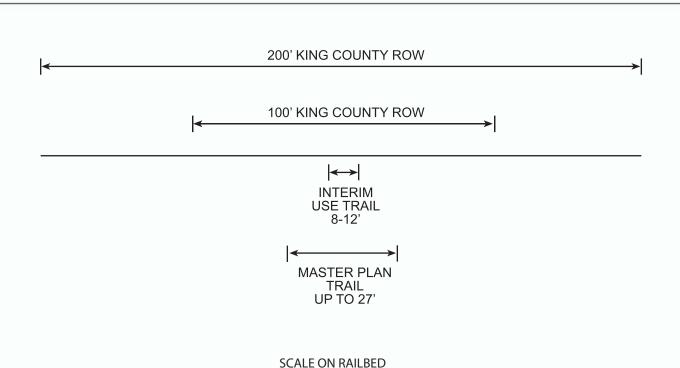
The Corridor Alternative, East A Alternative, and East B Alternative meet King County's purpose and need. The East A Alternative would utilize all of the existing corridor but would also require extensive development outside of the corridor. The East B Alternative would not use all of the existing corridor and would also require extensive development outside of the corridor. The No Action Alternative and Continuation of the Interim Use Trail Alternative fail to fully meet the project's purpose and need, as discussed in Section 2.5.

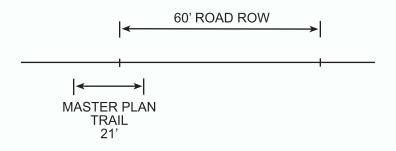
Is there a preferred alternative?

The preferred alternative is the Corridor Alternative because it best meets King County's purpose and need. Specifically, it offers a paved alignment along the railbanked corridor. Although a preferred alternative has been identified for this Draft EIS, final selection and refinement of an alternative will be based on the environmental review, including the impacts associated with each alternative, cost considerations, and comments received on this the Draft EIS. The final location will be confirmed in the federal Record of Decision (ROD) issued for this project.

What safety features will the trail include?

State and local design guidelines would be considered in order to design a multi-use trail to safely accommodate the anticipated uses (AASHTO, 1999; King County, 1992, 1993, 2004; WSDOT, 1995). Physical and spatial separation between the trail and vehicle traffic is important to provide a safe environment for trail users. In addition, trails need to provide adequate operating space for bicycle riders and other users (including equestrians); adequate width to avoid conflicts with other users of a two-way trail; appropriate surfaces in good condition; appropriate bicyclist speed limit for the conditions; grade changes that comply with requirements of the Americans with Disabilities Act (ADA); controlled crossings that include curb cuts and truncated domes at intersections with roadways; safe alignment; and adequate stopping sight distances. When an alternative varies from the design guidelines, the potential impacts are discussed.





SCALE IMMEDIATELY ADJACENT TO PARKWAY

NOTE: THESE FIGURES ARE INTENDED TO SHOW THE RELATIVE SCALE OF THE TRAIL WITH RESPECT TO RIGHTS-OF-WAY. THE LOCATION OF THE TRAIL WITH RESPECT TO THE RIGHTS-OF-WAY VARIES.



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SOURCES:



FIGURE S-3 GENERAL SCALE OF TRAIL TO ROW EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON

How do the estimated costs compare between the Build Alternatives?

Table S-1 summarizes the estimated cost of construction and property acquisition for each alternative. These estimates are based on the preliminary configurations developed for each alternative as described in the Draft-EIS. If alternatives are refined based on environmental review and comments received, the cost estimates will be refined accordingly.

Table S-1. Comparison of Estimated Costs among Build Alternatives

DESIGN ELEMENT/ALTERNATIVE	CORRIDOR ALTERNATIVE	EAST A OR EAST B ALTERNATIVE	CONTINUATION OF THE INTERIM USE TRAIL
Preparation	2,296,000	3,221,000	26,000
Grading	663,000	951,000	7,000
Erosion Control and Planting	1,998,000	2,106,000	12,000
Surfacing	1,468,000	1,567,000	41,000
Drainage	1,421,000	1,826,000	0
Structures	8,364,000	13,169,000	0
Traffic	530,000	1,139,000	26,000
Signage	76,000	109,000	2,000
Other Items	4,982,000	7,016,000	145,000
Parking, Restrooms, Access ^a	5,325,000	5,165,000	5,165,000
Subtotal	27,123,000	36,269,000	6,124,000
Construction Contingency (5%)	1,356,000	1,813,000	306,000
Construction Engineering (10%)	2,712,000	3,627,000	612,000
Total Construction	31,191,000	41,709,000	7,043,000
Engineering and Permitting (12%)	3,743,000	5,005,000	845,000
Right of Way Acquisition ^b	0	22,000,000	0
TOTAL	34,934,000	68,714,000	7,888,000

^a Specific features of some access improvements vary between alternatives (see EIS Chapter 2, Table 2-2). These distinctions are not reflected in the above estimates.

Summary of Impacts

The following sections briefly describe and compare the impacts of the alternatives. Table S-2 provides a summary of differences in impacts among the alternatives.

What will happen during construction?

What is the timing of the proposed trail construction and how does the duration of construction compare between the alternatives?

The approximate phasing and relative duration of construction is described for each alternative below from shortest to longest:

• The No Action Alternative would not require construction.

^b Acquisition cost based on impacts identified in EIS Chapter 3, Section 3.8.4, Private Property Impacts; average property value identified in Section 3.8.2.4, Property Values; an average of 5 percent of average property value for partial acquisitions; and negotiation and acquisition costs.

Estimated costs are based on 2004 dollars. <u>Costs are likely to be escalated by 6% per year to the date of</u> construction. The costs are comprehensive planning-level costs that take ADA compliance into consideration.

- The Continuation of the Interim Use Trail Alternative would require extending the Interim Use Trail approximately 1,500 feet to the north and constructing parking and restroom facilities. These activities would occur in the cities of Redmond and Sammamish. Depending on permitting and funding availability, the work could be completed in a single season and within 2 to 3 months.
- The Corridor Alternative would likely be constructed in segments due to the length of the trail and the multiple jurisdictions that would be affected. Assuming seasonal constraints and funding availability, construction would likely occur over at least three-four construction seasonscalendar years (not necessarily consecutive), possibly beginning in 2010.
 Construction sequencing and phasing will be based upon funding availability. Construction of the portion of the trail occurring within the City of Redmond is funded for 2010. Some funding is available in 2010 for construction of the portion of the trail occurring in the City of Issaquah. Funding availability after 2010 is uncertain.
- The phasing of the East Alternatives would be similar to that for the Corridor Alternative. However, the East Alternatives require more extensive construction (e.g., more excavation and more than twice as much fill), compared with the Corridor Alternative. Thus more resources would be required to complete the work in the same amount of time.

How would local roadways and driveways be affected by construction work?

With the use of standard best management practices for traffic control, no disruption of traffic flow is expected during construction. The East Alternatives would require more work along roadways than the Corridor Alternative (approximately 300 feet for Corridor compared to 4 miles for the East Alternatives). Construction at residential driveways, which would take about one to two weeks per driveway, would be managed to allow access to private properties.

How would construction noise differ between alternatives?

The equipment used to construct the trail would generate noise that could disrupt activities at nearby homes. Construction of the trail is expected to occur only on weekdays, during daylight hours. The Corridor Alternative would follow the existing Interim Use Trail for most of the route and would likely require less excavation, grading, and pile driving than the East Alternatives. Under the East Alternatives, the trail would be located off of the Interim Use Trail and involve construction in areas with steeper terrain. With the East Alternatives, some construction activities would occur farther from homes west of the trail, but closer to homes east of the trail, including properties east of East Lake Sammamish Parkway (Parkway). The steeper terrain would require more complex construction that would likely extend the duration or intensity of construction and increase the potential for noise impacts. The East Alternatives would require more truck trips for hauling of additional materials to and from the project corridor compared with the Corridor Alternative. Because the East Alternative route would move the trail eastward and raise the trail elevation compared to remaining on the Interim Use Trail alignment, both East Alternatives would increase the potential for short-term construction noise impacts at homes both east and west of the trail.

Construction noise associated with the Continuation of the Interim Use Trail Alternative would be limited to the northerly trail extension and the parking and restroom facilities. There would be no construction-related noise under the No Action Alternative.

Table S-2. Summary of Differences in Impacts among Alternatives, East Lake Sammamish Master Plan Trail

ALTERNATIVE	CORRIDOR ALTERNATIVE	EAST A ALTERNATIVE	East B Alternative	CONTINUATION OF THE INTERIM USE TRAIL ALTERNATIVE	No Action
Construction Impacts	 Construction would likely be phased due to the length of the trail and multiple jurisdictions that would be affected. Assuming seasonal constraints and staggered funding availability, construction would likely occur over at least three four construction seasons. Construction of trail would occur along approx. 300 ft. of roadway to extend the northern terminus beyond the current location. Approx 30 one-way truck trips would occur each day of construction. Trucks would access trail from public streets and potentially from driveways through negotiation with homeowners. Equipment noise could disrupt activities at nearby homes on weekdays during daylight hours. 	 Construction duration within a single season could be longer than Corridor Alternative due to more earthwork and higher retaining walls. Construction of trail would occur along approx. 4 miles of roadway. Approx. 47 one-way truck trips would occur each day of construction. More truck access points available than with Corridor Alternative because of proximity of trail to roadways. Potential for noise impacts greater than Corridor Alternative. 	Similar to East A Alternative, potentially with more installation of signs and bollards to mark closed portions of railbed.	Construction activities would occur in the cities of Redmond and Sammamish. Depending on permitting and funding availability, the work could be completed in a single season and within 2 to 3 months. Construction of trail would occur along approx. 300 ft. of roadway to extend the northern terminus. Approx. 17 truck trips would occur each day of construction. Construction noise would be limited to northern trail extension and parking/restroom areas.	No construction required.
Wetland Impacts	 4.041.03 acres of wetland fill. 3.93.29 acres of wetland buffer impact. 	 1.191.21 acres of wetland fill. 4.14.35 acres of wetland buffer impact. 	Same as East A Alternative.	No wetland or buffer fill required.	 No wetland or buffer fill required.
Fish and Stream Impacts	Increase of 20 acres total impervious surface; however, minimal increase in stormwater runoff expected because area is small relative to basin and stormwater management facilities would be provided. 2.3 acres of fill and permanent vegetation removal along streambanks. Work on culverts required in 18 streams. Net benefit to fish passage resulting from replacement of barrier culverts. Potential for turbidity during trail and drainage system maintenance.	 Increase of 20 acres total impervious surface; however, minimal increase in stormwater runoff expected because area is small relative to basin and stormwater management facilities would be provided. 2.4 acres of fill and permanent vegetation removal along streambanks. Work on culverts required in 22 streams. Net benefit to fish passage resulting from replacement of barrier culverts. Greatest potential for turbidity during trail and drainage system maintenance because more area would be maintained (railbed plus portions of trail along roadways). 	Same as East A Alternative.	 Culvert and fish passage improvements limited to ongoing maintenance. Minor potential for turbidity during trail and drainage system maintenance. 	 Culvert and fish passage improvements limited to ongoing maintenance. Minor potential for turbidity during trail and drainage system maintenance.
Impacts to Private Properties	 No property acquisitions or relocations required. Potential for parking impacts near businesses in Issaquah (near southern terminus of trail). Potential for illegal parking on residential driveways. No substantial increase in crime expected along trail. Due to higher trail use volumes and some vegetation removal. Rresidents may experience reduced privacy due to the presence of the trail and trail users, especially where trail is close to a residence or divides a property. 	 Approx. 58 to 61 partial acquisitions and 15 to 18 full acquisitions of private property required. 12 to 15 family units would need to be relocated. Parking impacts similar to Corridor Alternative. Potential for loss of some parking along west side of East Lake Sammamish Parkway. No substantial increase in crime expected along trail. Privacy impacts would be less for residents adjacent to portions of railbed that are closed to high-speed use; residents of homes adjacent to East Lake Sammamish Place SE and East Lake Sammamish Parkway would experience reduced privacy, especially where trail would be at a similar elevation to yards facing the road. 	Similar to East A Alternative, but no impacts on privacy for residents along portions of railbed that would be closed to all users.	No impacts to private properties.	No impacts to private properties.
Impacts on Views	 Removal of private landscaping and structures from publicly owned trail corridor could increase visibility from or toward homes. Visual impacts due to retaining walls and fencing would be moderate to high where a wall is visible from a sensitive view or is close to a house. 	 Greater visual impacts than Corridor Alternative in areas where trail would come close to several residences or where tall retaining walls were required. 	 Improvement of view along railbed where existing fencing and signs would be removed (where paved portion of trail moves to the roadway). 	No impacts on views aside from construction of two parking/restroom facilities.	 Views would remain the same as they are currently.
Trail Safety and User Conflicts	 Potential for conflicts between trail users and vehicles where trail intersects roadways and driveways. Proposed trail widths would minimize potential for conflicts among trail users. 	 Trail users may be less safe compared to Corridor Alternative in areas where trail runs adjacent to roadways. Potential for conflicts among trail users could be less than with Corridor Alternative where paved portion of trail transitions to roadway because the soft-surface trail would be fully separated from the high-speed paved trail. 	 Similar to East A Alternative but safety further reduced where both equestrians and pedestrians travel close to roadways. Potential for conflicts among trail users higher than with Corridor and East A Alternatives because of less separation between equestrian/ pedestrian and higher speed trail users. 	Ongoing potential for conflicts among trail users because trail does not separate high- speed trail users and equestrians/ pedestrians.	 Same as Continuation Alternative.

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How would the contractor access construction areas?

Trucks would access the trail <u>primarily</u> from public streets. In addition, <u>King County and the contractor may jointly determine that</u> some driveways <u>may are also</u> need<u>ed to be used</u> for access; <u>temporary easements this</u>-would be negotiated with homeowners <u>as needed prior to construction</u>. The East Alternatives would have more access points available than the Corridor Alternative because of the proximity of portions of the trail to roadways.

Under the Continuation of the Interim Use Trail Alternative, trucks would also access the trail from public streets. Minimal impact from trucks would occur. Under the No Action Alternative, no construction would be needed.

How many trucks would be used during construction?

Trucks would be needed during excavation, filling, and surfacing for the trail. The Corridor Alternative would require approximately 30 one-way truck trips per day. The East Alternatives would each require approximately 47 one-way truck trips per day. The Continuation of the Interim Use Trail Alternative would require approximately 17 truck trips per day. Though the East Alternatives would require the most truck trips, fewer trucks would require access to the corridor because most of the alignment would be accessed from roadways instead.

What other major projects are planned or underway along the trail corridor?

The City of Redmond, City of Sammamish, and City of Issaquah Six-Year Transportation Improvement Programs (TIPs) were reviewed to identify planned transportation improvements within the transportation study area. Each jurisdiction has several roadway improvements planned for the next decade (for example, roadway widening, intersection improvements, bike lanes, sidewalk, signalization, restriping). Non-motorized improvements are proposed for the Bear Creek Trail in Redmond. Planned improvements are identified in detail, by jurisdiction, in Section 3.11 of Chapter 3 (Table 3.11-12).

In addition, the Washington State Department of Transportation is designing improvements to SR 520 from West Lake Sammamish Parkway to SR 202. These improvements include widening the highway and other access improvements where the trail would intersect the highway.

None of these projects would be adversely impacted by, or adversely impact, the construction or operation of the Corridor Alternative or the Continuation of the Interim Use Trail Alternative. Most of these projects could increase traffic volumes on roadways in the project area and could increase trail use. With the East Alternatives, the potential for northbound queuing due to vehicles turning left at driveways along East Lake Sammamish Parkway would be reduced with the addition of a center two-way left-turn lane. The location of the East Alternatives with respect to the roadway is intended to accommodate the future roadway improvements. However, depending on the outcome of ongoing corridor studies and planning efforts by the local jurisdictions, the location may require some minor modifications. Trail design would be coordinated with local jurisdictions.

How do effects to fish and aquatic resources compare between the alternatives?

Construction activities in or near streams or wetlands could potentially cause localized sedimentation, turbidity, and erosion. The Corridor and East Alternatives would likely require temporary dewatering for construction of cast-in-place concrete walls. The Build Alternatives could disturb fish due to construction noise, machinery, or human activity, or spills of fuel or oil within construction or staging areas. With the application of best management practices (BMPs) and stream and wetland mitigation, the Build Alternatives should not have major negative effects on aquatic resources, including streams, wetlands, or fish.

The project would increase the amount of impervious surface area along the trail corridor, approximately 18.8 acres associated with the Corridor Alternative and 18.4 acres associated with the East A Alternative; stormwater best management practices would be installed to manage the increase in surface runoff that would result from the increased impervious surface area. The Corridor and East Alternatives would require a small amount of wetland fill (1.04 acres and 1.19 acres, respectively), wetland buffer fill, and removal of vegetation along streambanks. The Corridor and East Alternatives would require replacing or lengthening culverts in streams but would result in net beneficial effects on fish passage conditions resulting from the replacement of barrier culverts. The impacts to fish and aquatic resources and habitat are expected to be negligible for the No Action Alternative.

How do effects to wildlife compare between the alternatives?

The Corridor and East Alternatives would result in the greatest potential to disturb wildlife through noise and visual disturbance during construction. Construction impacts of the Continuation of the Interim Use Trail Alternative would be limited to the northern trail extension and parking areas, restrooms, and access points.

Sensitive wildlife could be temporarily displaced to surrounding areas during construction. However, the construction period along any given portion of the trail would be short and most wildlife would be expected to return after construction was complete. Based on existing levels of human disturbance, construction impacts are expected to be relatively lower adjacent to East Lake Sammamish Parkway or Place (because of existing high levels of disturbance and limited habitat) and relatively higher adjacent to Marymoor Park (because of lower existing levels of disturbance and more intact habitat). Construction impacts to sensitive species such as bald eagle would be largely avoided by timing construction to avoid nesting seasons, as directed by resource agencies.

The Corridor and East Alternatives would result in the permanent removal of primarily nonnative shrubs and trees, which would not result in substantial impacts to wildlife. Vegetation removal for the other alternatives would be limited to maintenance activities.

The Corridor and East Alternatives have a greater potential to disturb wildlife than the Continuation of the Interim Use Trail Alternative because more people would likely use the trail. However, the effect of trail use on wildlife is expected to be minor because of the existing level of human disturbance. Sensitive species in relatively intact habitats (i.e., Marymoor Park and Lake Sammamish State Park) are likely to be more affected by trail use than wildlife adjacent to housing and other developed areas.

The Corridor and East A Alternatives would more than double the amount of chain-link fencing along the trail, which would restrict the movements of some animals. However, this fencing would not be continuous, would only be placed in those areas as required for public safety, and predominantly occurs in areas that are characterized by urban landscape (i.e., buildings, asphalt, ornamental gardens, lawns, and shrubby/grassy areas with scattered trees. Areas without fencing or with only split-rail fencing would continue to provide wildlife access to key habitats. The East B Alternative would result in a minor benefit to wildlife in areas where the corridor would be closed and fencing removed.

How would adjacent neighborhoods and communities be affected?

Are private properties divided by the trail?

Yes, 75 properties are currently divided by the historic railbed corridor and Interim Use Trail, and would be divided by the proposed Master Plan Trail. The majority of the divided properties are within the City of Sammamish between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE.

Won't the widening of the railbed or the road prism to accommodate the trail result in loss of access to some properties?

Loss of access to some properties will occur as a result of project construction; however, the preliminary designs for the Build Alternatives are intended to minimize access impacts. The Corridor Alternative does not eliminate access to any residential properties, and it transitions to the narrowest configuration (that is, 12 feet of pavement with two 2-foot shoulders and two 1-foot clear zones) for each driveway and road crossing for safety reasons, thus minimizing impacts to driveways. The East Alternatives incorporate the above minimum configuration with the addition of a buffer separating the trail from vehicle use or a landing for vehicle use. Regardless of these measures, access would likely be altered to some properties because of the topography in the project vicinity and the proximity of homes to some alignments.

Would private property be acquired for the trail?

Despite design measures to minimize the width of the trail where private property would be affected, under the East Alternatives private property would have to be fully or partially acquired in some areas where the trail would extend outside the public right of way. Even where the trail would not extend beyond the public right of way, private property would be impacted where the project modifies or eliminates access.

Not all properties that would be impacted by the proposed trail under the Build Alternatives would need to be fully acquired. Full acquisition would likely occur when the project substantially interferes with and thus damages the property to a degree that it removes all economic value. For example, if a portion of the house would have to be removed or if access to the property was eliminated and could not be replaced, full acquisition is assumed. In addition, for safety reasons, a number of constraints exist for an intersection of a driveway and a trail. For example: (1) drivers should be at eye level with the trail before crossing; and (2) the grades for modified driveways should be functional and safe. If access to a property that complies with these criteria cannot be provided, then full acquisition of the property is assumed. Partial acquisitions occur when only a portion of the property is required by the project and the remaining portion of the site retains its economic value.

Based on preliminary investigations, the East Alternatives would require approximately 58 to 61 partial acquisitions, 15 to 18 full acquisitions, and 12 to 15 relocations. None of the other alternatives would require relocations or acquisitions. The number of relocations relates to the number of family units that would need to be relocated, and the number of acquisitions relates to the number of properties that would need to be acquired.

Under both the Corridor and East Alternatives, easements or agreements with other public agencies would be necessary when the trail or associated improvements occur in another right of way. For example, all of the Build Alternatives are routed through the Redmond Way right of way, which would require approval from the City of Redmond. However, many more such agreements would be necessary under the East Alternatives, due to the use of road right of way along East Lake Sammamish Parkway and Place for the trail alignment.

Where residential driveways must be regraded or reconstructed to maintain access, easements or agreements with the property owners would be necessary for any work outside the King County corridor.

What would happen to adjacent parking?

Under the Corridor and East Alternatives, the combination of existing and proposed new parking facilities would provide sufficient parking for trail users on most days. However, parking at Marymoor Park by trail users could reduce available parking for park users, especially on busy summer weekends. There is some potential for parking impacts near businesses in Issaquah because limited parking is currently available for trail users near the south terminus of the trail. Trail users would be discouraged from parking on the shoulders of East Lake Sammamish Parkway since this could encourage illegal access. There is potential for illegal parking if trail users attempted to access the trail via residential driveways.

The location of the East Alternatives with respect to East Lake Sammamish Parkway and East Lake Sammamish Place is based on direction by the City of Sammamish. The Parkway configuration would appear to accommodate either a center turn lane or parallel parking, but not both. Therefore, the cumulative effect of the East Alternatives and roadway improvements could be the elimination of parking in some or all portions of the west side of the Parkway. The East Lake Sammamish Place configuration is intended to allow parallel parking on one side of the road. However, some or all areas of parking could be eliminated during final design to further minimize access and property impacts to adjacent property owners.

The Corridor Alternative narrows in some areas and meanders across the centerline of the former railbed, thereby preserving existing parking in most areas. In some areas the alignment moves off the railbed entirely to improve existing parking.

Shared parking agreements could make additional parking available for weekend use at the existing Microsoft campus, Issaquah District Court, and potentially other local businesses. With Washington State Parks approval, additional parking may also be available at Lake Sammamish State Park.

What would happen to existing views from residences along the trail?

Visual impacts during construction of the Build Alternatives would include the temporary presence of construction equipment, temporary storage of construction materials, and excavation of soil. Overall construction impacts to views may be less for the East Alternatives than for the Corridor Alternative because there would be no construction along the rail corridor in areas where

the multi-purpose trail diverts to the roadway. However, impacts on East Lake Sammamish Place would be greater for the East Alternatives due to clearing and construction of retaining walls.

The Corridor Alternative would require the removal of privately-installed vegetation and structures, such as fences, walls, sheds and irrigation systems, in the publicly-owned corridor. The loss of landscaping could cause increased visibility from or toward homes and change the visual character. Overall, the asphalt paving of the trail and the addition of split-rail fences and retaining walls less than 4 or 5 feet high would not create major changes in views. In some places retaining walls may be up to 8 feet high; however, these taller walls would be used primarily in wooded areas where no residences are located. Visual impacts due to walls and chain-link fences would be moderate to high in areas where a wall is visible from a sensitive view, such as in the Sammamish Place area, or where the wall is very close to a house, such as in the 205th Avenue SE area. View impacts would be less intrusive where the project corridor is currently used as private storage space.

The East Alternatives would result in higher impacts to views in the East Lake Sammamish Place neighborhood than the Corridor Alternative because the alignment would come very close to several residences. This proximity would require the removal of private landscaping, driveways, and parking spaces, and the addition of a physical barrier between the trail and East Lake Sammamish Place. Retaining walls as tall as 10 to 15 feet high could be required in some places, including in the Sammamish Place area, where the retaining wall would be close to an existing home. For the East B Alternative, most chain-link fences and trail etiquette and traffic control signs would be removed from areas where the paved portion of the trail leaves the corridor. This would improve the view of the corridor in these areas.

Would noise from people using the trail be noticeable to nearby residents?

None of the alternatives are expected to have <u>substantial significant</u> noise impacts during operation of the trail, <u>although noise from trail users may be audible to nearby receptors</u>.

Noise sources associated with use of the trail under the Corridor and East Alternatives would include bicycles traveling on pavement, occasional bicycle bells, foot traffic on pavement and possibly gravel, human voices, and horses traveling on gravel. Noise levels would be expected to be greater than current conditions due to the anticipated increased trail use. Vehicles would create some noise in and near parking lots. Trail maintenance would involve occasional movement of vehicles on the trail and use of equipment for mowing or other activities, generating noise similar to existing neighborhood yard maintenance noise.

For portions of the trail located near major roadways such East Lake Sammamish Parkway, noise generated by trail users under the Corridor and East Alternatives is likely to be completely obscured by traffic noise. Noise from trail users may be more noticeable to residents along portions of the trail that are far from traffic noise and shielded from view of the roadway; such areas are currently quiet and therefore additional noise may be more perceptible to residents. However, even in these quieter areas, it is unlikely that noise generated by permitted trail uses would approach or exceed any local noise standards or pose substantial noise impacts to residents. The trail and parking areas would be closed to the public at night. The proposed parking areas are far enough away from existing homes that they would not pose noise impacts to residents.

Noise levels could be reduced under the Continuation and No Action Alternatives because the gravel surface of the trail might restrict the types of users and overall trail numbers.

How would the trail affect crime incidents and the safety of nearby residents?

The trail is not expected to substantially impact public safety or security based on data from other paved, multi-use trails in King County. There are no reported data to indicate the proposed trail would result in a substantial increase in crime. Past studies indicate that trails within urban and suburban areas do not experience disproportionately high rates of crime relative to other types of recreational venues or meeting places. The trails seem to be viewed as desirable quality of life enhancements that, despite occasional problems, make homes and property more desirable. These studies indicate that crime does not necessarily result from trail proximity. Other factors not related to the trail, such as the location of property and the presence of a wooded area, may also influence the possibility of criminal activity.

Potential safety and crime issues associated with the Corridor and East Alternatives include the increased potential for collisions with trail users, particularly for young children and the hard-of-hearing; conflicts arising from untethered or off-leash dogs; increased trespass or vandalism; or an increase in other crimes such as robbery.

Occasional incidents of trespass or private property vandalism could occur along the proposed trail but would not be expected to exceed current levels. Major crimes such as robbery are possible but are expected to be similar to, or less than, that experienced in other venues where people gather for recreation.

Are there issues related to safety where the trail runs alongside or crosses roadways?

Trail user safety may be lowered for those portions of the East Alternatives located immediately adjacent to roadways because of the reduced separation between vehicles and trail users. Under the East B Alternative in particular, equestrian/pedestrian use would occur in proximity to a high-volume arterial. Safety risks would be highest during heavy traffic or bad weather. Safety issues can be addressed through design features such as using a planter or other barrier between the trail and the roadway.

The potential for safety impacts at crossings under the Build Alternatives would be minimized by installing signs and managing vegetation to allow for better sight distance. The Corridor and East Alternatives would increase the potential for conflicts between trail users and vehicles where the trail intersects roadways and driveways, compared to the existing Interim Use Trail. This is because of the increased trail use and the likelihood that some trail users would travel at higher speeds on a paved surface than they do on the existing gravel surface. Sight distance would be limited in many locations for vehicles as well as for trail users. Under the East B Alternative, equestrians would be exposed to more residential driveway crossings and other potential distractions from the adjacent roadway.

What about conflicts between users on the trail?

The typical trail sections designed for the Corridor Alternative and East Alternatives are based on recommendations published by the American Association of State Highway and Transportation Officials (AASHTO) in its 1999 *Guide for the Development of Bicycle Facilities*. Based on King County's experience with other urban trails, the narrowest trail section is 12 feet of pavement with two 2-foot shoulders and two 1-foot clear zones. Where possible, a separate soft-surface trail is being evaluated to separate equestrian and pedestrian use from higher-speed, wheeled uses.

The Corridor Alternative substantially meets current King County and AASHTO guidelines for ideal trail widths on multi-use trails. The trail widths that can be provided under the Corridor Alternative are expected to minimize the potential for trail user conflicts. Under the East A Alternative, the potential for trail user conflicts could be less than for the Corridor Alternative where the paved portion of the trail transitions to the roadway and equestrians/pedestrians would continue along the Interim Use Trail. The potential for trail user conflicts would be higher under the East B Alternative than the Corridor and East A Alternatives since there would be less separation between equestrian/pedestrian use and higher speed trail users. The highest potential for trail user conflicts would occur under the Continuation of the Interim Use Trail Alternative, which would not meet minimum standards for separation between higher speed trail users and equestrians/pedestrians. The No Action Alternative would result in continued potential for trail user conflicts. However, neither the No Action Alternative nor the Continuation of the Interim Use Trail Alternative is expected to attract the volumes anticipated with a wider, paved trail.

Would the alternatives affect cultural or historic resources?

Archaeological surveys of the area were conducted in 2000 and 2003, and archaeological monitoring was conducted in 2004. The Interim Use Trail was constructed largely on the same alignment as the proposed Corridor Alternative. It is possible that the Build Alternatives could affect cultural resources such as archaeological deposits that have not previously been identified. The primary impacts would be associated with construction or maintenance activities that disturb native soils. For example, constructing or upgrading access roads for construction equipment, clearing staging areas, building parking and restroom facilities, extending culverts, constructing retaining walls, or installing fences could impact cultural resources during construction of the trail. During trail operation, maintenance activities such as culvert maintenance requiring excavation into native soil could disturb archaeological deposits.

The potential to impact cultural resources would be higher under the East Alternatives than for the Corridor Alternative, because the East Alternatives would potentially require more extensive construction and ground disturbance of native soils. Potential impacts for the Continuation of the Interim Use Trail Alternative would be limited to disturbance of native soils associated with the northern extension of the trail. The tribes have requested for all alternatives that tribal representatives monitor any excavations around culverts because of the high probability of cultural resources being present in these areas. King County would coordinate proper monitoring and excavation.

Are there any significant unavoidable adverse impacts that cannot be mitigated?

The magnitude of the property acquisition that would occur under the East Alternatives would be considered a significant unavoidable adverse land use and socioeconomic impact to displaced residents. Based on preliminary investigations, the East Alternatives would require approximately 58 to 61 partial acquisitions, 15 to 18 full acquisitions, and 12 to 15 relocations. None of the other alternatives would require relocations or acquisitions.

Under the East Alternatives, the trail would pass very closes to several residences in the East Lake Sammamish Place neighborhood. If these properties are not acquired, significant unavoidable adverse impacts to visual quality could result.

Areas of Controversy and Major Unresolved Issues

What will East Lake Sammamish Parkway and other local roadways look like in the future?

Traffic on key roadways in the study area is increasing as the cities of Issaquah, Sammamish, and Redmond continue to grow. Accordingly, these local jurisdictions are planning improvements to these roadways to accommodate the increased traffic. Many of these roadways, including East Lake Sammamish Parkway, will likely be wider with new or additional lanes for through travel, turning, and bicycling, as well as sidewalks. However, the final configuration for many of these improvements has not been established at this time.

The alignment for the East Alternatives is frequently adjacent to East Lake Sammamish Parkway and East Lake Sammamish Place SE. The location of the trail alignment with respect to East Lake Sammamish Parkway and East Lake Sammamish Place SE (e.g., the distance from the existing center line) is intended to accommodate potential future roadway improvements. However, depending on the outcome of ongoing corridor studies and planning efforts by the local jurisdictions, the location may require some minor modification.

Because of the potential for modifications to the trail alignment as the project design is refined, some of the property acquisition and natural resource impacts described for the East Alternatives may be reduced or avoided. King County will continue to coordinate with the local jurisdiction during the environmental review process. Any additional information regarding future roadway improvements will be incorporated in the Final EIS.

Should equestrian use be allowed on the trail?

A number of citizens and several staff from resource agencies have commented that equestrian use should not be allowed on the trail due to the potential impacts associated with the need for a wider trail and the potential impacts to water quality. These impacts are discussed further in Section 3.2, Surface Water Resources and Water Quality and Section 3.7, Recreation. However, the adopted *King County Regional Trails Plan* directs that trail planning and design consider the broadest array of uses appropriate to the setting. As a result, King County is including accommodation of equestrian use in each of the Build Alternatives for the Redmond portion of the trail. Based on the results of the Draft EIS evaluations and comments received on the Draft EIS, equestrian use may be included in all parts of the trail, limited to certain trail segments, or eliminated entirely. Equestrian use along all or part of the trail would be conducted in accordance with local jurisdictions' plans and policies. Any changes to the Build Alternatives will be fully described in the Final EIS.

How wide should the trail be?

The minimum typical sections applied to the Corridor and East Alternatives have 12 feet of pavement with two 2-foot wide shoulders. This is the accepted minimum width applied to the greatest extent possible for King County's paved urban trail system. Configurations with wider shoulders or separated soft-surface for pedestrian and equestrian use are were evaluated in the Draft-EIS. King County and FHWA will make final decisions regarding trail configuration based on the Draft-EIS evaluations and comments received on the Draft EIS.

Required Permits and Approvals

The following permits and approvals would likely be needed to construct the permanent trail:

- Record of Decision (ROD) issued by FHWA <u>and WSDOT</u> and published in the *Federal Register* as the final NEPA approval
- Notice of Action Taken (NAT) issued by King County and WSDOT and published in the Washington State Department of Ecology SEPA Register as the final SEPA approval
- Federal Endangered Species Act Section 7 Compliance Consultation
- U.S. Army Corps of Engineers Section 404 Permit
- Office of Archaeology and Historic Preservation Section 106 of the National Historic Preservation Act
- Section 401 Water Quality Certification, Washington State Department of Ecology
- National Pollutant Discharge Elimination System (NPDES) Permit, Washington State Department of Ecology
- Washington State Department of Fish and Wildlife Hydraulic Project Approval
- Right of Way Permit from City of Issaquah, City of Sammamish, City of Redmond
- Shoreline Substantial Development Permit from City of Issaquah, City of Sammamish, City of Redmond
- Clearing and Grading Permit from City of Issaquah, City of Sammamish, City of Redmond
- Public Agency Utility Exception Permit from City of Issaquah, City of Sammamish, City of Redmond
- Building Permit, City of Issaquah, City of Sammamish, City of Redmond
- Administrative Design and Planning, City of Issaquah

Environmental Commitments

Appendix A summarizes the mitigation commitments, as well as additional potential mitigation measures that have been identified for possible implementation. The measures have been grouped by topic in the appendix, as a single mitigation measure may benefit a number of elements of the environment. Refer to the specific sections in Chapter 3 of the Draft <u>and final EISs</u> for a complete listing associated with each element of the environment.

Next Steps

King County, together with FHWA and WSDOT, will-evaluated public and agency comments submitted on the Draft EIS. The evaluation will-could be used to:

- Develop new alternatives or refine existing alternatives if necessary;
- Update information of the affected environment;
- Determine if additional studies or supplemental review are needed;
- Incorporate other changes; and
- Select mitigation measures.

ne- <u>Theis</u> Final EIS <u>will-communicates</u> the above changes, contains the lead agencies' final commendations for a preferred alternative, and provides responses to public and agency comment ceived.	S

Chapter 1

Purpose and Need

In 1971, King County identified the need for a corridor to connect the Burke-Gilman Trail with the John Wayne Pioneer Trail (Iron Horse State Park). The Burlington-Northern/Santa Fe (BNSF) rail corridor was identified as a future urban trail corridor and was included in the *King County Urban Trails Plan* (1971). The growing demand for public recreation venues, including trails, has been continually identified in county and city planning documents since 1971.

King County owns and manages a number of local and regional trails. Currently, there are over 100 miles of paved and nearly 70 miles of unpaved regional trails in King County (King County, 2004). Additional miles of trail are proposed for development, which will connect to existing trails in the region and create a continuous network of non-motorized transportation corridors.

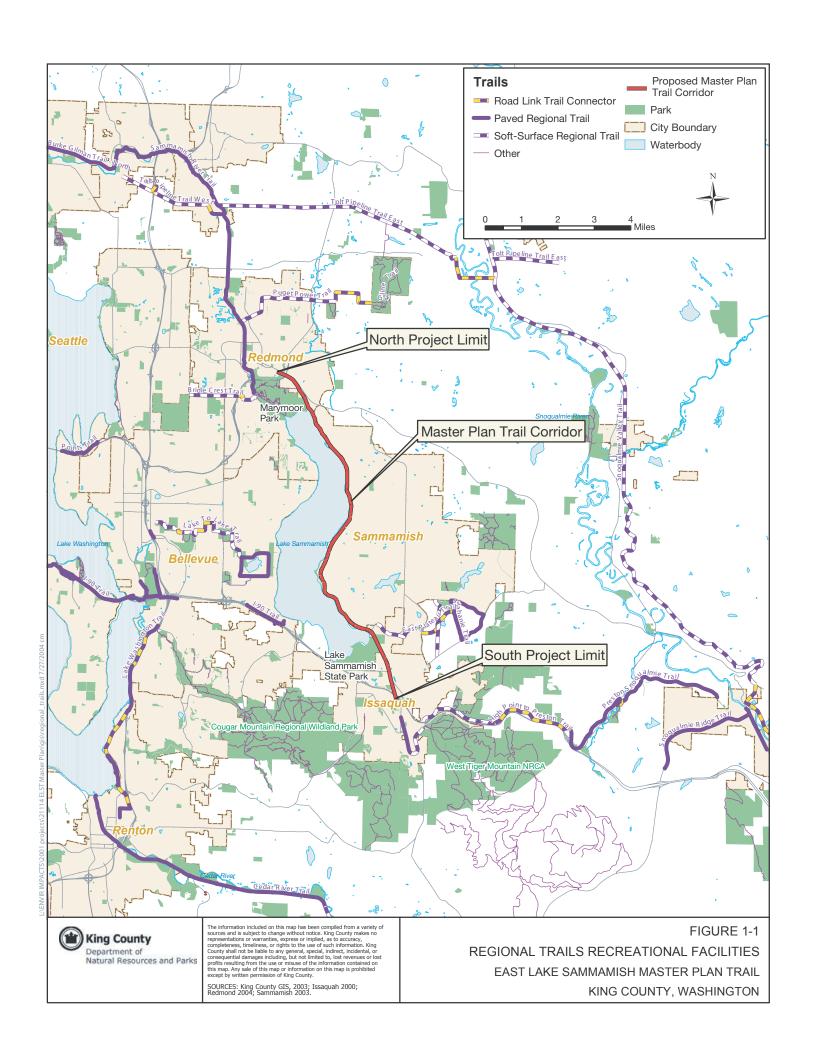
The Federal Highway Administration (FHWA) and King County Department of Executive Services, Facilities Management Division (KCFMD) propose to develop a non-motorized multi-use trail along approximately 11 miles of former railroad corridor on the east side of Lake Sammamish. The trail would extend from Gilman Boulevard in the City of Issaquah north to approximately 300 feet beyond Bear Creek in the City of Redmond (see Figure 1-1 (pg 1-2)). Portions of the railroad corridor have already been developed into an Interim Use Trail, which has been evaluated in previous environmental documents. Theis Draft-Environmental Impact Statement (Draft-EIS) evaluateds alternatives for developing a safe, permanentlong-term, multi-use Master Plan Trail.

1.1 Purpose of the Project

The purpose of the proposed project is to design and construct an alternative non-motorized transportation corridor and a multi-use recreational trail along the former BNSF railroad corridor on the east side of Lake Sammamish. A multi-use trail is synonymous with a "shared use path or trail" as defined by the American Association of State Highway and Transportation Officials (AASHTO). It is also defined as a "multi-purpose trail" in the *King County Regional Trails Plan* and as a "Share Use Path" in the Washington State Department of Transportation (WSDOT) *Facilities for Non-Motorized Transportation*.

The trail would provide access to recreation, employment, and retail centers in the Cities of Redmond, Sammamish, and Issaquah and complete a link in the King County regional trails system. The trail is intended to safely accommodate a variety of user groups such as bicyclists, pedestrians, runners, wheelchair users (including those with motorized wheelchairs), in-line skaters, and equestrians, and different ages and skill levels within those groups.

Federal, state, and local design guidelines would be considered in order to design a multi-use trail to safely accommodate the anticipated uses (AASHTO, 1999; King County, 1992, 1993, 2004; WSDOT, 1995). Physical and spatial separation between the trail and vehicle traffic is important to provide a safe environment for trail users. In addition, trails need to provide adequate operating space for bicycle riders and other users (including equestrians); adequate width to avoid conflicts with other users of a two-way trail; appropriate surfaces in good condition; appropriate bicyclist speed limit for the conditions; grade changes that comply with requirements of the Americans with Disabilities Act (ADA); controlled crossings; safe alignment; and adequate stopping sight distances.



1.2 Need for the Project

The need for the Master Plan Trail is driven by three factors including: (1) the regional need for alternative transportation corridors between major business centers, (2) the need for non-motorized recreational trails to support a growing multi-use population, and (3) the need to make connections between other existing trails in the regional trails system. These needs are discussed below.

1.2.1 Need for Alternative Transportation Corridors

Population growth to the east of Lake Sammamish has resulted in the development of new retail, commercial, and office centers at both the north and south ends of the project area. However, north-south linkages between these centers are constrained by both the natural and built environment. Traffic congestion has increased substantially in recent years on East Lake Sammamish Parkway and connecting arterial streets in Issaquah, Sammamish, and Redmond. Several intersections adjacent to the trail corridor experience high levels of traffic congestion, especially during peak periods. Approximately 2,000 to 4,000 users are anticipated to use the proposed East Lake Sammamish Master Plan Trail on a peak day, based on user counts from the nearby Sammamish River Trail. Daily recreational use is expected to be lower during inclement weather and shortened daylight hours. However, commuter use is expected to remain fairly constant throughout the year. An alternative transportation corridor is needed to provide a commute option to the local roadways. A survey conducted in May 2005 on the Burke-Gilman/Sammamish River Trail, another well-used trail in King County, indicated that 33 percent of trail users were commuters (Moritz, 2005).

1.2.2 Need for Non-Motorized Recreational Trails

The increase in population has put pressure on existing recreational facilities in the area. Furthermore, the existence of other trails and parks in the area attracts many recreational users and heightens demand for additional facilities suitable for walkers, runners, wheelchair users, bicyclists, in-line skaters, and equestrians of all ages and skill levels. Demand for passive recreational opportunities and access to Lake Sammamish from existing publicly owned property is also increasing. A trail is needed to accommodate the expected range of users in a safe manner.

1.2.3 Need to Provide Links in the Regional Trails System

The Master Plan Trail would also provide critical links in the regional trails system (Figure 1-1 (pg 1-2)). Local trail connections are shown on Figures 3.7-1 (pg 3.7-3) and 3.7-2 (pg 3.7-4) in Section 3.7, Recreation.

Lake Sammamish State Park, at the south end of Lake Sammamish adjacent to Issaquah city limits, is a major recreation destination, and formal and informal paths connect with the proposed trail corridor in this area. The East Plateau Connector Trail begins about 0.25 mile east of the proposed trail corridor along SE 43rd Way. Portions of the East Plateau Connector Trail are yet to be completed. King County is working with Lake Sammamish State Park, the City of Issaquah, and private parties to complete the missing links. Once completed, the East Plateau Connector Trail would provide a connection between the Master Plan Trail and the East Plateau Regional Trail.

Also at the south end, the Master Plan Trail would connect with both the planned and developed local trail system within the City of Issaquah, including the Pickering Trail and the Rainier Multiple Use Trail, which provides a connection with the Issaquah-Preston Regional Trail, the Preston-Snoqualmie Trail, and

the Snoqualmie Valley Trail. The Snoqualmie Valley Trail ultimately connects to the John Wayne Trail/Iron Horse State Park (not mapped on Figure 1-1 (pg 1-2)). The John Wayne Trail traverses the state and provides numerous recreation opportunities through the Mountains to Sound Greenway program.

The 7-mile middle section of the Master Plan Trail is within the City of Sammamish where several east-west trail connections are planned, as well as other local trails identified in the City's current trail planning process.

King County's Marymoor Park is located in Redmond near the north terminus of the Master Plan Trail. Trail users would be able to connect to the regional multi-use Sammamish River Trail at the park. From the Sammamish River Trail, the Burke-Gilman Trail would connect non-equestrian trail users to Bothell, Kenmore, Lake Forest Park, and through Seattle to the terminus of the Burke-Gilman Trail in Ballard. Also from the Sammamish River Trail, trail users would be able to connect to the Tolt Pipeline Trail and the Puget Power Trail. Connections to the Bear Creek Trail and the Bike 520 Trail at Leary Way at the north end are also possible. The partially completed Bike 520 Trail along SR-520 will eventually route users across Lake Washington to Seattle. Equestrian connections include the Sammamish River Trail, Marymoor Park, the Bear Creek Trail, and the Evans Creek Trail and Greenway segments, and Bridle Crest Trail from Marymoor Park east to Bridle Crest State Park.

1.3 Background and History

1.3.1 National and Regional Context

The growing demand for public recreation venues, including trails, has been continually addressed in county and city planning documents for the last three decades. As early as 1971, the *King County Urban Trails Plan* identified a trail on the East Lake Sammamish railroad right of way as a future urban trail corridor (King County, 1971). The East Lake Sammamish Trail has been consistently identified as an important link in the County's regional trail system because it would not only provide recreational opportunities and open space but would also function as an alternative transportation corridor between Issaquah, Sammamish, Redmond, and areas connected through other regional trails.

Following its inclusion in the 1971 King County Urban Trails Plan, the proposed East Lake Sammamish Trail was included in the 1975 King County General Bicycle Plan, which emphasized the County's desire to identify and acquire rail corridors for trail use (King County, 1975). The trail was also specifically included as part of the King County Regional Trail Plan (1992), King County Non-motorized Transportation Plan (1993), King County Comprehensive Plan (1994), and King County Park, Recreation, and Open Space Plan (1996). The trail has also been included in other city and county planning documents including the City of Redmond Parks, Recreation, and Open Space Plan (2004), the City of Issaquah Final Comprehensive Plan (2004), and the City of Sammamish Draft Parks, Recreation and Open Space Comprehensive Plan (2003). These documents identify the proposed East Lake Sammamish Trail as an important recreational facility as well as a transportation corridor.

In 1983 Congress adopted amendments to the National Trail Systems Act (P.L. 90-543, 16 USC 1241 et seq., as amended through P.L. 102-461) to preserve railroad corridors through what has become known as "railbanking." Railbanking is a process that preserves rail corridors for future railroad use, and allows interested trail sponsors the opportunity to negotiate agreements with rail carriers to use these rights of way for trails (16 USC 1247).

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) directed states to plan for bicycling and walking trails as an important element of the transportation system and made funds

available for enhancement activities. ISTEA included in its definition of transportation enhancements preservation of railroad corridors through use as pedestrian and bicycle trails.

A recent survey (May 2005) conducted on the Burke-Gilman Trail indicated that a minimum of 33 percent of the trail users were commuters. Trail use in general has increased since a survey conducted in 2000. Weekend use increased by more than 850 users, and weekday use increased by 1,250 users. The weekday users are likely to be largely commuters (Moritz, 2005).

1.3.2 Corridor Acquisition

In 1996, the BNSF railroad ceased operations along the proposed East Lake Sammamish Trail corridor. The Cascade Land Conservancy (formerly the Land Conservancy of Seattle and King County) purchased the active railroad corridor from BNSF in April 1997 and owned the corridor continuously until September 1998. In 1997, King County and the Land Conservancy requested that the federal Surface Transportation Board (Board) grant interim trail use/railbanking status to this corridor under 16 USC 1247(d). Railbanking is a method by which rail lines proposed for abandonment can be preserved through interim conversion to trail use in accordance with Section 8(d) of the National Trails System Act (16 USC §1247(d) and 49 CFR §1152.29). Once a line is railbanked, abandonment of the rail line is suspended and, accordingly, the corridor is treated as if abandonment has not been completed. Railbanked railroad rights of way are maintained as recreational trails or other approved interim uses. At a future date, if needed, the East Lake Sammamish Trail right of way could revert back to a railway. Action was deferred by the Board until August 1998 when BNSF notified the Board of its intent to act on its abandonment exemption authority and joined the requests for interim trail use of this corridor. The application to railbank the corridor was approved by the Board in August 1998 and a federal Notice of Interim Trail Use was issued (Decision Summary, September 6, 1998). The Board prepared a National Environmental Policy Act (NEPA) Environmental Assessment (EA) prior to approving the railbanking and the Notice of Interim Trail Use for the rail corridor. No adverse impacts were identified from issuing the Notice of Interim Use and the subsequent salvage activity along the railroad corridor.

The Land Conservancy sold the railbanked corridor to King County on September 18, 1998. The County purchased the corridor with the intention of developing it into the East Lake Sammamish Trail. In 1998 the King County Council voted to keep the corridor closed to public use until a plan for an interim trail was submitted and approved by the Council. In August 2000, the King County Council adopted the Interim Use Trail and Resource Protection Plan, which selected the railbed alignment for the trail.

The corridor is 100 to 200 feet wide over 91 percent of the proposed trail length. The Land Conservancy retained the salvage rights and completed salvage of most of the rails, ties, and spikes after the purchase. As part of the salvage operation, gravel and rock were placed on the railbed for erosion and sediment control purposes. Currently, King County has developed the Interim Use Trail in Issaquah and Redmond, and recently received permit approval in Sammamish. This document addresses the use of the corridor for the Master Plan Trail.

1.3.3 Corridor Maintenance and Management

Under its railbanking agreement, King County is responsible for maintaining and managing the rail corridor to preserve the integrity of the former railbed in order to accommodate potential reestablishment of rail service. King County intends to fulfill this obligation by installing and operating a recreational and alternative transportation trail pursuant to the Notice of Interim Trail Use. However, even if King County ultimately develops a trail that is located partially off the rail corridor, the County may be obligated to maintain the entire former rail corridor.

In keeping with these management obligations, King County has initiated a program of restorative maintenance along the East Lake Sammamish Trail corridor. Since 1999, King County has repaired or restored nearly 40 drainage systems and culverts along the trail corridor. Approximately 50 more maintenance projects were completed in are planned for 2004. The County regularly mows, removes litter, replaces deteriorated driveway crossings, installs signage, and removes hazardous trees. In addition, County maintenance staff are often required to remove household waste, yard clippings, and construction debris left by others in ditches and elsewhere in the public right of way.

Pursuant to King County Code (KCC) 14.30, King County maintains a special use permit system to authorize the private use of County-owned property, including the East Lake Sammamish Trail corridor, consistent with policies outlined in current administrative guidelines. King County has issued special use permits recognizing established and historically used trail corridor crossings for access as well as utilities, new trail corridor crossings or new users of existing crossings. The many vehicular access crossings permitted along the corridor are hereafter referred to in this EIS as "residential driveways." Other non-trail-related uses of the County-owned corridor include:

- 1. Temporary or permanent improvements or alterations to the County-owned corridor that would ultimately enhance the trail or protect natural resources. Examples are installation/donation of benches, signs, and vegetation.
- 2. Long-term or permanent alterations to the County-owned corridor not related to trail use or natural resource protection. Examples are retaining walls and docks.
- 3. Short-term or temporary use or alterations to the County-owned corridor not related to trail use or natural resource protection. Examples are removal, installation, or alteration of vegetation, temporary structures, and temporary roads.

These permits are typically issued for a 5-year period, except for crossing permits (both utility and access) which are issued for a 10-year term. King County reserves the right to revoke a special use permit.

1.3.4 Phased Development of the Trail

In 1999, King County held three community meetings to discuss trail planning and formed a Citizen Advisory Group (CAG). A number of the decisions that needed to be made for the long-term, permanent trail were not yet ready for evaluation or decision (e.g., final alignment of the trail, ultimate users of the trail, trail configuration and width, and trail amenities and support facilities). Because such final trail decisions are complex, controversial, and require further public process and discussion in order to provide meaningful evaluations, the County developed a plan to implement the Master Plan Trail in phases. A phased plan would also be more responsive to public input and concerns regarding potential impacts. The first phase was the Interim Use Trail; the next phase is the Master Plan Trail. These phases are discussed below.

1.3.4.1 Interim Use Trail Phase

The first phase of the plan was to allow public use of the railbanked trail corridor as an Interim Use Trail. Along with allowing public use of the railbanked trail corridor, the interim use phase was designed to protect natural resources and human safety and fulfill railbanking requirements until the planning for a long-term, permanent trail could be completed and the permanent trail developed. The *East Lake Sammamish Trail Interim Use and Resource Protection Plan* (King County, 1999) encompassed the planning for this initial phase. The Interim Use Trail is a gravel trail, located on the former railbed, which varies in width from 8 to 12 feet wide.

Environmental evaluation and documentation of the Interim Use Trail was prepared in compliance with the State and National Environmental Policy Acts (SEPA and NEPA). In 2000, King County published a final SEPA environmental impact statement (EIS) for the *East Lake Sammamish Trail Interim Use and Resource Protection Plan* and selected the railbed alignment for implementation (King County, 2000). The East Lake Sammamish Trail Project was partly funded with Transportation Equity Act for the 21st Century (TEA-21) funds, which are administered by the FHWA. The proposed use of these federal funds triggered the requirement for NEPA review. Therefore, in 2002 FHWA and WSDOT published a NEPA EA for the *Interim Use and Resource Protection Plan* and subsequently issued a Finding of No Significant Impact (FONSI).

In order to meaningfully evaluate impacts of the Interim Use Trail, the SEPA and NEPA documents evaluated the first phase of the project, through 2015. In 2015, authorization for the trail would expire in the absence of additional environmental review.

In addition to completing SEPA and NEPA environmental documentation, development of the Interim Use Trail required obtaining permits from local jurisdictions along the trail corridor. All permits necessary to construct the Interim Use Trail within the Cities of Redmond and Issaquah were obtained, and construction of the Interim Use Trail in these areas was completed in early 2004. Permits were recently obtained for construction of the remaining segment of Interim Use Trail within the City of Sammamish. Construction of the Interim Use Trail was completed and open to the public in March 2006.

Construction of the Interim Use Trail involved various improvements to the existing railbed, such as removing the remaining rail ties; adding gravel to the surface of the railbed; installing fencing, signage, and litter receptacles; and repairing and maintaining existing ditches and culverts.

1.3.4.2 Master Plan Trail Phase

This EIS addresses the alternatives for the next phase of the project: development of a permanent long-term Master Plan Trail (refer to section 1.3.2 for a discussion of railbanking). As described further in Chapter 2, the Master Plan Trail would be a multi-use trail, with both paved and soft surfaces to accommodate pedestrians, non-motorized wheeled vehicles, and equestrians. The Master Plan Trail would be located in the same general corridor as the Interim Use Trail. For planning and evaluation purposes, the existing condition in the EIS is assumed to be that of the fully developed Interim Use Trail.

The Master Plan Trail would likely be constructed in segments due to the length of the trail and the multiple jurisdictions that would be affected. Because of local permitting requirements, the segments would likely be defined at least in part by city boundaries. These segments could be constructed simultaneously or independently, allowing for the flexibility to accelerate or delay the overall construction schedule.

1.3.4.3 Delayed Implementation

Should the King County council decide to delay implementation of the Master Plan Trail, the Interim Use Trail would remain in operation through 2015. No additional environmental impacts would result from this alternative. This alternative is described throughout the document as the No Action Alternative.

1.3.5 Terminology Used throughout the Document

The term "corridor" is used to describe the former railroad right of way. The term "railbed" is used in instances where physical studies or analyses were conducted prior to the construction of the Interim Use Trail. The "Interim Use Trail" is a gravel-surface trail that was completed in 2006 along the railbed corridor. The "Master Plan Trail" is used to describe the long-term, paved trail in the project area. The

"Corridor Alternative" refers to the preferred Master Plan Trail alternative that would be constructed in the general location of the Interim Use Trail.				

Chapter 2 Alternatives

2.1 Planning Process

2.1.1 Environmental Documentation and Procedures

The East Lake Sammamish Trail is partially funded by the federal Transportation Efficiency Act (TEA-21) (see Section 1.3.4, Phased Development of the Trail, in Chapter 1). Because of the federal funding, the environmental impacts of the project must be evaluated under state and federal laws. King County and the Federal Highway Administration (FHWA) are preparing the Environmental Impact Statement (EIS) for the Master Plan Trail in compliance with both the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA). The FHWA and King County are preparing a combined NEPA/SEPA EIS for the project.

2.1.2 Summary of Scoping

Public, tribal, and agency scoping regarding this permanent long-term Master Plan Trail has been occurring over several years as part of this combined NEPA/SEPA EIS, as described below.

- In early 2000, King County began a series of five neighborhood workshops with adjacent property owners. Through roundtable discussions and brainstorming, citizens identified issues, concerns, and ideas for the East Lake Sammamish Trail Master Plan.
- In spring 2000, King County conducted a user group survey and met with several equestrian and bicycle user groups to collect additional ideas and concerns.
- In November 2000, a public scoping meeting was advertised and held in accordance with SEPA requirements to present the input collected to date and to receive comment. Nearly 80 people attended the meeting, and over 150 people submitted comments.
- In January 2001, FHWA published in the Federal Register a Notice of Intent to prepare (in conjunction with King County) a joint NEPA/SEPA EIS for the proposed East Lake Sammamish Trail Master Plan.
- Following the FHWA notice, a second public scoping meeting was held in February 2001. Over 100 people attended. The alternatives presented at the February meeting showed slightly refined trail alignments, reflecting the comments received at the November scoping meeting.
- An agency scoping meeting was held with state, federal, and local agencies in May 2001 to identify relevant agency concerns and requirements.

During this time, the Citizen Advisory Group (CAG) also met periodically to provide input on the planning process. Comments received as a result of scoping and other public and agency outreach helped the County identify alternatives to be considered for the project, as well as areas of potential concern. Summaries of the two public scoping meetings (Fall 2000 and February 2001) are included in *Final Summary of Screening Criteria*, *East Lake Sammamish Master Plan Trail* (King County, 2004). Additional information about public and agency coordination is included in Chapter 5.

2.1.3 Interdisciplinary Team

In early 2002, WSDOT project representatives recommended that King County convene an Interdisciplinary Team (IDT) composed of representatives of a variety of agencies with different areas of expertise. See Section 5.3.3, Interdisciplinary Team, for additional information on the IDT process.

The nine-person IDT convened in June and July 2002. The IDT received a project overview, including the results of the extensive public scoping process and public comments. The IDT provided suggestions for revising the draft purpose and need for the project and assisted the County in screening project alternatives. Based on the project purpose and need, the IDT helped identify criteria appropriate for screening the alternatives for inclusion in the EIS. This process ultimately resulted in three screening criteria:

- consistency with local and regional plans;
- consistency with design guidelines; and
- linkage to regional trails and bike lanes.

Before applying the screening criteria to each of the alternatives identified in Section 2.3, Overview of Project Alternatives, the IDT was offered the opportunity to add alternatives to the preliminary list. No additional alternatives were identified. The process undertaken by the IDT is described in more detail in *Final Summary of Screening Criteria, East Lake Sammamish Master Plan Trail* (King County, 2004). The results of the screening process are discussed in Sections 2.4, Alternatives Considered but Rejected, and 2.5, Alternatives Selected for Further Study.

2.1.4 Project Termini

As discussed in Chapter 1, Purpose and Need, the Master Plan Trail is proposed for the east side of Lake Sammamish. The southern terminus of the trail is at the intersection of the railbanked corridor with Gilman Boulevard in the City of Issaquah. The northern terminus of the trail connects with the Bear Creek Trail in the City of Redmond. Refer to Section 1.2, Need for the Project, in Chapter 1 for further discussion of the potential trail connections and system linkages.

As stated in Chapter 1 (Section 1.1, Purpose of the Project, and Section 1.2, Need for the Project), the purpose of the Master Plan Trail is to provide an alternative mode of transportation and recreation opportunities in the East Lake Sammamish area and to provide connections to other regional trails. The termini of the Master Plan Trail are logical because the trail would connect to the Bear Creek Trail to the north and to the Pickering Trail and south to Gilman Boulevard. The Master Plan Trail would also connect to major employment and retail destinations in the area, and provide a connection between two major parks, Lake Sammamish State Park on the south end of the lake and King County's Marymoor Park on the north.

2.2 Overview of Project Area

The East Lake Sammamish area is a rapidly urbanizing area located east of Seattle. The Cities of Redmond and Issaquah were incorporated in 1912 and 1892, respectively (Issaquah was originally Gilman). Both cities have increased rapidly in population growth with both residential and business development. Both have annexed large areas in recent years and have plans for future annexations in their Urban Growth Areas. The City of Sammamish was incorporated in 1999 from lands that were formerly unincorporated King County. Numerous housing developments are proposed for all three cities.

The general boundaries of the East Lake Sammamish Trail Master Plan are Gilman Boulevard on the south, and East Lake Sammamish Parkway on the east. At the southern end of the proposed trail, Issaquah Creek is the western boundary. Where Issaquah Creek flows into Lake Sammamish, the lake becomes the western boundary of the project area. At the northern end of Lake Sammamish, the western boundary of the project area becomes the Marymoor Park boundary, and where East Lake Sammamish Parkway NE intersects Redmond Way, the eastern boundary of the project area becomes Redmond Way. Refer to Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7) for a depiction of the trail alignment. For purposes of this EIS, field research and analysis were primarily limited to the rights of way for adjacent roads and the railbanked right of way acquired by King County (see Section 1.3.2, Corridor Acquisition). The railbanked right of way is 100 to 200 feet wide over 91 percent of the trail length. Specific study areas for each discipline studied are described in the appropriate sections of Chapter 3.

2.3 Overview of Project Alternatives

The following eight preliminary alternatives, including a No Action Alternative, were identified during scoping. Of these, the *Rundle/Haro Plan*, the LID Alternative, and the No Trail Alternative were subsequently rejected from further consideration for reasons explained in Section 2.4, Alternatives Considered but Rejected. The remaining five alternatives, described in Section 2.5, Alternatives Selected for Further Study, have been carried forward for evaluation in this EIS.

- LID Alternative (not carried forward)
- Rundle/Haro Plan (not carried forward)
- Corridor Alternative
- East A Alternative
- East B Alternative
- Continuation of Interim Use Trail Alternative
- No Action Alternative
- No Trail Alternative (not carried forward)

2.4 Alternatives Considered but Rejected

Described below are the alternatives that were identified during the scoping process but have been rejected from further consideration.

2.4.1 LID Alternative

Under the Local Improved District (LID) Alternative, a sidewalk or sidewalks, combined with bicycle lanes, would be utilized along East Lake Sammamish Parkway in lieu of a multi-use trail. This alternative was proposed during the public involvement process by citizens, who also submitted the petition to the City of Sammamish regarding this alternative. It would apply only to a portion of the trail within the northern 2.5 miles of the City of Sammamish, between 187th Avenue NE and Inglewood Hill Road.

Per guidelines of the American Association of State Highway and Transportation Officials (AASHTO), the proposed East Lake Sammamish Trail as described in the project purpose and need would be a "shared use path." A shared use path is a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right of way or within an independent right of way. Shared use paths may be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users (AASHTO, 1999).

By contrast, AASHTO (1999) describes a "sidewalk" as the portion of a street or highway right of way designed for the preferential or exclusive use by pedestrians. Per AASHTO, utilizing a sidewalk as a shared use path is unsatisfactory because (1) sidewalks are typically designed for pedestrian speed and maneuverability and are not safe for higher speed uses (e.g., skates, bicycles) or multiple, potentially conflicting uses; (2) sidewalks often include fixed obstacles such as fire hydrants, utility poles, and sign posts; and (3) sidewalks are typically too narrow to accommodate side-by-side use, passing, or two-way use. AASHTO (1999) states, "it is important to recognize that the development of extremely wide sidewalks does not necessarily add to the safety of sidewalk bicycle travel. Wide sidewalks might encourage higher speed bicycle use and can increase potential for conflicts with motor vehicles at intersections, as well as with pedestrians and fixed objects."

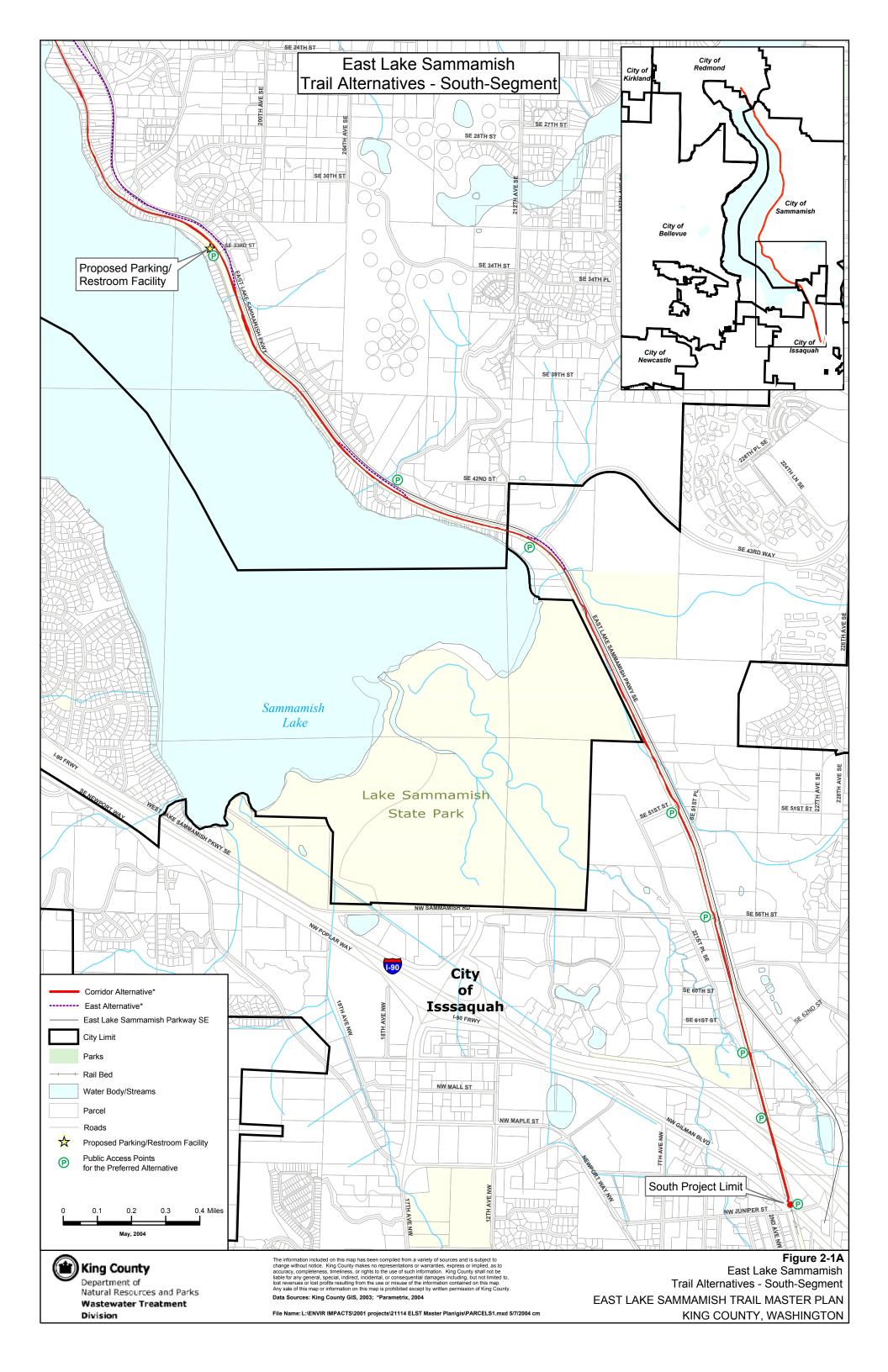
The LID Alternative does not meet the project purpose and need because, by design, a sidewalk is not intended to safely accommodate a wide variety of uses. Furthermore, the LID as proposed by citizens encompasses only a segment of the total corridor between Issaquah and Redmond, and fails to make several of the trail system linkages described in Section 1.2.3, Need to Provide Links in the Regional Trail System. Therefore, this alternative is not evaluated in the EIS.

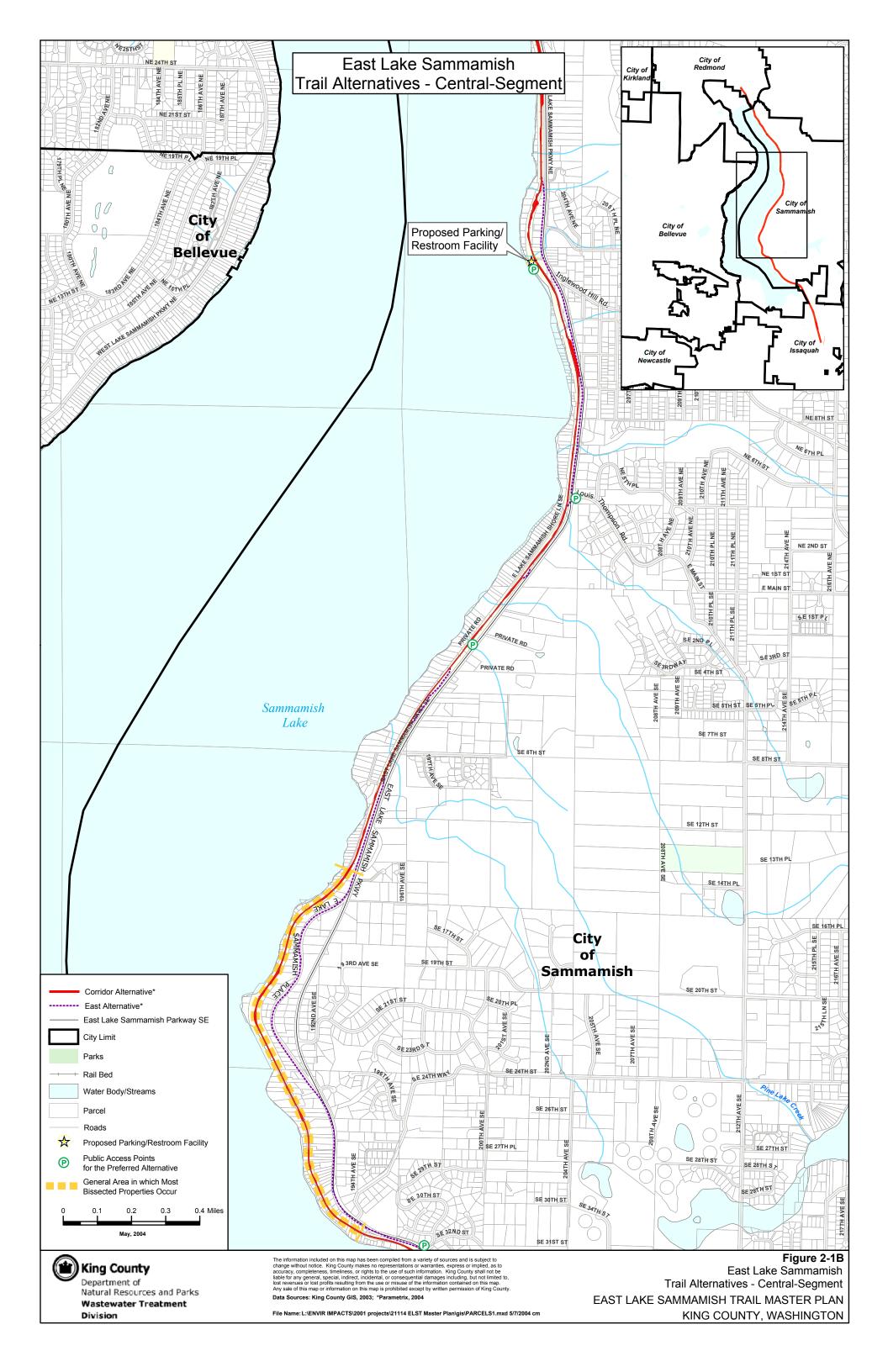
2.4.2 Rundle/Haro Plan

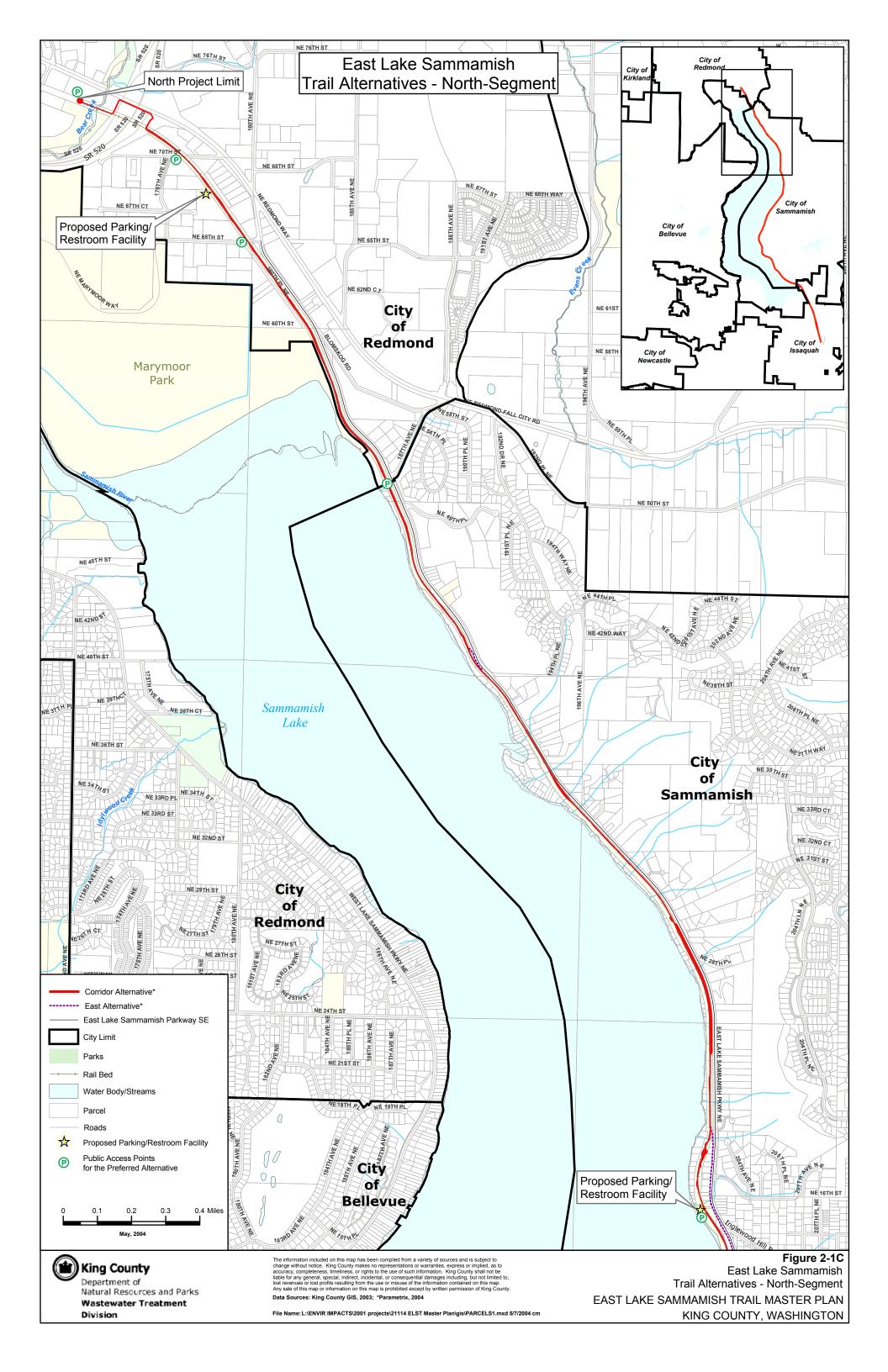
The *Rundle/Haro Plan* is a proposed alignment and crossing concept submitted by several citizens during the scoping process. The trail would leave the rail corridor in some areas and route between the Interim Use Trail and East Lake Sammamish Parkway, adjacent to the Parkway, or adjacent to East Lake Sammamish Place SE. The concept is to bring the trail up to the road right of way at as many driveway intersections as possible, and to avoid environmentally sensitive areas and 1.7 miles of divided properties between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE. The *Rundle/Haro Plan* assumes that high-speed bicycles would remain in the bike lanes on the roadway and would not utilize the trail. Where the trail is adjacent to the Parkway, trail use would be separated from roadway use with a planted divider in most places. The Rundle/Haro proposal does not address equestrian use, parking, or restrooms.

The *Rundle/Haro Plan*, as proposed by the citizens, is depicted on a set of half-size plan view sheets, supplemented with a number of site-specific cross sections of the alignment. The plan views are not engineered, but use a color-coded line drawn on a base map to communicate the general location of the alignment. The cross sections provide more insight into the operational concepts proposed by the citizens. These concepts include:

- A paved multi-use trail, varying from 10 to 12 feet in width, intermittently bounded by one or two 2-foot shoulders.
- Numerous improvements to East Lake Sammamish Parkway, both in locations where the trail is
 located immediately adjacent and in locations where it is not located adjacent to the proposed
 trail. These improvements vary but include sidewalk, curb and gutter, widened bicycle lanes,
 center turn lanes, additional signalization, restriping, and in some places relocating East Lake
 Sammamish Parkway.







The plan sheets of the submitted proposed alignment and conceptual crossing plan note,

These drawings are intended to promote ideas for final trail alignment. Final roadway and trail design elements are to be designed and approved by the appropriate agency. Cross sections are field measured and are not survey accurate.

NEPA regulations require: "All reasonable alternatives under consideration (including the no-build) need to be developed to a comparable level of detail in the draft EIS so that their comparative merits may be evaluated (40 CFR 1502.14(b) and (d))." In evaluating whether or not the *Rundle/Haro Plan* is a reasonable alternative, as required under NEPA, the screening process focused on the project purpose and need. As described in Chapter 1, the purpose of the proposed project is to design and construct an alternative non-motorized transportation corridor and multi-use recreational trail along the east side of Lake Sammamish and provide links to the regional trails system. As described in Section 2.1.3, Interdisciplinary Team, three criteria were developed to screen the alternatives. The *Rundle/Haro Plan*, as submitted by the citizens, is not a reasonable alternative because of (1) the roadway improvements that are integral to the alternative, and (2) the failure to safely accommodate the variety of users because it fails to meet accepted design guidelines for a multi-use trail.

Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint. The roadway improvements that are an integral part of the *Rundle/Haro Plan* are (1) a far greater undertaking than warranted for an alternative non-motorized transportation corridor and multi-use recreational trail, and (2) inconsistent with the local jurisdiction's plans for the roadway. For example, in one cross section, the *Rundle/Haro Plan* depicts shifting East Lake Sammamish Parkway 17 feet to the east to avoid and reduce impacts to the west. However, to accommodate this feature, the Parkway would have to be redesigned for horizontal geometry and drainage to meet roadway standards. In other words, East Lake Sammamish Parkway would have to be realigned for some distance both north and south of the location of the actual 17-foot shift. Lesser shifts are proposed in over two dozen other locations. A large extent of the Parkway would have to be redesigned to accommodate the proposal. Such an effort is not economically feasible for the implementation of a non-motorized facility.

The *Rundle/Haro Plan* is infeasible because it is inconsistent with direction provided by the City of Sammamish with regard to future improvements for the Parkway¹. If an alignment along the local roadways were selected, King County would need to enter into an agreement with the City of Sammamish regarding the use of the road right of way for a non-motorized facility. The location of the trail with respect to the roadway would have to accommodate the City's future plans for the roadway. As proposed, the *Rundle/Haro Plan* is inconsistent with the City's plans for its roadway.

The *Rundle/Haro Plan*, as depicted by the citizens, also fails to consistently meet design guidelines, including those pertaining to horizontal geometry, accessibility, minimum width, and separation (King County, 2004).

Therefore, the IDT recommended that the *Rundle/Haro Plan* be eliminated from consideration in the EIS due to its conceptual nature. Instead, the IDT recommended that an adapted version of the plan be carried forward by translating the concepts of the *Rundle/Haro Plan* into a trail design using applicable design guidelines. While the *Rundle/Haro Plan* as presented by the citizens has been rejected as an alternative in

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¹ John Cunninghan (IDT participant and Director of Public Works for Sammamish, 2003) directed that the trail cross sections be applied 23 feet west of the existing center paint stripe on East Lake Sammamish Parkway. This would accommodate potential future improvements in accordance with the City's minor arterial roadway standard detail.

the EIS, King County has developed the East Alternatives, which incorporate the concepts presented in the *Rundle/Haro Plan*, eliminate as many components as possible that are not reasonable or feasible, comply with the direction provided by the City of Sammamish, and meet design guidelines and ADA accessibility requirements for multiple user groups at varying skill levels. The East Alternatives are discussed in detail in Section 2.5, Alternatives Selected for Further Study. This process is further documented in the *Final Summary of Screening Criteria*, *East Lake Sammamish Master Plan Trail* (King County, 2004).

2.4.3 No Trail Alternative

The No Trail Alternative would result in the immediate decommissioning of the Interim Use Trail. This alternative was considered due to the public's concern that the Interim Use and Master Plan Trails be considered distinct projects. The feeling of the public was that an alternative for the Master Plan Trail should be considered that would result in no trail at all, which would have been the result of the required No Action Alternative for the Master Plan Trail, if not for the existence of the Interim Use Trail. Given this concern, there is an apparent public desire that an alternative be considered in which the Interim Use Trail would be decommissioned immediately, rather than in 2015 when the Interim Use Trail expires. However, the No Trail Alternative fails to meet the project purpose and need, because it does not provide for an alternative transportation corridor or non-motorized recreational trail in the Lake Sammamish area. Furthermore, the No Trail Alternative would be inconsistent with applicable guidelines arising from one of the project's funding sources.

The East Lake Sammamish Master Plan Trail project is a transportation and recreation project with partial funding from the federal Transportation Equity Act (TEA-21). Section 4(f) of the federal Department of Transportation Act of 1966 (23 CFR 771.135; 49 USC 303) directs that highway projects shall not "use" any "publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by such national, state, or local officials having jurisdiction thereof, or any land from an historic site of national, state, or local significance. "Use" of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility or substantially impairs recreational activities. Given that the No Trail Alternative would eliminate the Interim Use Trail, which has been approved through 2015, it is inconsistent with Section 4(f).

Therefore, since the No Trail Alternative fails to meet the project purpose and need, and would result in a use under Section 4(f), this alternative is not being considered in this document.

2.5 Alternatives Selected for Further Study

When the IDT applied the screening criteria to the list of potential alternatives, only the Corridor Alternative and the East Alternatives truly satisfied the criteria. However, consideration of a No Action Alternative is required under both SEPA and NEPA. The Interim Use Trail is the existing condition, and thus the No Action Alternative would be to leave the Interim Use Trail in place until its expiration in 2015 or until additional environmental review is conducted prior to 2015.

In addition, although the alternative failed to meet the screening criteria, the IDT unanimously recommended considering the Continuation of the Interim Use Trail for consideration in the EIS for the following reasons:

• Continuation of the Interim Use Trail Alternative: Members of the public, CAG, and IDT expressed concerns over the potential impacts associated with the Corridor Alternative and the

East Alternatives, and the lack of a potentially less environmentally damaging alternative. The Continuation of the Interim Use Trail beyond 2015 represents such an alternative.

As a result of the alternatives development process, five alternatives are considered in this EIS:

- Corridor Alternative.
- East A Alternative (with separated pedestrian/equestrian use on the Interim Use Trail),
- East B Alternative (with closure of portions of the Interim Use Trail and no separated pedestrian/equestrian use in these areas),
- Continuation of the Interim Use Trail Alternative, and
- No Action Alternative.

These alternatives are described below. Table 2-1 provides a summary of the features associated with each alternative. Trail alternatives are shown in Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7). Figure 2-1D (pg 2-15) provides a depiction of where the users would be on the various trail segments associated with the Corridor and East Alternatives.

Table 2-1. Summary of Features of Alternatives, East Lake Sammamish Master Plan Trail

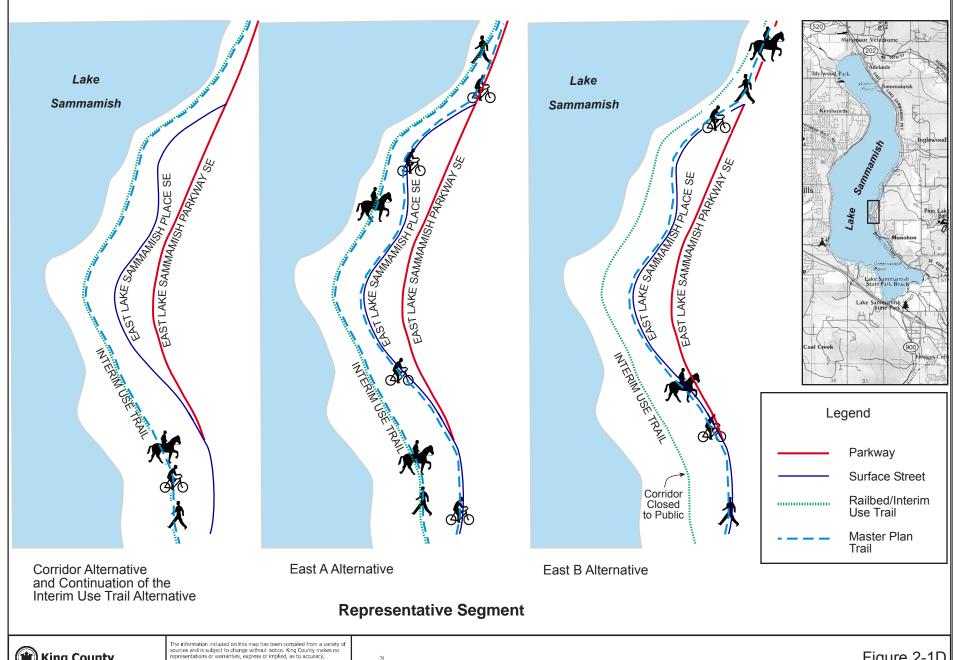
FEATURE	CORRIDOR	East A	EAST B	CONTINUATION OF INTERIM USE TRAIL	No Action
Fate of Interim Use Trail	Interim Use Trail would be replaced by Master Plan Trail.	Interim Use Trail would be replaced by Master Plan Trail.	Interim Use Trail would be replaced by Master Plan Trail.	Interim Use Trail would continue beyond 2015 expiration date.	Interim Use Trail would operate through 2015; further use beyond that date would require additional environmental review in or prior to 2015.
Trail location	Paved and soft-surface portions of trail located mostly along existing Interim Use Trail except in areas where leaving Interim Use Trail would improve trail safety.	Paved portion of trail would leave Interim Use Trail and transition to shoulder of East Lake Sammamish Parkway SE and East Lake Sammamish Place at driveway/public roadway intersections and other sensitive areas. Soft-surface portion of trail would continue along Interim Use Trail in these areas.	Same as East Alt. A, but Interim Use Trail would be closed to public use in areas where trail transitions to roadway shoulder.	Trail located entirely along Interim Use Trail. May include 1500-ft extension of Interim Use Trail north from NE 70th Street over Bear Creek.	Trail located entirely along Interim Use Trail.
Intended trail users	Pedestrians Non-motorized wheeled vehicles, including wheel chairs Equestrians (in Redmond segment)	Pedestrians Non-motorized wheeled vehicles, including wheel chairs Equestrians (in Redmond segment) Equestrians and pedestrians could continue on Interim Use Trail in areas where paved portion of trail transitions to roadway shoulder. High-speed bicycles would transition to paved trail along the roadway.	Pedestrians Non-motorized wheeled vehicles, including wheel chairs Equestrians (in Redmond segment) All trail users would transition to roadway shoulder in areas where Interim Use Trail is closed.	Pedestrians Non-motorized wheeled vehicles Equestrians (not currently allowed on Interim Use Trail but would be allowed in Redmond segmenteonsidered) The gravel trail surface may discourage some wheeled uses, including wheel chairs.	Pedestrians Non-motorized wheeled vehicles The gravel trail surface may discourage some wheeled uses, including wheel chairs.

Table 2-1. Summary of Features of Alternatives, East Lake Sammamish Master Plan Trail (continued)

FEATURE	CORRIDOR	East A	EAST B	CONTINUATION OF INTERIM USE TRAIL	No Action
Trail width	Varies from 18 to 27 feet wide. Minimum evaluated paved width is 12 feet; each shoulder 2 feet. Wider configurations may occur depending on results of environmental review and Draft EIS comments.	Same as Corridor Alternative where trail is between the Interim Use Trail and the roadway. Portions along roadway would be 18 to 21 feet wide.	Same as East Alt. A, but Interim Use Trail would be closed in areas where trail transitions to roadway shoulder.	8 to 12 feet wide without shoulders.	8 to 12 feet wide without shoulders.
Trail length	City of Redmond: 1.57 miles City of Sammamish: 7.23 miles City of Issaquah: 2.20 miles Total length: 11.00 miles	City of Redmond: 1.57 mile City of Sammamish: 7.21 miles City of Issaquah: 2.20 miles Total length: 10.98 miles	City of Redmond: 1.57 mile City of Sammamish: 7.21 miles City of Issaquah: 2.20 miles Total length: 10.98 miles	City of Redmond: 1.59 miles City of Sammamish: 7.21 miles City of Issaquah: 2.19 miles Total length: 10.99 miles	Through 2015: City of Redmond: 1.31 miles City of Sammamish: 7.21 miles City of Issaquah: 2.19 miles Total length: 10.7 miles Following 2015, 0 mile of trail.
Trail surface materials	Multi-use: paved Shoulders: gravel Separated: gravel	Multi-use: paved Shoulders: gravel Separated: gravel	Multi-use: paved Shoulders: gravel Separated: gravel	Multi-use: gravel Shoulders: none Separated: none	Multi-use: gravel Shoulders: none Separated: none
Fencing	Total fencing required: 60,800 linear feet. Types and approximate locations similar to fencing on Interim Use Trail, but some fencing would have to be removed and replaced due to the widened trail area. Additional fencing placed where retaining walls present hazards to users	Total fencing required: 69,500 linear feet. Where multi-use portion of trail leaves the Interim Use Trail, but pedestrian/equestrian use continues on Interim Use Trail, the existing split-rail and chain-link fence on the Interim Use Trail would likely remain in place. Additional fencing would be required for the multi-use portion of trail.	Total fencing required: 62,600 linear feet. Same as East Alternative A. However, where the trail leaves the Interim Use Trail, existing chain-link fence could be removed and the holes would be backfilled. Other fencing types would also likely be left in place.	Total fencing required: 56,800 linear feet. Existing fencing would remain in place and new fencing would be added north of NE 70th Street.	Total fencing required: 55,300 linear feet. Fencing for Interim Use Trail would be left in place through 2015.

Table 2-1. Summary of Features of Alternatives, East Lake Sammamish Master Plan Trail (continued)

FEATURE	Corridor	EAST A	EAST B	CONTINUATION OF INTERIM USE TRAIL	No Action
Retaining walls	<5 ft high: 21,200 lf 5-10 ft high: 4,100 lf >10 ft high: 700 lf	<5 ft high: 12,500 lf 5-10 ft high: 10,100 lf >10 ft high: 3,200 lf	<5 ft high: 12,500 lf 5-10 ft high: 10,100 lf >10 ft high: 3,200 lf	<5 ft high: 0 lf 5-10 ft high: 0 lf >10 ft high: 0 lf	<5 ft high: 0 lf 5-10 ft high: 0 lf >10 ft high: 0 lf
Parking	Three new parking areas proposed (at approximately East Lake Sammamish Parkway SE/SE 33 rd Street, East Lake Sammamish Parkway SE/Inglewood Hill Road, and between NE 65 th and NE 70 th Streets in Redmond). Existing parking areas could potentially be used, including Marymoor Park, areas along NE 65th Street and NE 70th Street, Lake Sammamish State Park, King County District Court (Issaquah) and Microsoft campus.	Same as Corridor Alternative.	Same as Corridor Alternative.	Same as Corridor Alternative.	No new parking facilities proposed.
Restrooms	Two new restroom facilities are proposed in Sammamish (at approximately East Lake Sammamish Parkway SE/SE 33 rd Street, and East Lake Sammamish Parkway SE/Inglewood Hill Road). Existing restrooms at Marymoor Park and Lake Sammamish State Park could be utilized.	Same as Corridor Alternative.	Same as Corridor Alternative.	Same as Corridor Alternative.	No new restroom facilities proposed.





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SOURCES:



Figure 2-1D Representative Segment of Alternative Alignments by Use East Lake Sammamish Trail Master Plan King County, Washington

2.5.1 Corridor Alternative

Under the Corridor Alternative, a Master Plan the Ttrail would be located within the former railroad right of way, hereafter referred to as the "corridor." The majority of the trail would encompass the existing Interim Use Trail. The trail would accommodate pedestrian and, wheeled uses, on paved and adjacent or separated soft surfaces. Equestrian use would be allowed in the Redmond segment only. This alternative includes parking and restrooms.

Under current guidelines, the ideal width of the trail to safely accommodate multiple uses is 27 feet. This includes a 3-foot clear zone, 4-foot pedestrian/equestrian trail, 3-foot vegetated buffer, two 2-foot gravel shoulders, 12-foot paved trail, and 1-foot vegetated clear zone (refer to Figure 2-2 (pg 2-17)). Fences and/or retaining walls would be located immediately adjacent to each side of the trail where necessary. In a few instances, the separation between the paved trail and the pedestrian/equestrian trail would increase to take advantage of existing topography (refer to Figure 2-3 (pg 2-18)).

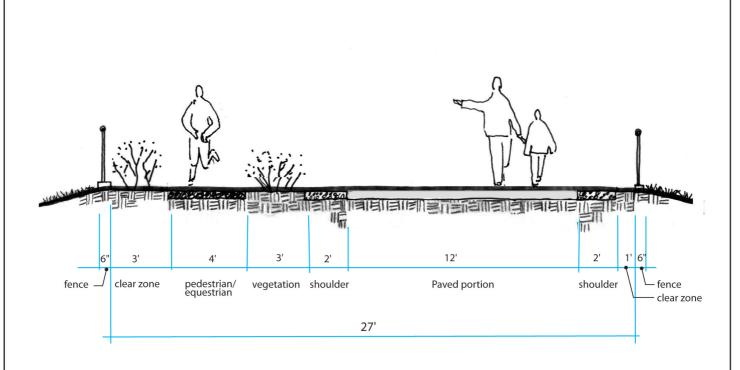
Based on the preliminary design concept, the proposed trail would narrow to 21 feet, 19 feet, or 18 feet in some areas to avoid existing structures, preserve access to adjacent properties, avoid and minimize impacts to sensitive areas, and increase safety at vehicle crossings (refer to Figures 2-4 (pg 2-19), 2-5 (pg 2-20), and 2-6 (pg 2-21)). The narrowing would be accomplished by combining uses and/or eliminating trail buffer. Specifically, a single contiguous soft shoulder on the west side of the trail, intended for two-way pedestrian/equestrian use, would narrow from 5 feet, to 3 feet, to 2 feet, respectively. However, the width of the paved portion of the trail would be 12 feet, with each shoulder 2 feet. The safety concerns regarding equestrian use on a narrow shoulder are considered in Section 3.7, Recreation of this EIS.

In two locations in the corridor, adjacent homeowners currently use the corridor for parking. These areas are (1) a 500-foot segment of the trail between NE 7th Court and Inglewood Hill Road, and (2) a 2,100-foot segment of the trail between NE 18th Place and NE 30th Court. For these two locations, safety and access are improved by providing parking to those homeowners along the west side of the corridor with the trail on the east side. Figures 2-7 (pg 2-22) and 2-8 (pg 2-23) provide conceptual cross section for these locations.

Figures 2-1A (pg 2-5), B (pg 2-6), and C (pg 2-7) show the approximate location of the parking and restroom facilities. Plans depicting the alignment of this alternative and the more specific location of parking and restroom facilities are provided in Volume II of this EIS. It should be noted that these plans are preliminary, and the base map is largely based on aerial photography not ground survey. Detailed survey and design of the selected alternative would be undertaken following completion of the environmental review process.

2.5.2 East Alternatives

The original *Rundle/Haro Plan* has been adapted into the East Alternatives by translating the concepts into a trail design using applicable trail guidelines and regulations. The process undertaken to develop the East Alternatives is described in detail in *Final Summary of Screening Criteria, East Lake Sammamish Master Plan Trail* (King County, 2004). During the planning process, the East Alternatives have also been known as the Adapted *Rundle/Haro Plan* Alternative.





Corridor and East Alternatives

LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Notes

This section applies to the East Alternatives where they occur on the railbed. Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



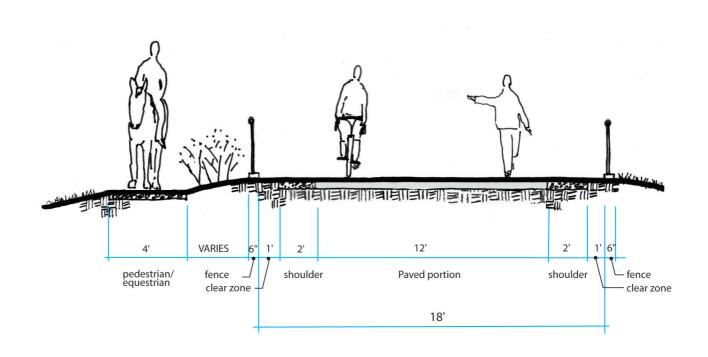
King County

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FIGURE 2-2 IDEAL TRAIL WIDTH, CROSS SECTION A EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





Corridor and East Alternatives

LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL

PAVEMENT

Notes

This section applies to the East Alternatives where they occur on the railbed. Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

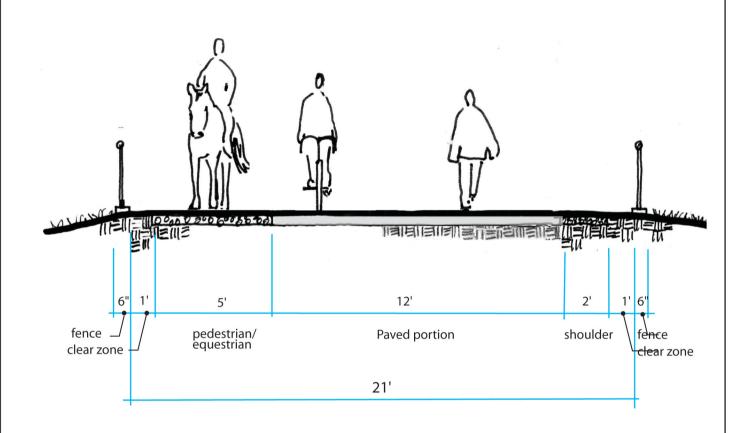


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FIGURE 2-3 VARIED WIDTH DUE TO TOPOGRAPHY, CROSS SECTION B EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Notes

This section applies to the East Alternatives where they occur on the railbed.

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

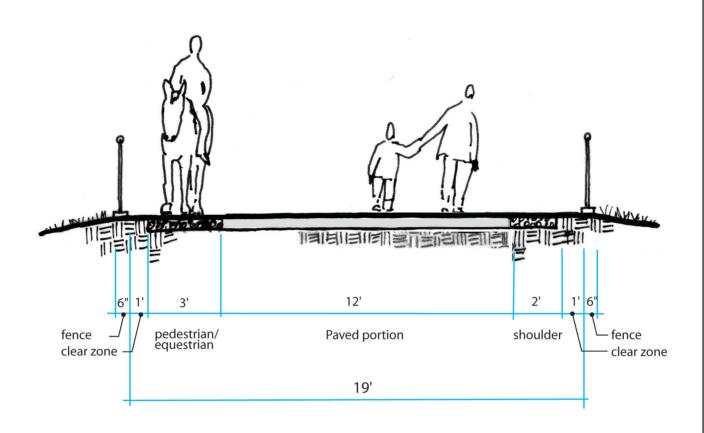


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FIGURE 2-4
NARROWED TRAIL WIDTH, CROSS SECTION C
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



PAVEMENT

Notes

This section applies to the East Alternatives where they occur on the railbed.
The safety concerns regarding equestrian use of a relatively narrow shoulder are considered in this EIS.

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

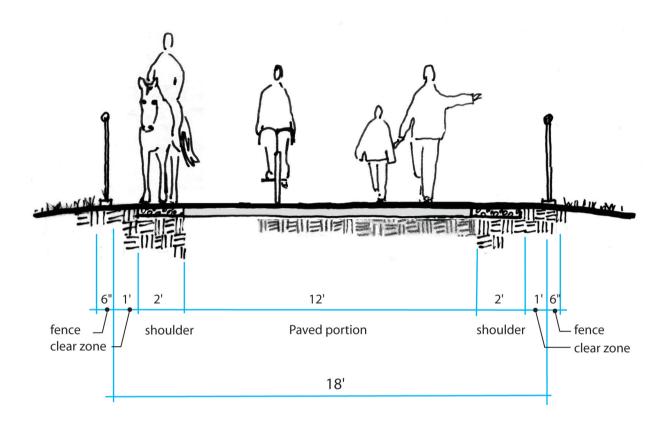


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FIGURE 2-5 NARROWED TRAIL WIDTH, CROSS SECTION D EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Notes

This section applies to the East Alternatives where they occur on the railbed.
The safety concerns regarding equestrian use of a relatively narrow shoulder are considered in this EIS.

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

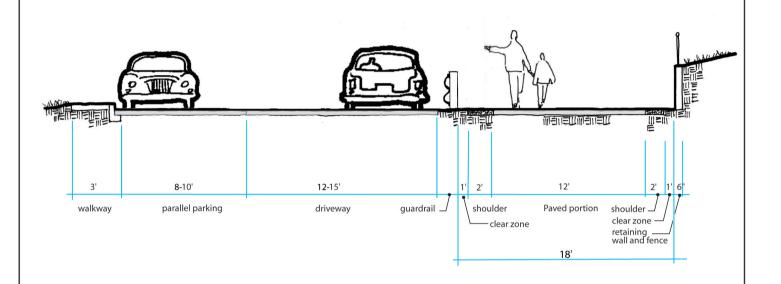


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FIGURE 2-6
NARROWED TRAIL WIDTH, CROSS SECTION E
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



PAVEMENT

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

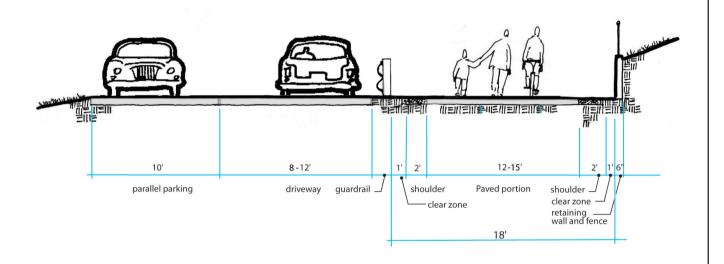


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FIGURE 2-7 ADJACENT PARKING, CROSS SECTION F EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



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FIGURE 2-8 ADJACENT PARKING, CROSS SECTION G EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON

2.5.2.1 East A Alternative

The East A Alternative, like the Corridor Alternative, features a combination of paved and soft surface trail within each typical section. In certain segments, the paved and soft-surface portions of the trail are both located along the Interim Use Trail (see Figures 2-2 through 2-8 (pgs 2-17 through 2-23)). However, the paved portion of the trail transitions to the roadway shoulder at an ADA-acceptable gradient in the following areas: for each driveway/public roadway intersection, along 1.7 miles of divided properties between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE, to avoid sensitive areas, and in other locations where the *Rundle/Haro Plan* calls for the transition. This alternative assumes that the local jurisdictions will retain bike lanes on East Lake Sammamish Parkway for high-speed bicycle use. This alternative includes parking and restrooms as in all Build Alternatives.

Where the alignment for the paved portion of the multi-use trail leaves the Interim Use Trail, pedestrian and equestrian-use would continue on the Interim Use Trail which would be signed for these uses only. The width of this paved portion would be 12 feet with two, 2-foot gravel shoulders (see Figures 2-9 (pg 2-25) and 2-10 (pg 2-26)). Depending upon the grade of each transition area between the Interim Use Trail and the Parkway, the gravel shoulders may be eliminated during detailed design due to drainage and maintenance considerations.

Along East Lake Sammamish Parkway, a 4-foot vegetated buffer is also part of the cross section (see Figure 2-9 (pg 2-25)). However, a barrier or buffer along East Lake Sammamish Place would be provided by the City of Sammamish during future road improvements (Cunningham, personal communication, see Figure 2-10 (pg 2-26)).

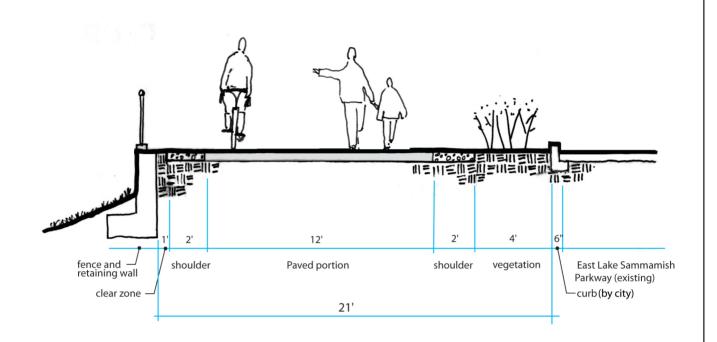
The cross section may vary in width where the trail transitions from the Interim Use Trail to the roadway, depending on location. Cross sections at transitions would be designed during the permitting and design phase. Like the Corridor Alternative, the paved width would be 12 feet, with each shoulder 2 feet wide.

Plans depicting the alignment of this alternative and various features are provided in Volume II of this EIS. It should be noted that these plans are preliminary, and the base map is largely based on aerial photography not ground survey. Detailed survey and design of the selected alternative would be undertaken following completion of the environmental review process.

2.5.2.2 East B Alternative

As the alternatives were being finalized for the EIS, King County determined that the East A Alternative did not fully address the intent of the original *Rundle/Haro Plan*, which was to have no use of the Interim Use Trail along certain segments of the railbed. In addition, there was no alternative that considered a location for the trail located off the Interim Use Trail as recommended in SEPA guidance documents. For those reasons, a variation of the East A Alternative that would not use the Interim Use Trail for pedestrian/equestrian use has been added. The resulting alternative is referred to as the East B Alternative.

This alternative would be identical to the East A Alternative except that there would be no equestrian or pedestrian use on the existing Interim Use Trail in some segments. Where the paved portion of the trail transitions to the roadway shoulder, the existing Interim Use Trail would be closed and no trail access would be permitted on the Interim Use Trail. Pedestrian, equestrian, and bicycle use would continue on the paved trail adjacent to the roadway in these areas. (The safety concerns regarding equestrian use on a narrow shoulder and near the roadway are considered in this EIS.) High-speed bicycle use would remain in the bike lanes on the roadway. This alternative includes parking and restrooms. Separate plans are not provided for this alternative because plans for the East A Alternative provide the necessary information. Locations where the Interim Use Trail would be closed in the East B Alternative are shown on the East A Alternative plans (in the cross reference table provided in Volume II).





East Alternative

LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

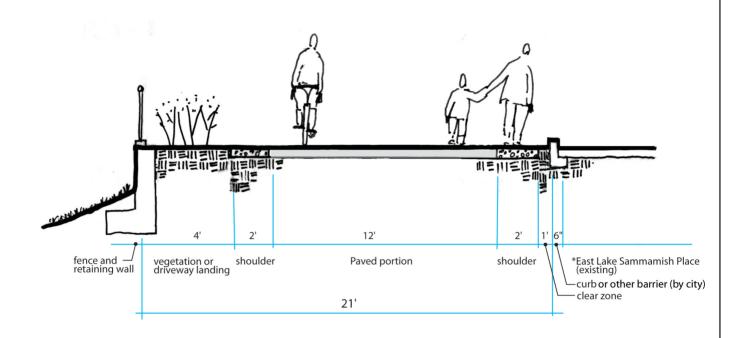


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FIGURE 2-9 ADJACENT TO PARKWAY, CROSS SECTION H EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





East Alternative

*Future road improvements by the City of Sammamish would incorporate some type of buffer or barrier between the trail and roadway.

LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



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FIGURE 2-10 ADJACENT TO THE PLACE, CROSS SECTION I EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON

2.5.3 Continuation of the Interim Use Trail Alternative

Under this alternative, the existing Interim Use Trail would be continued beyond the currently approved 2015 expiration date. Construction of the Interim Use Trail was approved by the King County Council in December 2000. The existing Interim Use Trail consists of an 8- to 12-foot-wide gravel trail without shoulders along 10.6 miles of the railbed for pedestrian and bicycle use. Figure 2-11 (pg 2-28) depicts the typical cross section for the Interim Use Trail. Plans for this alternative are not provided in Volume II of the EIS. The impacts of the Interim Use Trail were evaluated in a SEPA EIS (King County, 2000) and NEPA EA (FHWA and WSDOT, 2002).

Equestrian use is not permitted on the existing Interim Use Trail. <u>Under this alternative</u>, <u>equestrian use</u> <u>would be allowed in the Redmond segment only.</u> <u>Evaluation of this alternative will include whether the existing gravel trail could safely accommodate equestrians.</u> As with all of the Build Alternatives, this alternative includes extending the Interim Use Trail approximately 1,500 feet from its current terminus across NE 70th Street to a point approximately 300 feet northwest of Bear Creek. This alternative includes the same parking and restroom facilities as in all Build Alternatives.

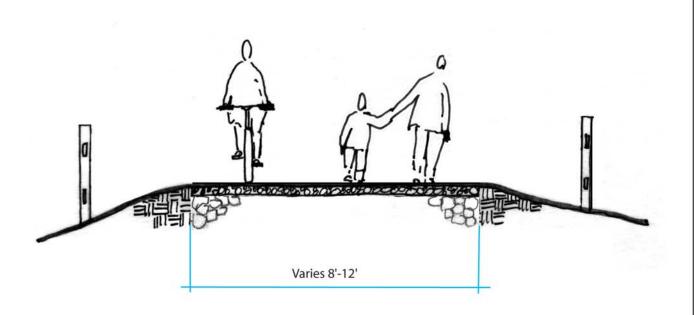
2.5.4 No Action Alternative

Under the No Action Alternative, King County would continue to operate the existing Interim Use Trail through 2015, at which time the permitted operation of the trail would expire. The trail would be decommissioned and closed to public use in 2015. Continued use of the Interim Use Trail would require additional environmental review prior to 2015.

After 2015, decommissioning of the Interim Use Trail would include removal of traffic control and trail etiquette signs and installation of "closed to public use" signs and/or barricades at public access points and driveway crossings, as well as removal of chain-link fence. Sign and fence post holes would be backfilled.

Features of the Interim Use Trail that were constructed to protect natural resources (e.g., geotextile fabric) would be left in place. If removing an element of the Interim Use Trail would present greater potential harm to the environment than leaving it in place, that feature would be left in place. Crushed rock surfacing and split-rail fences would be left in place since their removal would cause more harm than good. For as long as King County maintains ownership, the County would continue to maintain drainage through the corridor and safe access for maintenance crews.

Under this alternative, the acquisition agreement with Cascade Land Conservancy requires King County to offer the corridor for lease to the local cities and then to Cascade Land Conservancy for use as a trail for a nominal fee. King County would request the Surface Transportation Board (Board) to accept these parties as trail sponsors for those sections leased. If neither the local cities nor Cascade Land Conservancy wanted to operate a trail, King County could offer trail sponsorship to other non-profit



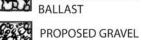
SECTION J TYPICAL NO SCALE

Interim Use Trail

LEGEND



EXISTING RAILROAD





EXISTING SOIL OR FILL MATERIAL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



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FIGURE 2-11 INTERIM USE TRAIL, CROSS SECTION J EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON organizations or government entities. The Board would have to reissue the Notice of Interim Trail Use to replace the trail sponsor. If no other non-profit or government entity wanted to operate a trail, and King County did not anticipate doing so in the foreseeable future, King County could request the Board to vacate the Notice of Interim Trail Use. BNSF would be allowed to complete abandonment of the rail line. After abandonment, King County would utilize or dispose of the fee portions of the corridor as it saw fit.

2.5.5 Preferred Alternative

The preferred alternative is the Corridor Alternative because it best meets King County's purpose and need of (1) providing an alternative transportation corridor between major business centers, (2) providing non-motorized recreational trails to support the growing population, and (3) providing connections between other existing regional trails. The No Action Alternative and Continuation of the Interim Use Trail Alternative fail to fully meet the project's purpose and need. As described in Chapter 1, the County purchased the railbanked corridor with the intention of developing the corridor into the East Lake Sammamish Trail. The East A Alternative would utilize all of the existing corridor but would also require extensive development outside of the corridor. The East B Alternative would not use all of the existing corridor and would also require extensive development outside of the corridor. Although a preferred alternative has been identified for this Draft EIS, final selection and refinement of the preferred alternative will be based on the environmental review, including cost considerations, and comments received on this Draft EIS.

2.5.6 Features Common to Most Build Alternatives

This section describes features that are common to most of the Build Alternatives (Corridor, East A, East B, and Continuation of the Interim Use Trail).

2.5.6.1 Station Numbering

The preliminary plans for the Corridor Alternative and the East Alternatives, both contained in Volume II of this EIS, depict the centerline of the trail with stationing on 100-foot increments for each alignment. These 100-foot increments are assigned numbers known as Station Numbers. These Station Numbers are used as reference points in this document. To distinguish the Station Numbers for the Build Alternatives, Station 100 on the Corridor Alternative is written as STA_{COR} 100. For the East A Alternative, it is written as STA_{EASTA} 100.

2.5.6.2 Parking and Restroom Facilities

The number and locations of existing and proposed parking and restrooms are the same for all of the Build Alternatives, as described below. The approximate locations of these facilities are shown on Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7). Conceptual drawings of proposed parking areas are provided on the plan sheets (Volume II, Figures 13, 25, 26, 37, 38, 13A, 25A, and 26A). Parking and restroom facilities would be designed to be accessible to disabled persons.

Existing parking and restroom facilities that could be used include:

- Existing restrooms and parking at Marymoor Park could be utilized. Marymoor Park has 641 paved parking spaces and 1,351 unpaved parking spaces available year-round. During the winter months, the park contains 600 additional spaces.
- Thirty parking spaces are available along NE 65th Street. Parking is permitted only on the south side of the street.

Proposed new parking and restroom facilities include:

- New <u>accessible</u> restrooms and vehicle parking is proposed at the intersection of East Lake Sammamish Parkway SE and SE 33rd Street at approximately STA_{COR} 281 to 285. Drinking fountains would be provided at the restroom facility. The restroom facility would be approximately 500 square feet. A new signal, crosswalks, and sidewalks are proposed at the intersection of SE 33rd Street and the Parkway and along this portion of East Lake Shore Lane. The parking lot would accommodate approximately 30 autos. The autos would enter the parking area via SE 33rd Street and exit via a new driveway onto East Lake Sammamish Parkway SE. Trail users would access the trail using a sidewalk on the north side of SE 33rd Street.
- New <u>accessible</u> restrooms and vehicle parking is proposed north of the intersection of East Lake Sammamish Parkway SE and Inglewood Hill Road in Sammamish, on the west side of the Parkway, at 1529 East Lake Sammamish Parkway NE at approximately STA_{COR} 465 to 469. Drinking fountains would be provided at the restroom facility. The restroom facility would be approximately 500 square feet. The parking lot would accommodate approximately 20 autos, and would be accessed via one of two driveways from East Lake Sammamish Parkway NE.

For autos exiting the parking lot, left turns would be prohibited from the southern driveway due to the left-turn lane onto Inglewood Hill Road for vehicles traveling southbound on East Lake Sammamish Parkway NE. Likewise, vehicles traveling northbound on East Lake Sammamish Parkway NE would be prohibited from making left turns into the southern driveway. The City of Sammamish is currently planning on redeveloping portions of East Lake Sammamish Parkway. This redevelopment may provide an opportunity for U-turn lanes to allow northbound traffic access to this parking area. The city's redevelopment is in the planning stage at this time. For all alternatives, trail users would use sidewalks to access the trail from the parking area. For the two East Alternatives, trail users would access the trail via a ramp on the south side of the south driveway.

• New <u>accessible</u> parking between NE 65th and NE 70th Street in Redmond is proposed (STA_{COR} 623+00). Approximately 44 parallel parking spaces would be provided.

The sites for new parking/restroom facilities were selected, in part, because they are close to East Lake Sammamish Parkway and thus relatively visible to law enforcement officers, as well as the general public. In addition to the above existing and proposed parking and restroom facilities, other existing facilities might be available as discussed below. The additional parking is not expected to increase trail usage, but could reduce the potential for illegal parking along the corridor. Use of the following facilities would require permission from the property owners. These property owners would be approached during the planning and permitting phase.

- Existing restrooms and parking at Lake Sammamish State Park in Issaquah possibly could be utilized. Lake Sammamish State Park has approximately 2,300 regular parking spaces in the western portion near the picnic/swimming area.
- Existing parking at the King County District Court, located at 5415 220th Avenue SE in Issaquah, could potentially be utilized on evenings and weekends. Approximately 80 spaces are available.
- Some businesses located adjacent to the project corridor appear to use available parking spaces
 only during normal working hours. Potentially, arrangements to allow trail parking during nonwork hours could be made.

- King County has an existing agreement with an adjacent property owner who is currently developing a public storage facility near STA_{COR} 630. The agreement would allow trail users to park in the 26 parking stalls provided in coordination with the storage facility.
- King County is cooperating with the City of Issaquah to develop a new north-south connector road across I-90, which would be located partially in the King County right of way. As part of the proposed agreement, a segment of Zetech Road between Gilman Boulevard and I-90 would be available to King County for parallel parking. Trail users could access 16 parking spots via one-way vehicular access from Gilman Boulevard to the new connector road.

The adequacy of existing, proposed, and potential future parking facilities is evaluated in Section 3.11, Transportation, of this EIS.

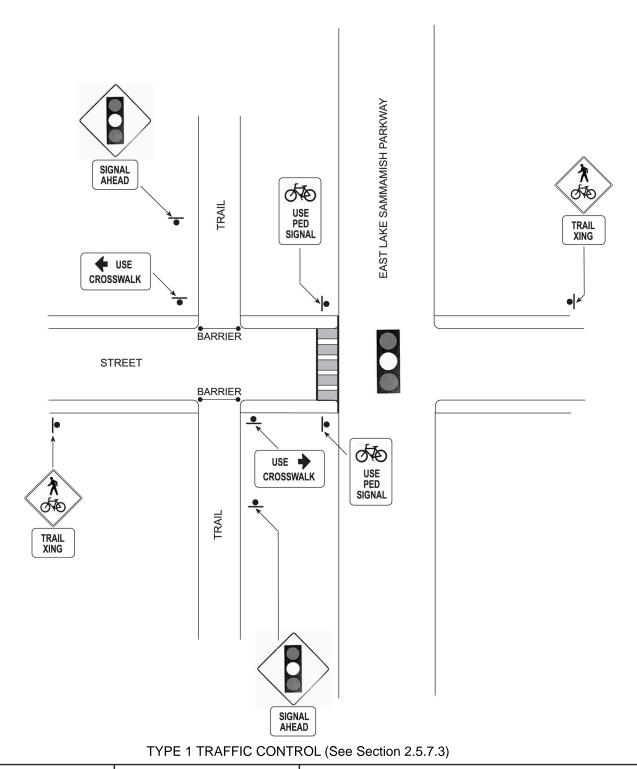
2.5.6.3 Traffic Control

Traffic engineers developed preliminary traffic control measures for roadway or driveway crossings, which apply in the majority of cases. These measures are described below. Trail accessibility for persons with disabilities has been taken into consideration throughout the design process. The Type 1 and Type 2 intersections would include curb cuts and truncated domes to assist persons with disabilities. Further detail regarding the potential impacts of each type of crossing can be found in Section 3.11, Transportation.

- **Type 1—High-volume streets.** In some places, the Build Alternatives would cross high-volume streets where signalized intersections are located in close proximity to the trail. At these locations, trail users would be directed to the signalized crosswalk at the intersection (Figure 2-12 (pg 2-32)). This situation exists at SE 56th Street, SE 51st Street, the State Route (SR) 520 on- and off-ramps, and potentially at NE 65th Street. At NE 65th Street, the alternative of providing a safe crossing at the former railbed would be considered as well, but it is probable that a final decision will not be made prior to detailed design and permitting.
- **Type 2—Low-volume streets.** In some places, the Build Alternatives would cross several low-volume streets where the traffic volume and/or sight distance limitations would warrant stop signs on the trail for the safety of trail users (Figure 2-13 (pg 2-33)). This situation occurs at SE 62nd Street, SE 33rd Street, and NE 70th Street.
- Type 3—Residential driveway crossings farther than 30 feet from parallel roadway intersection with limited sight distance. The Build Alternatives would cross many residential driveways. Where sight distance limitations would exist due to horizontal curves or vegetation that cannot be altered or relocated, the recommended traffic control would be to place stop signs on the driveway for vehicles and to install intersection crossing warning signs on the trail for trail users (Figure 2-14 (pg 2-34)).
- Type 4—Residential driveway crossings farther than 30 feet from parallel roadway intersection with adequate sight distance. These intersections would be a slight modification of those described immediately above where the recommended traffic control for vehicles on the driveway would be yield signs instead of stop signs. Where sufficient sight distance exists, requiring vehicles to fully stop would not be necessary (Figure 2-15 (pg 2-35)).
- Type 5—Residential driveway crossings within approximately 30 feet of East Lake Sammamish Parkway. This situation would exist primarily for the East Alternatives and would be similar to the residential crossings described above, except the trail/driveway intersections would be located closer to East Lake Sammamish Parkway. When intersections are located approximately 30 feet or less from the edge of the southbound East Lake Sammamish Parkway travel lane, stop signs on the trail

would be recommended for trail users, since drivers making left or right turns from East Lake Sammamish Parkway would not have sufficient distance to stop if a trail user were encountered (Figure 2-16 (pg 2-36)).	

Trail users are directed to the signalized crosswalk at the intersection.





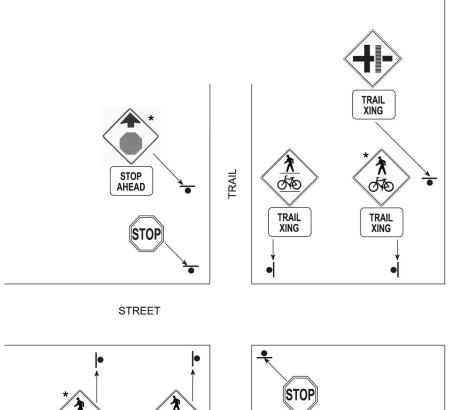
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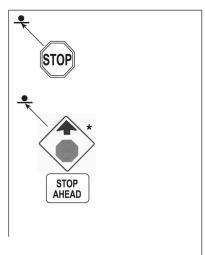


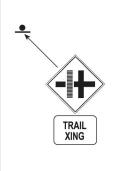
FIGURE 2-12 TRAFFIC CONTROL FOR HIGH VOLUME STREET CROSSINGS WITH SIGNALS EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON Trail users stop at the intersection, yielding to vehicles.



TRAIL

EAST LAKE SAMMAMISH PARKWAY





* Advance warning signs no less than 50 feet from crossing.

TYPE 2 TRAFFIC CONTROL (See Section 2.5.7.3)



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XING

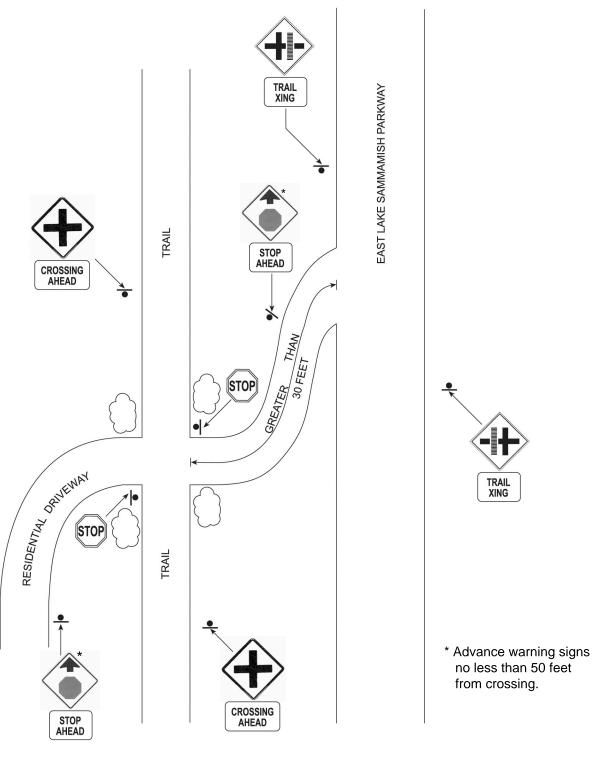
9

TRAIL

XING



FIGURE 2-13 TRAFFIC CONTROL FOR LOW VOLUME STREET CROSSINGS EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON Vehicles stop at the intersection, yielding to trail users.



TYPE 3 TRAFFIC CONTROL (See Section 2.5.7.3)



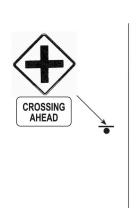
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SOURCES:



FIGURE 2-14
TRAFFIC CONTROL FOR LIMITED SIGHT DISTANCE
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON

Vehicles yield to trail users crossing the driveway.



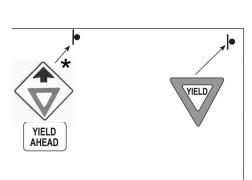
TRAIL XING

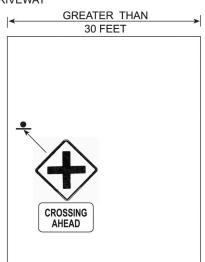
YIELD

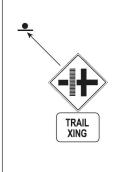
AHEAD

EAST LAKE SAMMAMISH PARKWAY

RESIDENTIAL DRIVEWAY







*Advance warning signs no less than 50 feet from crossing.

TYPE 4 TRAFFIC CONTROL (See Section 2.5.7.3)



King County

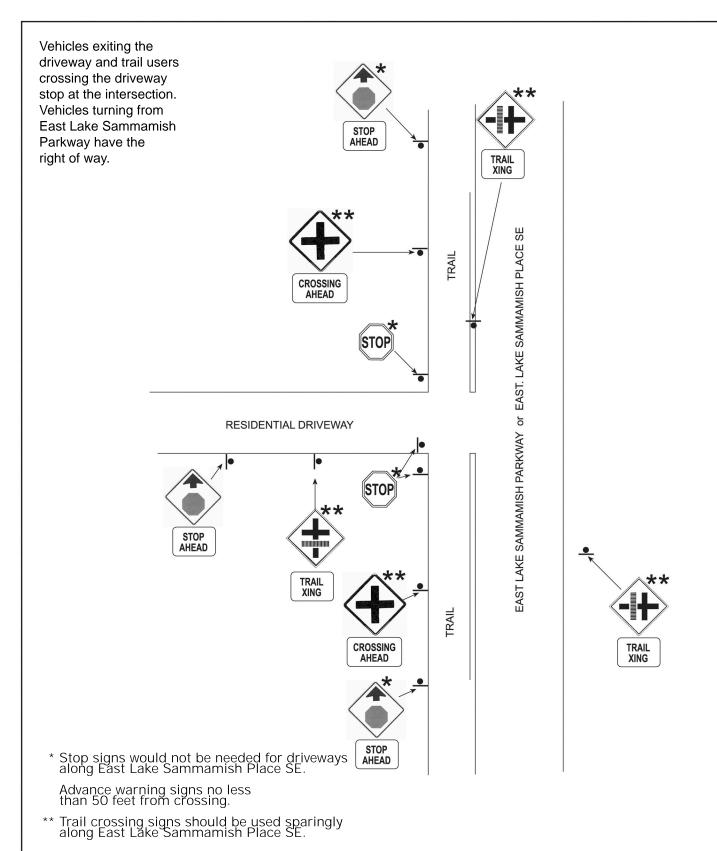
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SOURCES:



FIGURE 2-15 TRAFFIC CONTROL FOR CROSSINGS WITH ADEQUATE SIGHT DISTANCE EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON



TYPE 5 TRAFFIC CONTROL (See Section 2.5.7.3)

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SOURCES:



FIGURE 2-16
TRAFFIC CONTROL FOR DRIVEWAY CROSSINGS
WITHIN 30' OF PARALLEL ROADWAYS
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON

Type 6—Multiple crossings of a residential driveway. For the East A Alternative only, the driveway crossing with the paved portion of the trail is separated from the crossing of the pedestrian/equestrian portion by 30 to 200 feet. Where the distance between the crossings of the two portions of the trail is greater than 30 feet, stop or yield signs (depending on sight distance condition) would be placed on the driveway at the soft-surface trail crossing (Figure 2-17 (pg 2-38)).

Type 7—Frequent residential driveways. Where a series of driveways occurs within a short distance, a "Frequent Driveways Ahead" notice would also be posted on the trail (Figure 2-18 (pg 2-39)).

2.5.6.4 Stormwater Management

The Master Plan Trail would create new impervious surface area and require a drainage system. Potential design concepts for each alternative and the implications of the improvements are discussed in Section 3.2, Surface Water and Water Quality, and elsewhere in Chapter 3 as appropriate. Where the proposed trail would leave the Interim Use Trail, routine maintenance and planned replacement of drainage systems along the corridor would continue, as well as drainage improvements associated with the trail. Hydrologic modeling of the subbasins along the project corridor would be performed in compliance with current regulations and in conjunction with the final design of the selected alternative. Also during the design phase and with input from permitting agencies, King County would select some of the existing culverts over fish-bearing streams to be replaced with fish-passable structures (e.g., bottomless culverts or bridges). Selection of these locations and design of the new structure would consider and avoid potential impacts to downstream properties (e.g., localized flood and sediment deposition).

2.5.6.5 Retaining Walls

Because of the topography along portions of the project corridor, retaining walls would be required in many places along the trail. In developing the preliminary designs for the Corridor and East Alternatives, cut and fill lines were first calculated based on creating 3:1 slopes at all locations. However, this wider footprint would have resulted in more impacts to property/driveway access, wetlands, and streams and would also require additional property acquisitions or easements. As a result, retaining walls are planned for many places along the alignments and are depicted in the plan sheets (Volume II).

As shown in Table 2-1, the Corridor and East Alternatives require similar amounts (in total linear feet) of retaining walls. These estimated quantities include both the left and right sides of the trail. The Corridor Alternative more frequently requires walls on both sides of the trail. The total length of trail that would be bounded by retaining walls on one or both sides is approximately 4.2 miles for the Corridor Alternative and 4.7 miles for the East Alternatives. The East Alternatives also more frequently require taller walls than the Corridor Alternative.

The application of various types of walls in specific situations is further discussed in Section 3.1, Earth Resources, and Appendix B, Geology Technical Report (Volume III).

2.5.6.6 Public Access

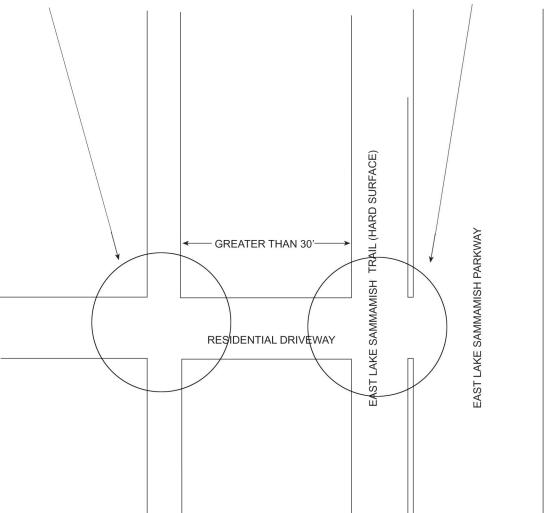
Access points would be located where the trail crosses existing public streets and public property, or at locations where access ramps/connector trails can be created within public rights of way in order to connect with existing streets or other public areas. Access points are listed in Table 2-2. Public access points are depicted on the plan set for the Corridor Alternative and the East Alternatives (see Volume II). The safety implications of access and the recommended traffic controls to improve safety are evaluated as part of this EIS.

TYPE 3 OR 4 TRAFFIC CONTROL: Intersection of a driveway with the separated soft-surface pedestrian/ equestrian trail. Vehicles either stop or yield, depending on sight distances.

See Figures 2-14 and 2-15.

TYPE 5 TRAFFIC CONTROL:

Intersection of a driveway with the paved, multi-use trail. Vehicles exiting the driveway and trail users crossing the driveway stop at the intersection. Vehicles turning from East Lake Sammamish Parkway have the right of way. See Figure 2-16.



TYPE 6 TRAFFIC CONTROL (See Section 2.5.7.3)
Applicable to East A Alternative Only

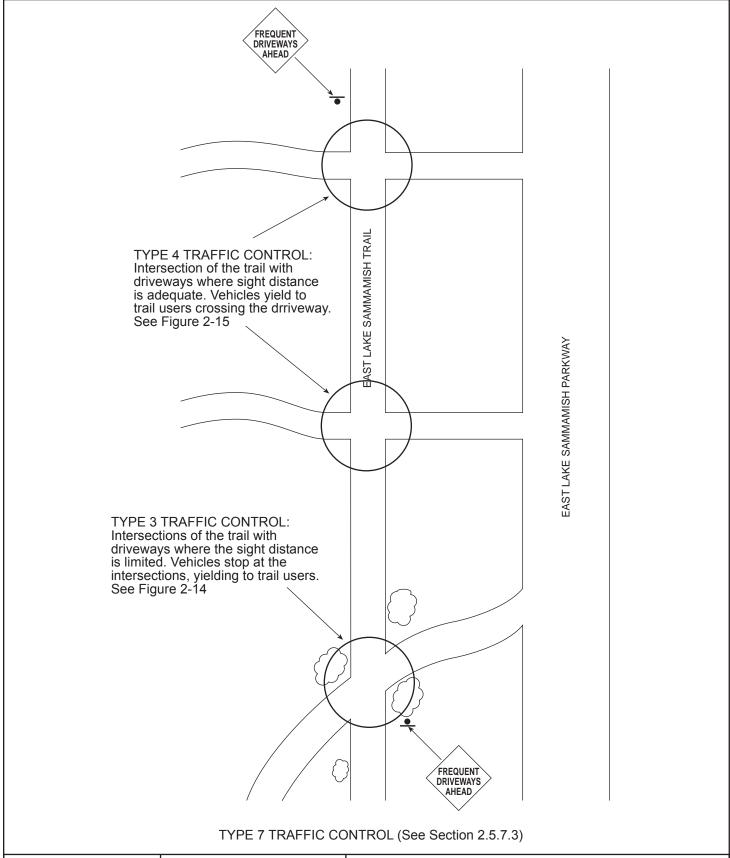
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SOURCE: PARAMETRIX, 2004

FIGURE 2-17 TRAFFIC CONTROL FOR MULTIPLE CROSSINGS OF A DRIVEWAY EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON



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SOURCE: PARAMETRIX, 2004

FIGURE 2-18
TRAFFIC CONTROL FOR FREQUENT
DRIVEWAY CROSSINGS
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON

Table 2-2. Summary of Additional Improvements at Trail Access Points

LOCATION OF IMPROVEMENT	CORRIDOR STATION LOCATION	TYPE OF IMPROVEMENT/ ACCESS	APPLICABLE ALTERNATIVES	DESCRIPTION
Gilman Boulevard	99+09 (Volume II, Figure 1)	Signage to existing crossing	All Build Alternatives	Depending on final location of new north-south connector road proposed by the City of Issaquah (see Table 3.11-11), trail users would likely be directed to the existing signalized pedestrian crossing 300 feet west of the trail terminus.
STA _{COR} = 117+50	117+50 (Volume II, Figure 2)	Connection to Pickering Trail	All Build Alternatives	Specifics of connection would be determined during detailed design and permitting, and depend on potential adjacent right of way uses under consideration by King County and the City of Issaquah. For example, a connector road may be developed west of the trail between SE 62nd Street and Gilman Boulevard.
SE 62nd Street to East Lake Sammamish Parkway	123+50 (Volume II, Figure 2)	Sidewalk, curb, and gutter	All Build Alternatives	Sidewalk, curb, and gutter may be implemented to provide safe access along the roadway. Specifics of improvements would be determined during detailed design and permitting, and depend on future improvements to the roadway under consideration by the City of Issaquah.
SE 56th Street, SE 51st Street, and entrance to Lake Sammamish State Park Boat Launch	145+00 (Volume II, Figures 4, 5, 8)	Sidewalk, curb and gutter	All Build Alternatives	New sidewalk, curb and gutter may be provided in the King County right of way to safely accommodate connections to the existing sidewalk. Existing sidewalk, curb, and gutters would have to be reconstructed where trail alignment is routed.
North of signalized intersection of SE 43rd Way and East Lake Sammamish Parkway	209+50 (Volume II, Figure 8)	Connection from intersection to the King County corridor	Corridor, East A, and Continuation of the Interim Use Trail Alternatives	No additional improvements to the Parkway have been identified but would be reviewed during detailed design and permitting phase. The East B Alternative and the paved portion of the East A Alternative are immediately adjacent to the Parkway in this vicinity.
Signalized intersection of 212th Way SE and East Lake Sammamish Parkway SE	232+50 (Volume II, Figure 10)	Sidewalk, curb, and gutter	Corridor, East A, and Continuation of the Interim Use Trail Alternatives	Construct a sidewalk, curb, and gutter on the west side of East Lake Sammamish Shore NE and the east side of 206th Avenue SE for the Corridor and Continuation of the Interim Use Trail Alternatives. These features would extend west from the latter to connect with the existing sidewalk, curb, and gutter along the Parkway. The East B Alternative and the paved portion of the East A Alternative are immediately adjacent to the Parkway in this vicinity. Under the East A Alternative, only the sidewalk along 206th Avenue SE would be provided for northbound access to the separate pedestrian/equestrian trail. These proposed improvements will be reviewed during the detailed design and permitting phase of the project.

Table 2-2. Summary of Additional Improvements at Trail Access Points (continued)

LOCATION OF IMPROVEMENT	CORRIDOR STATION LOCATION	TYPE OF IMPROVEMENT/ ACCESS	APPLICABLE ALTERNATIVES	DESCRIPTION	
Intersection of SE 39th Street and East Lake Sammamish Parkway SE	257+00 (Volume II, Figures 12, 12A)	Signalized crossing, sidewalk, curb, and gutter	All Build Alternatives	The proposed configuration is a new signalized crossing with a crosswalk southeast of the signal, and a sidewalk, curb, and gutter along the south side of the south driveway to the Twin Cedars community.	
Intersection of SE 33rd Street and East Lake Sammamish Parkway SE	280+50 (Volume II, Figures 13, 13A)	Signalized crossing	All Build Alternatives	To provide safe access at SE 33rd Street, a new signal is proposed at its intersection with East Lake Sammamish Parkway SE. Crosswalks would be provided on all four sides. The sidewalk, curb, and gutter would be extended from the Parkway along the south side of SE 33rd Street to allow safe pedestrian access away from the traffic flow of the proposed parking area on the north side. The school bus stop would be moved to the south side of 33rd Street.	
Intersection of SE 8th Street and East Lake Sammamish Parkway SE	382+00 (Volume II, Figures 20, 20A)	Signalized crossing, sidewalk, curb, and gutter	All Build Alternatives	Provide sidewalk, curb, and gutter along existing driveway down to trail. Provide pedestrian crosswalk and signal on north side of SE 8th intersection.	
Intersection of Louis Thompson Road and East Lake Sammamish Harkway SE	430+00 (Volume II, Figures 23, 23A)	Signalized crossing ^a , sidewalk, curb, and gutter	See description in next column	For all Build Alternatives, signalize intersection and provide pedestrian crosswalks in all directions. For the Corridor Alternative and the Continuation the Interim Use Trail Alternative, provide sidewalk, curb, and gutter on the w side of the Parkway to connect to a new access path from the Parkway to the Interim Use Trail. The separate pedestrian/equestrian trail under the East A Alternative could be accessed at Sta _{EAST} =429 (see Figure 23A).	
Intersection of Inglewood Hill Road and East Lake Sammamish Parkway NE to parking and restroom facilities	465+00 (Volume II, Figures 25, 25A)	Sidewalk	See description in next column	For all Build Alternatives, a sidewalk along the south side of the south parking driveway would provide access from the signalized intersection of Inglewood Hill Road and East Lake Sammamish Parkway SE to the parking and restroom facilities being developed by the County ^b . From these facilities, the trail below could be accessed by either stairs or a ramp (for all Build Alternatives except the East B Alternative). The City of Sammamish is already pursuing the improvement of the Parkway between 187th Avenue NE and Inglewood Hill Road.	

Table 2-2. Summary of Additional Improvements at Trail Access Points (continued)

LOCATION OF IMPROVEMENT	CORRIDOR STATION LOCATION	TYPE OF IMPROVEMENT/ ACCESS	APPLICABLE ALTERNATIVES	DESCRIPTION
Near intersection of 187th Avenue NE and East Lake Sammamish Parkway NE	596.50 (Volume II, Figure 34)	Signalized crossing and connection to trail	All Build Alternatives	Just south of the intersection of 187th Avenue NE and East Lake Sammamish Parkway SE, a connection would be provided from the existing tunnel under the Parkway to the trail. This route avoids crossing the Parkway, but would not be suitable for bicycles (due to the stairs on the east side) or for equestrians (due to the tunnel). Therefore, a new signalized crossing is proposed at the intersection, as well as access from the Parkway to the trail north of the intersection. The City of Redmond is already pursuing the improvement of the Parkway between 187th Avenue NE and Redmond Way. The City's project may include bicycle lane improvements and/or sidewalk, curb, and gutter. The City's improvements would accommodate safe access from the intersection to the access path.
NE 65th Street	640+00 (Volume II, Figure 37)	Sidewalk, curb, and gutter	All Build Alternatives	To provide safe access to the trail from East Lake Sammamish Parkway via NE 65th Street, sidewalk, curb, and gutter improvements are proposed on both sides of NE 65th Street.
NE 70th Street	656+50 (Volume II, Figure 38)	Road striping, sidewalk, curb, and gutter	All Build Alternatives	To provide safe access to the trail from Redmond Way via NE 70th Street, NE 70th Street would be restriped to better delineate bicycle lanes and the sidewalk, curb, and gutter would be extended through the King County right of way. Specific configurations would be considered during detailed design and permitting, as would the access needs of adjacent businesses.

Chapter Two: Alternatives

^a This signal is listed in the City of Sammamish Six-Year Transportation Improvement Program (2003).

^b The City of Sammamish is currently studying improvements to East Lake Sammamish Parkway from Inglewood Hill Road to 187th Avenue NE. These improvements will likely include a sidewalk and/or a bicycle lane on the west side of the road that would provide access from the intersection to the parking lot driveway.

2.5.6.7 Additional Improvements

Additional improvements (e.g., sidewalks, crosswalks) are proposed at many of the public access locations in order to provide for public safety. These improvements are depicted in preliminary form in Volume II, are evaluated as needed in the various sections of this EIS, and are summarized in Table 2-2. The improvements would be further developed during the detailed design and permitting process.

2.5.6.8 Trail Operation and Signage

The proposed Master Plan Trail would be open seven days a week for public use during daylight hours. The trail would not be illuminated other than by existing sources of light, and therefore, would be closed during hours of darkness for safety reasons. Litter receptacles, doggy litter bag boxes, and trail etiquette signs would be provided at public access points. Trail users would be required to keep pets on leashes.

Travel at speeds in excess of 15 miles per hour (mph) is not reasonable or prudent, and is a violation of King County Code, Section 7.12.295. The posted speed limit for trail users would be 15 mph. After applying a safety factor, the design speed for both the Corridor Alternative and the East Alternatives would be 20 mph, which is also the minimum design speed recommended by AASHTO for a shared use path. The design speed helps determine the horizontal geometry (minimum turn radius) of the trail, the distance needed for a trail user (bicyclist) to come to a complete stop, and thus the sight distances necessary when approaching an intersection.

2.5.6.9 Fencing

At least three types of fencing would be installed and maintained along the proposed Master Plan Trail. The hierarchy for determining which type of fence would be used in various situations ranges from the most protective or restrictive fence to the least, as described below:

- Guardrail or approved equivalent would be used adjacent to roads, driveways, and parking areas
 when necessary to delineate and separate the trail from areas used by vehicles.
- Five-foot, black-coated chain-link fencing or approved equivalent would be used in areas where guardrail is not required and where (1) less than 20 feet exists between the trail edge and a home, (2) docks and waterfront property create a safety, liability, proximity, trespass, and/or privacy concern, and (3) the edge of the trail represents a hazard to trail users (i.e., is immediately adjacent to a retaining wall or a slope steeper than 1:3).
- Split-rail fencing would be located adjacent to environmentally sensitive areas such as wetlands, streams, and steep slopes. The fencing would be located no closer than 1 foot from the outside edge of the trail shoulder, maintaining the 1-foot "clear" zone depicted on trail typical sections. This fencing is intended to reduce the risk of intrusion from humans and pets, while allowing movement of small wildlife. Split-rail fencing may be used instead of chain-link fencing to alert trail users to slopes adjacent to the trail edge.

Fencing schemes for each alternative are as follows described below. The locations and estimates presented are preliminary. And King County will consider minor changes in fence location, including reducing the amount of chain link fencing, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way, during the design process.

• **Corridor Alternative**. Although the fencing types and approximate locations for the Corridor Alternative would be similar to the existing fencing on the Interim Use Trail, some fencing would

have to be removed and replaced due to the widened trail area. Additional fencing would also be needed to delineate edge hazards such as retaining walls.

- East A Alternative. Where the multi-use portion of the East A Alternative leaves the Interim Use Trail, but the pedestrian/equestrian use continues on the Interim Use Trail, the existing split-rail and chain-link fence on the Interim Use Trail would be expected to remain in place for the Master Plan Trail. Additional fencing would be required for the paved portion of the trail. Where the East A alignment is the same as that for the Corridor Alternative, requirements to remove and replace fencing would be the same.
- East B Alternative. The new fencing requirements for the East B Alternative would be the same as for the East A Alternative. Where the alignment leaves the Interim Use Trail, the existing chain-link fence would likely be removed, and the holes would be backfilled.
- Continuation of the Interim Use Trail Alternative. The existing fencing would remain in place and new fencing would be added where the trail is extended north of NE 70th Street.
- **No Action Alternative**. Fencing installed in conjunction with the Interim Use Trail would be left in place through 2015.

The total amount and type of fence required for each alternative, based on the preliminary design, is summarized in Table 2-3. These estimated quantities include fencing that would be left in place from the interim phase of the project (as shown from the No Action quantities), as well as new or replacement fencing, for both the right and left sides of the trail.

ALTERNATIVE	CHAIN- LINK	SPLIT RAIL	GUARD RAIL	HAND RAIL	OTHER ^A	TOTAL
Corridor	30,100	28,000	2,400	300	0	60,800
East A	33,300	28,600	3,500	300	3,800	69,500
East B	26,400	28,600	3,500	300	3,800	62,600
Continuation	14,500	37,400	4,600	300	0	56,800
No Action	14,500	36,400	4,200	200	0	55,300

Table 2-3. Summary of Fencing Requirements (linear feet) by Alternative

The total length of trail that would be bounded by chain-link fence on one or both sides is approximately 4.5 miles for the Corridor Alternative; 5.8 miles for the East A Alternative; 4.5 miles for the East B Alternative; 2.3 miles for the Continuation of the Interim Use Trail Alternative; and 2.3 miles for the No Action Alternative.

The approximate locations where new or replacement fencing is required for the Corridor Alternative and the East A Alternative are shown in the Volume II plan sets.

2.5.6.10 Bollards

Bollards (posts) 5 feet or further apart would be located at <u>all trail intersections</u> trail and roadway erossings. The middle bollard(s) would be either removable or "knock-down" to accommodate access by

^a A barrier of some type would be provided between vehicular use and trail use along East Lake Sammamish Place SE. This may be a guard rail or some other fence.

emergency and maintenance vehicles. The outer bollards would be fixed and located off the edge of the paved surface.

2.5.6.11 Vegetation Management

Circumstances under which vegetation located adjacent to the Master Plan Trail would be trimmed or removed include the following:

- To maintain sight distances on the approaches to an intersection, where vegetation would
 potentially prevent a vehicle or trail user from identifying an obstruction and stopping in time to
 prevent an accident.
- To remove trees or limbs located within the project corridor that represent a hazard to trail users
 or adjacent structures, roadways, or utilities, or would present an obstacle to reestablishment of
 rail service.
- To remove noxious weeds and replace them with appropriate plantings.
- To maintain drainage systems (e.g., conveyance ditches) through practices such as slope mowing, dry ditch cleaning, wet ditch cleaning, and repairing or replacing damaged culverts.
- To maintain vertical and horizontal clearances from the trail for maintenance and emergency vehicles, as well as for trail users.
- To implement and maintain approved mitigation for the trail.

A *Vegetation Management Plan* was prepared in conjunction with the implementation of the Interim Use Trail (Parametrix, 2002). The plan describes in more detail the circumstances under which vegetation is managed and removed; applicable King County standard best management practices (BMPs), policies, and procedures; and site-specific conditions and considerations, including work within critical areas such as wetlands, streams, and steep slopes. During the design and permitting phase of the project, the *Vegetation Management Plan* would be updated for use in conjunction with the Master Plan Trail, incorporating current regulatory requirements for each of the applicable local jurisdictions as well as approved mitigation plans.

2.5.6.12 Art Program

King County has a program called "1% for Art" in which qualified projects receive funds to develop and construct art or interpretive elements in conjunction with the projects. The East Lake Sammamish Trail project is participating in the art program. The artist is currently developing criteria for siting artwork along the trail corridor and identifying themes that will unify the corridor. Potential locations or applications include gates, trailheads, and special environmental or natural features. These efforts are ongoing concurrent with the environmental review process and will extend into the design phase of the project.

2.6 Related Projects

Several other development projects are proposed in the vicinity of the proposed East Lake Sammamish Master Plan Trail. These are briefly described below and are referred to in the applicable Cumulative Impacts sections of Chapter 3.

2.6.1 Millennium Trolley

The Issaquah Historical Society is proposing the development of a trolley line that would operate between downtown Issaquah and SE 51st Street. The Society proposes to use the former railbed and reroute the track in this alignment. The Historic Society has approached King County and the City of Issaquah with plans to reinstall track on 2 miles of King County right of way from downtown Issaquah north to SE 51st Street. The Historic Society's long-range plans include extending the trolley line up to SE 43rd Way, near Lake Sammamish State Park; however, recent removal of the rail at two East Lake Sammamish Parkway crossings may make the extension prohibitively expensive and infeasible (The Issaquah Press, 2004). If completed, the trolley would share the corridor with the East Lake Sammamish Trail to the extent possible. Where shared use is not possible, the trail routing would be coordinated between King County, the City of Issaquah, and the Issaquah Historical Society. The trolley car would likely travel at 15 to 20 mph (Thorpe, personal communication, 2003). The Millennium Trolley project is not likely to be constructed in the foreseeable future, and is not associated with the proposed Master Plan Trail project.

2.6.2 Road Improvements

Several roadway improvements are proposed in the area of the Master Plan Trail. These improvements may lessen traffic congestion, improve bicycle safety on East Lake Sammamish Parkway, and better accommodate access to the trail. The potential future road widening has been considered in locating the trail alternatives with respect to adjacent roadways. Refer to Section 3.11, Transportation, for discussion of proposed road improvements in the area.

2.6.3 Wastewater Conveyance

King County Wastewater Treatment Division is planning to construct a regional wastewater conveyance pipeline, located in either the East Lake Sammamish Parkway SE right of way and/or the East Lake Sammamish Trail right of way. The pipeline would be constructed from Inglewood Hills Road north and connect to the NE Lake Sammamish Interceptor near the northern terminus of the proposed Master Plan Trail alternatives. Construction of the pipeline is anticipated to begin in 2009.

2.6.4 Proposed Trail Connections

Potential trail connections are described in Chapter 1 (see Figure 1-1, (pg 1-2)). Trail projects currently underway include the following:

- The City of Redmond's Bear Creek Trail is a "Shared Use Path" Class 1, paved, multi-use, non-motorized trail corridor ultimately connecting the Sammamish River Trail and downtown Redmond to Farrel McWhirter Park and the Redmond-Puget Power Trail. Currently the trail extends between the Sammamish River Trail and Union Hill Road Redmond Way-in the City of Redmond. Planned construction in 2005 would extend the trail across Redmond Way to Union Hill Road. The northern terminus for the East Lake Sammamish Trail, regardless of Build Alternative, is located 300 feet northwest of the Bear Creek crossing, which is the approximate location of the Bear Creek Trail.
- The City of Redmond's planned Evans Creek Trail is a Class 1"Shared Use Path", paved, multiuse, non-motorized trail that would connect to the East Lake Sammamish Trail corridor at NE 187th Street, utilizing an existing tunnel under East lake Sammamish Parkway in the City of Redmond. The trail is proposed to continue north from the East Lake Sammamish vicinity ultimately connecting with the Bear Creek Trail just west of Perrigo Community Park. in downtown Redmond. Construction of a 1-mile segment was constructed in 2004-2005 that connected would build the middle section of the trail between Union Hill Road and NE 95th Street

- with a connection to Perrigo Community Park where parking facilities are located. <u>Another trail connection is Redmond's 65th Street Trail which runs on the northern portion of NE 65th Street from the East Lake Sammamish Trail to Marymoor Park.</u>
- The King County East Plateau Connector Trail currently begins about 0.25 mile east of East Lake Sammamish Parkway SE along SE 43rd Way. The trail is soft-surface to Issaquah-Pine Lake Road and paved until it connects with the Klahanie Trail which is also paved. Portions of the trail are yet to be completed. King County is working with Lake Sammamish State Park, the City of Issaquah, and private parties to complete the missing links (McLeod, personal communication, 2004).
- The Issaquah Preston Trail (Highpoint Trail) would parallel the north side of I-90 between Issaquah and Highpoint. The trail would be built and owned by the State of Washington (State) and maintained by King County. It will be a paved trail that connects to a future extension of the Preston/Snoqualmie Trail to the east, and to a proposed City of Issaquah trail to the west.

2.6.5 Marymoor Connector Trail

As a separate project, King County recently constructed a regional trail through Marymoor Park, which would connect the Sammamish River Trail to East Lake Sammamish Trail. The connection to East Lake Sammamish Trail would occur south of NE 65th Street in Redmond.

2.6.6 Sammamish Landing Park

The City of Sammamish is starting a master plan process for several publicly owned parcels along Lake Sammamish. The narrow strip of land occurs between the East Lake Sammamish Trail right of way and the lake from the northern Sammamish city limits southward approximately 3,000 linear feet.

2.7 Construction Timing and Methods

A detailed construction plan would not be developed until the final alternative has been selected <u>and initial construction funding is secured</u>. However, the following information is provided to guide the reader in considering the evaluation of potential impacts that could occur during construction.

2.7.1 Phasing

The approximate phasing and relative duration of construction is described for each alternative below from shortest to longest: The impacts associated with phasing would be the same for all build alternatives, and would be dependent upon funding availability. Because the construction duration would be relatively short at any given location, impacts related to phasing are not anticipated. The Interim Use Trail (gravel surface) would remain in place until the paved trail is completed over the entire length.

- The No Action Alternative would not require construction.
- The Continuation of the Interim Use Trail Alternative would require extending the Interim Use Trail approximately 1,500 feet to the north and constructing parking and restroom facilities. These activities would occur in the cities of Redmond and Sammamish. Depending on permitting and funding availability, the work could be completed in a single season and within 2 to 3 months.
- The Corridor Alternative would likely be constructed in segments due to the length of the trail and the multiple jurisdictions that would be affected. Assuming seasonal constraints and funding

- availability, construction would likely occur over at least three-four construction seasons calendar years (not necessarily consecutive), possibly beginning in 2010.
- The phasing of the East Alternatives would be similar to that for the Corridor Alternative. However, the East Alternatives require <u>more private property acquisition and more extensive construction</u> (e.g., more excavation and more than twice as much fill), compared with the Corridor Alternative. Thus more resources would be required to complete the work in the same amount of time.

2.7.2 Construction Sequence

The following is a general description of the types of construction methods and their sequence that likely would be employed to construct any segment of the project. The general steps in the construction sequence for the Master Plan Trail would occur as follows:

- 1. Preparation and demolition (of fence and footings, if needed)
- 2. Erosion and traffic control
- 3. Grading and retaining wall construction
- 4. Drainage
- 5. Structures (the construction of retaining walls, including shoring, excavation, and backfill)
- 6. Surfacing (the placement of asphalt, top course, base course, and top soil)
- 7. Pavement
- 8. Fencing
- 9. Signage and road striping

Construction activities expected to generate the most noise would be asphalt cutting in conjunction with the regrading of driveway crossings; pile driving required for certain types of retaining walls; and audio warnings on vehicles backing up.

2.7.3 Staging

For all Build Alternatives, three locations have been identified as possible staging areas for construction material, equipment, and project offices. These staging areas would be located at the site of the three proposed parking areas and two proposed restroom facilities in order to minimize the right of way takes and other environmental impacts.

2.7.4 Truck Traffic

It is estimated that tons of materials would be exported from and imported to the construction area under the Corridor Alternative, East A Alternative, and East B Alternative, resulting in many one-way truck trips. See Section 3.11, Transportation, for further detail of impacts due to truck traffic for each alternative.

2.7.5 Management of Pedestrians and Vehicles around Work Areas

Three primary measures would be used during construction of the Master Plan Trail to provide for pedestrian safety, driveway access, and traffic control along roadways (refer to Sections 3.7 and 3.11, Recreation and Transportation, respectively, for a discussion of user safety during construction). These measures include:

- 1. **Closure of Interim Use Trail.** During construction, portions of the Interim Use Trail would need to be closed to pedestrians for a period of one to three months. The Interim Use Trail would be closed using removable traffic barricades and signs in accordance with the Manual of Uniform Traffic Control Devices (6D.01). Pedestrians would be routed around the construction area.
- 2. **Driveway Crossings.** Access through driveways and roads would be maintained during construction. Vehicle and pedestrian access to homes along the trail would be maintained through use of traffic control devices and traffic control personnel who would conduct traffic through work zones. Construction activities would be temporary and would be minimized through proper traffic control, signage, and homeowner notification. Construction at driveway and road crossings would typically last from one to two weeks per crossing.
- 3. **Construction Along Roadways**. This type of traffic control would occur where the trail approaches and is adjacent to the roadway. The road shoulder would be closed, construction fencing and traffic control devices would be placed, and in some situations the adjacent roadway might be temporarily restriped. Along with the traffic control devices, flaggers would guide oncoming traffic through and around the work zone.

To reduce construction time and cost, efforts would be made to coordinate design elements and construction schedules with municipal, county, and state projects. For example, if the selected alternative includes segments immediately adjacent to East Lake Sammamish Parkway, King County would attempt to coordinate design and construction with the City of Sammamish's design and construction of planned improvements along the Parkway, where practical.

2.8 Cost Comparison

A preliminary engineering estimate of cost was been-prepared in 2004 for each of the Build Alternatives and is summarized in Table 2-4. These estimates are based on the preliminary configurations developed for each alternative as described in the Draft and Final EISs. If alternatives are refined based on environmental review and comments received, the cost estimates will be refined accordingly. The costs for the Continuation of the Interim Use Trail Alternative include the northern extension of the gravel trail, parking and restroom facilities, and access point improvements. The costs for the Corridor and East Alternatives also include the parking and restroom facilities. The No Action Alternative requires no construction.

DESIGN ELEMENT/ALTERNATIVE	CORRIDOR ALTERNATIVE	East A or East B ALTERNATIVE	CONTINUATION OF THE INTERIM USE TRAIL	
Preparation	2,296,000	3,221,000	26,000	
Grading	663,000	951,000	7,000	
Erosion Control and Planting	1,998,000	2,106,000	12,000	
Surfacing	1,468,000	1,567,000	41,000	
Drainage	1,421,000	1,826,000	0	
Structures	8,364,000	13,169,000	0	
Traffic	530,000	1,139,000	26,000	
Signage	76,000	109,000	2,000	
Other Items	4,982,000	7,016,000	145,000	
Parking, Restrooms, Access ^a	5,325,000	5,165,000	5,165,000	
Subtotal	27,123,000	36,269,000	6,124,000	
Construction Contingency (5%)	1,356,000	1,813,000	306,000	
Construction Engineering (10%)	2,712,000	3,627,000	612,000	
Total Construction	31,191,000	41,709,000	7,043,000	
Engineering and Permitting (12%)	3,743,000	5,005,000	845,000	
Right-of-Way Acquisition ^b	0	22,000,000	0	
TOTAL	\$ 34,934,000	\$ 68,714,000	\$ 7,888,000	

Table 2-4. Cost Comparison Summary

^a Specific features of some access improvements vary between alternatives (see Table 2-2). These distinctions are not reflected in the above estimates.

^b Acquisition cost based on impacts identified in Section 3.8.4, Private Property Impacts; average property value identified in Section 3.8.2.4, Property Values; average of 5% of average property value for partial acquisitions; and 40% mark-up for negotiation and acquisition. Estimated costs based on 2004 dollars. Costs are likely to be escalated by 6% per year to the date of construction. The costs are comprehensive planning-level costs that take ADA compliance into consideration.

Chapter 2 Alternatives

2.1 Planning Process

2.1.1 Environmental Documentation and Procedures

The East Lake Sammamish Trail is partially funded by the federal Transportation Efficiency Act (TEA-21) (see Section 1.3.4, Phased Development of the Trail, in Chapter 1). Because of the federal funding, the environmental impacts of the project must be evaluated under state and federal laws. King County and the Federal Highway Administration (FHWA) are preparing the Environmental Impact Statement (EIS) for the Master Plan Trail in compliance with both the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA). The FHWA and King County are preparing a combined NEPA/SEPA EIS for the project.

2.1.2 Summary of Scoping

Public, tribal, and agency scoping regarding this permanent long-term Master Plan Trail has been occurring over several years as part of this combined NEPA/SEPA EIS, as described below.

- In early 2000, King County began a series of five neighborhood workshops with adjacent property owners. Through roundtable discussions and brainstorming, citizens identified issues, concerns, and ideas for the East Lake Sammamish Trail Master Plan.
- In spring 2000, King County conducted a user group survey and met with several equestrian and bicycle user groups to collect additional ideas and concerns.
- In November 2000, a public scoping meeting was advertised and held in accordance with SEPA requirements to present the input collected to date and to receive comment. Nearly 80 people attended the meeting, and over 150 people submitted comments.
- In January 2001, FHWA published in the Federal Register a Notice of Intent to prepare (in conjunction with King County) a joint NEPA/SEPA EIS for the proposed East Lake Sammamish Trail Master Plan.
- Following the FHWA notice, a second public scoping meeting was held in February 2001. Over 100 people attended. The alternatives presented at the February meeting showed slightly refined trail alignments, reflecting the comments received at the November scoping meeting.
- An agency scoping meeting was held with state, federal, and local agencies in May 2001 to identify relevant agency concerns and requirements.

During this time, the Citizen Advisory Group (CAG) also met periodically to provide input on the planning process. Comments received as a result of scoping and other public and agency outreach helped the County identify alternatives to be considered for the project, as well as areas of potential concern. Summaries of the two public scoping meetings (Fall 2000 and February 2001) are included in *Final Summary of Screening Criteria*, *East Lake Sammamish Master Plan Trail* (King County, 2004). Additional information about public and agency coordination is included in Chapter 5.

2.1.3 Interdisciplinary Team

In early 2002, WSDOT project representatives recommended that King County convene an Interdisciplinary Team (IDT) composed of representatives of a variety of agencies with different areas of expertise. See Section 5.3.3, Interdisciplinary Team, for additional information on the IDT process.

The nine-person IDT convened in June and July 2002. The IDT received a project overview, including the results of the extensive public scoping process and public comments. The IDT provided suggestions for revising the draft purpose and need for the project and assisted the County in screening project alternatives. Based on the project purpose and need, the IDT helped identify criteria appropriate for screening the alternatives for inclusion in the EIS. This process ultimately resulted in three screening criteria:

- consistency with local and regional plans;
- consistency with design guidelines; and
- linkage to regional trails and bike lanes.

Before applying the screening criteria to each of the alternatives identified in Section 2.3, Overview of Project Alternatives, the IDT was offered the opportunity to add alternatives to the preliminary list. No additional alternatives were identified. The process undertaken by the IDT is described in more detail in *Final Summary of Screening Criteria, East Lake Sammamish Master Plan Trail* (King County, 2004). The results of the screening process are discussed in Sections 2.4, Alternatives Considered but Rejected, and 2.5, Alternatives Selected for Further Study.

2.1.4 Project Termini

As discussed in Chapter 1, Purpose and Need, the Master Plan Trail is proposed for the east side of Lake Sammamish. The southern terminus of the trail is at the intersection of the railbanked corridor with Gilman Boulevard in the City of Issaquah. The northern terminus of the trail connects with the Bear Creek Trail in the City of Redmond. Refer to Section 1.2, Need for the Project, in Chapter 1 for further discussion of the potential trail connections and system linkages.

As stated in Chapter 1 (Section 1.1, Purpose of the Project, and Section 1.2, Need for the Project), the purpose of the Master Plan Trail is to provide an alternative mode of transportation and recreation opportunities in the East Lake Sammamish area and to provide connections to other regional trails. The termini of the Master Plan Trail are logical because the trail would connect to the Bear Creek Trail to the north and to the Pickering Trail and south to Gilman Boulevard. The Master Plan Trail would also connect to major employment and retail destinations in the area, and provide a connection between two major parks, Lake Sammamish State Park on the south end of the lake and King County's Marymoor Park on the north.

2.2 Overview of Project Area

The East Lake Sammamish area is a rapidly urbanizing area located east of Seattle. The Cities of Redmond and Issaquah were incorporated in 1912 and 1892, respectively (Issaquah was originally Gilman). Both cities have increased rapidly in population growth with both residential and business development. Both have annexed large areas in recent years and have plans for future annexations in their Urban Growth Areas. The City of Sammamish was incorporated in 1999 from lands that were formerly unincorporated King County. Numerous housing developments are proposed for all three cities.

The general boundaries of the East Lake Sammamish Trail Master Plan are Gilman Boulevard on the south, and East Lake Sammamish Parkway on the east. At the southern end of the proposed trail, Issaquah Creek is the western boundary. Where Issaquah Creek flows into Lake Sammamish, the lake becomes the western boundary of the project area. At the northern end of Lake Sammamish, the western boundary of the project area becomes the Marymoor Park boundary, and where East Lake Sammamish Parkway NE intersects Redmond Way, the eastern boundary of the project area becomes Redmond Way. Refer to Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7) for a depiction of the trail alignment. For purposes of this EIS, field research and analysis were primarily limited to the rights of way for adjacent roads and the railbanked right of way acquired by King County (see Section 1.3.2, Corridor Acquisition). The railbanked right of way is 100 to 200 feet wide over 91 percent of the trail length. Specific study areas for each discipline studied are described in the appropriate sections of Chapter 3.

2.3 Overview of Project Alternatives

The following eight preliminary alternatives, including a No Action Alternative, were identified during scoping. Of these, the *Rundle/Haro Plan*, the LID Alternative, and the No Trail Alternative were subsequently rejected from further consideration for reasons explained in Section 2.4, Alternatives Considered but Rejected. The remaining five alternatives, described in Section 2.5, Alternatives Selected for Further Study, have been carried forward for evaluation in this EIS.

- LID Alternative (not carried forward)
- Rundle/Haro Plan (not carried forward)
- Corridor Alternative
- East A Alternative
- East B Alternative
- Continuation of Interim Use Trail Alternative
- No Action Alternative
- No Trail Alternative (not carried forward)

2.4 Alternatives Considered but Rejected

Described below are the alternatives that were identified during the scoping process but have been rejected from further consideration.

2.4.1 LID Alternative

Under the Local Improved District (LID) Alternative, a sidewalk or sidewalks, combined with bicycle lanes, would be utilized along East Lake Sammamish Parkway in lieu of a multi-use trail. This alternative was proposed during the public involvement process by citizens, who also submitted the petition to the City of Sammamish regarding this alternative. It would apply only to a portion of the trail within the northern 2.5 miles of the City of Sammamish, between 187th Avenue NE and Inglewood Hill Road.

Per guidelines of the American Association of State Highway and Transportation Officials (AASHTO), the proposed East Lake Sammamish Trail as described in the project purpose and need would be a "shared use path." A shared use path is a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right of way or within an independent right of way. Shared use paths may be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users (AASHTO, 1999).

By contrast, AASHTO (1999) describes a "sidewalk" as the portion of a street or highway right of way designed for the preferential or exclusive use by pedestrians. Per AASHTO, utilizing a sidewalk as a shared use path is unsatisfactory because (1) sidewalks are typically designed for pedestrian speed and maneuverability and are not safe for higher speed uses (e.g., skates, bicycles) or multiple, potentially conflicting uses; (2) sidewalks often include fixed obstacles such as fire hydrants, utility poles, and sign posts; and (3) sidewalks are typically too narrow to accommodate side-by-side use, passing, or two-way use. AASHTO (1999) states, "it is important to recognize that the development of extremely wide sidewalks does not necessarily add to the safety of sidewalk bicycle travel. Wide sidewalks might encourage higher speed bicycle use and can increase potential for conflicts with motor vehicles at intersections, as well as with pedestrians and fixed objects."

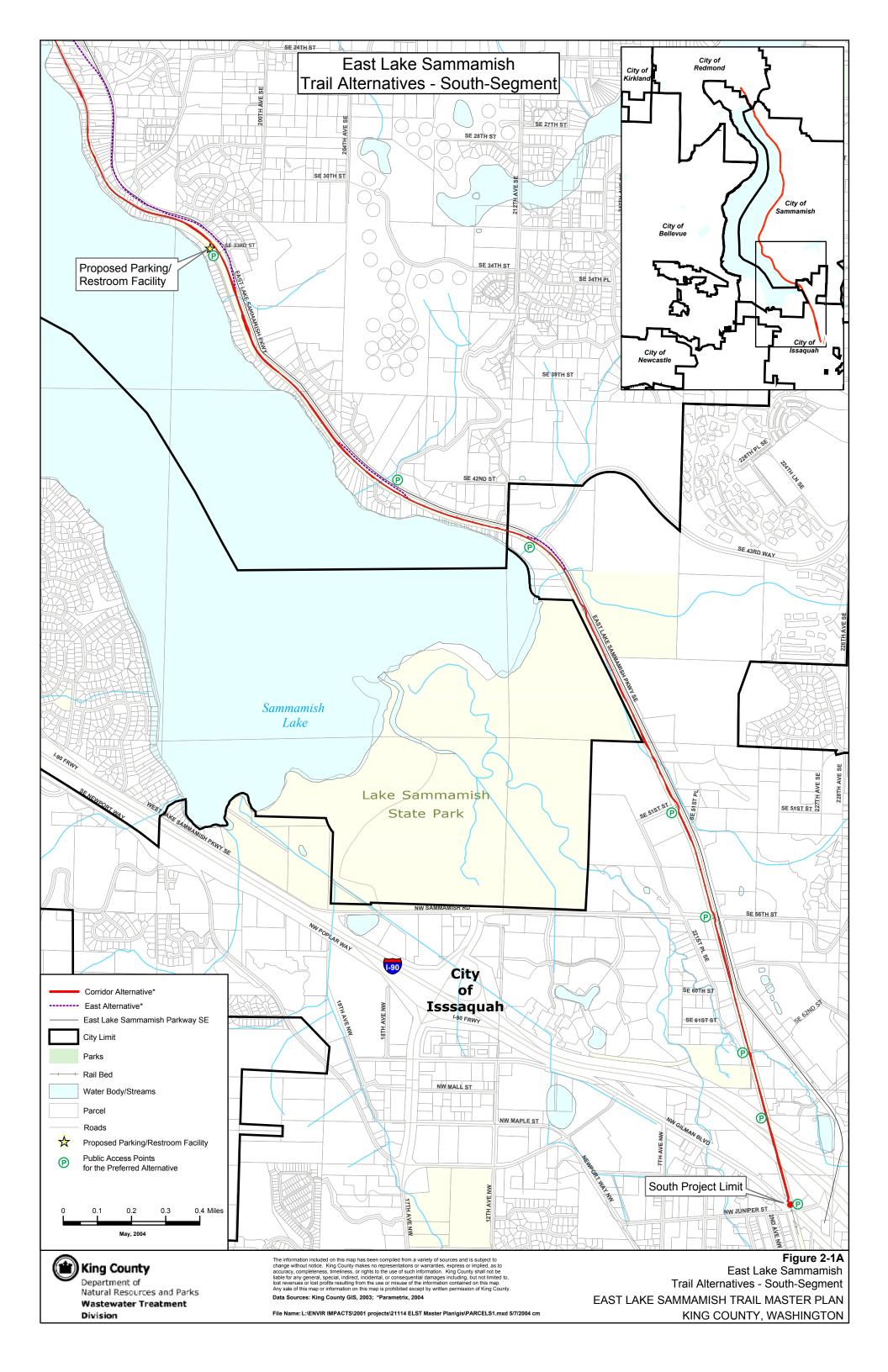
The LID Alternative does not meet the project purpose and need because, by design, a sidewalk is not intended to safely accommodate a wide variety of uses. Furthermore, the LID as proposed by citizens encompasses only a segment of the total corridor between Issaquah and Redmond, and fails to make several of the trail system linkages described in Section 1.2.3, Need to Provide Links in the Regional Trail System. Therefore, this alternative is not evaluated in the EIS.

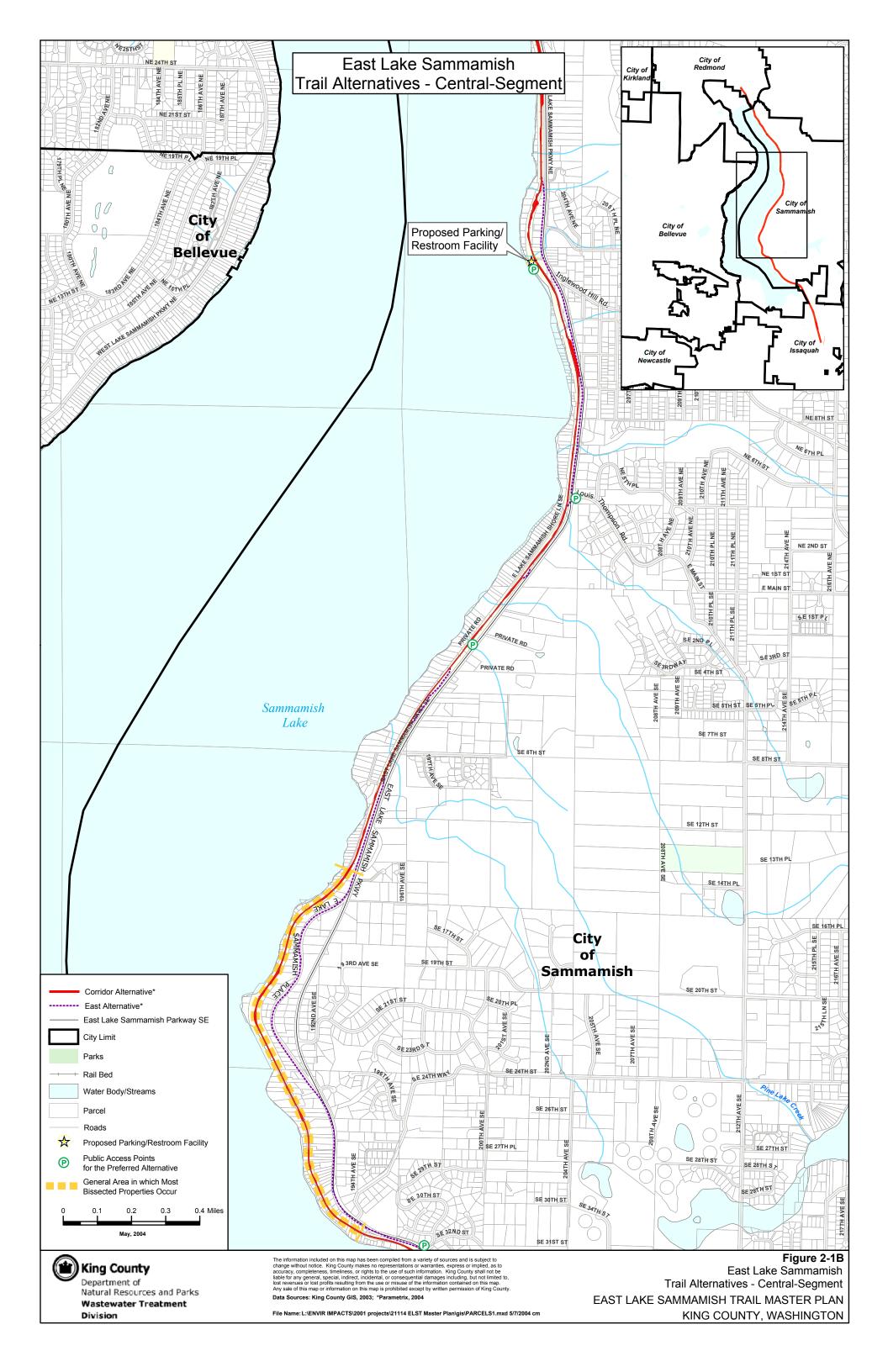
2.4.2 Rundle/Haro Plan

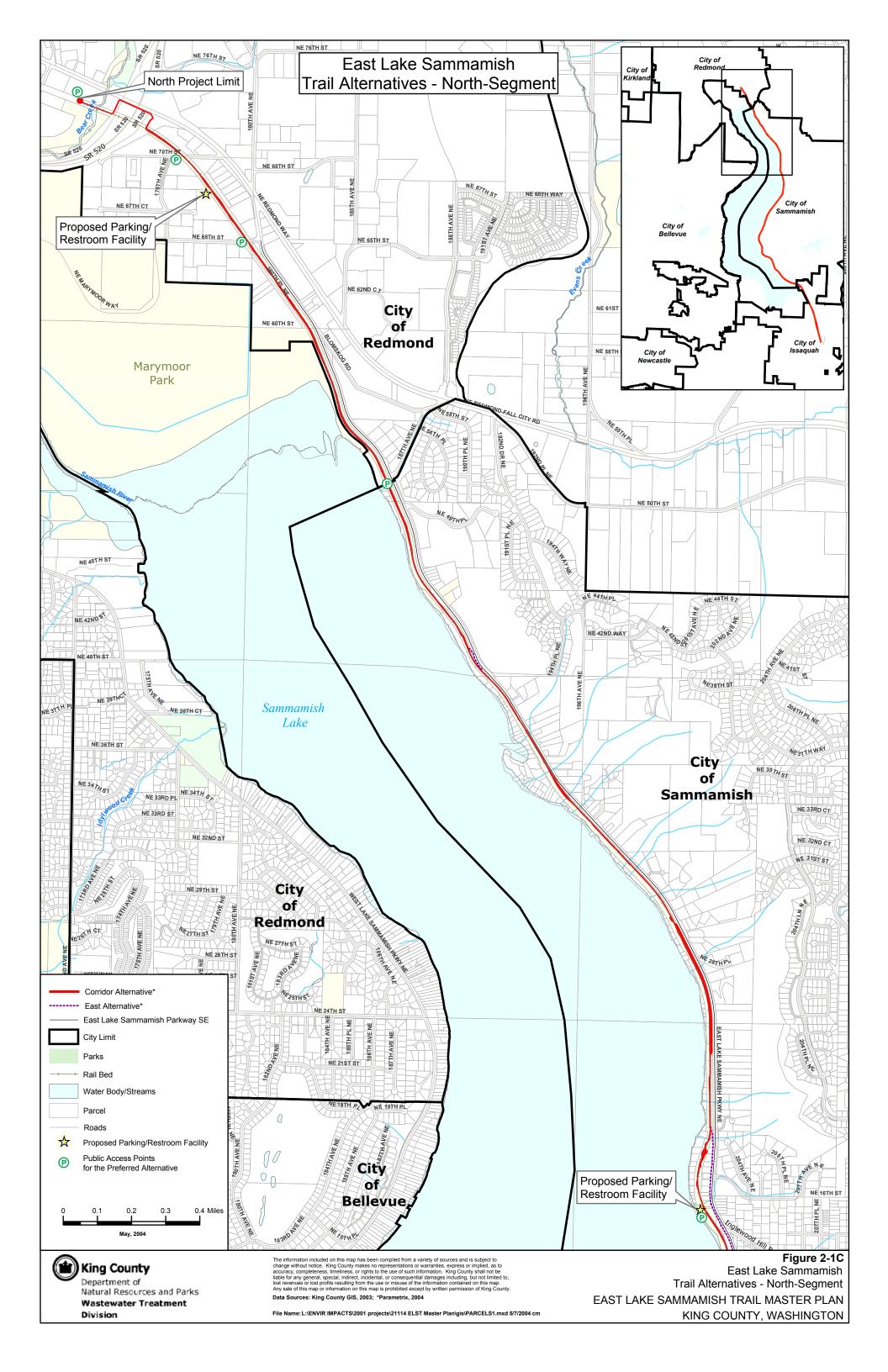
The *Rundle/Haro Plan* is a proposed alignment and crossing concept submitted by several citizens during the scoping process. The trail would leave the rail corridor in some areas and route between the Interim Use Trail and East Lake Sammamish Parkway, adjacent to the Parkway, or adjacent to East Lake Sammamish Place SE. The concept is to bring the trail up to the road right of way at as many driveway intersections as possible, and to avoid environmentally sensitive areas and 1.7 miles of divided properties between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE. The *Rundle/Haro Plan* assumes that high-speed bicycles would remain in the bike lanes on the roadway and would not utilize the trail. Where the trail is adjacent to the Parkway, trail use would be separated from roadway use with a planted divider in most places. The Rundle/Haro proposal does not address equestrian use, parking, or restrooms.

The *Rundle/Haro Plan*, as proposed by the citizens, is depicted on a set of half-size plan view sheets, supplemented with a number of site-specific cross sections of the alignment. The plan views are not engineered, but use a color-coded line drawn on a base map to communicate the general location of the alignment. The cross sections provide more insight into the operational concepts proposed by the citizens. These concepts include:

- A paved multi-use trail, varying from 10 to 12 feet in width, intermittently bounded by one or two 2-foot shoulders.
- Numerous improvements to East Lake Sammamish Parkway, both in locations where the trail is
 located immediately adjacent and in locations where it is not located adjacent to the proposed
 trail. These improvements vary but include sidewalk, curb and gutter, widened bicycle lanes,
 center turn lanes, additional signalization, restriping, and in some places relocating East Lake
 Sammamish Parkway.







The plan sheets of the submitted proposed alignment and conceptual crossing plan note,

These drawings are intended to promote ideas for final trail alignment. Final roadway and trail design elements are to be designed and approved by the appropriate agency. Cross sections are field measured and are not survey accurate.

NEPA regulations require: "All reasonable alternatives under consideration (including the no-build) need to be developed to a comparable level of detail in the draft EIS so that their comparative merits may be evaluated (40 CFR 1502.14(b) and (d))." In evaluating whether or not the *Rundle/Haro Plan* is a reasonable alternative, as required under NEPA, the screening process focused on the project purpose and need. As described in Chapter 1, the purpose of the proposed project is to design and construct an alternative non-motorized transportation corridor and multi-use recreational trail along the east side of Lake Sammamish and provide links to the regional trails system. As described in Section 2.1.3, Interdisciplinary Team, three criteria were developed to screen the alternatives. The *Rundle/Haro Plan*, as submitted by the citizens, is not a reasonable alternative because of (1) the roadway improvements that are integral to the alternative, and (2) the failure to safely accommodate the variety of users because it fails to meet accepted design guidelines for a multi-use trail.

Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint. The roadway improvements that are an integral part of the *Rundle/Haro Plan* are (1) a far greater undertaking than warranted for an alternative non-motorized transportation corridor and multi-use recreational trail, and (2) inconsistent with the local jurisdiction's plans for the roadway. For example, in one cross section, the *Rundle/Haro Plan* depicts shifting East Lake Sammamish Parkway 17 feet to the east to avoid and reduce impacts to the west. However, to accommodate this feature, the Parkway would have to be redesigned for horizontal geometry and drainage to meet roadway standards. In other words, East Lake Sammamish Parkway would have to be realigned for some distance both north and south of the location of the actual 17-foot shift. Lesser shifts are proposed in over two dozen other locations. A large extent of the Parkway would have to be redesigned to accommodate the proposal. Such an effort is not economically feasible for the implementation of a non-motorized facility.

The *Rundle/Haro Plan* is infeasible because it is inconsistent with direction provided by the City of Sammamish with regard to future improvements for the Parkway¹. If an alignment along the local roadways were selected, King County would need to enter into an agreement with the City of Sammamish regarding the use of the road right of way for a non-motorized facility. The location of the trail with respect to the roadway would have to accommodate the City's future plans for the roadway. As proposed, the *Rundle/Haro Plan* is inconsistent with the City's plans for its roadway.

The *Rundle/Haro Plan*, as depicted by the citizens, also fails to consistently meet design guidelines, including those pertaining to horizontal geometry, accessibility, minimum width, and separation (King County, 2004).

Therefore, the IDT recommended that the *Rundle/Haro Plan* be eliminated from consideration in the EIS due to its conceptual nature. Instead, the IDT recommended that an adapted version of the plan be carried forward by translating the concepts of the *Rundle/Haro Plan* into a trail design using applicable design guidelines. While the *Rundle/Haro Plan* as presented by the citizens has been rejected as an alternative in

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¹ John Cunninghan (IDT participant and Director of Public Works for Sammamish, 2003) directed that the trail cross sections be applied 23 feet west of the existing center paint stripe on East Lake Sammamish Parkway. This would accommodate potential future improvements in accordance with the City's minor arterial roadway standard detail.

the EIS, King County has developed the East Alternatives, which incorporate the concepts presented in the *Rundle/Haro Plan*, eliminate as many components as possible that are not reasonable or feasible, comply with the direction provided by the City of Sammamish, and meet design guidelines and ADA accessibility requirements for multiple user groups at varying skill levels. The East Alternatives are discussed in detail in Section 2.5, Alternatives Selected for Further Study. This process is further documented in the *Final Summary of Screening Criteria*, *East Lake Sammamish Master Plan Trail* (King County, 2004).

2.4.3 No Trail Alternative

The No Trail Alternative would result in the immediate decommissioning of the Interim Use Trail. This alternative was considered due to the public's concern that the Interim Use and Master Plan Trails be considered distinct projects. The feeling of the public was that an alternative for the Master Plan Trail should be considered that would result in no trail at all, which would have been the result of the required No Action Alternative for the Master Plan Trail, if not for the existence of the Interim Use Trail. Given this concern, there is an apparent public desire that an alternative be considered in which the Interim Use Trail would be decommissioned immediately, rather than in 2015 when the Interim Use Trail expires. However, the No Trail Alternative fails to meet the project purpose and need, because it does not provide for an alternative transportation corridor or non-motorized recreational trail in the Lake Sammamish area. Furthermore, the No Trail Alternative would be inconsistent with applicable guidelines arising from one of the project's funding sources.

The East Lake Sammamish Master Plan Trail project is a transportation and recreation project with partial funding from the federal Transportation Equity Act (TEA-21). Section 4(f) of the federal Department of Transportation Act of 1966 (23 CFR 771.135; 49 USC 303) directs that highway projects shall not "use" any "publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by such national, state, or local officials having jurisdiction thereof, or any land from an historic site of national, state, or local significance. "Use" of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility or substantially impairs recreational activities. Given that the No Trail Alternative would eliminate the Interim Use Trail, which has been approved through 2015, it is inconsistent with Section 4(f).

Therefore, since the No Trail Alternative fails to meet the project purpose and need, and would result in a use under Section 4(f), this alternative is not being considered in this document.

2.5 Alternatives Selected for Further Study

When the IDT applied the screening criteria to the list of potential alternatives, only the Corridor Alternative and the East Alternatives truly satisfied the criteria. However, consideration of a No Action Alternative is required under both SEPA and NEPA. The Interim Use Trail is the existing condition, and thus the No Action Alternative would be to leave the Interim Use Trail in place until its expiration in 2015 or until additional environmental review is conducted prior to 2015.

In addition, although the alternative failed to meet the screening criteria, the IDT unanimously recommended considering the Continuation of the Interim Use Trail for consideration in the EIS for the following reasons:

• Continuation of the Interim Use Trail Alternative: Members of the public, CAG, and IDT expressed concerns over the potential impacts associated with the Corridor Alternative and the

East Alternatives, and the lack of a potentially less environmentally damaging alternative. The Continuation of the Interim Use Trail beyond 2015 represents such an alternative.

As a result of the alternatives development process, five alternatives are considered in this EIS:

- Corridor Alternative.
- East A Alternative (with separated pedestrian/equestrian use on the Interim Use Trail),
- East B Alternative (with closure of portions of the Interim Use Trail and no separated pedestrian/equestrian use in these areas),
- Continuation of the Interim Use Trail Alternative, and
- No Action Alternative.

These alternatives are described below. Table 2-1 provides a summary of the features associated with each alternative. Trail alternatives are shown in Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7). Figure 2-1D (pg 2-15) provides a depiction of where the users would be on the various trail segments associated with the Corridor and East Alternatives.

Table 2-1. Summary of Features of Alternatives, East Lake Sammamish Master Plan Trail

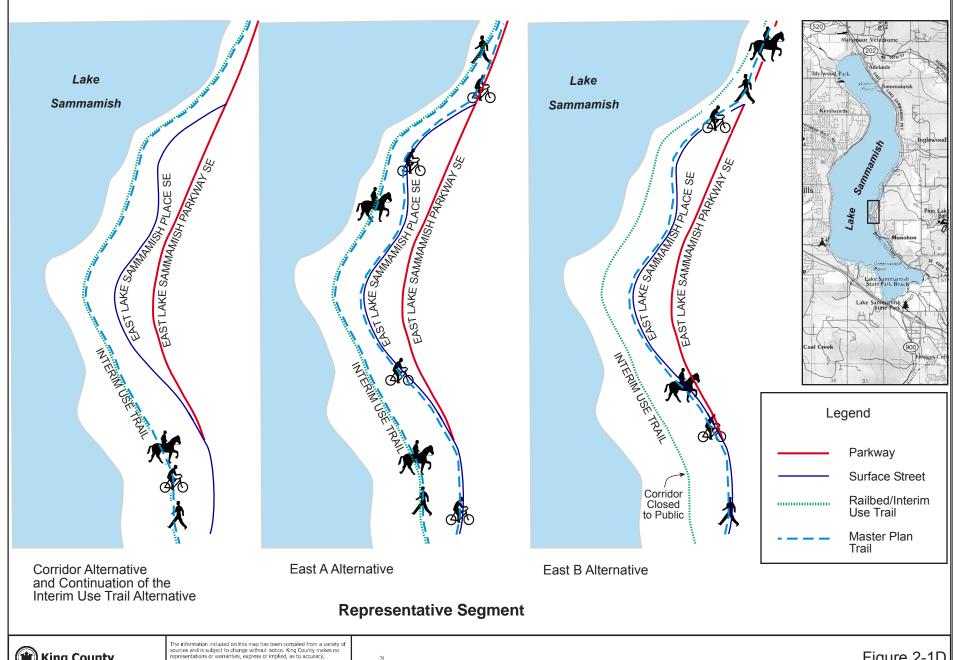
FEATURE	CORRIDOR	East A	EAST B	CONTINUATION OF INTERIM USE TRAIL	No Action
Fate of Interim Use Trail	Interim Use Trail would be replaced by Master Plan Trail.	Interim Use Trail would be replaced by Master Plan Trail.	Interim Use Trail would be replaced by Master Plan Trail.	Interim Use Trail would continue beyond 2015 expiration date.	Interim Use Trail would operate through 2015; further use beyond that date would require additional environmental review in or prior to 2015.
Trail location	Paved and soft-surface portions of trail located mostly along existing Interim Use Trail except in areas where leaving Interim Use Trail would improve trail safety.	Paved portion of trail would leave Interim Use Trail and transition to shoulder of East Lake Sammamish Parkway SE and East Lake Sammamish Place at driveway/public roadway intersections and other sensitive areas. Soft-surface portion of trail would continue along Interim Use Trail in these areas.	Same as East Alt. A, but Interim Use Trail would be closed to public use in areas where trail transitions to roadway shoulder.	Trail located entirely along Interim Use Trail. May include 1500-ft extension of Interim Use Trail north from NE 70th Street over Bear Creek.	Trail located entirely along Interim Use Trail.
Intended trail users	Pedestrians Non-motorized wheeled vehicles, including wheel chairs Equestrians (in Redmond segment)	Pedestrians Non-motorized wheeled vehicles, including wheel chairs Equestrians (in Redmond segment) Equestrians and pedestrians could continue on Interim Use Trail in areas where paved portion of trail transitions to roadway shoulder. High-speed bicycles would transition to paved trail along the roadway.	Pedestrians Non-motorized wheeled vehicles, including wheel chairs Equestrians (in Redmond segment) All trail users would transition to roadway shoulder in areas where Interim Use Trail is closed.	Pedestrians Non-motorized wheeled vehicles Equestrians (not currently allowed on Interim Use Trail but would be allowed in Redmond segmenteonsidered) The gravel trail surface may discourage some wheeled uses, including wheel chairs.	Pedestrians Non-motorized wheeled vehicles The gravel trail surface may discourage some wheeled uses, including wheel chairs.

Table 2-1. Summary of Features of Alternatives, East Lake Sammamish Master Plan Trail (continued)

FEATURE	CORRIDOR	East A	EAST B	CONTINUATION OF INTERIM USE TRAIL	No Action
Trail width	Varies from 18 to 27 feet wide. Minimum evaluated paved width is 12 feet; each shoulder 2 feet. Wider configurations may occur depending on results of environmental review and Draft EIS comments.	Same as Corridor Alternative where trail is between the Interim Use Trail and the roadway. Portions along roadway would be 18 to 21 feet wide.	Same as East Alt. A, but Interim Use Trail would be closed in areas where trail transitions to roadway shoulder.	8 to 12 feet wide without shoulders.	8 to 12 feet wide without shoulders.
Trail length	City of Redmond: 1.57 miles City of Sammamish: 7.23 miles City of Issaquah: 2.20 miles Total length: 11.00 miles	City of Redmond: 1.57 mile City of Sammamish: 7.21 miles City of Issaquah: 2.20 miles Total length: 10.98 miles	City of Redmond: 1.57 mile City of Sammamish: 7.21 miles City of Issaquah: 2.20 miles Total length: 10.98 miles	City of Redmond: 1.59 miles City of Sammamish: 7.21 miles City of Issaquah: 2.19 miles Total length: 10.99 miles	Through 2015: City of Redmond: 1.31 miles City of Sammamish: 7.21 miles City of Issaquah: 2.19 miles Total length: 10.7 miles Following 2015, 0 mile of trail.
Trail surface materials	Multi-use: paved Shoulders: gravel Separated: gravel	Multi-use: paved Shoulders: gravel Separated: gravel	Multi-use: paved Shoulders: gravel Separated: gravel	Multi-use: gravel Shoulders: none Separated: none	Multi-use: gravel Shoulders: none Separated: none
Fencing	Total fencing required: 60,800 linear feet. Types and approximate locations similar to fencing on Interim Use Trail, but some fencing would have to be removed and replaced due to the widened trail area. Additional fencing placed where retaining walls present hazards to users	Total fencing required: 69,500 linear feet. Where multi-use portion of trail leaves the Interim Use Trail, but pedestrian/equestrian use continues on Interim Use Trail, the existing split-rail and chain-link fence on the Interim Use Trail would likely remain in place. Additional fencing would be required for the multi-use portion of trail.	Total fencing required: 62,600 linear feet. Same as East Alternative A. However, where the trail leaves the Interim Use Trail, existing chain-link fence could be removed and the holes would be backfilled. Other fencing types would also likely be left in place.	Total fencing required: 56,800 linear feet. Existing fencing would remain in place and new fencing would be added north of NE 70th Street.	Total fencing required: 55,300 linear feet. Fencing for Interim Use Trail would be left in place through 2015.

Table 2-1. Summary of Features of Alternatives, East Lake Sammamish Master Plan Trail (continued)

FEATURE	Corridor	EAST A	EAST B	CONTINUATION OF INTERIM USE TRAIL	No Action
Retaining walls	<5 ft high: 21,200 lf 5-10 ft high: 4,100 lf >10 ft high: 700 lf	<5 ft high: 12,500 lf 5-10 ft high: 10,100 lf >10 ft high: 3,200 lf	<5 ft high: 12,500 lf 5-10 ft high: 10,100 lf >10 ft high: 3,200 lf	<5 ft high: 0 lf 5-10 ft high: 0 lf >10 ft high: 0 lf	<5 ft high: 0 lf 5-10 ft high: 0 lf >10 ft high: 0 lf
Parking	Three new parking areas proposed (at approximately East Lake Sammamish Parkway SE/SE 33 rd Street, East Lake Sammamish Parkway SE/Inglewood Hill Road, and between NE 65 th and NE 70 th Streets in Redmond). Existing parking areas could potentially be used, including Marymoor Park, areas along NE 65th Street and NE 70th Street, Lake Sammamish State Park, King County District Court (Issaquah) and Microsoft campus.	Same as Corridor Alternative.	Same as Corridor Alternative.	Same as Corridor Alternative.	No new parking facilities proposed.
Restrooms	Two new restroom facilities are proposed in Sammamish (at approximately East Lake Sammamish Parkway SE/SE 33 rd Street, and East Lake Sammamish Parkway SE/Inglewood Hill Road). Existing restrooms at Marymoor Park and Lake Sammamish State Park could be utilized.	Same as Corridor Alternative.	Same as Corridor Alternative.	Same as Corridor Alternative.	No new restroom facilities proposed.





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SOURCES:



Figure 2-1D Representative Segment of Alternative Alignments by Use East Lake Sammamish Trail Master Plan King County, Washington

2.5.1 Corridor Alternative

Under the Corridor Alternative, a Master Plan the Ttrail would be located within the former railroad right of way, hereafter referred to as the "corridor." The majority of the trail would encompass the existing Interim Use Trail. The trail would accommodate pedestrian and, wheeled uses, on paved and adjacent or separated soft surfaces. Equestrian use would be allowed in the Redmond segment only. This alternative includes parking and restrooms.

Under current guidelines, the ideal width of the trail to safely accommodate multiple uses is 27 feet. This includes a 3-foot clear zone, 4-foot pedestrian/equestrian trail, 3-foot vegetated buffer, two 2-foot gravel shoulders, 12-foot paved trail, and 1-foot vegetated clear zone (refer to Figure 2-2 (pg 2-17)). Fences and/or retaining walls would be located immediately adjacent to each side of the trail where necessary. In a few instances, the separation between the paved trail and the pedestrian/equestrian trail would increase to take advantage of existing topography (refer to Figure 2-3 (pg 2-18)).

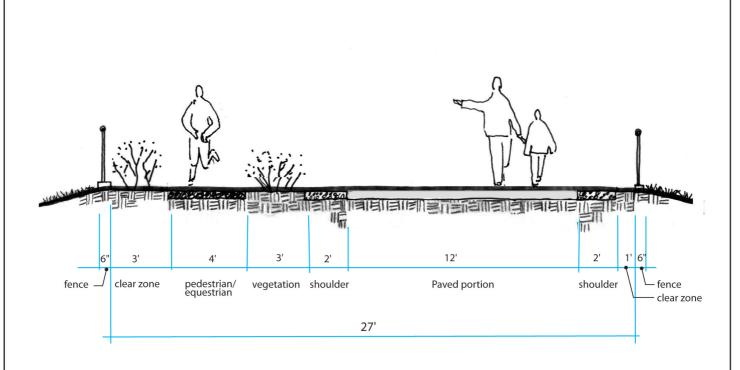
Based on the preliminary design concept, the proposed trail would narrow to 21 feet, 19 feet, or 18 feet in some areas to avoid existing structures, preserve access to adjacent properties, avoid and minimize impacts to sensitive areas, and increase safety at vehicle crossings (refer to Figures 2-4 (pg 2-19), 2-5 (pg 2-20), and 2-6 (pg 2-21)). The narrowing would be accomplished by combining uses and/or eliminating trail buffer. Specifically, a single contiguous soft shoulder on the west side of the trail, intended for two-way pedestrian/equestrian use, would narrow from 5 feet, to 3 feet, to 2 feet, respectively. However, the width of the paved portion of the trail would be 12 feet, with each shoulder 2 feet. The safety concerns regarding equestrian use on a narrow shoulder are considered in Section 3.7, Recreation of this EIS.

In two locations in the corridor, adjacent homeowners currently use the corridor for parking. These areas are (1) a 500-foot segment of the trail between NE 7th Court and Inglewood Hill Road, and (2) a 2,100-foot segment of the trail between NE 18th Place and NE 30th Court. For these two locations, safety and access are improved by providing parking to those homeowners along the west side of the corridor with the trail on the east side. Figures 2-7 (pg 2-22) and 2-8 (pg 2-23) provide conceptual cross section for these locations.

Figures 2-1A (pg 2-5), B (pg 2-6), and C (pg 2-7) show the approximate location of the parking and restroom facilities. Plans depicting the alignment of this alternative and the more specific location of parking and restroom facilities are provided in Volume II of this EIS. It should be noted that these plans are preliminary, and the base map is largely based on aerial photography not ground survey. Detailed survey and design of the selected alternative would be undertaken following completion of the environmental review process.

2.5.2 East Alternatives

The original *Rundle/Haro Plan* has been adapted into the East Alternatives by translating the concepts into a trail design using applicable trail guidelines and regulations. The process undertaken to develop the East Alternatives is described in detail in *Final Summary of Screening Criteria, East Lake Sammamish Master Plan Trail* (King County, 2004). During the planning process, the East Alternatives have also been known as the Adapted *Rundle/Haro Plan* Alternative.





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Notes

This section applies to the East Alternatives where they occur on the railbed. Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



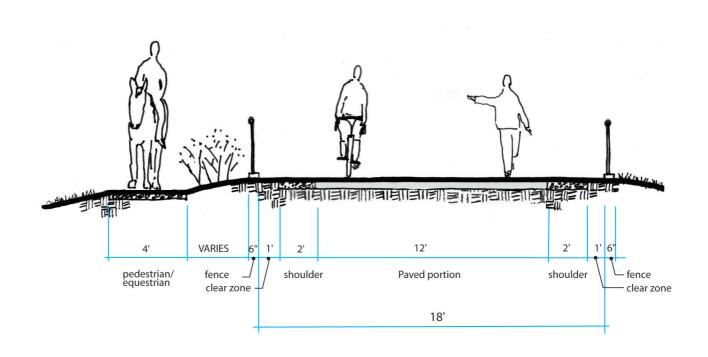
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FIGURE 2-2 IDEAL TRAIL WIDTH, CROSS SECTION A EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL

PAVEMENT

Notes

This section applies to the East Alternatives where they occur on the railbed. Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

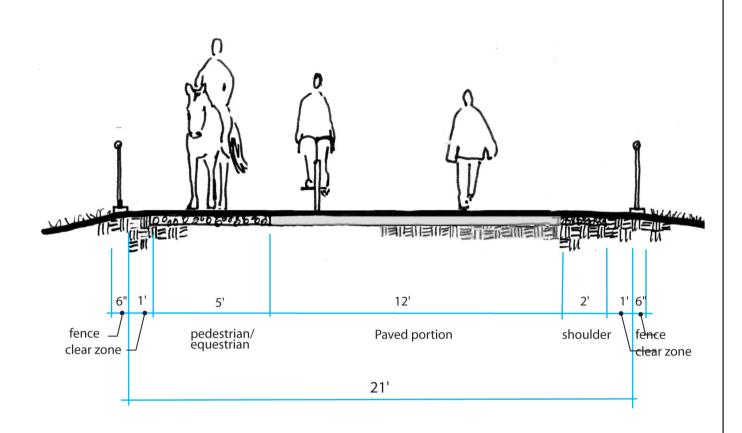


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FIGURE 2-3 VARIED WIDTH DUE TO TOPOGRAPHY, CROSS SECTION B EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Notes

This section applies to the East Alternatives where they occur on the railbed.

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

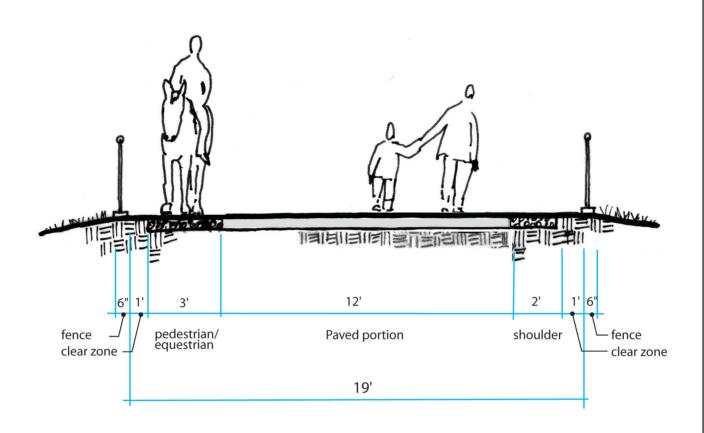


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FIGURE 2-4
NARROWED TRAIL WIDTH, CROSS SECTION C
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



PAVEMENT

<u>Notes</u>

This section applies to the East Alternatives where they occur on the railbed.
The safety concerns regarding equestrian use of a relatively narrow shoulder are considered in this EIS.

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

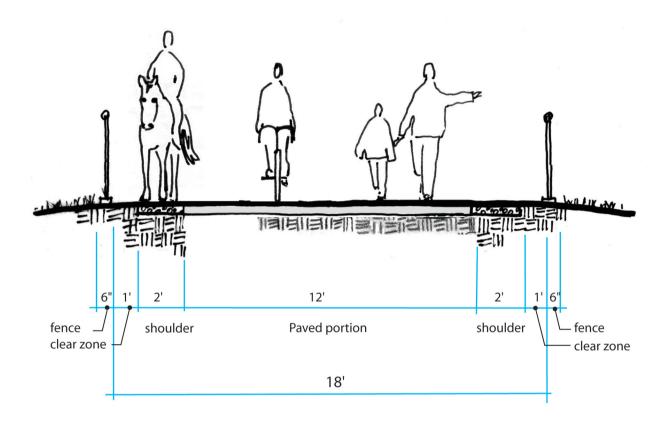


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FIGURE 2-5 NARROWED TRAIL WIDTH, CROSS SECTION D EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Notes

This section applies to the East Alternatives where they occur on the railbed.
The safety concerns regarding equestrian use of a relatively narrow shoulder are considered in this EIS.

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

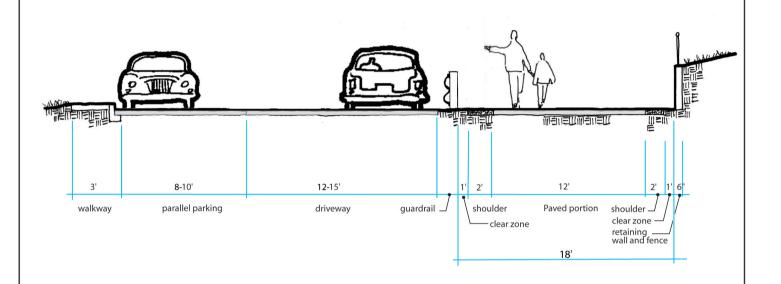


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FIGURE 2-6
NARROWED TRAIL WIDTH, CROSS SECTION E
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



PAVEMENT

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

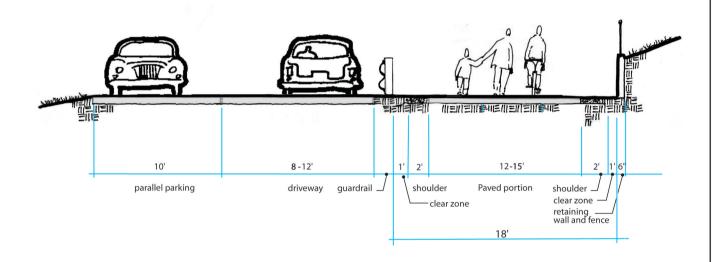


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FIGURE 2-7 ADJACENT PARKING, CROSS SECTION F EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



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FIGURE 2-8 ADJACENT PARKING, CROSS SECTION G EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON

2.5.2.1 East A Alternative

The East A Alternative, like the Corridor Alternative, features a combination of paved and soft surface trail within each typical section. In certain segments, the paved and soft-surface portions of the trail are both located along the Interim Use Trail (see Figures 2-2 through 2-8 (pgs 2-17 through 2-23)). However, the paved portion of the trail transitions to the roadway shoulder at an ADA-acceptable gradient in the following areas: for each driveway/public roadway intersection, along 1.7 miles of divided properties between SE 33rd Street and approximately the 1400 block of East Lake Sammamish Parkway SE, to avoid sensitive areas, and in other locations where the *Rundle/Haro Plan* calls for the transition. This alternative assumes that the local jurisdictions will retain bike lanes on East Lake Sammamish Parkway for high-speed bicycle use. This alternative includes parking and restrooms as in all Build Alternatives.

Where the alignment for the paved portion of the multi-use trail leaves the Interim Use Trail, pedestrian and equestrian-use would continue on the Interim Use Trail which would be signed for these uses only. The width of this paved portion would be 12 feet with two, 2-foot gravel shoulders (see Figures 2-9 (pg 2-25) and 2-10 (pg 2-26)). Depending upon the grade of each transition area between the Interim Use Trail and the Parkway, the gravel shoulders may be eliminated during detailed design due to drainage and maintenance considerations.

Along East Lake Sammamish Parkway, a 4-foot vegetated buffer is also part of the cross section (see Figure 2-9 (pg 2-25)). However, a barrier or buffer along East Lake Sammamish Place would be provided by the City of Sammamish during future road improvements (Cunningham, personal communication, see Figure 2-10 (pg 2-26)).

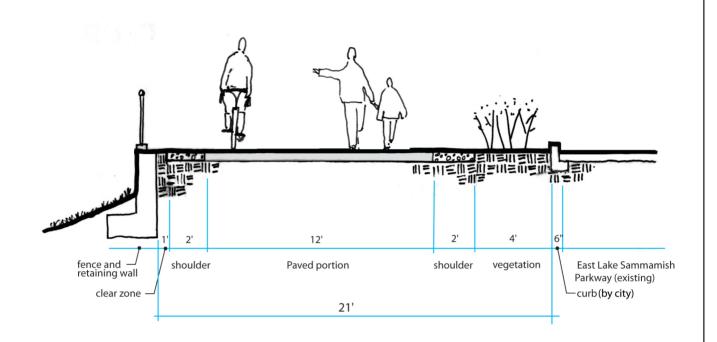
The cross section may vary in width where the trail transitions from the Interim Use Trail to the roadway, depending on location. Cross sections at transitions would be designed during the permitting and design phase. Like the Corridor Alternative, the paved width would be 12 feet, with each shoulder 2 feet wide.

Plans depicting the alignment of this alternative and various features are provided in Volume II of this EIS. It should be noted that these plans are preliminary, and the base map is largely based on aerial photography not ground survey. Detailed survey and design of the selected alternative would be undertaken following completion of the environmental review process.

2.5.2.2 East B Alternative

As the alternatives were being finalized for the EIS, King County determined that the East A Alternative did not fully address the intent of the original *Rundle/Haro Plan*, which was to have no use of the Interim Use Trail along certain segments of the railbed. In addition, there was no alternative that considered a location for the trail located off the Interim Use Trail as recommended in SEPA guidance documents. For those reasons, a variation of the East A Alternative that would not use the Interim Use Trail for pedestrian/equestrian use has been added. The resulting alternative is referred to as the East B Alternative.

This alternative would be identical to the East A Alternative except that there would be no equestrian or pedestrian use on the existing Interim Use Trail in some segments. Where the paved portion of the trail transitions to the roadway shoulder, the existing Interim Use Trail would be closed and no trail access would be permitted on the Interim Use Trail. Pedestrian, equestrian, and bicycle use would continue on the paved trail adjacent to the roadway in these areas. (The safety concerns regarding equestrian use on a narrow shoulder and near the roadway are considered in this EIS.) High-speed bicycle use would remain in the bike lanes on the roadway. This alternative includes parking and restrooms. Separate plans are not provided for this alternative because plans for the East A Alternative provide the necessary information. Locations where the Interim Use Trail would be closed in the East B Alternative are shown on the East A Alternative plans (in the cross reference table provided in Volume II).





East Alternative

LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL

PAVEMENT

Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.

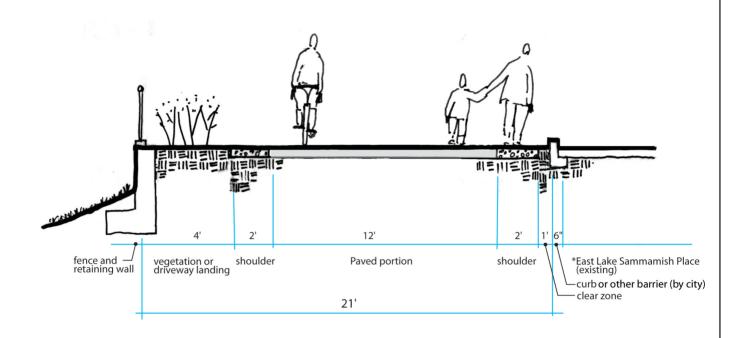


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FIGURE 2-9 ADJACENT TO PARKWAY, CROSS SECTION H EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





East Alternative

*Future road improvements by the City of Sammamish would incorporate some type of buffer or barrier between the trail and roadway.

LEGEND



EXISTING SOIL, BALLAST, OR FILL MATERIAL



PROPOSED GRAVEL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



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FIGURE 2-10 ADJACENT TO THE PLACE, CROSS SECTION I EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON

2.5.3 Continuation of the Interim Use Trail Alternative

Under this alternative, the existing Interim Use Trail would be continued beyond the currently approved 2015 expiration date. Construction of the Interim Use Trail was approved by the King County Council in December 2000. The existing Interim Use Trail consists of an 8- to 12-foot-wide gravel trail without shoulders along 10.6 miles of the railbed for pedestrian and bicycle use. Figure 2-11 (pg 2-28) depicts the typical cross section for the Interim Use Trail. Plans for this alternative are not provided in Volume II of the EIS. The impacts of the Interim Use Trail were evaluated in a SEPA EIS (King County, 2000) and NEPA EA (FHWA and WSDOT, 2002).

Equestrian use is not permitted on the existing Interim Use Trail. <u>Under this alternative</u>, <u>equestrian use</u> <u>would be allowed in the Redmond segment only.</u> <u>Evaluation of this alternative will include whether the existing gravel trail could safely accommodate equestrians.</u> As with all of the Build Alternatives, this alternative includes extending the Interim Use Trail approximately 1,500 feet from its current terminus across NE 70th Street to a point approximately 300 feet northwest of Bear Creek. This alternative includes the same parking and restroom facilities as in all Build Alternatives.

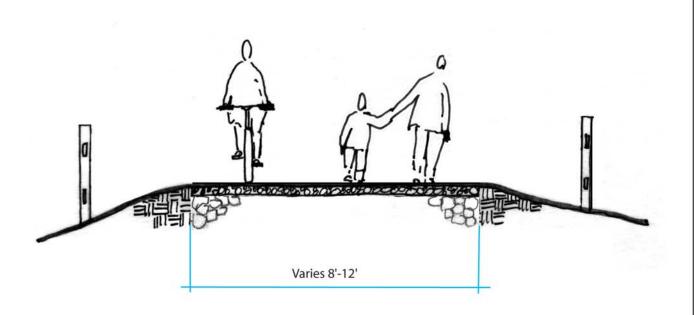
2.5.4 No Action Alternative

Under the No Action Alternative, King County would continue to operate the existing Interim Use Trail through 2015, at which time the permitted operation of the trail would expire. The trail would be decommissioned and closed to public use in 2015. Continued use of the Interim Use Trail would require additional environmental review prior to 2015.

After 2015, decommissioning of the Interim Use Trail would include removal of traffic control and trail etiquette signs and installation of "closed to public use" signs and/or barricades at public access points and driveway crossings, as well as removal of chain-link fence. Sign and fence post holes would be backfilled.

Features of the Interim Use Trail that were constructed to protect natural resources (e.g., geotextile fabric) would be left in place. If removing an element of the Interim Use Trail would present greater potential harm to the environment than leaving it in place, that feature would be left in place. Crushed rock surfacing and split-rail fences would be left in place since their removal would cause more harm than good. For as long as King County maintains ownership, the County would continue to maintain drainage through the corridor and safe access for maintenance crews.

Under this alternative, the acquisition agreement with Cascade Land Conservancy requires King County to offer the corridor for lease to the local cities and then to Cascade Land Conservancy for use as a trail for a nominal fee. King County would request the Surface Transportation Board (Board) to accept these parties as trail sponsors for those sections leased. If neither the local cities nor Cascade Land Conservancy wanted to operate a trail, King County could offer trail sponsorship to other non-profit



SECTION **TYPICAL** NO SCALE

Interim Use Trail

LEGEND



EXISTING RAILROAD BALLAST



EXISTING SOIL OR FILL MATERIAL



Fences, guardrails and retaining walls are shown in all illustrations, however these will be installed where needed but not in all locations.



PROPOSED GRAVEL





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FIGURE 2-11 INTERIM USE TRAIL, CROSS SECTION J EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON organizations or government entities. The Board would have to reissue the Notice of Interim Trail Use to replace the trail sponsor. If no other non-profit or government entity wanted to operate a trail, and King County did not anticipate doing so in the foreseeable future, King County could request the Board to vacate the Notice of Interim Trail Use. BNSF would be allowed to complete abandonment of the rail line. After abandonment, King County would utilize or dispose of the fee portions of the corridor as it saw fit.

2.5.5 Preferred Alternative

The preferred alternative is the Corridor Alternative because it best meets King County's purpose and need of (1) providing an alternative transportation corridor between major business centers, (2) providing non-motorized recreational trails to support the growing population, and (3) providing connections between other existing regional trails. The No Action Alternative and Continuation of the Interim Use Trail Alternative fail to fully meet the project's purpose and need. As described in Chapter 1, the County purchased the railbanked corridor with the intention of developing the corridor into the East Lake Sammamish Trail. The East A Alternative would utilize all of the existing corridor but would also require extensive development outside of the corridor. The East B Alternative would not use all of the existing corridor and would also require extensive development outside of the corridor. Although a preferred alternative has been identified for this Draft EIS, final selection and refinement of the preferred alternative will be based on the environmental review, including cost considerations, and comments received on this Draft EIS.

2.5.6 Features Common to Most Build Alternatives

This section describes features that are common to most of the Build Alternatives (Corridor, East A, East B, and Continuation of the Interim Use Trail).

2.5.6.1 Station Numbering

The preliminary plans for the Corridor Alternative and the East Alternatives, both contained in Volume II of this EIS, depict the centerline of the trail with stationing on 100-foot increments for each alignment. These 100-foot increments are assigned numbers known as Station Numbers. These Station Numbers are used as reference points in this document. To distinguish the Station Numbers for the Build Alternatives, Station 100 on the Corridor Alternative is written as STA_{COR} 100. For the East A Alternative, it is written as STA_{EASTA} 100.

2.5.6.2 Parking and Restroom Facilities

The number and locations of existing and proposed parking and restrooms are the same for all of the Build Alternatives, as described below. The approximate locations of these facilities are shown on Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7). Conceptual drawings of proposed parking areas are provided on the plan sheets (Volume II, Figures 13, 25, 26, 37, 38, 13A, 25A, and 26A). Parking and restroom facilities would be designed to be accessible to disabled persons.

Existing parking and restroom facilities that could be used include:

- Existing restrooms and parking at Marymoor Park could be utilized. Marymoor Park has 641 paved parking spaces and 1,351 unpaved parking spaces available year-round. During the winter months, the park contains 600 additional spaces.
- Thirty parking spaces are available along NE 65th Street. Parking is permitted only on the south side of the street.

Proposed new parking and restroom facilities include:

- New <u>accessible</u> restrooms and vehicle parking is proposed at the intersection of East Lake Sammamish Parkway SE and SE 33rd Street at approximately STA_{COR} 281 to 285. Drinking fountains would be provided at the restroom facility. The restroom facility would be approximately 500 square feet. A new signal, crosswalks, and sidewalks are proposed at the intersection of SE 33rd Street and the Parkway and along this portion of East Lake Shore Lane. The parking lot would accommodate approximately 30 autos. The autos would enter the parking area via SE 33rd Street and exit via a new driveway onto East Lake Sammamish Parkway SE. Trail users would access the trail using a sidewalk on the north side of SE 33rd Street.
- New <u>accessible</u> restrooms and vehicle parking is proposed north of the intersection of East Lake Sammamish Parkway SE and Inglewood Hill Road in Sammamish, on the west side of the Parkway, at 1529 East Lake Sammamish Parkway NE at approximately STA_{COR} 465 to 469. Drinking fountains would be provided at the restroom facility. The restroom facility would be approximately 500 square feet. The parking lot would accommodate approximately 20 autos, and would be accessed via one of two driveways from East Lake Sammamish Parkway NE.

For autos exiting the parking lot, left turns would be prohibited from the southern driveway due to the left-turn lane onto Inglewood Hill Road for vehicles traveling southbound on East Lake Sammamish Parkway NE. Likewise, vehicles traveling northbound on East Lake Sammamish Parkway NE would be prohibited from making left turns into the southern driveway. The City of Sammamish is currently planning on redeveloping portions of East Lake Sammamish Parkway. This redevelopment may provide an opportunity for U-turn lanes to allow northbound traffic access to this parking area. The city's redevelopment is in the planning stage at this time. For all alternatives, trail users would use sidewalks to access the trail from the parking area. For the two East Alternatives, trail users would access the trail via a ramp on the south side of the south driveway.

• New <u>accessible</u> parking between NE 65th and NE 70th Street in Redmond is proposed (STA_{COR} 623+00). Approximately 44 parallel parking spaces would be provided.

The sites for new parking/restroom facilities were selected, in part, because they are close to East Lake Sammamish Parkway and thus relatively visible to law enforcement officers, as well as the general public. In addition to the above existing and proposed parking and restroom facilities, other existing facilities might be available as discussed below. The additional parking is not expected to increase trail usage, but could reduce the potential for illegal parking along the corridor. Use of the following facilities would require permission from the property owners. These property owners would be approached during the planning and permitting phase.

- Existing restrooms and parking at Lake Sammamish State Park in Issaquah possibly could be utilized. Lake Sammamish State Park has approximately 2,300 regular parking spaces in the western portion near the picnic/swimming area.
- Existing parking at the King County District Court, located at 5415 220th Avenue SE in Issaquah, could potentially be utilized on evenings and weekends. Approximately 80 spaces are available.
- Some businesses located adjacent to the project corridor appear to use available parking spaces
 only during normal working hours. Potentially, arrangements to allow trail parking during nonwork hours could be made.

- King County has an existing agreement with an adjacent property owner who is currently developing a public storage facility near STA_{COR} 630. The agreement would allow trail users to park in the 26 parking stalls provided in coordination with the storage facility.
- King County is cooperating with the City of Issaquah to develop a new north-south connector road across I-90, which would be located partially in the King County right of way. As part of the proposed agreement, a segment of Zetech Road between Gilman Boulevard and I-90 would be available to King County for parallel parking. Trail users could access 16 parking spots via one-way vehicular access from Gilman Boulevard to the new connector road.

The adequacy of existing, proposed, and potential future parking facilities is evaluated in Section 3.11, Transportation, of this EIS.

2.5.6.3 Traffic Control

Traffic engineers developed preliminary traffic control measures for roadway or driveway crossings, which apply in the majority of cases. These measures are described below. Trail accessibility for persons with disabilities has been taken into consideration throughout the design process. The Type 1 and Type 2 intersections would include curb cuts and truncated domes to assist persons with disabilities. Further detail regarding the potential impacts of each type of crossing can be found in Section 3.11, Transportation.

Type 1—High-volume streets. In some places, the Build Alternatives would cross high-volume streets where signalized intersections are located in close proximity to the trail. At these locations, trail users would be directed to the signalized crosswalk at the intersection (Figure 2-12 (pg 2-32)). This situation exists at SE 56th Street, SE 51st Street, the State Route (SR) 520 on- and off-ramps, and potentially at NE 65th Street. At NE 65th Street, the alternative of providing a safe crossing at the former railbed would be considered as well, but it is probable that a final decision will not be made prior to detailed design and permitting.

Type 2—Low-volume streets. In some places, the Build Alternatives would cross several low-volume streets where the traffic volume and/or sight distance limitations would warrant stop signs on the trail for the safety of trail users (Figure 2-13 (pg 2-33)). This situation occurs at SE 62nd Street, SE 33rd Street, and NE 70th Street.

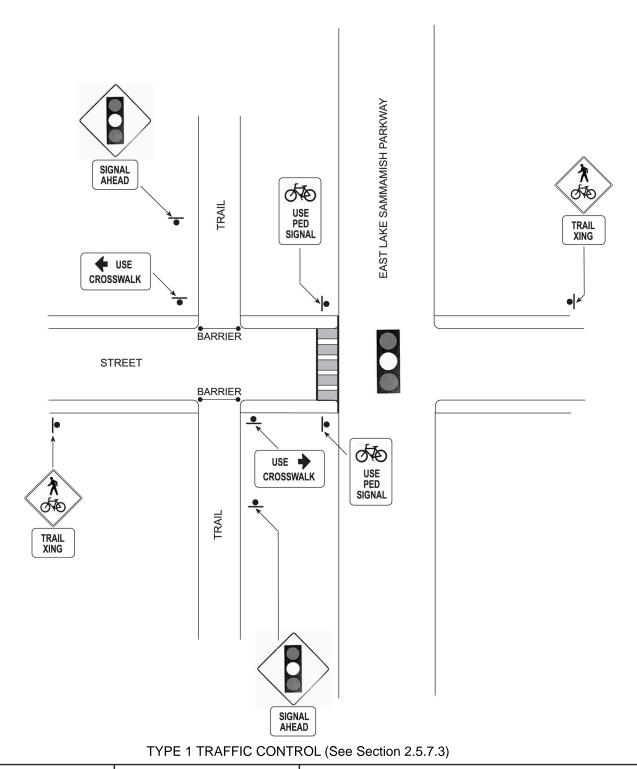
Type 3—Residential driveway crossings farther than 30 feet from parallel roadway intersection with limited sight distance. The Build Alternatives would cross many residential driveways. Where sight distance limitations would exist due to horizontal curves or vegetation that cannot be altered or relocated, the recommended traffic control would be to place stop signs on the driveway for vehicles and to install intersection crossing warning signs on the trail for trail users (Figure 2-14 (pg 2-34)).

Type 4—Residential driveway crossings farther than 30 feet from parallel roadway intersection with adequate sight distance. These intersections would be a slight modification of those described immediately above where the recommended traffic control for vehicles on the driveway would be yield signs instead of stop signs. Where sufficient sight distance exists, requiring vehicles to fully stop would not be necessary (Figure 2-15 (pg 2-35)).

Type 5—Residential driveway crossings within approximately 30 feet of East Lake Sammamish Parkway. This situation would exist primarily for the East Alternatives and would be similar to the residential crossings described above, except the trail/driveway intersections would be located closer to East Lake Sammamish Parkway. When intersections are located approximately 30 feet or less from the edge of the southbound East Lake Sammamish Parkway travel lane, stop signs on the trail

would be recommended for trail users, since drivers making left or right turns from East Lake Sammamish Parkway would not have sufficient distance to stop if a trail user were encountered (Figure 2-16 (pg 2-36)).					

Trail users are directed to the signalized crosswalk at the intersection.





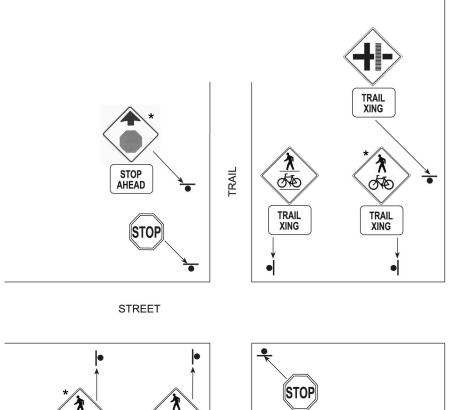
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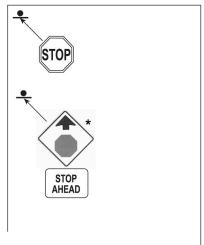


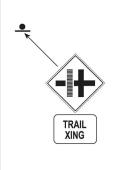
FIGURE 2-12 TRAFFIC CONTROL FOR HIGH VOLUME STREET CROSSINGS WITH SIGNALS EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON Trail users stop at the intersection, yielding to vehicles.



TRAIL

EAST LAKE SAMMAMISH PARKWAY





* Advance warning signs no less than 50 feet from crossing.

TYPE 2 TRAFFIC CONTROL (See Section 2.5.7.3)



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TRAIL

XING

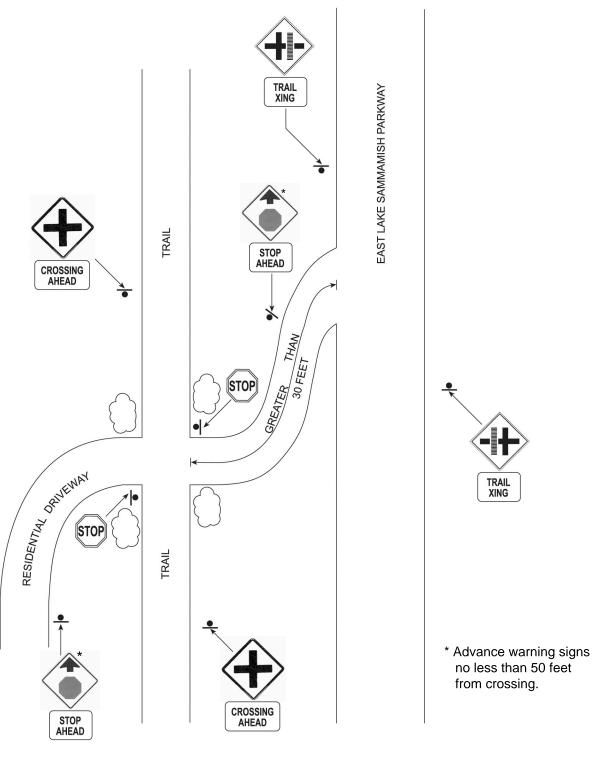
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TRAIL

XING



FIGURE 2-13 TRAFFIC CONTROL FOR LOW VOLUME STREET CROSSINGS EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON Vehicles stop at the intersection, yielding to trail users.



TYPE 3 TRAFFIC CONTROL (See Section 2.5.7.3)



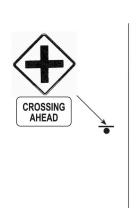
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SOURCES:



FIGURE 2-14
TRAFFIC CONTROL FOR LIMITED SIGHT DISTANCE
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON

Vehicles yield to trail users crossing the driveway.



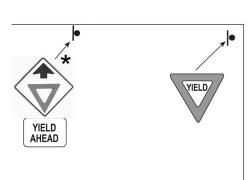
TRAIL XING

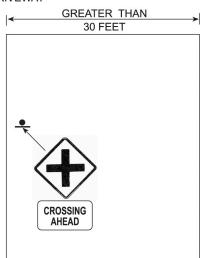
YIELD

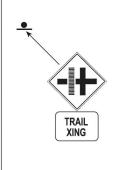
AHEAD

EAST LAKE SAMMAMISH PARKWAY

RESIDENTIAL DRIVEWAY







*Advance warning signs no less than 50 feet from crossing.

TYPE 4 TRAFFIC CONTROL (See Section 2.5.7.3)



King County

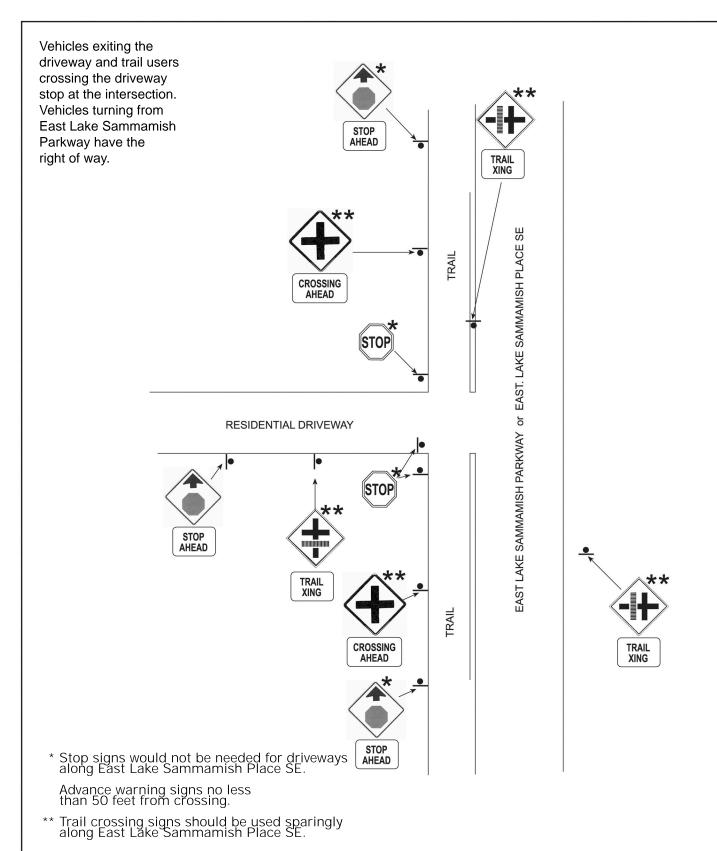
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SOURCES:



FIGURE 2-15 TRAFFIC CONTROL FOR CROSSINGS WITH ADEQUATE SIGHT DISTANCE EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON



TYPE 5 TRAFFIC CONTROL (See Section 2.5.7.3)



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SOURCES:



FIGURE 2-16
TRAFFIC CONTROL FOR DRIVEWAY CROSSINGS
WITHIN 30' OF PARALLEL ROADWAYS
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON

Type 6—Multiple crossings of a residential driveway. For the East A Alternative only, the driveway crossing with the paved portion of the trail is separated from the crossing of the pedestrian/equestrian portion by 30 to 200 feet. Where the distance between the crossings of the two portions of the trail is greater than 30 feet, stop or yield signs (depending on sight distance condition) would be placed on the driveway at the soft-surface trail crossing (Figure 2-17 (pg 2-38)).

Type 7—Frequent residential driveways. Where a series of driveways occurs within a short distance, a "Frequent Driveways Ahead" notice would also be posted on the trail (Figure 2-18 (pg 2-39)).

2.5.6.4 Stormwater Management

The Master Plan Trail would create new impervious surface area and require a drainage system. Potential design concepts for each alternative and the implications of the improvements are discussed in Section 3.2, Surface Water and Water Quality, and elsewhere in Chapter 3 as appropriate. Where the proposed trail would leave the Interim Use Trail, routine maintenance and planned replacement of drainage systems along the corridor would continue, as well as drainage improvements associated with the trail. Hydrologic modeling of the subbasins along the project corridor would be performed in compliance with current regulations and in conjunction with the final design of the selected alternative. Also during the design phase and with input from permitting agencies, King County would select some of the existing culverts over fish-bearing streams to be replaced with fish-passable structures (e.g., bottomless culverts or bridges). Selection of these locations and design of the new structure would consider and avoid potential impacts to downstream properties (e.g., localized flood and sediment deposition).

2.5.6.5 Retaining Walls

Because of the topography along portions of the project corridor, retaining walls would be required in many places along the trail. In developing the preliminary designs for the Corridor and East Alternatives, cut and fill lines were first calculated based on creating 3:1 slopes at all locations. However, this wider footprint would have resulted in more impacts to property/driveway access, wetlands, and streams and would also require additional property acquisitions or easements. As a result, retaining walls are planned for many places along the alignments and are depicted in the plan sheets (Volume II).

As shown in Table 2-1, the Corridor and East Alternatives require similar amounts (in total linear feet) of retaining walls. These estimated quantities include both the left and right sides of the trail. The Corridor Alternative more frequently requires walls on both sides of the trail. The total length of trail that would be bounded by retaining walls on one or both sides is approximately 4.2 miles for the Corridor Alternative and 4.7 miles for the East Alternatives. The East Alternatives also more frequently require taller walls than the Corridor Alternative.

The application of various types of walls in specific situations is further discussed in Section 3.1, Earth Resources, and Appendix B, Geology Technical Report (Volume III).

2.5.6.6 Public Access

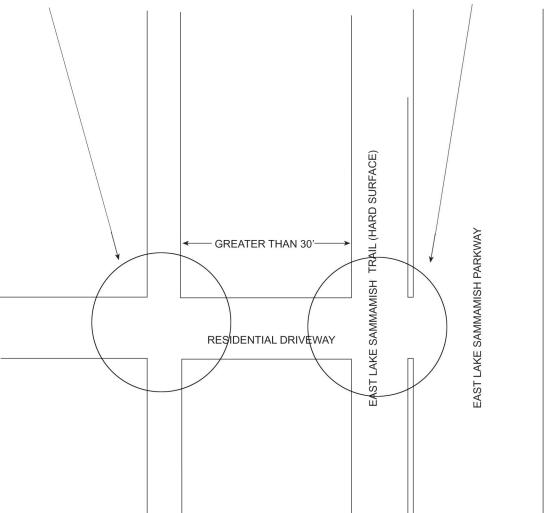
Access points would be located where the trail crosses existing public streets and public property, or at locations where access ramps/connector trails can be created within public rights of way in order to connect with existing streets or other public areas. Access points are listed in Table 2-2. Public access points are depicted on the plan set for the Corridor Alternative and the East Alternatives (see Volume II). The safety implications of access and the recommended traffic controls to improve safety are evaluated as part of this EIS.

TYPE 3 OR 4 TRAFFIC CONTROL: Intersection of a driveway with the separated soft-surface pedestrian/ equestrian trail. Vehicles either stop or yield, depending on sight distances.

See Figures 2-14 and 2-15.

TYPE 5 TRAFFIC CONTROL:

Intersection of a driveway with the paved, multi-use trail. Vehicles exiting the driveway and trail users crossing the driveway stop at the intersection. Vehicles turning from East Lake Sammamish Parkway have the right of way. See Figure 2-16.



TYPE 6 TRAFFIC CONTROL (See Section 2.5.7.3)
Applicable to East A Alternative Only

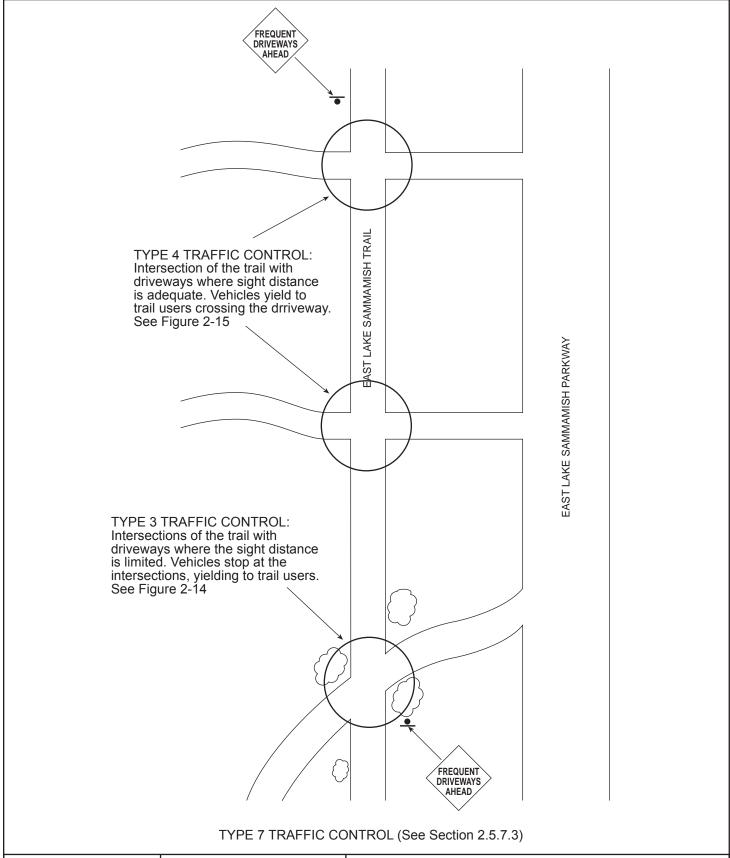
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SOURCE: PARAMETRIX, 2004

FIGURE 2-17 TRAFFIC CONTROL FOR MULTIPLE CROSSINGS OF A DRIVEWAY EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON



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SOURCE: PARAMETRIX, 2004

FIGURE 2-18
TRAFFIC CONTROL FOR FREQUENT
DRIVEWAY CROSSINGS
EAST LAKE SAMMAMISH TRAIL MASTER PLAN
KING COUNTY, WASHINGTON

Table 2-2. Summary of Additional Improvements at Trail Access Points

LOCATION OF IMPROVEMENT	CORRIDOR STATION LOCATION	TYPE OF IMPROVEMENT/ ACCESS	APPLICABLE ALTERNATIVES	DESCRIPTION
Gilman Boulevard	99+09 (Volume II, Figure 1)	Signage to existing crossing	All Build Alternatives	Depending on final location of new north-south connector road proposed by the City of Issaquah (see Table 3.11-11), trail users would likely be directed to the existing signalized pedestrian crossing 300 feet west of the trail terminus.
STA _{COR} = 117+50	117+50 (Volume II, Figure 2)	Connection to Pickering Trail	All Build Alternatives	Specifics of connection would be determined during detailed design and permitting, and depend on potential adjacent right of way uses under consideration by King County and the City of Issaquah. For example, a connector road may be developed west of the trail between SE 62nd Street and Gilman Boulevard.
SE 62nd Street to East Lake Sammamish Parkway	123+50 (Volume II, Figure 2)	Sidewalk, curb, and gutter	All Build Alternatives	Sidewalk, curb, and gutter may be implemented to provide safe access along the roadway. Specifics of improvements would be determined during detailed design and permitting, and depend on future improvements to the roadway under consideration by the City of Issaquah.
SE 56th Street, SE 51st Street, and entrance to Lake Sammamish State Park Boat Launch	145+00 (Volume II, Figures 4, 5, 8)	Sidewalk, curb and gutter	All Build Alternatives	New sidewalk, curb and gutter may be provided in the King County right of way to safely accommodate connections to the existing sidewalk. Existing sidewalk, curb, and gutters would have to be reconstructed where trail alignment is routed.
North of signalized intersection of SE 43rd Way and East Lake Sammamish Parkway	209+50 (Volume II, Figure 8)	Connection from intersection to the King County corridor	Corridor, East A, and Continuation of the Interim Use Trail Alternatives	No additional improvements to the Parkway have been identified but would be reviewed during detailed design and permitting phase. The East B Alternative and the paved portion of the East A Alternative are immediately adjacent to the Parkway in this vicinity.
Signalized intersection of 212th Way SE and East Lake Sammamish Parkway SE	232+50 (Volume II, Figure 10)	Sidewalk, curb, and gutter	Corridor, East A, and Continuation of the Interim Use Trail Alternatives	Construct a sidewalk, curb, and gutter on the west side of East Lake Sammamish Shore NE and the east side of 206th Avenue SE for the Corridor and Continuation of the Interim Use Trail Alternatives. These features would extend west from the latter to connect with the existing sidewalk, curb, and gutter along the Parkway. The East B Alternative and the paved portion of the East A Alternative are immediately adjacent to the Parkway in this vicinity. Under the East A Alternative, only the sidewalk along 206th Avenue SE would be provided for northbound access to the separate pedestrian/equestrian trail. These proposed improvements will be reviewed during the detailed design and permitting phase of the project.

Table 2-2. Summary of Additional Improvements at Trail Access Points (continued)

LOCATION OF IMPROVEMENT	CORRIDOR STATION LOCATION	TYPE OF IMPROVEMENT/ ACCESS	APPLICABLE ALTERNATIVES	DESCRIPTION	
Intersection of SE 39th Street and East Lake Sammamish Parkway SE	257+00 (Volume II, Figures 12, 12A)	Signalized crossing, sidewalk, curb, and gutter	All Build Alternatives	The proposed configuration is a new signalized crossing with a crosswalk southeast of the signal, and a sidewalk, curb, and gutter along the south side of the south driveway to the Twin Cedars community.	
Intersection of SE 33rd Street and East Lake Sammamish Parkway SE	280+50 (Volume II, Figures 13, 13A)	Signalized crossing	All Build Alternatives	To provide safe access at SE 33rd Street, a new signal is proposed at its intersection with East Lake Sammamish Parkway SE. Crosswalks would be provided on all four sides. The sidewalk, curb, and gutter would be extended from the Parkway along the south side of SE 33rd Street to allow safe pedestrian access away from the traffic flow of the proposed parking area on the north side. The school bus stop would be moved to the south side of 33rd Street.	
Intersection of SE 8th Street and East Lake Sammamish Parkway SE	382+00 (Volume II, Figures 20, 20A)	Signalized crossing, sidewalk, curb, and gutter	All Build Alternatives	Provide sidewalk, curb, and gutter along existing driveway down to trail. Provide pedestrian crosswalk and signal on north side of SE 8th intersection.	
Intersection of Louis Thompson Road and East Lake Sammamish Harkway SE	430+00 (Volume II, Figures 23, 23A)	Signalized crossing ^a , sidewalk, curb, and gutter	See description in next column	For all Build Alternatives, signalize intersection and provide pedestrian crosswalks in all directions. For the Corridor Alternative and the Continuation the Interim Use Trail Alternative, provide sidewalk, curb, and gutter on the we side of the Parkway to connect to a new access path from the Parkway to the Interim Use Trail. The separate pedestrian/equestrian trail under the East A Alternative could be accessed at Staeast=429 (see Figure 23A).	
Intersection of Inglewood Hill Road and East Lake Sammamish Parkway NE to parking and restroom facilities	465+00 (Volume II, Figures 25, 25A)	Sidewalk	See description in next column	For all Build Alternatives, a sidewalk along the south side of the south parking driveway would provide access from the signalized intersection of Inglewood Hill Road and East Lake Sammamish Parkway SE to the parking and restroom facilities being developed by the County ^b . From these facilities, the trail below could be accessed by either stairs or a ramp (for all Build Alternatives except the East B Alternative). The City of Sammamish is already pursuing the improvement of the Parkway between 187th Avenue NE and Inglewood Hill Road.	

Table 2-2. Summary of Additional Improvements at Trail Access Points (continued)

LOCATION OF IMPROVEMENT	CORRIDOR STATION LOCATION	TYPE OF IMPROVEMENT/ ACCESS	APPLICABLE ALTERNATIVES	DESCRIPTION
Near intersection of 187th Avenue NE and East Lake Sammamish Parkway NE	596.50 (Volume II, Figure 34)	Signalized crossing and connection to trail	All Build Alternatives	Just south of the intersection of 187th Avenue NE and East Lake Sammamish Parkway SE, a connection would be provided from the existing tunnel under the Parkway to the trail. This route avoids crossing the Parkway, but would not be suitable for bicycles (due to the stairs on the east side) or for equestrians (due to the tunnel). Therefore, a new signalized crossing is proposed at the intersection, as well as access from the Parkway to the trail north of the intersection. The City of Redmond is already pursuing the improvement of the Parkway between 187th Avenue NE and Redmond Way. The City's project may include bicycle lane improvements and/or sidewalk, curb, and gutter. The City's improvements would accommodate safe access from the intersection to the access path.
NE 65th Street	640+00 (Volume II, Figure 37)	Sidewalk, curb, and gutter	All Build Alternatives	To provide safe access to the trail from East Lake Sammamish Parkway via NE 65th Street, sidewalk, curb, and gutter improvements are proposed on both sides of NE 65th Street.
NE 70th Street	656+50 (Volume II, Figure 38)	Road striping, sidewalk, curb, and gutter	All Build Alternatives	To provide safe access to the trail from Redmond Way via NE 70th Street, NE 70th Street would be restriped to better delineate bicycle lanes and the sidewalk, curb, and gutter would be extended through the King County right of way. Specific configurations would be considered during detailed design and permitting, as would the access needs of adjacent businesses.

Chapter Two: Alternatives

^a This signal is listed in the City of Sammamish Six-Year Transportation Improvement Program (2003).

^b The City of Sammamish is currently studying improvements to East Lake Sammamish Parkway from Inglewood Hill Road to 187th Avenue NE. These improvements will likely include a sidewalk and/or a bicycle lane on the west side of the road that would provide access from the intersection to the parking lot driveway.

2.5.6.7 Additional Improvements

Additional improvements (e.g., sidewalks, crosswalks) are proposed at many of the public access locations in order to provide for public safety. These improvements are depicted in preliminary form in Volume II, are evaluated as needed in the various sections of this EIS, and are summarized in Table 2-2. The improvements would be further developed during the detailed design and permitting process.

2.5.6.8 Trail Operation and Signage

The proposed Master Plan Trail would be open seven days a week for public use during daylight hours. The trail would not be illuminated other than by existing sources of light, and therefore, would be closed during hours of darkness for safety reasons. Litter receptacles, doggy litter bag boxes, and trail etiquette signs would be provided at public access points. Trail users would be required to keep pets on leashes.

Travel at speeds in excess of 15 miles per hour (mph) is not reasonable or prudent, and is a violation of King County Code, Section 7.12.295. The posted speed limit for trail users would be 15 mph. After applying a safety factor, the design speed for both the Corridor Alternative and the East Alternatives would be 20 mph, which is also the minimum design speed recommended by AASHTO for a shared use path. The design speed helps determine the horizontal geometry (minimum turn radius) of the trail, the distance needed for a trail user (bicyclist) to come to a complete stop, and thus the sight distances necessary when approaching an intersection.

2.5.6.9 Fencing

At least three types of fencing would be installed and maintained along the proposed Master Plan Trail. The hierarchy for determining which type of fence would be used in various situations ranges from the most protective or restrictive fence to the least, as described below:

- Guardrail or approved equivalent would be used adjacent to roads, driveways, and parking areas
 when necessary to delineate and separate the trail from areas used by vehicles.
- Five-foot, black-coated chain-link fencing or approved equivalent would be used in areas where guardrail is not required and where (1) less than 20 feet exists between the trail edge and a home, (2) docks and waterfront property create a safety, liability, proximity, trespass, and/or privacy concern, and (3) the edge of the trail represents a hazard to trail users (i.e., is immediately adjacent to a retaining wall or a slope steeper than 1:3).
- Split-rail fencing would be located adjacent to environmentally sensitive areas such as wetlands, streams, and steep slopes. The fencing would be located no closer than 1 foot from the outside edge of the trail shoulder, maintaining the 1-foot "clear" zone depicted on trail typical sections. This fencing is intended to reduce the risk of intrusion from humans and pets, while allowing movement of small wildlife. Split-rail fencing may be used instead of chain-link fencing to alert trail users to slopes adjacent to the trail edge.

Fencing schemes for each alternative are as follows described below. The locations and estimates presented are preliminary. And King County will consider minor changes in fence location, including reducing the amount of chain link fencing, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way, during the design process.

• **Corridor Alternative**. Although the fencing types and approximate locations for the Corridor Alternative would be similar to the existing fencing on the Interim Use Trail, some fencing would

have to be removed and replaced due to the widened trail area. Additional fencing would also be needed to delineate edge hazards such as retaining walls.

- East A Alternative. Where the multi-use portion of the East A Alternative leaves the Interim Use Trail, but the pedestrian/equestrian use continues on the Interim Use Trail, the existing split-rail and chain-link fence on the Interim Use Trail would be expected to remain in place for the Master Plan Trail. Additional fencing would be required for the paved portion of the trail. Where the East A alignment is the same as that for the Corridor Alternative, requirements to remove and replace fencing would be the same.
- East B Alternative. The new fencing requirements for the East B Alternative would be the same as for the East A Alternative. Where the alignment leaves the Interim Use Trail, the existing chain-link fence would likely be removed, and the holes would be backfilled.
- Continuation of the Interim Use Trail Alternative. The existing fencing would remain in place and new fencing would be added where the trail is extended north of NE 70th Street.
- **No Action Alternative**. Fencing installed in conjunction with the Interim Use Trail would be left in place through 2015.

The total amount and type of fence required for each alternative, based on the preliminary design, is summarized in Table 2-3. These estimated quantities include fencing that would be left in place from the interim phase of the project (as shown from the No Action quantities), as well as new or replacement fencing, for both the right and left sides of the trail.

ALTERNATIVE	CHAIN- LINK	SPLIT RAIL	GUARD RAIL	HAND RAIL	OTHER ⁴	TOTAL
Corridor	30,100	28,000	2,400	300	0	60,800
East A	33,300	28,600	3,500	300	3,800	69,500
East B	26,400	28,600	3,500	300	3,800	62,600
Continuation	14,500	37,400	4,600	300	0	56,800
No Action	14,500	36,400	4,200	200	0	55,300

Table 2-3. Summary of Fencing Requirements (linear feet) by Alternative

The total length of trail that would be bounded by chain-link fence on one or both sides is approximately 4.5 miles for the Corridor Alternative; 5.8 miles for the East A Alternative; 4.5 miles for the East B Alternative; 2.3 miles for the Continuation of the Interim Use Trail Alternative; and 2.3 miles for the No Action Alternative.

The approximate locations where new or replacement fencing is required for the Corridor Alternative and the East A Alternative are shown in the Volume II plan sets.

2.5.6.10 Bollards

Bollards (posts) 5 feet or further apart would be located at <u>all trail intersections</u> trail and roadway erossings. The middle bollard(s) would be either removable or "knock-down" to accommodate access by

^a A barrier of some type would be provided between vehicular use and trail use along East Lake Sammamish Place SE. This may be a guard rail or some other fence.

emergency and maintenance vehicles. The outer bollards would be fixed and located off the edge of the paved surface.

2.5.6.11 Vegetation Management

Circumstances under which vegetation located adjacent to the Master Plan Trail would be trimmed or removed include the following:

- To maintain sight distances on the approaches to an intersection, where vegetation would
 potentially prevent a vehicle or trail user from identifying an obstruction and stopping in time to
 prevent an accident.
- To remove trees or limbs located within the project corridor that represent a hazard to trail users
 or adjacent structures, roadways, or utilities, or would present an obstacle to reestablishment of
 rail service.
- To remove noxious weeds and replace them with appropriate plantings.
- To maintain drainage systems (e.g., conveyance ditches) through practices such as slope mowing, dry ditch cleaning, wet ditch cleaning, and repairing or replacing damaged culverts.
- To maintain vertical and horizontal clearances from the trail for maintenance and emergency vehicles, as well as for trail users.
- To implement and maintain approved mitigation for the trail.

A *Vegetation Management Plan* was prepared in conjunction with the implementation of the Interim Use Trail (Parametrix, 2002). The plan describes in more detail the circumstances under which vegetation is managed and removed; applicable King County standard best management practices (BMPs), policies, and procedures; and site-specific conditions and considerations, including work within critical areas such as wetlands, streams, and steep slopes. During the design and permitting phase of the project, the *Vegetation Management Plan* would be updated for use in conjunction with the Master Plan Trail, incorporating current regulatory requirements for each of the applicable local jurisdictions as well as approved mitigation plans.

2.5.6.12 Art Program

King County has a program called "1% for Art" in which qualified projects receive funds to develop and construct art or interpretive elements in conjunction with the projects. The East Lake Sammamish Trail project is participating in the art program. The artist is currently developing criteria for siting artwork along the trail corridor and identifying themes that will unify the corridor. Potential locations or applications include gates, trailheads, and special environmental or natural features. These efforts are ongoing concurrent with the environmental review process and will extend into the design phase of the project.

2.6 Related Projects

Several other development projects are proposed in the vicinity of the proposed East Lake Sammamish Master Plan Trail. These are briefly described below and are referred to in the applicable Cumulative Impacts sections of Chapter 3.

2.6.1 Millennium Trolley

The Issaquah Historical Society is proposing the development of a trolley line that would operate between downtown Issaquah and SE 51st Street. The Society proposes to use the former railbed and reroute the track in this alignment. The Historic Society has approached King County and the City of Issaquah with plans to reinstall track on 2 miles of King County right of way from downtown Issaquah north to SE 51st Street. The Historic Society's long-range plans include extending the trolley line up to SE 43rd Way, near Lake Sammamish State Park; however, recent removal of the rail at two East Lake Sammamish Parkway crossings may make the extension prohibitively expensive and infeasible (The Issaquah Press, 2004). If completed, the trolley would share the corridor with the East Lake Sammamish Trail to the extent possible. Where shared use is not possible, the trail routing would be coordinated between King County, the City of Issaquah, and the Issaquah Historical Society. The trolley car would likely travel at 15 to 20 mph (Thorpe, personal communication, 2003). The Millennium Trolley project is not likely to be constructed in the foreseeable future, and is not associated with the proposed Master Plan Trail project.

2.6.2 Road Improvements

Several roadway improvements are proposed in the area of the Master Plan Trail. These improvements may lessen traffic congestion, improve bicycle safety on East Lake Sammamish Parkway, and better accommodate access to the trail. The potential future road widening has been considered in locating the trail alternatives with respect to adjacent roadways. Refer to Section 3.11, Transportation, for discussion of proposed road improvements in the area.

2.6.3 Wastewater Conveyance

King County Wastewater Treatment Division is planning to construct a regional wastewater conveyance pipeline, located in either the East Lake Sammamish Parkway SE right of way and/or the East Lake Sammamish Trail right of way. The pipeline would be constructed from Inglewood Hills Road north and connect to the NE Lake Sammamish Interceptor near the northern terminus of the proposed Master Plan Trail alternatives. Construction of the pipeline is anticipated to begin in 2009.

2.6.4 Proposed Trail Connections

Potential trail connections are described in Chapter 1 (see Figure 1-1, (pg 1-2)). Trail projects currently underway include the following:

- The City of Redmond's Bear Creek Trail is a "Shared Use Path" Class 1, paved, multi-use, non-motorized trail corridor ultimately connecting the Sammamish River Trail and downtown Redmond to Farrel McWhirter Park and the Redmond-Puget Power Trail. Currently the trail extends between the Sammamish River Trail and Union Hill Road Redmond Way-in the City of Redmond. Planned construction in 2005 would extend the trail across Redmond Way to Union Hill Road. The northern terminus for the East Lake Sammamish Trail, regardless of Build Alternative, is located 300 feet northwest of the Bear Creek crossing, which is the approximate location of the Bear Creek Trail.
- The City of Redmond's planned Evans Creek Trail is a Class 1"Shared Use Path", paved, multiuse, non-motorized trail that would connect to the East Lake Sammamish Trail corridor at NE 187th Street, utilizing an existing tunnel under East lake Sammamish Parkway in the City of Redmond. The trail is proposed to continue north from the East Lake Sammamish vicinity ultimately connecting with the Bear Creek Trail just west of Perrigo Community Park. in downtown Redmond. Construction of a 1-mile segment was constructed in 2004-2005 that connected would build the middle section of the trail between Union Hill Road and NE 95th Street

- with a connection to Perrigo Community Park where parking facilities are located. <u>Another trail connection is Redmond's 65th Street Trail which runs on the northern portion of NE 65th Street from the East Lake Sammamish Trail to Marymoor Park.</u>
- The King County East Plateau Connector Trail currently begins about 0.25 mile east of East Lake Sammamish Parkway SE along SE 43rd Way. The trail is soft-surface to Issaquah-Pine Lake Road and paved until it connects with the Klahanie Trail which is also paved. Portions of the trail are yet to be completed. King County is working with Lake Sammamish State Park, the City of Issaquah, and private parties to complete the missing links (McLeod, personal communication, 2004).
- The Issaquah Preston Trail (Highpoint Trail) would parallel the north side of I-90 between Issaquah and Highpoint. The trail would be built and owned by the State of Washington (State) and maintained by King County. It will be a paved trail that connects to a future extension of the Preston/Snoqualmie Trail to the east, and to a proposed City of Issaquah trail to the west.

2.6.5 Marymoor Connector Trail

As a separate project, King County recently constructed a regional trail through Marymoor Park, which would connect the Sammamish River Trail to East Lake Sammamish Trail. The connection to East Lake Sammamish Trail would occur south of NE 65th Street in Redmond.

2.6.6 Sammamish Landing Park

The City of Sammamish is starting a master plan process for several publicly owned parcels along Lake Sammamish. The narrow strip of land occurs between the East Lake Sammamish Trail right of way and the lake from the northern Sammamish city limits southward approximately 3,000 linear feet.

2.7 Construction Timing and Methods

A detailed construction plan would not be developed until the final alternative has been selected <u>and initial construction funding is secured</u>. However, the following information is provided to guide the reader in considering the evaluation of potential impacts that could occur during construction.

2.7.1 Phasing

The approximate phasing and relative duration of construction is described for each alternative below from shortest to longest: The impacts associated with phasing would be the same for all build alternatives, and would be dependent upon funding availability. Because the construction duration would be relatively short at any given location, impacts related to phasing are not anticipated. The Interim Use Trail (gravel surface) would remain in place until the paved trail is completed over the entire length.

- The No Action Alternative would not require construction.
- The Continuation of the Interim Use Trail Alternative would require extending the Interim Use Trail approximately 1,500 feet to the north and constructing parking and restroom facilities. These activities would occur in the cities of Redmond and Sammamish. Depending on permitting and funding availability, the work could be completed in a single season and within 2 to 3 months.
- The Corridor Alternative would likely be constructed in segments due to the length of the trail and the multiple jurisdictions that would be affected. Assuming seasonal constraints and funding

- availability, construction would likely occur over at least three <u>four construction seasonscalendar</u> <u>years</u> (not necessarily consecutive), possibly beginning in 2010.
- The phasing of the East Alternatives would be similar to that for the Corridor Alternative. However, the East Alternatives require <u>more private property acquisition and more extensive construction</u> (e.g., more excavation and more than twice as much fill), compared with the Corridor Alternative. Thus more resources would be required to complete the work in the same amount of time.

2.7.2 Construction Sequence

The following is a general description of the types of construction methods and their sequence that likely would be employed to construct any segment of the project. The general steps in the construction sequence for the Master Plan Trail would occur as follows:

- 1. Preparation and demolition (of fence and footings, if needed)
- 2. Erosion and traffic control
- 3. Grading and retaining wall construction
- 4. Drainage
- 5. Structures (the construction of retaining walls, including shoring, excavation, and backfill)
- 6. Surfacing (the placement of asphalt, top course, base course, and top soil)
- 7. Pavement
- 8. Fencing
- 9. Signage and road striping

Construction activities expected to generate the most noise would be asphalt cutting in conjunction with the regrading of driveway crossings; pile driving required for certain types of retaining walls; and audio warnings on vehicles backing up.

2.7.3 Staging

For all Build Alternatives, three locations have been identified as possible staging areas for construction material, equipment, and project offices. These staging areas would be located at the site of the three proposed parking areas and two proposed restroom facilities in order to minimize the right of way takes and other environmental impacts.

2.7.4 Truck Traffic

It is estimated that tons of materials would be exported from and imported to the construction area under the Corridor Alternative, East A Alternative, and East B Alternative, resulting in many one-way truck trips. See Section 3.11, Transportation, for further detail of impacts due to truck traffic for each alternative.

2.7.5 Management of Pedestrians and Vehicles around Work Areas

Three primary measures would be used during construction of the Master Plan Trail to provide for pedestrian safety, driveway access, and traffic control along roadways (refer to Sections 3.7 and 3.11, Recreation and Transportation, respectively, for a discussion of user safety during construction). These measures include:

- 1. **Closure of Interim Use Trail.** During construction, portions of the Interim Use Trail would need to be closed to pedestrians for a period of one to three months. The Interim Use Trail would be closed using removable traffic barricades and signs in accordance with the Manual of Uniform Traffic Control Devices (6D.01). Pedestrians would be routed around the construction area.
- 2. **Driveway Crossings.** Access through driveways and roads would be maintained during construction. Vehicle and pedestrian access to homes along the trail would be maintained through use of traffic control devices and traffic control personnel who would conduct traffic through work zones. Construction activities would be temporary and would be minimized through proper traffic control, signage, and homeowner notification. Construction at driveway and road crossings would typically last from one to two weeks per crossing.
- 3. **Construction Along Roadways**. This type of traffic control would occur where the trail approaches and is adjacent to the roadway. The road shoulder would be closed, construction fencing and traffic control devices would be placed, and in some situations the adjacent roadway might be temporarily restriped. Along with the traffic control devices, flaggers would guide oncoming traffic through and around the work zone.

To reduce construction time and cost, efforts would be made to coordinate design elements and construction schedules with municipal, county, and state projects. For example, if the selected alternative includes segments immediately adjacent to East Lake Sammamish Parkway, King County would attempt to coordinate design and construction with the City of Sammamish's design and construction of planned improvements along the Parkway, where practical.

2.8 Cost Comparison

A preliminary engineering estimate of cost was been-prepared in 2004 for each of the Build Alternatives and is summarized in Table 2-4. These estimates are based on the preliminary configurations developed for each alternative as described in the Draft and Final EISs. If alternatives are refined based on environmental review and comments received, the cost estimates will be refined accordingly. The costs for the Continuation of the Interim Use Trail Alternative include the northern extension of the gravel trail, parking and restroom facilities, and access point improvements. The costs for the Corridor and East Alternatives also include the parking and restroom facilities. The No Action Alternative requires no construction.

DESIGN ELEMENT/ALTERNATIVE	Corridor Alternative	East A or East B ALTERNATIVE	CONTINUATION OF THE INTERIM USE TRAIL	
Preparation	2,296,000	3,221,000	26,000	
Grading	663,000	951,000	7,000	
Erosion Control and Planting	1,998,000	2,106,000	12,000	
Surfacing	1,468,000	1,567,000	41,000	
Drainage	1,421,000	1,826,000	0	
Structures	8,364,000	13,169,000	0	
Traffic	530,000	1,139,000	26,000	
Signage	76,000	109,000	2,000	
Other Items	4,982,000	7,016,000	145,000	
Parking, Restrooms, Access ^a	5,325,000	5,165,000	5,165,000	
Subtotal	27,123,000	36,269,000	6,124,000	
Construction Contingency (5%)	1,356,000	1,813,000	306,000	
Construction Engineering (10%)	2,712,000	3,627,000	612,000	
Total Construction	31,191,000	41,709,000	7,043,000	
Engineering and Permitting (12%)	3,743,000	5,005,000	845,000	
Right-of-Way Acquisition ^b	0	22,000,000	0	
TOTAL	\$ 34,934,000	\$ 68,714,000	\$ 7,888,000	

Table 2-4. Cost Comparison Summary

^a Specific features of some access improvements vary between alternatives (see Table 2-2). These distinctions are not reflected in the above estimates.

^b Acquisition cost based on impacts identified in Section 3.8.4, Private Property Impacts; average property value identified in Section 3.8.2.4, Property Values; average of 5% of average property value for partial acquisitions; and 40% mark-up for negotiation and acquisition. Estimated costs based on 2004 dollars. Costs are likely to be escalated by 6% per year to the date of construction. The costs are comprehensive planning-level costs that take ADA compliance into consideration.

3.1 Earth

3.1.1 Studies and Coordination

This section is based upon field reconnaissance by geologists and engineers from HWA GeoSciences, Inc., a review of existing geotechnical borehole logs, and a review of published sensitive area maps, geology maps, and other literature (see the references in Chapter 6). The field reconnaissance included walking the alternative alignments for the proposed trail to evaluate soil exposures, slopes, seepage zones, evidence of mass wasting (land slides, soil creep, and debris flows), and other geologic conditions that may impact the project. Geographic Information System (GIS) data from King County were used to delineate the surface geology and geologically hazardous areas within the study area.

The Geology Technical Report (Appendix B) provides additional details about the geological studies performed for this analysis and their findings.

3.1.2 Affected Environment

3.1.2.1 Regulatory Environment

Washington State's Growth Management Act (Chapter 36.70A RCW) requires all cities and counties to identify critical areas within their jurisdictions and to formulate development regulations for their protection. Among the critical areas designated by the Growth Management Act are geologically hazardous areas. The Cities of Issaquah, Sammamish, and Redmond, along with King County, have each developed geologically hazardous areas maps or folios (King County Department of Natural Resources, 1990; City of Issaquah, 1990; City of Redmond, 2005; City of Sammamish, 2005). Before development is allowed in these mapped critical areas, detailed geotechnical studies must be prepared.

3.1.2.2 Topography and Geology

The study area for earth resources is herein defined as the area between East Lake Sammamish Parkway and the eastern shoreline of Lake Sammamish, bounded on the south by Gilman Boulevard in Issaquah and on the north by Bear Creek in Redmond. On a broader scale, this study area is located in the central portion of the Puget Lowland, a north-south trending depression situated between the Olympic Mountains and the Cascade Range in western Washington. Crossing the Puget Lowland from the Cascade foothills to the eastern edge of the Olympics is the Seattle Fault. The continental crust south of the fault is being thrust northward, causing uplift, which has resulted in the series of bedrock hills south of the study area, from Tiger Mountain to the Newcastle Hills. The existing topography, surficial geology, and hydrogeology in the project area are heavily influenced by past glacial activity. The topography is dominated by a series of north-south trending ridges and troughs formed by glacial processes. The topography in the study area slopes approximately 400 feet from the Sammamish Plateau on the east side down to Lake Sammamish on the west. The northern and southern ends of the project corridor traverse flat plains.

Both the Interim Use Trail and East Lake Sammamish Parkway are built on cuts into and fills over dense soils, as well as over loose soils deposited by rivers. Previous borings (test holes) indicate the potential for peat deposits to exist under recent fill soils in the valleys and lowlands.

3.1.2.3 Groundwater

Several groundwater supply wells are located within 0.25 mile of the southern and middle portions of the study area (Ecology, 2003; Turney et al., 1995). Thick layers of low-permeability silt and clay restrict downward infiltration of water to the deeper aquifers.

Groundwater is also present in the shoreline of Lake Sammamish, generally at depths less than 10 feet. Surface water infiltrates into the alluvium and discharges as groundwater directly toward Lake Sammamish.

3.1.2.4 Geologically Hazardous Areas

Among the critical areas designated by the Growth Management Act are geologically hazardous areas, which are susceptible to erosion, sliding, earthquake, or other geologic hazards. Geologically hazardous areas discussed in this section include seismic hazards, steep slopes, landslide hazard areas, erosion hazards, and coal mines.

The Cities of Redmond, Sammamish, and Issaquah, along with King County, have each developed geologically hazardous areas maps or folios. In general, before development is allowed in these mapped critical areas, detailed geotechnical studies must be prepared to discuss specific standards relating to site geology and soils, seismic hazards, and facility design.

The approximate locations of mapped geologically hazardous areas with respect to the alternative trail alignments are shown in the figures in the Geology Technical Report (Appendix B of Volume III, Technical Appendices).

3.1.2.5 Seismic Hazards

Seismic hazard areas are generally defined as those areas that are subject to severe risk of earthquake damage as a result of seismically induced ground shaking, ground settlement, or soil liquefaction. The project area, along with the entire Puget Sound region, is susceptible to moderately high seismic activity. Consequently, moderate to high levels of shaking should be anticipated during the design life of the proposed project. Seismic coefficients necessary for project design will be obtained from the most updated International Building Code prior to final trail design.

Soil liquefaction is a phenomenon wherein loose, saturated, granular soils temporarily lose strength and behave as a liquid, in response to earthquake shaking. A structure can sustain substantial damage during a large seismic event if it is supported in or on a soil susceptible to liquefaction. Large portions of the north and south ends of the project corridor, where the corridor is located on alluvial plains, are potentially liquefiable during a seismic event. Possible effects of liquefaction include settlement and cracking of the Interim Use Trail and road embankments. Portions of the proposed trail located along hillsides may be susceptible to seismically induced lateral spreading of embankment fills and any loose native soils.

The 2001 Nisqually earthquake caused settlement of embankment fill at two locations along East Lake Sammamish Parkway (STA_{COR} 216+75 to 218+00, western half of the roadway and embankment settled; and STA_{COR} 363+00 to 365+00, shoulders settled) and at one location along the railbed (STA_{COR} 548+50 to 550+00, east shoulder settled).

3.1.2.6 Steep Slope and Landslide Hazard Areas

Steep slope areas are generally defined as those that rise at an inclination of 40 percent or more with a vertical change in elevation of at least 10 feet. There are many areas of mapped steep slopes along the proposed trail corridor, but most of the larger areas of mapped hazards are to the east of East Lake Sammamish Parkway. Smaller areas of steep slopes and landslide hazard are mapped between East Lake Sammamish Parkway and Lake Sammamish. Many sections of slopes that have been cut or built from fill for railbed and roadway construction meet the criteria for steep slopes but are too small for mapping at the scale of the sensitive areas maps. Nevertheless, areas that meet the sensitive areas definitions but do not show on the maps are still regulated by critical areas ordinances.

Areas of known landslides are included in the mapped landslide hazard areas. Some of these areas have a history of repeated landsliding while others do not. Frequently, these areas of repeat landsliding are located within areas mapped as steep slope hazard areas. The degree of sloughing and sliding varies with the steepness and height of the slope. Steeper, higher slopes are more likely to create larger slides, whereas shorter slopes are capable of producing smaller slides.

3.1.2.7 Erosion Hazards

Erosion hazard areas are defined as those areas containing soils that may experience severe to very severe erosion. Erosion potential within the study area varies with geology and soil type, topography, groundwater seepage and surface runoff, vegetative cover, and the built environment. The greatest erosion potential appears to be along the existing cut slopes of the Interim Use Trail, East Lake Sammamish Parkway, streets, and driveways.

3.1.2.8 Coal Mine Hazards

Coal mine hazard areas are those areas located over or adjacent to or affected by mine workings such as adits, tunnels, drifts, or air shafts. No coal mine hazards are mapped within 400 feet of the study area.

3.1.3 Direct Impacts

This section analyzes the potential direct impacts of construction, operation, and maintenance of the trail facilities on the geologic environment (e.g., excavation of soils for construction of a trail retaining wall, potential sliding of existing steep slopes onto the trail). Operation impacts to the geologic environment associated with the daily use of the trail are likely to be negligible.

3.1.3.1 Corridor Alternative

Construction Impacts

Various types of construction activities and associated impacts could occur during the construction of the trail. These are summarized below and discussed in more detail in the Geology Technical Report (Appendix B). Earthwork quantities for the Corridor Alternative are estimated as follows: 32,500 cubic yards (cy) of excavation; 21,500 cy of fill; and 22,000 cy of surfacing materials.

Soil disturbance. Construction of the Corridor Alternative could result in erosion associated with vegetation removal, culvert replacement, excavation (including over-excavation), fill placement, and spoils removal or stockpiling. Erosion could in turn lead to silt-laden runoff being transported off-site, resulting in water quality degradation of local surface waters. This is especially critical where ditches parallel the Interim Use Trail (for example, from the entrance to Lake Sammamish State Park in Issaquah

north along the Interim Use Trail). Truck traffic could also track mud into the streets. The severity of potential erosion would be a function of the quantity of vegetation removed, construction site topography, weather during certain construction activities, and volume of soils stockpiled.

Vibration and settlement. Many construction methods may result in vibrations that could cause settlement or damage to nearby structures, including homes and road embankments. These methods include installation of driven piles, installation of auger cast piles, excavation for wall construction, and compaction of fill.

Disposal of spoils. Construction would generate relatively large volumes of spoils that would need to be disposed. Spoils disposal could result in transportation of soil, dust, and mud off-site through erosion or by being tracked off-site on truck tires. Erosion was discussed in the previous paragraph on soil disturbance. Impacts due to increased truck traffic are addressed in Section 3.11, Transportation.

Excavation and filling. Excavation and filling would be needed to grade and widen areas to accommodate the width of the trail. This could involve creation of soil stockpiles, transportation of excavated material to a stockpile or an off-site location, and filling of a disposal site should excavated materials need to be disposed. These activities could result in erosion of exposed soil and creation of dust. It is likely that a large net import of borrow materials may be required for use as fill, thereby contributing to the depletion of existing borrow sources.

Construction of retaining walls. Retaining walls would be needed along many of the locations where cuts or fills would be made along existing slopes. Walls would be used to reduce the widths of cuts and fills, in order to minimize encroachment upon existing features such as houses, roads, driveways, and wetlands. The impacts would include construction of the walls, maintenance of the walls, a potential for slope instability, and changed drainage courses. The slope stability and drainage issues can be designed for and thus completely mitigated at wall locations. The relative magnitude of the remaining impacts would depend on wall type, wall location (construction access, potential over-excavation requirements, and surrounding conditions), wall height, and wall length.

There are numerous types of walls, each with its own advantages and disadvantages, depending on engineering considerations such as retained earth properties, foundation conditions, height, and construction access. Other influences such as property ownership, cost, and aesthetics are also factors. Specific types of walls that could be used to retain cut and fill slopes along various portions of the trail are discussed in the Geology Technical Report (Appendix B). Final selection of wall type would be made during detailed design and permitting.

The walls proposed for the Corridor Alternative are generally shorter and would result in a lower estimated overall cost for construction as compared to the East Alternatives. Fill walls along the Corridor Alternative are likely to be founded on soft soils that would require over-excavation.

Compared to the East Alternatives, the Corridor Alternative would have fewer access points available for construction equipment that would be used to construct the retaining walls. Therefore the Corridor Alternative may require construction of new haul roads or improvement of existing driveways.

Groundwater Impacts

Surface activities related to trail construction or maintenance may temporarily change the local water flow at culverts or wetlands, but the effect is expected to be minor. These activities would include temporary dewatering of excavations for culvert replacement. Such dewatering would be shallow (typically 10 feet or less) and of limited duration. Thick layers of low-permeability silt and clay separate the alluvium near

the surface from deeper aquifers. The intervening low-permeability sediment and the upward pressure of groundwater in the deeper aquifer would reduce potential impacts to groundwater flow or quality resulting from trail construction or operation.

Geologically Hazardous Area Impacts

Seismic Hazard Areas. Construction or operation of the trail would not affect existing seismic hazard areas; however, use of the trail may be impacted in the event of a seismic event. The entire study area may be subjected to earthquake shaking and should be considered to have a moderate to high seismic risk. There is also potential for loss of strength, settlement, and lateral displacement of soils supporting the Interim Use Trail and roadways where these are founded in or over liquefiable soils. The magnitude of settlement, soil movement, and loss of strength would be a function of the soil thickness, soil quality, groundwater level, location, and magnitude of the seismic event.

The study area crosses the Seattle Fault zone and, as such, the risk for liquefaction and lateral spreading occurring anywhere along the project corridor during a large earthquake is high. However, the impacts are anticipated to be minimal because of the past compaction of the alluvial and beach soils beneath the Interim Use Trail or roadways resulting from the weight of the fill and of the railroad traffic and vehicles. Ramps or transitional sections of the trail connecting the Parkway and the Interim Use Trail that are constructed over liquefiable soils would likely be more susceptible to damage from liquefaction.

Landsliding and Steep Slopes. Construction of the planned retaining walls would involve cutting into steep slopes and filling out onto steep slopes. There is potential for sliding of existing steep slopes, including natural slopes, cut slopes, and fill slopes. Sliding can be triggered by a seismic event, by the natural process of stabilization of a steep slope to a flatter profile, by an increase in the amount of water in the soil (from excessive rainfall), or by construction that adds fill to, traverses, or cuts into a steep slope.

Most cut slopes along the project corridor (road cuts, railroad cuts, driveway cuts, and grading for houses) were observed to be in an oversteepened condition and subject to soil creep. It is evident that shallow landsliding has occurred in the recent past in many locations. Notable landslides include a repaired slide near STA_{EAST} 488+75, where the slide had encroached into the travel lanes of East Lake Sammamish Parkway, and a chronic surficial slide area in the highest railroad cuts at STA_{COR} 332+00. Slope instabilities could continue within and in the vicinity of the project corridor, particularly in steep slopes where retaining walls would not be constructed for the trail. These slope instabilities would likely be consistent with those observed in recent years, such as surficial slides and pavement distress. At locations where retaining walls would be built for trail construction along the Interim Use Trail, slope stability would be improved as necessary, or maintained where sufficiently stable.

Debris Flows. Construction or operation of the trail would not affect debris flows; however, use of the trail may be impacted in the event of a debris flow. Debris flows derived from upstream landslides triggered by intense storms could overtop the proposed trail at existing stream culverts, possibly burying the trail and/or scouring it. Streets and driveways could be similarly affected.

Erosion Hazards. Based on information obtained from the Soil Survey of King County, the native soils in the study area are rated as having slight inherent erosion potential. However, the existing cut slopes along the Interim Use Trail are highly prone to erosion. Most of the cut slopes exhibit some degree of soil creep into the road, driveway, and ditches along the Interim Use Trail.

Coal Mine Hazards. Most underground coal mines in the vicinity have been abandoned and can create hazardous conditions. For example, as the roof and sides of an underground mine gradually fail, the

area over the mine may subside. More dramatically, a sudden collapse of a shallow mine may occur. Structures located above subsurface mines can be damaged during such events. However, based upon information from the Washington State Department of Natural Resources, no known coal mines are mapped within 400 feet of the Interim Use Trail.

3.1.3.2 East Alternatives

Construction of the East Alternatives would involve construction activities similar to those discussed above for the Corridor Alternative. The primary difference would be in the greater magnitude of these activities for those sections of the trail built next to roadways (either of the East Alternatives) instead of along the Interim Use Trail, particularly the length, height, and type of retaining walls needed. Earthwork quantities for the East Alternatives are estimated to be 43,500 cy of excavation (11,000 cy more than the Corridor Alternative); 51,500 cy of fill (30,000 cy more); and 22,800 cy of surfacing materials (800 cy more).

Potential retaining walls for the East Alternatives would be taller and more extensive than those for the Corridor Alternative along the sections of trail that would be constructed adjacent to East Lake Sammamish Parkway and East Lake Sammamish Place. The taller walls would require more costly construction methods and have greater construction impacts. There is also the potential for <u>roadways</u> settlement of East Lake Sammamish Parkway and East Lake Sammamish Place or of <u>encountering</u> buried (<u>underground</u>) utilities during construction of the trail for the East Alternatives. The East Alternatives would avoid impacts of slide debris from high, steep slopes onto the trail that may occur for the Corridor Alternative, from STA_{COR} 331+00 to 334+00.

3.1.3.3 Continuation of the Interim Use Trail Alternative

The Continuation of the Interim Use Trail Alternative would require ongoing ditch and culvert maintenance, trimming of vegetation, invasive vegetation removal, and repair or replacement of fencing around sensitive areas beyond 2015. Impacts associated with ditch and culvert maintenance may include erosion due to removal of sloughed material from ditches. Eroded soils could result in increased siltation and sedimentation of surface waters. Slope instabilities within and in the vicinity of the project corridor could continue, particularly in steep slopes along the fill embankment for East Lake Sammamish Parkway and in cuts along the Interim Use Trail. These instabilities would likely be consistent with those observed in recent years, such as surficial slides and pavement distress.

3.1.3.4 No Action Alternative

A variety of maintenance activities would be conducted under the No Action Alternative, including ditch and culvert maintenance, trail surfacing maintenance (until Interim Use Trail closure in 2015), trimming of vegetation, invasive vegetation removal, and possible fencing of sensitive areas. As described for the Continuation of the Interim Use Trail above, impacts associated with ditch and culvert maintenance may include erosion due to removal of sloughed material from ditches. Eroded soils could result in increased siltation and sedimentation of surface waters.

3.1.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Construction-related impacts were discussed above as direct impacts. Operational impacts to earth are not anticipated, and Nno indirect or secondary impacts are anticipated.

3.1.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7) Construction of the Build Alternatives would require a large net import of borrow material (sand and gravel) for use as fill, thereby contributing to the depletion of existing borrow sources over time. No other cumulative earth-related impacts are anticipated.

3.1.6 Mitigation Measures

The following mitigation measures would apply to the Corridor and East Alternatives. The measures to reduce erosion would also apply to trail maintenance activities performed as part of any of the alternatives.

3.1.6.1 Erosion

The following best management practices (BMPs) eould would be used to control erosion during construction along the project corridor and during trail maintenance activities such as ditch cleaning. These BMPs would be consistent with critical area codes and grading regulations of local jurisdictions.

- Prepare and implement a Temporary Erosion and Sediment Control Plan.
- Mulch the slopes of ditches with straw or matting to reduce erosion in areas where accumulated sediment is removed.
- Minimize areas of soil exposure.
- Retain vegetation where possible, especially on steeper slopes. Seed or plant appropriate vegetation on exposed areas as soon as work is completed.
- Route surface water through temporary drainage channels around and away from disturbed soils
 or exposed slopes.
- Use clean soils containing little or no silt and clay as fill to reduce the potential for erosion.
- Use silt fences, temporary sedimentation ponds, or other suitable sedimentation control devices.
- Cover exposed soil stockpiles and exposed slopes with plastic sheeting, as appropriate.
- Use straw mulch and erosion control matting to stabilize graded areas and reduce erosion and runoff impacts to slopes where appropriate.
- Intercept and drain water from any surface seeps if they are encountered.
- Use a truck tire wash to reduce the potential for turbid runoff from roads.
- Incorporate contract provisions allowing temporary cessation of work under certain, limited circumstances, if weather conditions warrant. Some construction activities that are difficult to mitigate through BMPs should be limited to the drier summer months. See Section 3.5, Fish Resources, for discussion of construction timing requirements related to fisheries.

Mitigation for additional impervious surfaces can include properly designing surface water catchment features to control runoff. See Section 3.2 of the EIS for further discussion of surface water impacts and mitigation.

3.1.6.2 Groundwater

No mitigation measures are proposed because only shallow groundwater would be impacted, in a minimal manner for short durations, as noted in Section 3.1.3, Direct Impacts.

3.1.6.3 Seismic Hazards

Seismically induced slope failure can be mitigated through the design and construction of retaining walls on slopes where walls would be built for the trail. For seismically induced liquefaction, the appropriate level of mitigation would likely be to re-level and repair the trail as needed following a seismic event. While more extensive mitigation measures such as ground improvement, pile-supported foundations, and other options are possible, these are likely to be impractical because failures resulting from a seismic event are likely to be relatively minor, and the cost of repair would be much less than the cost of initial mitigation. The only mitigation for fault rupture would be to regrade and repair the trail as needed.

3.1.6.4 Steep Slopes and Landslide Hazards

For existing steep slopes that would not be impacted by construction, little mitigation would be required outside of continued maintenance (e.g., removal of leaning trees, removal of slide debris as slides may occur, and continued clearing of drainage ditches). In some areas, steepening of the slopes can be accomplished without reducing the stability below normally accepted standards. In other areas requiring cutting or filling, retaining structures would be added to eliminate the possibility of sliding. The potential for slope instability would be mitigated by site-specific geotechnical investigation, engineering design, and construction techniques that would be detailed as part of the permitting process.

3.1.6.5 Debris Flows

Continued maintenance of culverts and cleanup as needed from debris flows are likely the most practical mitigation measures, as well as enforcement by local jurisdictions of their critical areas ordinances in regard to development of upslope properties.

3.1.6.6 Coal Mine Hazards

The nearest abandoned coal mine workings are mapped at the present Lakeside Industries gravel pit, which is approximately 2,000 feet northeast of the trail corridor where it crosses beneath I-90. Because of the distance from the trail, it is unlikely that abandoned mine workings would pose a threat to the trail.

3.1.6.7 Vibration and Settlement

King County would provide mitigation when construction methods that may cause damaging vibrations are proposed in close proximity to structures, and at the recommendation of a qualified engineer. Mitigation could include a pre-construction and post-construction survey of adjacent critical structures (such as houses) and a monitoring program during construction. Depending upon the severity of the impacts, additional mitigation could include modifying construction techniques (such as the choice of pile type or installation equipment), underpinning structures, or re-leveling and repair as appropriate. See the section on "Retaining Wall Construction" below for additional discussion.

3.1.6.8 Disposal of Spoils

The method used for disposal of the spoils would depend upon whether they are clean or contaminated, the type of soil (coarse-grained or fine-grained), the moisture content of the soil, regional demand for fill soils at the time the project is undertaken, the availability of disposal sites, and other factors. Site-specific

analysis, construction planning and sequencing, and an economic evaluation would be undertaken to determine the appropriate disposal method prior to construction.

3.1.6.9 Excavation and Filling

Mitigation would include implementation of BMPs, specifically installing erosion protection and following the Temporary Erosion and Sedimentation Control Plan for the project. Other mitigation would include limiting times of hauling and reusing excavated soil elsewhere along the corridor as appropriate.

3.1.6.10 Retaining Wall Construction

In general, choosing the most appropriate type of retaining wall, designing the wall for the site-specific conditions (soil, access, and space), taking care during construction, and using BMPs would mitigate most impacts associated with retaining wall construction. For example, selection of a wall that can be constructed from the Interim Use Trail or roadway would reduce impacts to sensitive areas, such as wetlands. Some of the impacts would be substantive only in certain areas or at certain times (such as vibrations due to pile driving), whereas other impacts would need mitigation at all times and for all Build Alternatives (such as controlling construction erosion).

Generally all of the erosion impacts that could result from constructing retaining walls would be mitigated by proper use of BMPs. Proper wall design that evaluates both the internal stability of the wall and the overall stability of the slope would mitigate existing slope instability issues at proposed wall locations. For impacts due to potential vibration from pile driving, a pre-and post-construction photo survey of critical areas or structures would be completed. Vibration and noise impacts resulting from use of construction equipment could be minimized by restricting the hours of construction work. Wall types could be chosen that require the use of less noisy equipment in locations adjacent to acoustically sensitive areas (homes, wildlife habitat, etc). Additionally, vibration monitoring during construction of sections of wall requiring driven soldier piles would be required as part of permitting.

For the East Alternatives, mitigation of potential impacts to the roadways resulting from adjacent excavation during trail construction would include limiting the length and duration of excavations, and/or using engineered shoring. Placing the new trail on a pile-supported bridge structure would be an option in some areas of the East Alternatives where the new trail is planned to cross a very steep slope and the resulting wall would be very high. Construction of the bridge foundation could be accomplished from either above or below the new trail.

Impacts to utilities may be mitigated by conducting a three-dimensional survey of utilities prior to design, calling the utilities locating service to mark utilities during construction, digging test holes to expose adjacent utilities, and possibly monitoring the utilities during construction with settlement meters. Final selection of structure types would be made during detailed design and permitting and could result in reduced impacts. The extent and magnitude of construction-related damages, if any, would be documented by pre- and post-construction photo surveys of the road condition.

3.1.7 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to earth resources associated with any of the alternatives have been identified.

3.2 Surface Water Resources and Water Quality

3.2.1 Studies and Coordination

Pertinent existing and historical water quality information used to characterize the affected environment, potential impacts, and mitigation measures was obtained by reviewing the following documents:

- Literature found through searches of library catalogs (University of Washington) and web searches:
- Stormwater Management Manual for Western Washington (Ecology, 2005);
- King County Surface Water Design Manual (King County, 2005)
- East Lake Sammamish Basin Plan (King County, 1994a), Bear Creek Basin Plan (King County, 1990), and Issaquah Creek Basin Plan (King County, 1994b);
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) (FEMA, 1995, 1998); and
- East Lake Sammamish Interim Use Trail and Resource Protection Plan (King County, 1999a).

Review of published documents was supplemented by coordination with local and county agencies and field reconnaissance.

3.2.2 Methodology

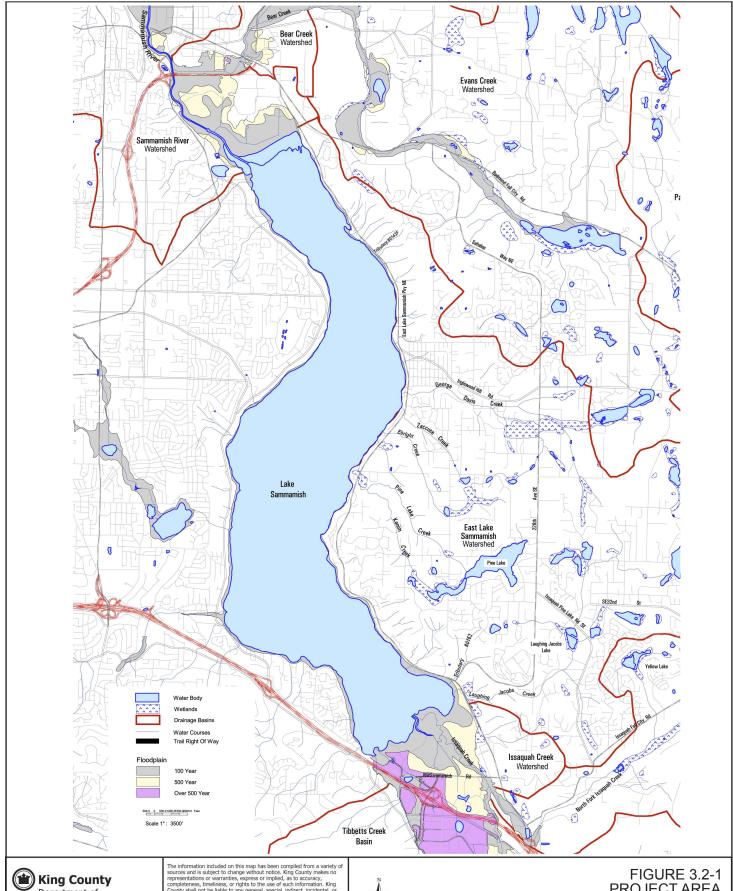
The study area for surface water resources is defined as the area between the western edge of the existing King County right of way, and either its eastern edge (in locations where the proposed project would be located near or on the Interim Use Trail alignment) or the eastern edge of the proposed trail (in locations where the trail would be located east of the Interim Use Trail alignment and adjacent to the East Lake Sammamish Parkway or East Lake Sammamish Place).

The proposed trail would be located in the following watersheds: the North Fork of Issaquah Creek, East Lake Sammamish, Sammamish River, and Bear Creek but would occupy only a small portion of each watershed (see Figure 3.2-1 (pg 3.2-2)). The East Lake Sammamish Watershed is composed of six major basins (from south to north): Laughing Jacobs, Pine Lake, Thompson, Monohon, Inglewood, and Panhandle (see Figure 3.2-2 (pg 3.2-3)). Each watershed has been further divided into sub-basins for the purpose of this analysis. Sub-basins were delineated based on the definition of a threshold drainage basin¹ and include streams and constructed drainage systems. Potential impacts were identified at the sub-basin, basin, and watershed scale, as appropriate.

The following assumptions and methods were used to evaluate potential long-term impacts associated with the alternatives. More details are available in the *Surface Water and Water Quality Discipline Report* (Parametrix, 2004).

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¹ A threshold drainage basin is an area that drains to a single natural discharge location or multiple natural discharge locations that combine within one-quarter mile downstream (King County, 1998).



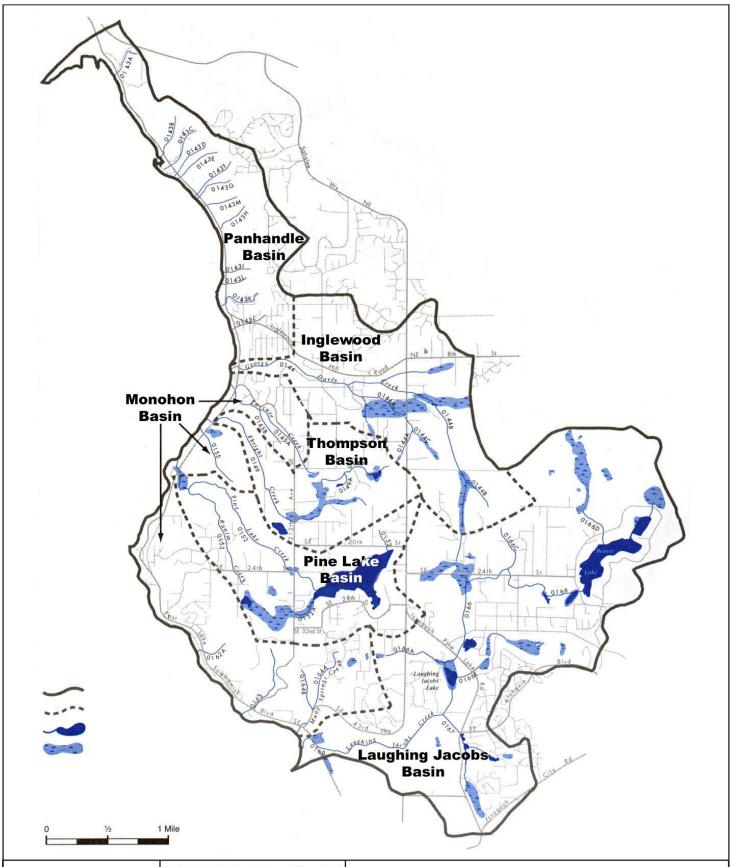
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Natural Resources and Parks **Facilities Management Division**

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PROJECT AREA EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON





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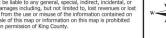




FIGURE 3.2-2 EAST LAKE SAMMAMISH WATERSHED EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON

3.2.2.1 Calculations of Impervious Surfaces

Several calculations were performed to estimate the area of impervious surfaces associated with the project. Impervious surfaces are those surfaces such as pavement, driveways, roads, and rooftops that do not allow rainfall to soak into the ground. Instead, water runs off of these surfaces and can enter water bodies such as streams and wetlands either directly or by being discharged from stormwater detention ponds or other facilities constructed to manage runoff. If not properly managed, runoff from impervious areas can affect the hydrology of streams and wetlands. In addition, runoff from some impervious surfaces, such roads and parking lots, can also carry different types of pollutants, such as oil, grease, heavy metals, and others that can be harmful to aquatic life.

For purposes of calculating the area and impacts of impervious surfaces, they are divided into several categories:

- Existing (paved roads and driveways),
- New (new paved portions of the trail, new compacted gravel that replaces native vegetation),
- Effective (the section of new impervious surface connected to a drainage system),
- Replaced (where new impervious is created on top of existing, such as repaving of driveways),
 and
- Pollutant-generating impervious surface (PGIS).

Any new impervious surface created by the trail alignment would not be PGIS because the trail would not be used by motorized vehicles, except for occasional maintenance and emergency vehicles. However, the proposed parking facilities would fall into the PGIS category.

A geographic information system (GIS) was used to calculate new impervious surface area. Impervious surface was assumed to include the proposed new paved portions of the trail alignments and gravel shoulders or trail surface if they would replace existing native soil. Gravel surfaces placed on the existing railroad ballast were assumed to not be a new impervious surface. The effective amount of new impervious surface in a subbasin was calculated by identifying areas where runoff could be dispersed, and subtracting them from the total new impervious area to arrive at the effective amount of new impervious surface.

The impact analysis assumes that:

- Subbasins draining to a stream or wetland could be impacted by an increase in effective impervious surface greater than 5,000 square feet.
- The primary impacts associated with changes in hydrology (changes in the rate and/or volume of runoff) are increases in flooding, erosive flows, and reduced summer low flow levels in streams. Lake Sammamish would not be affected by changes in hydrology because the amount of runoff from the trail would be small compared to the volume of the lake. Furthermore, the lake would not be subject to erosion and summer lake levels would not change.
- Existing ditches and pipes were have adequate capacity and would not be impacted by potential increases in runoff. Details of the stormwater system design would be addressed during final design and permitting for the trail.

3.2.2.2 Culvert Extensions

Among the locations where culverts could be lengthened, <u>impacts were assumed to occur in the following situations:</u>

- it was assumed that potential impacts could only occur iIn the culverts that convey a stream, that could be adversely affected by short-term increases in turbidity during construction and subject to ongoing local scour and erosion if velocities are increased at the culvert outlet; or
- <u>iIn locations of known flooding or local drainage problems, where failure to appropriately size and design the system could exacerbate the existing condition.</u>

3.2.2.3 Horse Use

A literature search was conducted to qualitatively evaluate the potential impacts from horse manure based on the potential type of pollutants and nutrients in the waste and the potential for these pollutants to enter surface water.

3.2.2.4 Long-Term Maintenance

Maintenance activities that could potentially increase turbidity were qualitatively evaluated.

3.2.3 Affected Environment

3.2.3.1 Regulatory Requirements

As described below, The project must comply with a number of federal, state, and local regulations, permits, and approvals. It is assumed that the point of compliance for determining water quality compliance with these water quality and quantity regulations is the point at which runoff from the project leaves the site. To comply with the requirements, Prunoff will be treated and detained as required prior to discharging discharge to the receiving water from the site.

Federal Regulations

Any activity that discharges stormwater into navigable waters must comply with the applicable provisions of Sections 301, 302, 306, and 307 of the Clean Water Act (CWA). Under CWA Section 402: National Pollutant Discharge Elimination System (NPDES), a permit is required for discharge of pollutants into U.S. waters. In addition, FEMA has mapped 100-year floodplains within the area's basins. Development within floodplains is regulated under local jurisdictions through the permitting process.

State Regulations

The Washington State Department of Ecology (Ecology) regulates discharge to surface waters within the state through several chapters of the Washington Administrative Code (WAC). These include standards for ambient water quality (which is part of the Section 401 Water Quality Certification) and the antidegradation policy for water quality. The project would comply with the antidegradation policy because the trail is not a pollutant-generating impervious surface, and stormwater treatment would be provided for the parking facilities as described in Section 3.2.4.1.

The Environmental Protection Agency (EPA) requires Ecology to prepare the 303(d) list to periodically assess the quality of water in the state by collecting data. Based on the data, Ecology prepares a list of all

waters in which beneficial uses, such as salmon habitat and recreational uses, have been impaired due to poor water quality. Ecology then uses this list to develop plans to improve water quality. The 303(d) list is a requirement of the federal Clean Water Act (33 U.S.C §1313(d)). Impaired water bodies in the study area are described below.

King County Regulations

The *King County Surface Water Design Manual* (King County, 2005) addresses stormwater flow control and water quality treatment. The manual includes requirements of the basin plans for Lake Sammamish, Issaquah Creek, and Bear Creek that the County has adopted.

Local Regulations

To regulate stormwater and water quality, the City of Redmond uses the *Stormwater Technical Notebook* 2004 (City of Redmond, 2004). The City of Sammamish uses the *King County Surface Water Design Manual* (King County, 1998). The City of Sammamish also uses its Development Code. The City of Issaquah uses the Issaquah Stormwater Management Plan, which is based on the King County Surface Water Design Manual (1998) (Issaquah 2002).

3.2.3.2 Existing Watersheds and Water Bodies

The project corridor lies adjacent to the eastern shoreline of Lake Sammamish in Water Resource Inventory Area (WRIA) 8, the Cedar-Sammamish Basin. The middle portion of the project corridor is located within the East Lake Sammamish Watershed. The southern segment is in the Issaquah Creek Watershed, and the northern portion is in the Bear Creek and Sammamish River Watersheds (Figure 3.2-1 (pg 3.2-2)).

Most of the corridor is located within the King County Urban Growth Area. Recent population growth within Issaquah, Sammamish, and Redmond has altered the natural hydrologic regime and water quality of these watersheds. The watersheds and the water bodies within them are briefly described below. More detail is available in the *Surface Water and Water Quality Discipline Report* (Parametrix, 2004).

Issaquah Creek Watershed

The Issaquah Creek Watershed covers 61 square miles. Under state regulations, Issaquah Creek is to be protected for the following designated uses: non-core salmon and trout rearing and migration; primary contact recreation; domestic, industrial, and agricultural water supply; livestock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values (Ecology, 2004). The project corridor passes through the North Fork Issaquah Creek Watershed, which is part of the Issaquah Creek Watershed and covers 2,855 acres. The North Fork originates on the plateau at Yellow Lake. Water quality problems in the North Fork are due to runoff from impervious surfaces in Issaquah, and discharges from a storm sewer outfall at River Mile 0.2, which is downstream of the Interim Use Trail (King County, 1994b). Ecology has listed the North Fork of Issaquah Creek in *Category 4c – Water Bodies Impaired by a Non-Pollutant* for fish habitat (Ecology, 2004).

East Lake Sammamish Watershed

The East Lake Sammamish Watershed covers 16 square miles and is composed of six major basins (from south to north): Laughing Jacobs, Pine Lake, Thompson, Monohon, Inglewood, and Panhandle (see Figure 3.2-2 (pg 3.2-3)). These basins are drained by 17 perennial streams and numerous additional intermittent streams and drainages (King County, 1999b). The streams, which generally originate in wetlands located on the Sammamish Plateau, drain west through steep ravines to Lake Sammamish, and

there are numerous seeps along the base of the plateau. The project corridor is located along the toe of the plateau, typically perpendicular to the natural drainages. These streams are to be protected for the following designated uses: salmon and trout spawning; non-core salmon and trout rearing and migration; primary contact recreation; domestic, industrial, and agricultural water supply; livestock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values (Ecology, 2004). These drainages typically pass through culverts under East Lake Sammamish Parkway and the Interim Use Trail (i.e., former railbed). Local flooding and drainage problems are common as a result of changes in drainage patterns due to the railroad, roads, residential development, poorly maintained local drainage systems, and natural seeps and springs.

Lake Sammamish and the six basins within the East Lake Sammamish Watershed are described below. Each of the six basins is further divided into sub-basins to evaluate specific potential impacts.

Lake Sammamish. Lake Sammamish receives flow primarily from Issaquah Creek. The lake discharges north through the Sammamish River to Lake Washington. It is listed by King County as a sensitive lake due to phosphorus loading. Along the eastern portion of Lake Sammamish, adjacent to the project corridor, Ecology has listed Lake Sammamish in Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies for total phosphorus, sediment bioassay, ammonia-N, fecal coliform, and dissolved oxygen (Ecology, 2004). In addition, elevated metal levels were found throughout the sediments of Lake Sammamish, and elevated organic levels were found near storm drains (King County, 2003a). Several portions of the project corridor are located within a 100-year floodplain, designated Zone X by FEMA. Zone X areas are areas within the 100-year floodplain where the average flood depth during a 100-year return frequency storm is less than 1 foot, or areas protected by levees.

Laughing Jacobs Basin. This basin covers 3,600 acres. It is drained by Laughing Jacobs Creek, which originates in a wetland known as Laughing Jacobs Lake on the Sammamish Plateau. The creek drains through a steep ravine to discharge into Lake Sammamish. Ecology has listed Laughing Jacobs Creek in Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies for fecal coliform and in Category 4c – Water Bodies Impaired by a Non-Pollutant for instream flow and fish habitat (Ecology, 2004). This stream also has a high phosphorus content and sediment loads. Where the creek crosses under the Interim Use Trail, the trail is supported by a bridge.

Pine Lake Basin. This basin covers 773 acres. Pine Lake Creek originates on the plateau and drains west through a steep ravine. Ecology has listed Pine Lake Creek in Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies for dissolved oxygen and fecal coliform (Ecology, 2004).

Thompson Basin. This basin covers 1,176 acres, and Ebright Creek is the main drainage feature. It is fed by two tributaries that originate in wetlands on the plateau. Erosion and sedimentation problems have been documented (King County, 1994a). Ecology has listed Ebright Creek in Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies for fecal coliform and in Category 4c -Water Bodies Impaired by a Non-Pollutant for instream flow and fish habitat (Ecology, 2004).

Monohon Basin. This basin is divided into south, middle, and north stream drainages along the eastern edge of Lake Sammamish. Zaccuse Creek is the primary drainage, originating in a series of wetlands on the plateau and flowing northwest to Lake Sammamish. Water quality problems include channel incision and sedimentation; however, there is no evidence of flooding.

Inglewood Basin. This basin covers 1,559 acres and drains through George Davis Creek, which originates on the plateau. Water quality problems include *Enterococcus* bacteria and nitrogen, possibly due to leaking septic tanks or sewer systems, and sediment deposition. Ecology has listed George Davis Creek in *Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies* for temperature and dissolved oxygen; in *Category 4A - Polluted Waters* that have a TMDL for fecal coliform; in *Category 4c - Water Bodies Impaired by a Non-Pollutant* for instream flow and fish habitat; and in *Category 2 - Waters of Concern* for copper and pH (Ecology, 2004). Local flooding along the Interim Use Trail alignment is common.

Panhandle Basin. This 3-mile-long basin is located in the northern portion of the East Lake Sammamish Watershed, and is drained by eight perennial streams and numerous intermittent streams and seeps. While there are no water quality problems, the drainages in the Panhandle Basin are incised in steep stream reaches and have sedimentation in the lower reaches. Drainage and flooding problems are due to seeps, poor conveyance systems, and sediment deposition.

Sammamish River Watershed

The Sammamish River Watershed covers 150 square miles, the majority of which drains to Lake Sammamish and Bear Creek (King County, 1993). The Sammamish River flows north, connecting Lake Sammamish to Lake Washington. The Sammamish River is to be protected for the following designated uses: salmon and trout spawning; non-core salmon and trout rearing and migration; primary contact recreation; domestic, industrial, and agricultural water supply; livestock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values (Ecology, 2004). A segment of the Master Plan Trail, which is the same for all alternatives, would be located within three unnamed basins draining to the Sammamish River.

North of the study area, Ecology has listed the Sammamish River in *Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies* for temperature and dissolved oxygen; in *Category 4A - Polluted Waters* that have a Total Maximum Daily Load (TMDL) for fecal coliform; and in *Category 2 - Waters of Concern* for dissolved oxygen, temperature, and pH (Ecology, 2004). FEMA has designated an extensive 100-year floodplain in this area.

Bear Creek Watershed

The Bear Creek Watershed covers 51 square miles and encompasses the northernmost section of the project corridor. The watershed drains into the Sammamish River in Redmond. Bear Creek is to be protected for the following designated uses: salmon and trout spawning; non-core salmon and trout rearing and migration; primary contact recreation; domestic, industrial, and agricultural water supply; livestock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values (Ecology, 2004).

King County has designated the lower reaches of Bear Creek as a "regionally significant resource area" and a productive salmon spawning stream (King County, 1990). Although it has excellent water quality, within the study area, Ecology lists Bear Creek in its *Category 5 - Polluted Waters/303(d) List of Threatened and Impaired Water Bodies* for temperature and fecal coliform, and in *Category 2 - Waters of Concern* for dissolved oxygen and pH (Ecology, 2004).

3.2.4 Direct Impacts

3.2.4.1 Corridor Alternative

Both construction and operational impacts could occur at the sub-basin, basin, or watershed scale.

Construction Impacts

Construction impacts could result from (1) a temporary increase in erosion and sedimentation and potential for spills of fuel or oil at staging areas; (2) in-water work associated with culvert extensions or replacements in perennial streams; (3) dewatering, cast-in-place concrete work, and stream diversions associated with retaining wall construction, and (4) work in and adjacent to wetlands. Construction impacts would be temporary and could be minimized or prevented through the proper implementation of best management practices (BMPs) as discussed in the mitigation section. Temporary impacts can also be avoided by properly monitoring Temporary Erosion and Sediment Control (TESC) BMPs and modifying these BMPs as site conditions change.

Temporary construction related impacts to water quality could result from the erosion of disturbed soil areas or soil stockpiles, resulting in stormwater runoff transporting silt and sediment to receiving waters. The highest probability of impacts associated with sediment is when construction occurs in or adjacent to wetlands or streams. Runoff may also carry other contaminants, such as fuel or oil from construction operations. Both sediment and contaminants can increase turbidity and affect other water quality parameters such as the amounts of available oxygen in the water. The highest probability of impacts associated with spills is at staging areas.

The Corridor Alternative would require nine culvert extensions or replacements on eight different perennial streams (see Table 3.5-3 in Section 3.5, Fish Resources). These extensions would likely require diverting the stream around the work area during construction, which could have temporary impacts to water quality, such as increased turbidity. The Corridor Alternative would also require construction of retaining walls. This work is likely to require temporary dewatering or cast-in-place concrete, which could impact water quality by reducing base flow or water levels or by increasing pH. The extent to which retaining walls would be required for this alternative is presented in Section 3.1, Earth.

Operation Impacts

Operation of the trail would have impacts associated with (1) new impervious surface area, (2) changes in scour or erosion resulting from culvert extensions, (3) horse waste, and (4) maintenance. These are discussed below.

New impervious surface area. New impervious surface area has been linked to increases in the frequency of peak flow rates and the volume of stormwater runoff. These in turn can result in bed incision and bank erosion in steep reaches of streams and can change the hydroperiod in wetlands. Eroded sediment is deposited as the stream slope decreases, which can lead to drainage problems and local flooding. Large areas of new impervious surface could also reduce groundwater recharge and thus result in lower flows in streams during the summer. However, since the project corridor makes up a very small part of each of the basins and is located away from the shoreline of Lake Sammamish, effects on recharge are unlikely.

Approximately 18.8 acres of total new impervious surface would be created along the project corridor as a result of widening the Interim Use Trail (i.e., the former railbed). Approximately 10.8 acres would be effective impervious surface (impervious surface connected to the stream by stormwater ditches and/or

pipes). Under the Corridor Alternative, 36 subbasins that drain to streams and wetlands would experience an increase of more than 5,000 square feet of new impervious surface. Stormwater management such as dispersion, infiltration, and/or detention would be provided for these 38 subbasins to minimize the potential impacts due to the increases in impervious surface area. In addition, the Corridor Alternative (and all of the Build Alternatives) would include other facilities such as crosswalks, sidewalks, curbs and gutters, three parking areas, and restrooms. These facilities would create an additional 1.2 acres of total (and effective) impervious surface area.

Only the parking facilities would create new PGIS and could have potential water quality impacts due to pollutants in stormwater runoff. It is difficult to estimate potential pollutant loads because they vary depending on the amount and type of PGIS, traffic volumes, duration and intensity of a storm event, time of year, and antecedent weather conditions. However, pollutant load can be correlated to the amount of PGIS. The proposed project would provide detention and water quality treatment as needed to meet applicable standards, and it is assumed that no additional property would be required to construct detention facilities. Detention and water quality treatment could include a range of techniques including low impact design, bioswales, wetponds, vaults, or numerous other techniques described in the *King County Surface Water Design Manual*.

Culvert extensions. Culvert extensions may alter the efficiency of the drainage system to convey sediment and could increase flow velocities at the outlet of the culvert. This could result in an increase in local scour and erosion (Whipple et al., 1981).

The Corridor Alternative would extend or replace 21 culverts on 18 different perennial and intermittent streams, which could result in localized increases in scour and erosion over time. These streams may have high sediment loads, which could lead to sedimentation problems. Table 3.5-3 in Section 3.5, Fish Resources, summarizes the locations at which culverts that convey streams would be extended under the Corridor and East A Alternatives.

Some of the existing culverts over fish-bearing streams would be replaced with larger culverts or bridges to provide or improve fish passage. Potential impacts to downstream properties such as flood and sediment deposition would be considered when selecting these locations and designing the new structures.

Horse waste. Unmanaged horse manure piles are a source of non-point pollution. Runoff from horse manure could be a source of nutrients such as nitrogen and phosphorus, as well as bacteria and excess minerals, and can thus be detrimental to water quality and fish habitat (King County, 2003b; Swinkler and Davies, 2003). This is not expected to occur because (1) use of the trail by horses outside the project corridor basins (i.e., new sources of pollution entering the watershed²) is likely to be minimal, (2) fences would be installed to prevent horses from entering wetlands and streams, and (3) vegetation located between the trail and streams, wetlands, and Lake Sammamish can filter nutrients and sediment, thereby protecting water quality. Equestrian use is proposed in the Redmond segment only, the majority of which is not located in proximity to a water body.

Trail maintenance. Trail maintenance would include removing sediment and vegetation from ditches and streams, repairing and replacing one to three culverts each year as needed, repairing gravel or pavement, and mowing. Emergency maintenance may be necessary if ditches or culverts are blocked with debris. Periodic and temporary increases in turbidity in local water course during maintenance are likely.

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² The East Lake Sammamish area has several horse pastures, and many of the streams are listed in Category 5 for fecal coliform; it was assumed that horses may be part of the source (Ecology 2004).

3.2.4.2 East A Alternative

Construction Impacts

The construction impacts of East A Alternative would be similar to those discussed above for the Corridor Alternative. The East A Alternative would create approximately 18.8 acres of total new impervious surface; approximately 12.7 acres would be effective impervious surface. However, the East A Alternative would require 17 culvert extensions on 12 perennial streams, potentially requiring diversion of streamflow around the work area. In addition, the construction of retaining walls would likely require temporary dewatering³. The water would be treated prior to discharge to minimize or prevent impacts to the receiving water.

Operation Impacts

As under the Corridor Alternative, new impervious surface would be created along the project corridor for the East A Alternative. Under East A Alternative, 38 subbasins would experience an increase of more than 5,000 square feet of new impervious surface. Stormwater management would be provided for these subbasins to minimize the potential environmental impacts caused by increases in impervious surface area.

The East A Alternative would extend or replace 29 culverts on 22 different perennial and intermittent streams. These culverts could result in localized increases in scour and erosion over time. These streams may have high sediment loads, which could lead to sedimentation problems.

Under the East A Alternative, impacts associated with new PGIS, horse waste, and maintenance would be the same as or similar to those for the Corridor Alternative.

3.2.4.3 East B Alternative

Construction Impacts

The East B Alternative would have the same construction impacts as those discussed under East A.

Operation Impacts

The East B Alternative would have the same operation impacts as those discussed under the East A Alternative. Although the location of equestrian use and resulting horse waste would be on a separated soft-surface trail along the Interim Use Trail alignment under East A, versus a multi-purpose trail along the shoulder of adjacent roadways under East B, this would not change the expected water quality impacts.

3.2.4.4 Continuation of the Interim Use Trail Alternative

Construction Impacts

Because the Continuation of the Interim Use Trail Alternative would not require the extension or replacement of culverts, construction impacts would be less than those for the Corridor, East A, or East B

³ Temporary dewatering is used to lower the groundwater table in localized areas to allow construction of footings and walls without having water on the site. In general, pumps are used to lower the groundwater table and the water is discharged to a surface water feature.

Alternatives. Impacts due to clearing and grading, such as temporary increases in turbidity could occur at the parking facility locations for all three alternatives. Construction of the Interim Use Trail north of NE 70th could result in some gravel entering Bear Creek during construction; however, impacts could be prevented by using BMPs and proper construction techniques.

Operation Impacts

Under the Continuation of the Interim Use Trail Alternative, impacts associated with new PGIS, horse waste, and routine maintenance and repair would be the same as or similar to those for the Corridor Alternative. The Continuation Alternative would not extend any culverts or create new impervious area outside the parking and restroom facilities.

3.2.4.5 No Action Alternative

Construction Impacts

No construction would be required for the No Action Alternative.

Operation Impacts

King County would continue to maintain the drainage system that serves the corridor as described and evaluated in the environmental documents for the Interim Use Trail (King County, 2000; FHWA and WSDOT, 2002). Potential impacts could include temporary, short-term increases in turbidity during maintenance activities.

3.2.5 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). It is possible that the Build Alternatives could have a net benefit for water quality by providing a non-motorized transportation corridor, thereby reducing the use of pollutant-generating automobiles over time. No indirect or secondary impacts are anticipated.

3.2.6 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The project is located within the King County Urban Growth Area, where suburban and urban development will continue. Such development will result in additional impervious surface that will impact streams and wetlands in the basins. The impervious surfaces created under the Corridor, East A, and East B Alternatives would add incrementally to this impervious surface area.

Current and future development in the study area, including the Master Plan Trail, would comply with a variety of increasingly protective stormwater regulations, which would reduce the potential for additional cumulative impacts to water quality.

3.2.7 Mitigation Measures

3.2.7.1 Construction Mitigation

Control of Runoff and Erosion

All of the Build Alternatives would disturb soils, possibly resulting in turbid stormwater runoff. The following measures <u>eould-would</u> be used to minimize the amount of sediment in runoff entering local water bodies during construction:

- Treat stormwater runoff from active construction sites with best management practices (BMPs) prior to discharge as necessary to comply with the requirements of the Washington Administrative Code and/or the construction NPDES permit.
- Treat turbid or contaminated dewatering water prior to discharge as necessary to comply with the requirements of the Washington Administrative Code, the construction NPDES permit, and/or the local grading permit.
- During the permitting and design processes, develop a temporary sediment and erosion control (TESC) plan, a spill containment and countermeasures plan (SCCP), and a stormwater pollution prevention plan (SWPPP) for the project. These plans would outline the BMPs that would be used during construction activities.
- Perform <u>construction</u> monitoring in accordance with Ecology's standards.

Habitat Enhancement

The Build Alternatives (except the Continuation of the Interim Use Trail Alternative) may require mitigation, such as local stream habitat enhancement, at locations where stream culverts are extended or replaced. These determinations would be made during the design and permitting phase of the project and in collaboration with permitting agencies.

3.2.7.2 Operation Mitigation

Subbasins in which an alternative would create more than 5,000 square feet of new impervious surface were assumed to require some level of stormwater management. Stormwater management was also evaluated for the parking areas and restrooms. In compliance with local permitting requirements, the management of stormwater runoff, such as dispersion, detention, biofiltration, retention, and/or treatment, would be included in all of the Build Alternatives. Because stormwater management minimizes or prevents impacts associated with runoff, no other long-term mitigation would be required. Details of the stormwater system would be addressed during final design and permitting for the trail. For those locations where culverts would be replaced to improve fish passage and downstream property impacts could occur, the downstream drainage system may be improved.

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⁴ A list of all permits potentially required for the project is provided in Chapter 2. Regulatory requirements specifically related to water resources are discussed in Section 3.2.3.1.

3.2.8 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to water resources have been identified for any of the proposed alternatives. The types of impacts on surface waters that would be considered to be significant unavoidable adverse impacts include extensive floodplain fill, levees, dredging, stream relocation, or activities resulting in high pollutant loads such as industrial or mining uses. However, none of these activities would occur with the proposed project.

3.3 Wetlands

This section discusses potential impacts to wetlands and wetland functions resulting from the proposed Master Plan Trail. Information in this section is summarized from the *East Lake Sammamish Master Plan Wetland Biology Discipline Report* (Parametrix, 2004b), which contains additional detailed information on wetlands in the project area. Technical terms used in this section are defined in the glossary (Chapter 9).

3.3.1 Regulatory Requirements

Wetlands are formally defined by the Federal Register, Washington State Shoreline Management Act, and Washington State Growth Management Act as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland buffers are not the same as wetlands. Wetland buffers are upland areas surrounding wetlands that provide protection to the biological, chemical, and hydrologic functions of the wetlands.

Wetlands are regulated at the federal, state, and local levels. The U.S. Army Corps of Engineers (Corps), Washington State Department of Ecology (Ecology), Washington State Department of Fish and Wildlife (WDFW), and Cities of Redmond, Sammamish, and Issaquah are the main regulatory agencies with jurisdiction over wetlands and wetland buffers in the study area.

Federal laws regulating wetlands include Sections 401 and 404 of the Clean Water Act, which are implemented by Ecology and the Corps, respectively. WDFW regulates certain wetlands under the Washington State Hydraulic Code, which is intended to protect fish. The Washington State Shoreline Management Act, along with local shoreline master programs in each jurisdiction, regulates the shoreline of Lake Sammamish and several streams in the vicinity that have a mean annual flow of over 20 cubic feet per second (cfs).

The Cities of Issaquah, Sammamish, and Redmond each regulate development and land use activities in wetlands and wetland buffers through their respective sensitive areas (or critical areas) regulations. These local regulations, including wetland buffer widths required by each jurisdiction, are summarized in Appendix J of the *East Lake Sammamish Master Plan Wetland Biology Discipline Report* (Parametrix, 2004b).

3.3.2 Studies and Coordination

The information presented in this section and associated tables are based upon the studies and coordination identified below. Wetlands in and near each project alternative were evaluated using standard analysis methodologies for assessing wetland boundaries, functions, and impacts. The field studies and project analysis address wetlands located: (1) in and near the King County corridor between the intersection at Gilman Boulevard in Issaquah to just west of the crossing of Bear Creek in Redmond; (2) in and near the area between the King County corridor and East Lake Sammamish Parkway where these rights of way are contiguous; and (3) the west side of East Lake Sammamish Parkway and East Lake Sammamish Place in locations where the East Alternatives would parallel the East Lake Sammamish Place roadway shoulder.

Potential wetlands within and adjacent to the study area were identified by reviewing several different existing information sources, as discussed in the *East Lake Sammamish Master Plan Wetland Biology Discipline Report* (Parametrix, 2004b).

Potential wetlands were then evaluated in the field following the Corps and Ecology wetland delineation manuals. The boundaries of wetlands in the study area were determined in 1999 through 2000. In addition to determining wetland boundaries, wetland biologists used several methods to characterize and describe the functions of the wetlands and buffers, wetland habitat types, water movement in the wetlands, and the state and local ratings of the wetlands. These methods are described in detail in the *Wetland Biology Discipline Report*.

It should be noted that, since the <u>original</u> field evaluations, the <u>three-local</u> jurisdictions have updated their critical area ordinances. In <u>general,some areas, critical areas ordinance updates may affect the buffer widths for wetlands within the project area. <u>aA</u>dditional field work <u>is-was conducted in 2007needed</u> to <u>update the wetland ratings and buffer widths to be consistent with apply</u> the new <u>critical areas elassification systems and other ordinance-requirements. Results of this recent field work are incorporated into this Final EIS. This field work will be completed prior to the issuance of the Final EIS for the project and will be incorporated in the Final EIS. The changes will do not affect the direct impacts to wetlands; however disclosed below because the buffers associated with the wetlands are now required to be wider, or the discussion of the significance of the impacts; however, the amount of buffer impacts and the mitigation requirements <u>havewill</u> changed for the Corridor and East Alternatives.</u></u>

3.3.3 Affected Environment

Approximately 78 wetland areas were identified in, or directly adjacent to, the study area (Table 3.3-1). These wetlands are mapped on the plan sheets in Volume II of this EIS. For purposes of this impact analysis, wetlands in the study area were grouped into five categories based on their topographic conditions and patterns of water sources. These groups, which are described below and in the wetland discipline report (Parametrix, 2004b), were established based on the hydrogeomorphic classification approach (Brinson et al., 1993), an accepted method for evaluating wetlands and their ecological functions.

Table 3.3-1. Summary of Wetlands within the East Lake Sammamish Master Plan Trail Wetlands Study Area

WETLAND TYPE (NO. OF WETLANDS)	ASSOCIATI WETLANDS WITH		CITY W WETLAN LOCA	IDS ARE	_	SFWS SIFICATION ^a	ECOLOGY RAT		Loc Rati		TOTAL WETLAND ACREAGE IN STUDY AREA
	Stream Name	No. of Wetlands	City	No. of Wetlands	Class	No. of Wetlands	Category	No. of Wetlands	Class or Type	No. of Wetlands	
Closed Depression (2)	not applicable	2	Issaquah Sammamish	1 1	PEM PSS	1 1	III	2	3 NR	1 1	0.08
Slope (16)	not applicable Pine Lake & #0155 Unnamed #0143L		Issaquah Sammamish Redmond	1 1 <u>6</u> 4 1	PEM PFO	1<u>13</u>1 5	 <u> V</u>	2 <u>5</u> 1 1 <u>1</u> 3	<u> </u> 4 2 <u> </u> 3 <u> V</u> NR	2 4 <u>5</u> 9 1	3.55
Modified Slope (32) ^b	not applicable		Issaquah Sammamish Redmond	12 18 2	PEM PSS PFO	24 3 5	<u> </u> <u> V</u>	32 <u>2</u> 23 7	<u>2- </u> 3- NR- V	5 2 22 23 5 7	3.81
with Fish Bearing Stream (20)	North Fork Issaquah Creek Trib #1 to Lk Sam Many Springs Pine Lake & #0155 Ebright Creek Zaccuse Creek #0143L #0143D Bear Creek	_	Issaquah Sammamish Redmond	8 11 1	PEM PSS PFO	6 7 7	II III NRIV	1 <u>92</u> 1 <u>6</u> <u>2</u>	2 <u> </u> 3 <u> </u> NR V	16 2 3 16 42	6.15
Bearing Stream (8) ^b	Trib #1 to North Fork Issaquah Creek Trib #2 to Lk Sam Unnamed #0150 #0143I	2 1 2 2 1	Issaquah Sammamish	3 5	PEM PSS PFO	4 3 1	II III IV	8 <u>1</u> 6 1	2 <u>-11</u> 3- <u>111</u> NR <u>IV</u>	2 <u>1</u> 5 <u>6</u> 1	1.55
									Total		15.14

^aPEM-palustrine emergent wetland, PSS-palustrine scrub-shrub wetland, PFO-palustrine forested wetland
^b Adjacent property owners have submitted information to the City of Sammamish indicating some or all of a slope wetland (Wetland 31D) and a riverine wetland without fish (Wetland 28A) are not wetland.

3.3.3.1 Closed Depression Wetlands

There are two closed depression wetlands in the study area. These wetlands are small, hydrologically isolated areas with no surface drainage channels present. Groundwater discharge and precipitation are the major sources of water for both wetlands. These wetlands cover approximately 0.04 acre total and are vegetated with emergent and shrub vegetation. Wetland 18C is a Class 3 wetland (City of Sammamish), and Ecology rates both wetlands as Category III. These wetlands merit low habitat ratings for aquatic invertebrates, amphibian habitat, and native plant richness. They do not provide other wetland functions (see Table 3.3-2).

Table 3.3-2. Functional Assessment of Depressional Closed Wetlands

FUNCTION OR VALUE	DO WETLANDS PROVIDE FUNCTION?	LEVEL OF FUNCTION PROVIDED	No. of Wetlands Providing Function
Flood flow alteration	No	No	
Sediment removal	No	No	
Nutrient and pollutant removal	No	No	
Erosion control and shoreline stabilization	No	No	
Production of organic matter and its export	No	No	
General habitat suitability	No	No	
Habitat for aquatic invertebrates	Yes	Low	2
Habitat for amphibians	Yes	Low	2
Habitat for wetland- associated mammals	No	No	
Habitat for wetland- associated birds	No	No	
General fish habitat	No	No	
Native plant richness	Yes	Low	2
Educational or scientific value	No	No	
Uniqueness and heritage	No	No	

3.3.3.2 Slope Wetlands

Slope wetlands occur on sloping land where groundwater surfaces and creates wetlands. The <u>sixteen16</u> slope wetlands in the study area are located on slopes between Lake Sammamish and the Interim Use Trail (i.e., the former railbed). They generally drain surface water directly to the lake. Most of the wetlands are rated by the Ecology system as Category III wetlands. However, two of these wetlands meet the criteria for Category I wetlands and one meets the Category II criteria. They meet the local rating criteria of Class 1, 2, or 3, depending on their size and vegetation. Groundwater is the major source of water for these wetlands.

Wetlands 4B/D and 34A are Class I wetlands located in Lake Sammamish State Park and Marymoor Park, respectively (see Figures 6, 7, 34, 35, and 36 in Volume II). These wetlands continue outside of the study area; the King County right of way defines their eastern boundaries. Wetland 24B is one of the larger slope wetlands in the study area (see Figures 19 and 20 in Volume II). This wetland is also

associated with two fish-bearing streams (Pine Lake Creek and Stream No. 0155) and includes a wetland enhancement area with a small pond.

Five of the slope wetlands have a forest cover consisting of red alder, black cottonwood, and Oregon ash. Salmonberry, Pacific ninebark, and red osier dogwood are common understory shrubs. The emergent wetlands (wetlands with rooted plants that may be temporarily or permanently flooded at the base but have parts extending above the water surface) in this group are vegetated with mowed turf and weedy vegetation as a result of frequent disturbance. The results of the assessment of functions conducted for the slope wetlands in the study area are presented in Table 3.3-3.

Table 3.3-3. Assessment of Functions for Slope Wetlands in Study Area

FUNCTION OR VALUE	DO WETLANDS PROVIDE FUNCTION?	LEVEL OF FUNCTION PROVIDED	No. of Wetlands Providing Function
Flood flow alteration	Yes	Low	1
Sediment removal	No		
Nutrient and pollutant removal	No		
Erosion control and shoreline stabilization	Yes	Moderate	4
Production of organic matter and its export	Yes	Moderate	4
General habitat suitability	Yes	Low	1
Habitat for aquatic invertebrates	Yes	Low and Moderate	16 (11 Low and 5 Moderate)
Habitat for amphibians	Yes	Low and Moderate	16 (11 Low and 5 Moderate)
Habitat for wetland-associated mammals	Yes	Low	16
Habitat for wetland-associated birds	Yes	Moderate to Low	16
General fish habitat	Yes	Low and Moderate	16 (11 Low and 5 Moderate)
Native plant richness	Yes	Low and Moderate	16 (11 Low and 5 Moderate)
Educational or scientific value	Yes	Low	16
Uniqueness and heritage	Yes	Low	5

3.3.3.3 Modified Slope Wetlands

Modified slope wetlands are slope wetlands where topography and water flow were modified by road or railroad construction such that they now include some natural slope wetland, but also constructed depressions and/or ditches. Thirty-two wetlands in the study area are modified slope wetlands. Most of these are rated by the local jurisdiction as Class 3; five of these wetlands have forested vegetation and are rated as Class 2; and the rest are too small to be rated. All of the modified slope wetlands are Category III under the Ecology rating system. Some of these wetlands have depressions that can retain and pond water, while others have flatter slopes that drain to ditches and do not have the capacity to hold water. The

hydrology of these wetlands is a result of groundwater discharge supplemented by runoff, including stormwater runoff from East Lake Sammamish Parkway.

Clearing, mowing, grading, or other human activities have modified vegetation and habitat conditions in nearly all of these wetlands, reducing the cover of native vegetation. Yard waste, construction debris, and other trash have also degraded several of these wetlands; however, the existing Interim Use Trail maintenance program removes these items as needed. The wetlands typically support emergent vegetation dominated by reed canarygrass. Five forested wetlands contain young red alder, black cottonwood, and Pacific willow trees. Three wetlands support shrub vegetation composed of willow, red alder saplings, red osier dogwood, and twinberry. The results of the assessment of functions for the modified slope wetlands in the study area are summarized in Table 3.3-4.

Table 3.3-4. Assessment of Functions for Modified Slope Wetlands

FUNCTION OR VALUE	DO WETLANDS PROVIDE FUNCTION?	LEVEL OF FUNCTION PROVIDED	No. of WETLANDS PROVIDING FUNCTION
Flood flow alteration	No		
Sediment removal	No		
Nutrient and pollutant removal	No		
Erosion control and shoreline stabilization	No		
Production of organic matter and its export	Yes	Low	32
General habitat suitability	No		
Habitat for aquatic invertebrates	No		
Habitat for amphibians	No		
Habitat for wetland- associated mammals	No		
Habitat for wetland- associated birds	No		
General fish habitat	No		
Native plant richness	Yes	Low	8
Educational or scientific value	No		
Uniqueness and heritage	No		

3.3.3.4 Modified Riverine Wetlands Associated with Fish-Bearing Streams

Twenty of the wetlands in the study area are associated with fish-bearing streams. Ecology rates these wetlands as Category III and the local jurisdictions rate them as Class 2 or 3 based on size and habitat features. These wetlands range in size from less than 0.03 to 1.0 acre within the study area, and most are linear or trough-shaped. A seasonally high groundwater table, overbank flows from the streams, and surface runoff support the hydrology of these wetlands.

These wetlands include forested, emergent, and scrub-shrub vegetation. The forested vegetation includes Oregon ash, black cottonwood, Pacific willow, and red alder. The shrub vegetation is generally composed of young Pacific willow and red osier dogwood, peafruit rose, Douglas spirea, and Himalayan blackberry. Also present in smaller numbers are other willow shrubs and Oregon ash saplings. Emergent vegetation is most commonly reed canarygrass and ladyfern, soft rush, giant horsetail, scouring rush, and small-fruited bulrush. Common cattail occurs in the center of some of the troughs within these wetlands.

Vegetation and habitat conditions in nearly all of these wetlands have been modified by clearing, mowing, grading, or other human activities, reducing the cover of native vegetation. Yard waste, construction debris, and other trash have also degraded several of these wetlands; however, the existing Interim Use Trail maintenance program removes these items as needed. The results of the assessment of functions for the modified riverine wetlands associated with fish-bearing streams in the study area are summarized in Table 3.3-5.

Table 3.3-5. Summary of Functions for Modified Riverine Wetlands Associated with Fish-Bearing Streams in Study Area

FUNCTION OR VALUE	DO WETLANDS PROVIDE FUNCTION?	LEVEL OF FUNCTION PROVIDED	No. of Wetlands Providing Function
Flood flow alteration	Yes	Low to Moderate	20
Sediment removal	Yes	Moderate	20
Nutrient and pollutant removal	Yes	Moderate	20
Erosion control and shoreline stabilization	Yes	Moderate	20
Production of organic matter and its export	Yes	Moderate	20
General habitat suitability	Yes	Low	20
Habitat for aquatic invertebrates	Yes	Low to Moderate	20
Habitat for amphibians	Yes	Low	20
Habitat for wetland- associated mammals	Yes	Low	20
Habitat for wetland- associated birds	Yes	Low	20
General fish habitat	Yes	Moderate	20
Native plant richness	Yes	Low	20
Educational or scientific value	Yes	Low	20
Uniqueness and heritage	Yes	Low	20

3.3.3.5 Modified Riverine Wetlands Associated with Non-Fish-Bearing Streams

Eight of the wetlands in the study area are associated with streams that do not provide habitat for fish. Generally, these streams originate east of East Lake Sammamish Parkway and flow through the wetlands. The local jurisdictions have rated these wetlands as Class 2 or Class 3, depending upon their size and types of vegetation. All of these wetlands are rated as Category III using the Ecology rating system. A seasonally high groundwater table provides the primary source of water for these wetlands, although overbank flow from the streams and surface runoff also contribute.

The vegetation within these wetlands consists mainly of young Pacific willows along with twinberry, peafruit rose, and red osier dogwood. Reed canarygrass and Himalayan blackberry are common on the fill slopes. Other willow shrubs and Oregon ash saplings are also occasionally present. Emergent vegetation is most commonly reed canarygrass with yellow iris, soft rush, giant horsetail, scouring rush, and small-fruited bulrush locally dominant. Like other wetlands in the study area, clearing, mowing, grading, or other human uses have modified vegetation and habitat conditions in nearly all of these wetlands. These uses reduce native vegetation cover in most of the wetlands. Yard waste, construction debris, and other

trash have also degraded several of these wetlands; however, the existing Interim Use Trail maintenance program removes these items as needed. The results of the assessment of functions for the modified riverine wetlands associated with non-fish-bearing streams are summarized in Table 3.3-6.

Table 3.3-6. Summary of Functions for Modified Riverine Wetlands Associated with Non-Fish Bearing Streams in Study Area

FUNCTION OR VALUE	Do WETLANDS PROVIDE FUNCTION?	LEVEL OF FUNCTION PROVIDED	No. of Wetlands Providing Function
Flood flow alteration	Yes	Low to Moderate	8
Sediment removal	Yes	Low	8
Nutrient and pollutant removal	Yes	Low	8
Erosion control and shoreline stabilization	Yes	Moderate	8
Production of organic matter and its export	Yes	Low	8
General habitat suitability	Yes	Low	8
Habitat for aquatic invertebrates	Yes	Low	8
Habitat for amphibians	Yes	Low	8
Habitat for wetland- associated mammals	Yes	Low	8
Habitat for wetland-associated birds	Yes	Low	8
General fish habitat	No		
Native plant richness	Yes	Low	8
Educational or scientific value	Yes	Low	8
Uniqueness and heritage	No		

3.3.3.6 Wetland Buffers

The buffers of wetlands in the study area range from 25 to 100 feet wide according to the regulations of the local jurisdictions. Habitat in the wetland buffers throughout the study area is generally in poor condition. Many of the buffers contain structures, roadways, driveways, and other constructed features. Many are vegetated with ornamental shrubs and trees or mowed turf. Where the buffers are not maintained, they are largely vegetated with non-native and invasive plants, including Himalayan blackberry. A few of the wetland buffers contain young red alder or bigleaf maple trees. Most of the buffers have a limited ability to maintain high levels of functions in the adjacent wetlands because of their degraded nature, or because the undeveloped buffers are too narrow to effectively protect the wetland from adjacent high-impact land uses.

3.3.4 Direct Impacts

The potential direct impacts of the Master Plan Trail alternatives to wetlands and wetland functions are evaluated in this section. The amount of wetland fill for each alternative was determined by overlaying the proposed trail design onto the maps of surveyed wetland boundaries.

3.3.4.1 Corridor Alternative

Construction Impacts

Under the Corridor Alternative, construction impacts include temporary impacts (<u>impacts that would occur for the duration of construction activities</u>) such as the clearing of wetland vegetation, changes in wetland hydrology due to dewatering, and an increase in sediment-laden runoff due to earthwork:

- **Removal and Disturbance of Vegetation.** Wetland vegetation and habitat functions could be temporarily disturbed during construction if clearing is required to provide access, maneuver equipment, or install fences.
- Changes in Wetland Hydrology. Retaining walls would be required along some segments of the Corridor Alternative. In wetland areas, the depth of soil of sufficient bearing strength may be below the water table, and construction of wall footings could potentially require dewatering of the footing area, or it may require construction during the dry season. Temporary effects to wetlands located downslope from fill areas could result during wall construction if dewatering for wall footings is required. Construction dewatering temporarily lowers the water table, removes moisture from the soil, and reduces the water available for plant uptake. Dewatering would occur for short periods during a single season. Given the broad tolerance of the wetland plant species found in wetlands near the corridor, it is unlikely that short-term changes in soil moisture would eliminate or change wetland vegetation.
- Increased Sedimentation. During construction, exposed soil during earthwork operations could erode and potentially result in a localized increase in sediment-laden runoff to ditches and adjacent wetlands. The installation of split-rail fences in areas adjacent to wetlands could also cause localized sedimentation. Because of the temporary and localized nature of this activity, the potential change in sedimentation would not be expected to alter the vegetation structure or physical conditions in wetlands or result in changes in wetland functions.

Operational Impacts

Potential operational impacts include the long-term loss of wetland area and associated functions due to wetland fill, changes in wetland water quantity or quality, vegetation management in wetlands, loss of wetland buffers, and habitat fragmentation. The Corridor Alternative would result in approximately 1.034 acres of wetland fill (Table 3.3-7). Table 3.3-8 provides a summary of potential impacts to wetlands within the study area, arranged by USFWS (Cowardin et al., 1979) classification (type of vegetation) and by local jurisdiction.

The impacts of this fill to each wetland type and to the ecological functions of wetlands are discussed below.

CONTINUATION OF CORRIDOR **EAST WETLAND TYPE** THE INTERIM USE **ALTERNATIVE ALTERNATIVES** TRAIL Closed Depression < 0.01 < 0.01 0.00 0.20 Slope 0.198 0.00 Modified Slope 0.40 0.5420.00 Modified Riverine with Fish 0.386 0.412 0.00 Modified Riverine without Fish 0.068 0.06 0.00 Total 1.034 1.219 0.00

Table 3.3-7. Potential Wetland Fill (Acres) Summarized by Alternative

Table 3.3-8. Potential Wetland Fill Impacts (Acres) under Corridor Alternative and East Alternatives Arranged by USFWS Wetland Classification and Local Jurisdiction

USFWS WETLAND CLASSIFICATION	ALTERNATIVE	ISSAQUAH	REDMOND	SAMMAMISH	TOTAL
Emergent Wetland	Corridor Alternative	0.41	0.0 <u>6</u> 4	0.1 <u>5</u> 7	0.62
	East Alternatives	0.41	0.04	0.19	0.6 <u>4</u> 5
Scrub-Shrub Wetland	Corridor Alternative	0.03	na	0.05	0.08
	East Alternatives	0.03	na	0. <u>08</u> 11	0.14
Forested Wetland	Corridor Alternative	0. <u>07</u> 12	0.00	0.2 <u>7</u> 4	0.3 <u>5</u> 3
	East Alternatives	0. <u>06</u> 10	0.0 <u>1</u> 0	0.3 <u>9</u> 0	0.4 <u>6</u> 0
Total Corridor Alternative		0.5 <u>1</u> 6	0.0 <u>6</u> 4	0.4 <u>6</u> 3	1.0 <u>3</u> 4
Total East Alternativ	es	0.5 <u>0</u> 4	0.0 <u>5</u> 4	0.6 <u>6</u> 1	1. <u>2</u> 1 9

Fill of Depressional Closed Wetlands. Impact to the depressional closed HGM wetland class would be limited to Wetland 8C (see Figure 3 in Volume II) where less than 0.01 acre of fill is anticipated. This would result in a small loss of reed canarygrass dominated vegetation that provides low quality wetland habitat for invertebrates and amphibians.

Fill of Slope Wetlands. Impacts to five slope wetlands would occur under the Corridor Alternative. The area of wetland impact to this HGM class would total about 0.20 acre (Table 3.3-7). The largest single area of slope wetlands that would be filled is 0.12 acre of Wetland 4B/4D (see Figures 6 and 7 in Volume II). The fill in this wetland would be limited to areas immediately adjacent to the Interim Use Trail that contain reed canarygrass and small patches of willow shrubs.

While the Wetland 4 system is rated as a high quality wetland (Ecology Category I, City of Issaquah Class 1), the portions of the wetland where impacts would occur have been modified by former railbed and road fill and provide low habitat functions. The loss of shrub vegetation would remove limited amounts of cover potentially used by urban adapted wildlife species. The wetlands could provide water quality improvement functions by retaining nutrients and sediment from runoff entering the wetland. Yet large areas of wetland would remain, and substantial impacts to water quality are unlikely to occur. The fill would eliminate wetland functions from within the affected areas, but the overall functions of the larger wetland would not change because the key physical and habitat features that result in this function would not be altered.

Approximately 0.06 acre of Wetland 24B (rated as Ecology Category II and City of Sammamish Class 2) would be filled (see Figures 19 and 20 in Volume II). This wetland provides a relatively low level of habitat functions because: (1) it lacks higher quality native vegetation; (2) it lacks undisturbed wetland buffers; and (3) it is isolated by roads and development from other habitat areas. Portions of the wetland that would be filled are limited to areas dominated by invasive plants (reed canarygrass and Himalayan blackberry). The two streams, open water, and forest areas would not be affected by construction. Up to several red alder trees and wetland shrubs could potentially be removed. This loss of vegetation could cause a small reduction in the production of organic matter for the entire wetland.

Fill of Modified Slope Wetlands. The Corridor Alternative would fill 0.40 acre of modified slope wetlands (Table 3.3-7). Direct impacts would occur in 26 locations along the western edge of the wetlands and adjacent to the eastern side of the Interim Use Trail embankment.

At 18 wetlands, impacts would be less than 0.01 acre and limited to removal of a narrow fringe of invasive reed canarygrass. Fill in these areas would result in a small loss of low quality habitat. Loss of native plant habitat would not occur due to the existing disturbed and modified condition of the affected areas.

While small portions of these wetlands would be filled, the fill would not alter the overall drainage patterns in the wetlands. Substantial changes to the functions of the remaining wetlands would be unlikely. The remaining wetland areas would continue to store and convey water, nutrients, and organic matter to downslope areas.

Fill placed in areas where the trail transitions between the Interim Use Trail alignment and the Parkway at the entrance to Lake Sammamish State Park and at SE 56th Street would result in direct impacts to Wetlands 4F and 6B, respectively (see Figures 4 and 8 in Volume II). Filling would reduce the potential ability of these modified slope wetlands to detain small amounts of stormwater.

Similar minor losses in water storage functions could occur in Wetlands 4E, 10C, 20A, 34B, and 34C/D where topography promotes some ability to store small volumes of water (see Figures 1, 6, 7, 8, 18, 34, and 35 in Volume II). The capacity of these areas to detain stormwater would be reduced in proportion to the volume of fill.

Fill of Modified Riverine Wetlands Associated with Fish-Bearing Streams. Modified riverine wetlands associated with fish-bearing streams are generally located between the Interim Use Trail and the Parkway. Fill totaling 0.386 acre would be placed in 15 locations (Table 3.3-7). Fill placed in these wetlands would be outside stream channels, immediately adjacent to the Interim Use Trail.

The wetland areas in this HGM class that would be affected by the Corridor Alternative provide limited shading and temperature attenuation functions to the streams that flow through them because they are largely dominated by herbaceous vegetation (including invasive reed canarygrass) that does not overhang or shade the water. Similarly, fill in these wetlands would have little impact on the plant production and export of organic matter functions because the filled areas are not located near creek channels where substantial organic matter export can occur.

The reduction of wetland area and vegetation would reduce the habitat support functions of the wetlands, generally in proportion to the area of wetland lost. Any loss of stormwater storage function would be proportional to the volume of fill placed in the portions of the wetlands that actively provide surface water storage.

The proposed wetland fill is unlikely to modify ecological or physical conditions in the fish-bearing stream channels that flow through these wetlands. Substantial direct or indirect impacts to fish habitat are not expected.

Fill of Modified Riverine Wetlands Associated with Non-Fish-Bearing Streams. Modified riverine wetlands associated with non-fish-bearing streams are generally located between the Interim Use Trail and the Parkway. Fill within these wetlands would total $0.0\underline{68}$ acre in seven locations (Table 3.3-7). Fill placed in these wetlands would be outside stream channels, immediately adjacent to the Interim Use Trail. Effects on functions of these wetlands would be the same as for the modified riverine wetlands associated with fish-bearing streams discussed above.

Water Quality and Hydrologic Conditions. New impervious surfaces (associated with parking facilities and the trail surface), ongoing culvert repair, and drainage ditch maintenance could potentially result in minor changes to the quantity and flow of water through the various wetlands adjacent to or

downslope of the trail. Equestrian use of the trail has limited potential to affect water quality in the wetlands located adjacent to the trail. These issues are discussed in this section.

New stormwater facilities that reduce the impact of impervious surfaces on water quantity and water quality would be required under the Corridor Alternative at proposed parking facilities. These facilities would be designed and located to avoid wetland impacts. The facilities would be constructed to meet King County stormwater management standards, and discharge of water from the facilities would not be expected to adversely affect downslope wetlands or streams.

Analysis of the effects of new impervious trail surface added under the Corridor Alternative determined that the potential increase in water quantity would be minimal, and that very small and widely dispersed changes to the runoff characteristics of the project area would occur as a result of the project; see Section 3.2, Surface Water Resources and Water Quality, and the *Water Resources Discipline Report* (Parametrix, 2004a).

The existing drainage facilities along the project corridor are maintained as part of the operation of the Interim Use Trail. This maintenance, including replacement or repair of culverts, would continue under the Corridor Alternative. Locations of culvert replacement or repair are described in the *Water Resources Discipline Report* (Parametrix, 2004a). These actions could result in limited temporary maintenance impacts to some riparian wetland vegetation. Measures discussed in the mitigation section would reduce the risk of sediments entering streams or wetlands during maintenance.

Equestrian use, which can generate horse manure, is a potential new source of pollutants that could result from the project. The Corridor Alternative would allow equestrian use on a soft-surface trail adjacent to the paved trail in the Redmond segment only. Where the trail is bordered by wetlands, equestrians would use the shoulders of the paved trail. Fencing would prohibit horses from entering sensitive areas, and horses would be present on the trail in small numbers for short durations. The effect of equestrian use on wetland water quality is discussed in Section 3.2 and the *Water Resources Discipline Report* (Parametrix, 2004a). Horse manure has the potential to introduce nutrients and organic matter to adjacent wetlands in stormwater runoff. The amount of manure anticipated, even if washed from the paved trail directly into wetlands and buffers, is unlikely to result in negative effects because it would represent a minor and transient nutrient load. Impacts of nutrients and organic matter on wetland vegetation or wetland functions would not be expected because plants growing in the area are generally non-native pasture grasses, including reed canarygrass, that tolerate a wide range of conditions. Importantly, vegetated areas next to the trail (including lawn or non-native vegetation) would serve to mitigate potential water quality impacts because the vegetation and soils would retain nutrients as water infiltrated into them (see Section 3.2).

Vegetation Management. Vegetation management during operation of the Corridor Alternative would proceed largely as it has for the Interim Use Trail. The *Vegetation Management Plan* developed as part of permitting for the Interim Use Trail prescribes appropriate techniques to manage vegetation in wetlands and wetland buffers, including minimizing native plant disturbance, controlling invasive and noxious weeds, and replanting with appropriate native plant species (Parametrix, 2002). During the permitting phase, the *Vegetation Management Plan* would be updated to respond to changes introduced by this alternative, and would incorporate current regulatory requirements for each of the applicable local jurisdictions along with approved mitigation plans.

The Interim Use Trail was built on an existing railbed where adjacent vegetation has historically been managed to maintain a clean corridor. The wider footprint of the Corridor Alternative would result in vegetation management activities in areas where such practices were not previously required. The impacts of vegetation management in wetlands would depend on the type of existing vegetation—whether the

wetland is forested (PFO), scrub-shrub (PSS), or emergent (PEM). Five forested wetland areas (Wetlands 3B, 4A, 24A, 24B, and 26A) would have operational impacts due to vegetation management (see Figures 5, 6, 8, 9, 19, 20, 22, and 23 in Volume II). Red alder and willow trees in these wetlands would be trimmed to provide height and width clearance, and potentially hazardous trees would be removed. Areas of direct impacts in these wetlands are estimated to be between 0.02 and 0.07 acre each. The removal of this vegetation would not be expected to substantially alter wetland habitat characteristics nor wildlife use of the wetland or adjacent areas.

Vegetation management within the 46 emergent or shrub-dominated wetlands would typically include periodic mowing to prevent tree establishment as necessary to maintain visibility. These wetlands are generally vegetated with reed canarygrass and Himalayan blackberry, and impacts would be minor. As for the forested wetlands, the removal and management of this vegetation would not be expected to substantially alter wetland habitat characteristics nor wildlife use of the wetland or adjacent areas.

Buffer Impacts. Under the Corridor Alternative, approximately 3.2992 acres of wetland buffer would be filled, resulting in the removal of herbaceous and mowed buffer vegetation. In many locations, buffer impacts are likely to occur along the slopes of the railbed embankment, specifically between the edge of the Interim Use Trail and the wetland edge. In most of these areas, the vegetation consists of reed canarygrass and Himalayan blackberry; no substantial areas of native trees, shrubs, or wildlife habitat would be impacted. Because buffers within the study area consist of non-native vegetation, and are currently maintained by the County or adjacent property owners, they generally do not provide habitat or screen wetlands from adjacent activity. Modification of these buffers would not substantially alter wetlands and wetland functions.

Habitat Fragmentation. Wildlife use of wetlands and wetland buffers in the study area is limited because the existing available wildlife habitat is highly altered and fragmented by urban development. The former railbed, East Lake Sammamish Parkway, numerous city streets, and numerous residential driveways contribute to this fragmentation, as do the numerous developed land parcels. The Corridor Alternative would not create new wetland crossings and would not bisect new wetlands, compared to the Interim Use Trail. It would not cross or alter areas of moderate or high quality habitat. Although more chain-link fence would be used along the corridor, compared to the Interim Use Trail, split-rail fencing would also continue to be used where possible to reduce human intrusion into wetlands, yet provide for wildlife movement. For these reasons, the Corridor Alternative would slightly increase existing levels of habitat fragmentation by further restricting wildlife movement to wetlands due to the increased use of chainlink fencing; see Section 3.4, Vegetation and Wildlife, for further discussion.

3.3.4.2 East Alternatives

Potential construction and operational impacts to wetlands are the same for the East A and East B Alternatives.

Construction Impacts

Under the East Alternatives, potential construction impacts to wetlands are similar in nature and magnitude to those discussed for the Corridor Alternative.

Operational Impacts

Potential operational impacts include a long-term loss of wetland area and associated functions due to wetland fill, and other impacts as discussed for the Corridor Alternative. The total area of direct impacts (wetland fill) under the East Alternatives is estimated to be 1.19-1.21 acres (Table 3.3-7).

Fill of Depressional Closed Wetlands. Direct permanent impacts to depressional closed wetlands under the East Alternatives would be largely the same as those under the Corridor Alternative. Less than 0.01 acre of direct impact would occur in wetlands of this HGM class (Table 3.3-7).

Fill of Slope Wetlands. Impacts to wetlands in this HGM class would be largely the same as for the Corridor Alternative. Approximately 0.198 acre of fill would occur in wetlands of this HGM class (Table 3.3-7). Impacts to Wetland 24B, 24D, and 4B/D would be identical under the Corridor and East Alternatives (see Figures 6, 7, 19A, and 20A in Volume II). Wetland 29B, which would be impacted under the Corridor Alternative, would be avoided by the East Alternatives (see Figure 25A in Volume II). The associated changes to wetland functions would be largely the same as under the Corridor Alternative.

Fill of Modified Slope Wetlands. Impacts to modified slope wetlands would total $0.5\underline{42}$ acre for the East Alternatives (Table 3.3-7). The impacts to wetland area and functions are generally the same as discussed for the Corridor Alternative. For most wetlands in this HGM class, direct impacts would occur along their western edges, adjacent to the eastern side of the Interim Use Trail embankment. Wetlands 12A, 22A/B, 22C/D, and 23A would be impacted along their eastern boundaries, adjacent to East Lake Sammamish Parkway (see Figures 10A, 11A, 18A, and 19A in Volume II). Impacts to Wetlands 3D, 4E, 4F, and 13A would occur where the East Alternatives transition to and from the rail embankment (see Figures 6, 7, 8A, 9A, and 10A in Volume II). Wetlands 12A and 23A are forested, and fill adjacent to the Parkway would potentially remove a portion of the forest canopy in these wetlands.

Changes to wetland functions would be largely the same as for the Corridor Alternative. While the East Alternatives would result in somewhat greater impacts to forested wetlands of the modified slope class (0.0<u>1</u>5 acre for the Corridor Alternative versus 0.09 acre for the East Alternatives), this difference is minor and unlikely to be ecologically significant. Overall, the impacts to wetland areas and functions of the East Alternative are similar to those described for the Corridor Alternative.

Fill of Modified Riverine Wetlands Associated with Fish-Bearing Streams. The area of modified riverine wetlands associated with fish-bearing streams affected by the East Alternative would be 0.412 acre (Table 3.3-7). The East Alternative would avoid Wetlands 3A and 30B (see Figures 8A and 25A in Volume II), which would be partially impacted by the Corridor Alternative. Impacts to Wetland 3B (see Figure 8A in Volume II) would be less under the East Alternatives. Impacts to Wetland 24A, 24C, and 26A would occur where the trail transitions between the Interim Use Trail alignment and East Lake Sammamish Parkway (see Figures 19A, 20A, 22A, and 23A in Volume II).

The East Alternatives would result in somewhat greater impacts on forested wetlands in this HGM class than the Corridor Alternative (0.289 acre versus 0.203 acre). However, the area impacted by both of these alternatives would be small and generally low in function, and the overall loss of function would be minor. Overall, the impacts of the East Alternatives to wetland area and functions would be similar to those of the Corridor Alternative.

Fill of Modified Riverine Wetlands Associated with Non-Fish-Bearing Streams. The area of modified riverine wetlands associated with non-fish-bearing streams that would be impacted under the East Alternatives is 0.06 acre (Table 3.3-7). Seven of the eight wetlands in this HGM class would potentially be affected. Wetland 21D would be impacted under the Corridor Alternative but avoided under the East Alternatives (see Figure 18A in Volume II). Wetland 25A would be avoided under the Corridor Alternative but impacted under the East Alternatives (see Figure 21A in Volume II). Impacts to the other five wetlands in this HGM class would be the same as in the Corridor Alternative. Overall, impacts to wetland functions would be the same as in the Corridor Alternative.

Other Impacts. Other permanent impacts to wetlands associated with operating the East Alternatives would be generally similar in magnitude and scope as those described for the Corridor Alternative. The East Alternatives would impact approximately 4.3505 acres of wetland buffer compared to 3.293.92 acres for the Corridor Alternative. However, since most wetland buffers that would be affected by each alternative are disturbed and lack native vegetation, the differences are minor.

3.3.4.3 Continuation of the Interim Use Trail Alternative

Construction Impacts

Impacts to wetlands and wetland buffers could occur during the construction of the northern 1,500-foot extension of the trail under the Continuation of the Interim Use Trail Alternative. These impacts could include temporary vegetation removal and sedimentation that would be similar in nature to those discussed in the analysis for the Corridor Alternative. The proposed parking lots and restroom facilities are not located near, and thus would not impact, wetlands.

Operational Impacts

Under the Continuation of the Interim Use Trail Alternative, no wetlands or wetland buffers would be filled. No wetland or buffer impacts would occur in the vicinity of the northern extension because existing railbed and roadside areas would be used for the new trail.

Water Quality and Quantity. As part of the Continuation of the Interim Use Trail Alternative, the construction of parking lots and restrooms would create new impervious surfaces, creating impacts and requirements for mitigation as discussed in the Corridor Alternative section.

Continued maintenance of the drainage system in the King County right of way (ditches and culverts) could cause sedimentation and disturb vegetation (mainly reed canarygrass), as discussed in the Corridor Alternative section.

Equestrian use could be allowed under the Continuation of the Interim Use Trail Alternative <u>in the Redmond segment only</u> and this could impact wetland water quality. See the Corridor Alternative for discussion.

Vegetation Management. Vegetation management is an ongoing part of operating the Interim Use Trail and would continue with the Continuation of the Interim Use Trail Alternative. During the permitting phase, the *Vegetation Management Plan* (Parametrix, 2002) would be updated to respond to changes introduced by this alternative, such as new parking lots and restrooms. The plan would incorporate current regulatory requirements for each of the applicable local jurisdictions, along with approved mitigation plans.

Buffers. The Continuation of the Interim Use Trail Alternative would not require filling wetland buffers.

Habitat Fragmentation. Wildlife use of wetlands and wetland buffers in the study area is limited because the available wildlife habitat is highly fragmented by urban development and the habitat quality is generally low. Wildlife species that are present are adapted to the urban environment, are tolerant of noise and the presence of humans and pets, and are unlikely to be deterred from the area as a result of human use. The Continuation of the Interim Use Trail Alternative is not likely to affect wildlife because habitat conditions would remain unchanged.

3.3.4.4 No Action Alternative

Under the No Action Alternative, no construction would be required. Operational impacts would be the same as those described in the East Lake Sammamish Interim Use Trail EIS (King County, 2000).

3.3.5 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Some of the impacts identified as direct operational impacts in the sections above could instead be considered secondary impacts. For example, changes in hydrology could occur over time, rather than immediately upon construction of the trail. No other indirect or secondary impacts are anticipated.

3.3.6 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

While changes in land use in the study area and vicinity have impacted wetlands and wetland buffers, it appears that the most substantial changes occurred prior to implementation of the Interim Use Trail. These changes included clearing old-growth and second-growth forest, developing agricultural lands and, more recently, developing residential, commercial, and transportation uses. Most of the early development occurred without environmental mitigation and has contributed to cumulative losses of wetlands and wetland buffers.

The historical impacts to wetlands and wetland buffers are typical for urban areas in King County. The development of agriculture in the area routinely included the modification of wetlands and wetland buffers to improve land for crop production. Land development has included filling wetlands, modifying stream channels, changing watershed hydraulics, and loss of wildlife habitat. Shorelines have been developed for recreation and residential uses. Loss of wetland buffers has resulted in an overall decline in the functions of the wetlands and a reduction of habitat. The increased vulnerability of this resource in King County is also true for the watershed in which the trail occurs.

Current and future development in the study area, including the Master Plan Trail, would comply with a variety of increasingly protective environmental regulations concerning wetlands and wetland buffers. These regulations and substantial mitigation requirements would reduce the potential for additional cumulative impacts. All substantial impacts to wetlands potentially resulting from the trail alternatives can be mitigated, and the project would not contribute to cumulative wetland impacts.

3.3.7 Mitigation Measures

The Master Plan Trail project has been planned to follow the mitigation sequencing requirements of federal, state, and local regulations. Planning of each alternative has included steps to avoid, minimize, and compensate for impacts to wetlands as discussed below.

3.3.7.1 Strategies to Avoid and Minimize Wetland Impacts

Avoidance and minimization of wetland and buffer impacts was a guiding principle in the preliminary design stage of this project. Many of the strategies discussed below have already been incorporated into the alignments depicted in Volume II and the project description provided in Chapter 2. For example, retaining walls and fencing are already proposed in many places, and the alignments have been located to reduce fill. Of the approximately 15 acres of wetlands in the study area, impacts to approximately 14 acres would be completely avoided under the Corridor and East Alternatives. All wetlands would be avoided by the Continuation of the Interim Use Trail Alternative. King County would continue to apply the following strategies to minimize wetland and buffer impacts during the design, permitting, and construction phases:

- using retaining walls to narrow the trail section where wetlands are crossed,
- shifting alignments away from wetland areas,
- reducing turning radii for transitions from the Interim Use Trail alignment to East Lake Sammamish Parkway,
- evaluating options to bridge sensitive areas to reduce fill,
- reducing potential for human and pet intrusion,
- limiting earthwork to the dry season, and
- utilizing best management practices (BMPs) to reduce direct and indirect impacts.

Some of the strategies that could be used to avoid or reduce direct impacts under the Corridor or East Alternatives are discussed in greater detail below. The feasibility of these suggested strategies would be evaluated further, in light of the project's purpose and need, their overall practicability, and other design constraints during the design and permitting phase of the project.

Reducing Trail Widths

In some locations, it may be possible to completely avoid or minimize wetland and buffer impacts by reducing the width of the trail through use of a narrower cross section or by incorporating retaining walls into the design. Standard fill slopes for the sides of the trail are designed with a ratio of two horizontal to one vertical, and achieving this slope sometimes results in wide areas of fill. Constructing retaining walls would narrow and thereby minimize the area of fill. In some locations, the use of a narrower cross section would avoid or minimize wetland and buffer impacts. Specifically, a narrower configuration could be considered at locations along the Corridor Alternative alignment where wider shoulders or a separated soft-surface trail are provided.

Shifting Alignments

The planned centerline of the Corridor Alternative varies from the centerline of the Interim Use Trail, in part to avoid and minimize impacts to sensitive areas. Similarly, the alignment of the East Alternatives, when moving between the Interim Use Trail alignment and the adjacent roadways, is planned to avoid and minimize impacts to wetland areas. During detail design, additional opportunities to reduce impacts would be considered.

Reducing Turning Radii for Transitions

Currently, AASHTO standards for turning radii are used to guide design of transitions to and from East Lake Sammamish Parkway, assuming a posted trail speed limit of 15 miles per hour. Some of these

transitions would result in wetland and buffer impacts. Potentially, the turning radii for these transitions could be changed to a configuration closer to a right (90 degree) turn and follow existing roads or driveways. This configuration would reduce or potentially eliminate the wetland or buffer impacts at some locations. However, trail user safety on these tight turns, particularly if on a down slope, could be a concern; therefore this approach would be evaluated more fully during future project phases in light of this and other potential constraints.

Reducing Potential for Human and Pet Intrusion

Fencing and signage can discourage intrusion by humans and pets into wetlands and buffers. Regulations for trail use would require pets to be leashed. Fencing is already in place for the Interim Use Trail to provide this protection to wetlands, and similar fencing would be used to reduce potential impacts of the Corridor Alternative and the East Alternatives.

Utilizing Construction Best Management Practices

BMPs would be employed during trail construction, maintenance, and operation to minimize temporary impacts to wetlands and buffers. The following BMPs are recommended during construction:

- Use highly visible temporary construction fencing to delineate sensitive areas and vegetation and avoid accidental intrusion.
- Design, implement, and maintain temporary erosion and sediment controls to eliminate or minimize potential effects from sedimentation.
- Preserve and protect native plant species when installing fencing, signage, and other features.
- Revegetate temporarily disturbed areas with appropriate species.

The *Vegetation Management Plan* provides details regarding the management and replacement of vegetation in wetlands and buffers during operation of the trail. This plan provides for BMPs that minimize impacts and specifies replacement of impacted vegetation.

3.3.7.2 Wetland Mitigation

As stated in the previous section, the project has been designed to avoid and minimize wetland impacts. However, approximately 1 acre of wetland fill would result under the Corridor and East Alternatives (see Table 3.3-7). The agencies that regulate wetlands would require compensation for these fill impacts. These agencies have established ratios for the acreage of mitigation required to compensate for each acre of fill within the different classes and categories of wetlands. The following tables provide the estimated area of compensatory mitigation that would be needed according to replacement ratios required or recommended by the local jurisdiction (Table 3.3-9) and Ecology (Table 3.3-10). Please note that the local jurisdictions have recently amended their critical area ordinances. Revised ratios may apply. This information will be provided in the Final EIS.Local jurisdictions have recently amended their critical area ordinances, and the mitigation ratios established in the current (as of 2007) critical area ordinances were used to calculate required mitigation areas.

The compensatory mitigation area for the Corridor Alternative is estimated at $\frac{1.58}{1.452}$ acres using the local jurisdiction ratios and $\frac{2.96}{2.61}$ acres using Ecology's mitigation ratios. For the East Alternatives, $\frac{1.84}{1.824}$ acres using local jurisdiction ratios and $\frac{2.99}{3.36}$ acres using Ecology ratios would likely be needed to meet mitigation requirements.

Table 3.3-9. Mitigation Acreage Needed According to Local Jurisdiction Compensation Ratios for the Corridor and East Alternatives

WETLAND RATING	ISSAQUAH	SAMMAMISH	REDMOND	TOTAL
Corridor Alternative				
Category IClass 1	0.24 <u>2</u>	<u>0</u>	<u>0</u>	0.24 <u>2</u>
Class 2Category II	0. <u>201</u> 35	0.51 <u>0</u>	<u>0</u>	0. <u>201</u> 86
Class 3CorridorCategory III	0. <u>339</u> 26	0. <u>521</u> 13	<u>0.116</u>	0. <u>976</u> 39
Category I <u>V</u>	<u>0</u>	0.097	0.0 0	0.0 <u>97</u> 0
Category III			0.04	0.04
Not Rated	0.00	0.05	0.00	0.05
Total	0. <u>782</u> 86	0.6 <u>18</u> 9	0. <u>116</u> 04	1.5 <u>15</u> 8
East Alternatives				
Category IClass 1	0.24 <u>2</u>	<u>0</u>	<u>0.059</u>	0. <u>30124</u>
Category IIClass 2	0. <u>201</u> 31	0 .75	<u>0</u>	<u>0.201</u> 1.06
Category IIIClass 3	0. <u>33526</u>	0. <u>776</u> 13	0.072	<u>1.187</u> 0.39
Category I <u>V</u>	<u>0</u>	<u>0.133</u>	0.00	0. <u>133</u> 00
Category III			0.04	0.04
Not Rated	0.00	0.10	0.00	0.10
Total	0. <u>77</u> 8 2	0.9 <u>09</u> 8	0. <u>131</u> 04	1.8 <u>18</u> 4

Table 3.3-10. Mitigation Acreage Needed According to Ecology's Compensation Ratios for the Corridor and East Alternatives^a

WETLAND RATING	ISSAQUAH	SAMMAMISH	REDMOND	TOTAL
Corridor Alternative				
Category I	0.7 <u>25</u> 3	<u>0</u>	0.00	0.7 <u>25</u> 3
Category II	0.302	0.17 <u>0</u>	<u>0</u>	0. <u>302</u> 17
Category III	<u>0.677</u> 1.05	0. <u>695</u> 93	0. <u>116</u> 07	2.06 1.488
Category IV	<u>0</u>	0.097	<u>0</u>	0.097
Total	1.7 <u>0</u> 8	1.11 0.792	0.07 <u>0.116</u>	2. <u>612</u> 96
East Alternatives				
Category I	0.7 <u>25</u> 3	<u>0</u>	0.0 <u>59</u> 0	0.7 <u>84</u> 3
Category II	0.302	0.17 <u>0</u>	<u>0</u>	0.17 <u>0.302</u>
Category III	0. <u>670</u> 99	1. <u>035</u> 40	0. <u>072</u> 07	2.47 1.777
Category IV	<u>0.</u>	<u>0.133</u>	<u>0.</u>	0.133
Total	1. <u>697</u> 72	1. <u>168</u> 57	0. <u>131</u> 07	3.36 <u>2.99</u>

^a Typically, the Department of Ecology would defer mitigation requirements to the local jurisdictions, so it is likely the mitigation areas identified in Table 3.3-9 would satisfy any Ecology requirement.

3.3.7.3 Mitigation Banking

The project currently proposes to compensate for <u>some</u>any unavoidable wetland and buffer impacts <u>primarily</u> through the purchase of wetland banking credits from the King County Certified Wetland Mitigation Bank. Use of the mitigation bank will be dependent on whether off-site mitigation at this bank

is deemed acceptable by King County for the individual local jurisdictions. To the extent possible, the project will mitigate wetland and buffer impacts off-site, due to the environmental benefits associated with use of a mitigation bank. Where use of the mitigation bank is not acceptable to a local jurisdiction, King County will develop a mitigation strategy that combines a mix of on-site (where possible) and off-site mitigation acceptable to each jurisdiction.

<u>The This</u> mitigation bank, which is administered by King County Department of Natural Resources and Parks (DNRP), is located east of the project corridor near the headwaters of Laughing Jacobs Creek in the City of Sammamish (near SE 32nd Street and 224th Avenue SE). The mitigation bank was established specifically for linear transportation projects. The Master Plan Trail is within the mitigation bank's service area and DNRP has determined that bank credits are currently available for release.

The mitigation bank includes enhanced, created, and natural wetland areas. Prior to purchase, a portion of the wetland was used as pasture and this area was restored by King County. The mitigation bank is composed of open water and emergent, shrub, and young forested wetland vegetation. Most The majority of the plant species present in the study area are also present in the mitigation bank, although the mitigation bank has a higher structural and species diversity than wetlands in the study area.

If King County uses the wetland mitigation bank instead of on-site mitigation areas, greater ecological benefits would result because:

- The wetland mitigation (i.e., restoration actions) have already taken place and therefore, temporal losses of wetland/buffer habitat associated with the project will not occur.
- The wetland mitigation is more likely to be successful.
- The ecological functions of the replacement wetland could be established more quickly and are likely to be higher than could be achieved in the corridor.
- The mitigation bank wetland is closer to relatively large areas of undeveloped land and to other wetlands with higher wetland functions.

The mitigation bank approach ensures that the functions of the wetlands affected by the selected alternative are replaced at a higher level of function at a site that is ecologically sustainable over time. The banking approach also ensures that appropriate compensatory mitigation is in place prior to unavoidable loss of wetland and buffer area and functions, thus reducing temporal losses of wetland functions. Importantly, the King County Mitigation Bank is currently functioning at a level that exceeds the level of wetland function at all of the potentially impacted wetlands in the study area. The larger offsite location at the mitigation bank provides greater ecological benefits than small on-site locations would provide. In general, for the wetland functions affected by the project alternatives, off-site mitigation in the Lake Sammamish Watershed could provide appropriate replacement functions to meet regulatory requirements for mitigation without resulting in substantial on-site impacts to wildlife, fish, or water resources in the project corridor along Lake Sammamish.

The detailed consideration and the calculation of appropriate bank credits would be performed in the project permitting and design phase in concert with federal, state, and local permitting agencies. Ultimately, the mitigation banking approach must be approved by federal, state, and local jurisdictions.

If it is determined that mitigation should not occur in the mitigation bank, on-site mitigation opportunities would be used. This approach would focus on replacing wetland and buffer impacts in the existing King County right of way and/or nearby areas. The mitigation would likely include establishing new wetland,

enhancing and restoring wetlands, and enhancing wetland or stream buffers. Such an approach would replace impacts to wetland areas and functions, but because of the urban setting, ecological functions of the mitigation may not substantially exceed the low levels of functions provided by the impacted wetland and buffer areas.

3.3.8 Significant Unavoidable Adverse Impacts

Due to the small area of wetland impacts, the generally low function provided by the affected wetlands, and the regulatory requirements for wetland mitigation (including no net loss of wetland function), no significant unavoidable adverse impacts to wetland resources in the project area would result from the Master Plan Trail.

3.4 Vegetation and Wildlife

3.4.1 Studies and Coordination

Vegetation and wildlife information in this section is based primarily on a review of data provided by resource agencies and on site visits conducted from 1999 to 2003. Note that wetlands are discussed briefly in this section as they relate to wildlife habitat. A more detailed discussion of wetlands is provided in Section 3.3.

3.4.2 Affected Environment

3.4.2.1 Regulations

Various federal, state, and city regulations address the protection of vegetation and wildlife in the project vicinity (Table 3.4-1). In most cases, city regulations reflect Washington Department of Fish and Wildlife (WDFW) recommendations.

3.4.2.2 Vegetation Management Plan

A Vegetation Management Plan was prepared in conjunction with the implementation of the Interim Use Trail (Parametrix, 2002). The plan describes in more detail the circumstances under which vegetation is managed and removed; applicable King County standard best management practices (BMPs), policies, and procedures; and site-specific conditions and considerations, including work within critical areas such as wetlands, streams, and steep slopes. During the design and permitting phase of the project, the Vegetation Management Plan would be updated for use in conjunction with the Master Plan Trail, incorporating current regulatory requirements for each of the applicable local jurisdictions as well as approved mitigation plans.

3.4.2.3 Existing Vegetation Cover Types and Associated Wildlife

This section describes the vegetation cover types (as defined in the following paragraphs) and associated wildlife in the project vicinity. It also discusses the occurrence of threatened, endangered, and other plant and wildlife species of state and federal concern.

Existing vegetation was grouped into "cover types" using aerial photography and field reconnaissance. The area where cover types were categorized is defined as the vegetation study area. In general, this study area included areas within 30 feet of the outer edge of the proposed trail alignment (for each Build Alternative). Using this method, four vegetation cover types were identified: urban matrix, deciduous tree cover (both upland and riparian), coniferous tree cover (upland only), and wetlands. These cover types are described later in this section.

Individual "patches" of the four cover types were digitized using a geographic information system (GIS). A patch is defined as an area of relatively homogenous vegetation that can be classified as a particular cover type. In some cases, areas extending beyond 30 feet from the proposed trail alignments were also classified (e.g., where a single patch extended beyond the 30-foot boundary of the study area, or where vegetation beyond the 30-foot boundary could be easily classified). The minimum mapped patch size was generally one-half acre, although smaller patches of large cottonwoods (minimum three large trees) were also distinguished, because they potentially provide important perch and nest sites for bald eagles (a threatened species) and other raptors.

Table 3.4-1. Federal, State, and Local Regulations Regarding Vegetation, Wildlife, and Habitat

REGULATION	OVERSEEING AGENCY	VEGETATION OR WILDLIFE OR HABITATS
Federal		·
Bald and Golden Eagle Protection Act	U.S. Fish and Wildlife Service (USFWS)	Bald and golden eagles and nests.
Federal Endangered Species Act (ESA)	NOAA Fisheries; U.S. Fish and Wildlife Service (USFWS)	All federally ESA listed threatened and endangered species and critical habitats.
National Environmental Policy Act (NEPA)	Federal Highway Administration (FHWA)	All wildlife.
Federal Migratory Bird Treaty Act	USFWS	Most birds.Listed migratory birds.
Fish and Wildlife Coordination Act	USFWS; WDFW	All wildlife.
State		·
Bald Eagle Protection Act	<u>WDFW</u>	Bald eagle and habitat.
Washington State Environmental Policy Act (SEPA)	King County	All wildlife.
Washington State Endangered Species Act	WDFW	All state-listed threatened and endangered species.
Washington State Fish and Game Code	WDFW	All state-listed Priority Habitats and Species.
Shoreline Management Act	Washington Department of Ecology	All wildlife.
City		·
King County Surface Water Design Manual, Special District Overlay, SO-200	Cities of Issaquah and Sammamish ^a	Great blue heron rookeries in unincorporated King County, Sammamish and Issaquah; does not apply in Redmond.
City of Issaquah Comprehensive Plan	City of Issaquah	Streams, wetlands, riparian areas, and other unique habitats.
City of Issaquah Sensitive Areas Ordinance, Code, Chapter 18.10.340	City of Issaquah	Wildlife and wildlife habitat; streams and wetlands.
City of Issaquah Tree Replacement Requirement, Clearing & Grading Section of Municipal Code, Chapter 16.2 <u>7</u> 6.0 <u>6</u> 50.H (<u>Table 1</u>)	City of Issaquah	Trees; requires minimum tree density per acre.
City of Issaquah Significant Tree Survey Requirement, Clearing & Grading Section of Municipal Code, Chapter 16.2 <u>7</u> 6.060 .C.7	City of Issaquah	Trees; requires written tree survey and tree replacement plan.
Cty of Issaquah Preservation of Trees, Land Use Section of Municipal Code, Chapter 18.12.180	City of Issaquah	Significant trees as defined in code.
City of Sammamish Comprehensive Plan	City of Sammamish	Streams, wetlands, riparian areas, wildlife corridors, and other unique habitats.
City of Sammamish Environmentally Citical Sensitive Areas, Chapter 21A. 50	City of Sammamish	Critical or outstanding habitat for state or federally designated endangered or threatened species; designated stream and wetland habitats; designated wildlife habitat corridors.

Table 3.4-1. Federal, State, and Local Regulations Regarding Vegetation, Wildlife, and Habitat (continued)

REGULATION	OVERSEEING AGENCY	VEGETATION OR WILDLIFE OR HABITATS
City of Sammamish Vegetation Management Plans, Municipal Code, Chapter 21A.50.160	City of Sammamish	Vegetation; requires vegetation management plan.
City of Redmond <u>CriticalSensitive</u> Areas <u>Community Development GuideOrdinance</u> , Code Chapter 20D.140	City of Redmond	Streams and their associated buffers; wildlife habitat.
City of Redmond Comprehensive Plan	City of Redmond	Habitats for state- or federally listed endangered, threatened, sensitive, candidate, or other priority species; wetlands and streams.
City of Redmond Tree Protection, Redmond Community Development Guide, Chapter 20.D.80.20	City of Redmond	Significant trees as defined in code.

^A The Cities of Issaquah and Sammamish use the King County Surface Water Design Manual.

A description of the four cover types is provided below, along with a discussion of wildlife species that are typically associated with each cover type. The maps in Appendix C depict the approximate location of these cover types in the project corridor. Individual plant species (with common and scientific names) identified in the project corridor are listed in Appendix C.

As discussed in Section 3.6.2, most of the area adjacent to proposed Master Plan Trail is urban density residential, with a density of 4 dwelling units per acre. The longest portion (7.2 miles) of the trail is within the City of Sammamish, which is nearly all single-family residence. These areas are developed with houses, garages, sheds, and other structures that are on both sides of the trail. Vegetated areas are typically maintained lawns and landscaped yards. The majority of the remaining undeveloped vegetated areas are fragmented by East Lake Sammamish Parkway that parallels most of the trail alignment, and access roads and driveways that cross over the trail. The largest continuous undisturbed areas are in Marymoor Park in the City of Redmond and Lake Sammamish State Park in the City of Issaquah.

Urban Matrix

Urban matrix is the most abundant cover type in the project corridor. It consists of a mix of buildings, asphalt, ornamental gardens, lawns, and shrubby/grassy areas with scattered trees. Naturally occurring trees within this cover type are deciduous (such as bigleaf maple) and generally 20 to 40 feet tall. Dominant shrubs are Himalayan blackberry, Scot's broom, and a variety of ornamental species. Grassy areas that are not mowed are dominated by non-native pasture grasses.

Wildlife species present in the urban matrix cover type are adapted to a wide variety of conditions. Characteristic species include European starlings, American robins, American crows, dark-eyed juncos, spotted towhees, house finches, house sparrows, black-capped chickadees, opossums, raccoons, deer mice, and Norway rats.

Deciduous Tree Cover

The deciduous tree cover type consists of mostly deciduous trees (Oregon ash, black cottonwood, and bigleaf maple) with an understory of swordfern, salal, Himalayan blackberry, and salmonberry. Trees in this cover type are generally more than 40 feet tall, and some cottonwoods reach more than 150 feet in height. Deciduous tree cover is scattered throughout the study area and includes both riparian and upland areas. Forested wetlands are included in the wetland cover type.

Wildlife species associated with the deciduous tree cover type include a variety of songbirds and raptors, small mammals, deer, and a few species of amphibians and reptiles. Deciduous trees and shrubs provide nesting habitat, cover, and forage for songbirds such as warbling vireos, orange-crowned warblers, song sparrows, spotted towhees, black-throated gray warblers, black-headed grosbeaks, and western tanagers (a species observed in the area by residents; Eychaner, 1999). Deciduous areas along streams also provide habitat for beavers. Large cottonwoods present in this cover type are particularly important as potential perch and nest sites for raptors, such as red-tailed hawks and bald eagles. Bald eagles are a federally listed threatened species and their occurrence in the project area is described in greater detail in Section 3.4.2.5. Amphibians and reptiles expected to occur in the deciduous tree cover type include common garter snakes and possibly ensatinas (a type of salamander).

Coniferous Tree Cover

The coniferous tree cover type consists of mostly coniferous trees (Douglas fir, western red cedar, and western hemlock), with an understory of swordfern, low Oregon grape, Himalayan blackberry, and

English ivy. Trees in this cover type are generally 40 to 80 feet tall. In the project corridor, coniferous tree cover occurs as small patches (up to approximately 2 acres) in upland areas.

Wildlife species characteristic of the coniferous tree cover type include ruby-crowned kinglets, Steller's jays, red-breasted nuthatches, pileated woodpeckers, vagrant shrews, and shrew-moles. Pileated woodpeckers are a state candidate species for listing, and their occurrence in the project area is described in greater detail in Section 3.4.2.5. During winter, coniferous trees provide important cover for a variety of birds, such as black-capped chickadees, Steller's jays, American robins, and song sparrows.

Wetlands

This cover type varies considerably in vegetation cover. Mature deciduous trees dominate the large forested wetland in Marymoor Park at the north end of Lake Sammamish. Other wetlands in the project corridor are smaller and include forested, shrub, and emergent habitats. Wetlands are further described in Section 3.3.

Wildlife species characteristic of wetlands in and along the project corridor include great blue herons, mallards, Canada geese, belted kingfishers, red-winged blackbirds, willow flycatchers, Bewick's wrens, Pacific treefrogs, and western terrestrial and common garter snakes. Wetland 34A (see Figures 34, 35, and 36 in Volume II) is expected to provide foraging habitat for beavers and muskrats, and breeding habitat for long-toed salamanders. A bald eagle nest is also present, as described further in Section 3.4.2.5.

Another large wetland, which contains emergent, forested, and open water habitats, is adjacent to the Interim Use Trail at Lake Sammamish State Park. The emergent portion of this wetland is located within the vegetation study area and is composed mainly of reed canarygrass. This grass provides habitat for Canada geese, striped skunks, long-tailed weasels, creeping voles, Townsend's moles, vagrant shrews, Townsend's voles, and northwestern garter snakes. Although not observed, Rred-tailed hawks and northern harriers likelyare expected to hunt for garter snakes and small mammals in this area. The open water portion of this wetland is not within the vegetation study area but provides habitat for mallards, gadwalls, buffleheads, and other waterfowl, which may also use the emergent wetland within the vegetation study area. Area residents report observing river otters and wood ducks (presumably in open water and wetland areas) in the project vicinity (Eychaner, 1999).

3.4.2.4 Threatened, Endangered, and Sensitive Plant Species

Plant Species with ESA FederalListed Status

Information provided by federal agencies indicates that no federally ESA listed plant species are known to occur in the township and ranges crossed by the project (see agency letters in Appendix C).

Plant Species with State Status

The Washington Natural Heritage Program (NHP) of the Washington State Department of Natural Resources maintains a list of plant species considered to be threatened, endangered, or sensitive within Washington State. Information received from the NHP indicated that a state sensitive plant species, shining flatsedge (*Cyperus bipartitus* [= *C. rivularis*]), a species recently downgraded from state sensitive to the "watch" list, was reported growing approximately 0.02 mile west of the King County right of way in the vicinity of Lake Sammamish State Park. This small, annual flatsedge occurs on sandbars adjacent to freshwater lakes and streams. The species was not observed to occur within the King County right of way or any other location that would be potentially impacted by the proposed alternatives. The

NHP information also indicated that no high quality wetland or terrestrial ecosystems are located in the project vicinity (DNR NHP, 20076).

The Puget Sound area represents the northwestern extent of the broad distribution of shining flatsedge, which includes most of North America from southern Canada to South America. Only a few populations are currently known within the State of Washington and. These populations are considered vulnerable-or declining. Within state boundaries the species could become threatened or endangered in the future. However, throughout its global range, the species is demonstrably secure (see Appendix C).

3.4.2.5 Threatened and Endangered Wildlife and Other Wildlife Species of Concern

Wildlife Species with Federal ESA Listed Status

The U.S. Fish and Wildlife Service (USFWS) identified <u>fivesix</u> threatened or endangered wildlife species as potentially occurring in King County: <u>bald eagle</u>, Canada lynx, gray wolf, grizzly bear, marbled murrelet, and northern spotted owl. The USFWS also identifie<u>s</u>d <u>aone</u> candidate species, the yellow-billed cuckoo, as potentially occurring in King County (USFWS, 2004). <u>Recently delisted on June 28, 2007, the bald eagle is also known to occur in the project vicinity. Given the location of the project and the types of habitat in the vicinity, only one of these species, the bald eagle, is known or likely to occur in the project vicinity. The <u>listed and candidateother</u> species have habitat requirements that are not met in this generally urban environment. The distribution of bald eagles in the area is described <u>further belowthe following</u> section.</u>

Bald and Golden Eagle

The USFWS regulates activities that may affect bald eagles through the Bald and Golden Eagle Protection Act. This act prohibits the take (pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb) of bald or golden eagles, including their parts, nests, or eggs without permit issued by the Secretary of the Interior. Bald eagles are also protected by the Migratory Bird Treaty Act and the state Bald Eagle Protection Act.

Bald Eagle. Bald eagles generally occur along shores of saltwater and freshwater lakes and rivers that support substantial densities of prey, generally anadromous fish or waterfowl (Livingston et al., 1990; Stalmaster, 1987). Breeding bald eagles use large trees for nesting that are generally within a mile of water and have an unobstructed view of water (ODFW, 1996; Anthony and Isaacs, 1989). Both breeding and wintering bald eagles forage over open water and use riparian trees, often cottonwoods, for perching.

Area residents report observing bald eagles in the vicinity of the wildlife study area (Eychaner, 1999; Ray, 2000), and WDFW (2004) has identified two bald eagle breeding territories in the vicinity (the Lake Sammamish breeding territory and the Marymoor Park breeding territory). In addition, King County staff reported a previously unidentified bald eagle breeding territory in 2005 (the Lake Sammamish Central breeding territory). The Lake Sammamish breeding territory, which is located on the south side of Lake Sammamish and encompasses the Interim Use Trail, contains one nest site, which is about 0.25 mile from the Interim Use Trail and is not within line of sight. The nest site was active from 1998 through 2001, was not monitored from 2002 to 2004, was active in 2005, and was not monitored in 2006 (Stofel, personal communication, 2004; WDFW, 2006). The Marymoor Park breeding territory, which is on the north side of Lake Sammamish, also encompasses the Interim Use Trail. This territory contains a nest in Marymoor Park, about 630 feet from the Interim Use Trail. Eagles began using this nest, which is within line of sight of the Interim Use Trail when deciduous trees have lost their leaves, during spring 2000. The nest site was active in 2001, 2003, 2004, and 2005 and was not monitored in 2002 or 2006 (Stofel, personal communication, 2004; WDFW, 2006). Through summer 1999, the eagle pair associated with this territory

nested in a cottonwood on the edge of the model airplane field at Marymoor Park. However, this nest tree blew down in the fall/winter 1999. The boundaries of the Lake Sammamish Central breeding territory have not been identified. The nest associated with this territory is in a large cottonwood within a wetland complex and is approximately 600 feet from the Interim Use Trail. The nest is east of East Lake Sammamish Parkway and was active in 2005 but was not monitored in 2006 (WDFW 2006). In addition to these three eagle breeding territories, bald eagles occur in the Lake Sammamish vicinity during the winter, where they forage along the lake and perch in adjacent large trees.

Wildlife Species with State and/or Local Status

One state-listed endangered species, the western pond turtle, and one <u>state-listed</u> threatened species, the bald eagle, are known to occur in the wildlife study area vicinity based on Priority Habitats and Species data from WDFW (2004). The bald eagle is discussed in the previous section. Two candidate species for state listing, the purple martin and the pileated woodpecker, are known to occur in the vicinity (WDFW, 2004). Great blue heron and osprey are known to nest in the vicinity of the former railbed (WDFW, 2004). Great blue heron rookeries are afforded special protection by King County and the Cities of Issaquah and Sammamish. Osprey nest sites are protected by federal and state regulations. These species are discussed below.

Western Pond Turtle. The western pond turtle, a state species of concern, occurs in streams, ponds, lakes, and permanent and ephemeral wetlands (Brown et al., 1995). This highly aquatic species spends most of its time in water but also requires terrestrial habitats for nesting, overwintering, and dispersal (WDFW, 1993). Western pond turtles use floating vegetation, logs, rocks, and mud or sand banks for basking. Their historical distribution was from Mexico north to the Puget Sound (Brown et al., 1995). However, in recent years, the species has been nearly eliminated from the Puget Sound region, largely due to habitat alteration and loss, disturbance from humans, and introduction of non-native predators (WDFW, 1993). Surveys indicate that only two viable populations remain in Washington state, one in Skamania County and another in Klickitat County (WDFW, 1993). However, two western pond turtles have been sighted in the Marymoor Park wetlands, on the northwest side of Lake Sammamish (WDFW, 2003). These turtle locations are approximately 1,320 feet and 1,650 feet from the Interim Use Trail.

Purple Martin. The purple martin is a state candidate species and a summer resident of the Puget Sound area. This species breeds primarily near water and feeds on insects in open areas, often near moist and wet sites (WDFW, 1991). Their presence appears to be limited by the availability of nesting cavities. A purple martin nest box is located near the north end of Lake Sammamish, about 650 feet from the Interim Use Trail. The WDFW records indicate that active nests have been found in this box, as well as in a cavity in nearby remnant pilings from an old cedar mill (WDFW, 2004).

Pileated Woodpecker. The pileated woodpecker is a state candidate species and is generally associated with older forests that have large trees, snags, and coarse woody debris (Aubry and Raley, 1993; Nelson, 1988). The birds may also use younger forests for foraging, where snags are present (WDFW, 2003). In addition, pileated woodpeckers are known to occasionally forage on suet feeders, utility poles, and fruit trees in suburban areas (WDFW, 2003). A pileated woodpecker call was heard near Sulphur Point during site visits to the wildlife study area in spring 1999, and one was observed in Wetland 29C (see Figures 24 and 24A in Volume II) during a site visit in January 2000. Area residents also report seeing pileated woodpeckers in the wildlife study area vicinity (Eychaner, 1999).

Great Blue Heron. The great blue heron is on the Washington State Monitor list. It is associated with both fresh and saltwater wetlands, seashores, rivers, swamps, marshes, and ditches (WDFW, 200<u>7</u>₃) and is afforded special protection by King County and the Cities of Sammamish and Issaquah. This

species feeds on aquatic and marine animals in shallow waters and occasionally preys upon mice and voles (Calambokidis et al., 1985; Butler, 1995). Nests of these colonial breeders are usually constructed in the tallest trees available at a given site (WDFW, 2003). Great blue herons are frequently sighted in wetlands adjacent to the former railbed and one rookery is located near the former railbed (Eychaner, 1999; WDFW, 2004). The rookery, which has been active since 1984, is south of Lake Sammamish at Lake Sammamish State Park, about 0.25 mile west of the Interim Use Trail.

Osprey. The osprey <u>is on the Washington State Monitor list, and has no state or federal listing status but</u> is protected under the federal Migratory Bird Treaty Act and the Revised Code of Washington (RCW). The Act makes it unlawful to hunt, take, capture, kill, possess, sell, purchase, ship, transport, or export any migratory bird, part, nest, or egg. Under the RCW 77.15.130, it is a misdemeanor to destroy the eggs or nests of protected species, including the osprey.

Ospreys are fish-eating birds that occur along lakes and rivers. The birds build large nests of sticks on snags or on living trees, and also readily nest on human-made structures including power line towers, light poles, and similar structures (Poole, 1989). On the coast, osprey nests are usually adjacent to, if not over, water, whereas on inland lakes and waterways, nests are usually more distant from foraging areas (up to 9 miles but typically within 2 to 3 miles) (Poole, 1989). The majority of nests in Oregon and California studies were within 0.6 mile of large lakes and rivers (Zarn, 1974; Vana-Miller, 1987).

One osprey nest is present within 0.5 mile of the proposed trail alignment (for all alternatives). The nest is located on a cell tower in a light industrial area, approximately 30 feet from the proposed trail alignment (WDFW, 2004). The nest was discovered in 2001 and has been active since that time.

3.4.3 Direct Impacts to Vegetation

This section describes the direct impacts associated with the alternatives on vegetation in the study area. Permanent removal of vegetation associated with the trail is discussed under operation impacts. Impacts to vegetation are summarized in Table 3.4-2.

Specific details on wetland and wetland buffer vegetation are provided in Section 3.3, Wetlands. Details on streams and stream buffer information are provided in Section 3.5, Fish Resources.

3.4.3.1 Vegetation Impacts Common to the Corridor and East Alternatives

Construction Impacts

Construction impacts on vegetation would be the same along the approximately 6.7 miles of the trail where the East Alternatives and the Corridor Alternative would share the same alignment. Temporary construction impacts to vegetation would include clearing a 2- to 5-foot-wide area outside the final trail footprint on either side of the trail to allow construction access. To the maximum extent practicable, the size of this construction impact area would be minimized and the area replanted after construction. Temporary construction impacts to vegetation would also occur in some locations where fences and retaining walls would be installed. The exact width of these areas is unknown and will depend on the construction method, local topography, and other potential site restrictions determined during final design.

Operation Impacts

Permanent impacts to vegetation would result from widening the Interim Use Trail prism or building the trail adjacent to roadways. Transitions to and from the existing Interim Use Trail alignment and new

parking and restroom facilities would also result in permanent impacts to vegetation. Vegetation impacts would be the same for the Corridor and East Alternatives along the approximately 6.7 trail miles where the trail location and configuration would be identical for both alternatives. To the extent that the East Alternatives would require more transitions from and to the adjacent roadways, direct vegetation impacts would be greater than for the Corridor Alternative.

Based on the total constructed area for each alternative, there would be only a slight difference in the area of direct vegetation impacts between the Corridor and East Alternatives. Both alternatives would impact relatively similar kinds of vegetation, mainly in the urban matrix cover type (including young deciduous trees, mowed lawns, and non-native ornamental plants).

Direct vegetation impacts for the Corridor or East Alternatives would be greater than for the Continuation of the Interim Use Trail Alternative, which would not require a wider trail footprint, new filled areas adjacent to the roadway, or transitions to and from East Lake Sammamish Parkway.

Table 3.4-2. Summary of Impacts to Vegetation in the Study Area

	IMP/	ACTS		
ACTION	CORRIDOR AND EAST ALTERNATIVES	CONTINUATION OF INTERIM USE TRAIL	No Action ALTERNATIVE	MITIGATION
Building wider trail footprint or widening at Parkway and building parking lot and restroom facilities	Permanent removal of vegetation from trail footprint and parking lot and restroom facilities. Most removed vegetation would be non-native and composed of grasses or shrubs, or young deciduous trees. Some mature hedges would be impacted.	Permanent removal of vegetation at parking lot and restroom facilities. Same types of vegetation as Corridor.	N/A	Avoid removal of large mature native trees wherever possible. Work with adjacent landowners on a case-by-case basis to replant same or similar hedges and other vegetation in appropriate locations. Emphasize using native plants where feasible.
Retaining wall construction	Temporary reduction of vegetation near walls for construction access.	N/A	N/A	Minimize disturbance area to greatest extent possible. Replant disturbed areas with native species if possible, or work with adjacent landowners to reestablish vegetation.
Vegetation removal for safety, invasive plant control, or for maintenance of open corridor	Removal of hazard trees. Reduction or removal of some areas of vegetation blocking sight lines.	Same as Corridor and East Alternatives	Periodic removal of vegetation.	Continue to use and update vegetation management plan for the project, which provides direction on minimizing impacts and rectifying impacts of vegetation management.
Culvert maintenance.	Temporary disturbance to vegetation adjacent to the culvert.	Same as Corridor and East Alternatives	Same as Corridor and East Alternatives	Use BMPs to reduce disturbance and revegetate disturbed areas, preferably with native plant species.
Long-term trail use	Removal of vegetation for safety, to maintain clear space, and to manage invasive species.	Same as Corridor and East Alternatives	Not applicable for No Action Alternative after 2015.	Continue to use and update vegetation management plan, which provides direction on minimizing and rectifying impacts.

Trail maintenance would include removing hazard trees when necessary and trimming vegetation to maintain sight lines at intersections and crossings. Vegetation may also be disturbed temporarily in maintaining the trail drainage system. These impacts would be necessary for any of the Build Alternatives, including the Continuation of the Interim Use Trail Alternative.

Vegetation in the study area is not likely to be subject to adverse impacts as a result of long-term use of any of the Build Alternatives. Because the study area is a largely urban environment, long-term use would not result in loss of plant species diversity or reduced plant structural diversity in the study area.

Trail use could result in trampling of adjacent vegetation by humans or pets that leave the trail. Fences and enforcement of leash regulations would minimize the likelihood of this in most instances.

3.4.3.2 Continuation of the Interim Use Trail Alternative

Under this alternative, the vegetation would be largely unchanged from the current condition. The existing trail would not be widened, and the trail extension to the north would occur partially on the former railbed. Where it is located off of the railbed, the trail extension would occur adjacent to existing highways and roadways where little to no vegetation is currently present. Activities to maintain existing vegetation in the King County right of way would continue and would be the same as those described under Vegetation Impacts Common to the Corridor and East Alternatives, Construction Impacts section above.

3.4.3.3 No Action

Under the No Action Alternative, the vegetation would be largely unchanged from the current condition. Activities to maintain vegetation would continue until 2015 and these impacts were evaluated in the environmental documentation for the Interim Use Trail (King County, 2000; FHWA and WSDOT, 2002). Specifically, King County would continue to remove or trim vegetation to maintain the trail (e.g., preserve sight distances, repair culverts, and remove hazard trees).

3.4.3.4 Threatened, Endangered, and Sensitive Plant Species

Because the population of shining flatsedge plants is located outside of the study area, nNo impacts to threatened, endangered, or sensitive plantthis species are anticipated from construction, operation, or maintenance of any of the proposed alternatives.

3.4.4 Indirect or Secondary Impacts to Vegetation

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). The Master Plan Trail itself is not expected to have any indirect or secondary effects to vegetation.

3.4.5 Cumulative Impacts to Vegetation

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Cumulative effects to native vegetation have resulted from urbanization in the region, and particularly within urban growth areas. These effects are expected to continue particularly as upland areas with remnant native plant communities are slated for development or as redevelopment results in larger structures.

Native plant communities in urbanized areas are reduced in extent, occur in small fragmented patches, and often are replaced by non-native ornamental trees, shrubs and grasses, or fast growing weedy species that tolerate disturbance. Many native Pacific Northwest overstory species are completely absent in portions of these urbanized environments.

Rare and sensitive species are generally intolerant of disturbance and are extirpated from the region. In general, current and future urbanization in the region could result in continued reductions in native coniferous and deciduous forest vegetation types in the watersheds in favor of establishing urban matrix vegetation within urban growth areas.

3.4.6 Direct Impacts to Wildlife

This section describes the construction and operation effects of the alternatives on general wildlife in the study area. Impacts specific to ESA listed threatened and endangered wildlife and other wildlife species of concern are addressed in Section 3.4.6.6. Construction impacts would include noise and human activities that might disturb some wildlife. Long-term operation of the trail represents three types of potential impacts to wildlife: (1) habitat loss from permanent vegetation removal; (2) disturbance; and (3) impediments to animal movement due to fencing. For the wildlife analysis, fencing types considered are split-rail, hand rail, and chain-link. The hierarchy for determining the type of fence to use in a given situation considers public safety and security, as well as wildlife movement is (provided in Section 2.5.6, on Page 2-43). In general, Guardrail fencing would be installed adjacent to areas used by vehicles that do not provide wildlife habitat (e.g., roadways, parking lots, and driveways) and therefore the presence of guardrails is expected to have no effect on wildlife and is not evaluated further. Split rail fencing would be located adjacent to environmentally sensitive areas such as wetlands, streams, and steep slopes. This would maintain small and large mammal movement, while reducing the intrusion from humans and pets. Chain-link fencing would be required where there is a trail edge that may be a hazard to trail users (e.g., retaining wall); a liability proximity, trespass, and/or privacy concern (e.g., waterfront property with dock); or a short distance between the trail and adjacent house. Retaining walls would be incorporated in some segments of the trail to avoid and minimize direct impacts to environmentally sensitive areas such as wetlands. Table 3.4-3 summarizes the impacts of each alternative on wildlife in the study area.

Table 3.4-3. Summary of Construction and Operation Effects on Wildlife, by Alternative

Construction	OPERATION	MITIGATION
	OFERATION	WITTIGATION
General Wildlife: Short-term displacement of some wildlife.	General Wildlife: Permanent loss of habitat, due to removal of shrubs and trees. Minor disturbance to wildlife, especially in vicinity of Marymoor Park. Disturbance expected to be slightly greater than No Action, given the anticipated higher level of human use of the area. Some wildlife may avoid the immediate trail vicinity. For some animals, some restriction in access to sensitive and other habitats due to portions of fencing.	Fencing and signage of streams and wetlands to discourage human intrusion. Avoid noise producing equipment during early part of nesting season near Marymoor Park. Replant disturbed areas with native species when possible, or work with adjacent landowners to reestablish vegetation.
Bald Eagle: No impact to existing bald eagle nest sites. Threatened and Endangered Species and Other Species of Special Concern: No impact to existing bald eagle nest sites, or great blue heron rookery. Potential short-term displacement of nesting and/or foraging pileated woodpeckers to surrounding areas. Protection measures should avoid impacts to nesting ospreys. No impact to other sensitive species.	Bald Eagle: No impact to existing bald eagle nest sites. Threatened and Endangered Species and Other Species of Special Concern: No impact to existing bald eagle nest sites or great blue heron rookery. The nesting osprey pair has demonstrated a tolerance to human trail use, so no impacts are anticipated. Potential long-term displacement of nesting and/or foraging pileated woodpeckers to surrounding areas. No impact to other sensitive species.	Restrictions on timing of noisy trail construction (e.g., and pile driving) near existing nest sites. Incorporate native evergreen vegetation (e.g., western redcedar) in landscape plan for yearround screening near bald eagle nest sites.
Purple Martin:	Purple Martin:	None.
No impact to purple martin. Osprey: Protection measures should avoid impacts to nesting ospreys.	No impact to purple martin. Osprey: The nesting osprey pair has demonstrated a tolerance to human trail use, so no impacts are anticipated.	Restrictions on timing of noisy trail construction (e.g. and pile driving) near existing nest sites.
Pileated Woodpecker: Potential short-term displacement of nesting and/or foraging pileated woodpeckers to surrounding areas.	Pileated Woodpecker: Potential long-term displacement of nesting and/or foraging pileated woodpeckers to surrounding areas.	Avoid noise producing equipment during early part of nesting season near Marymoor Park.None.
Western Pond Turtle:	Western Pond Turtle: No impact to western pond turtle.	None.
No impact to western pond turtle. Great Blue Heron: No impact to great blue heron.	Great Blue Heron: No impact to great blue heron.	None.

Construction	OPERATION	MITIGATION
EAST A ALTERNATIVE		
General Wildlife: Same as Corridor Alternative, except no effect for 3.5-mile portions of the trail along existing roadways.	General Wildlife: In many areas, same as Corridor Alternative due to identical alignment. No vegetation removal and less disturbance effects than Corridor Alternative where East A Alternative continues to use the existing Interim Use Trail configuration for pedestrian/equestrian use. Effects of vegetation removal and human presence where trail borders existing roadways would be negligible, given limited native vegetation requiring removal and existing vehicle and bicycle traffic. More fencing than Corridor Alternative resulting in greater impact on wildlife movement.	Fencing and signage of streams and wetlands. Replant disturbed areas with native species when possible, or work with adjacent landowners to reestablish vegetation.
Bald Eagle: Same as Corridor Alternative. Threatened and Endangered Species and Other Species of Special Concern: Same as Corridor Alternative	Bald Eagle: Same as Corridor Alternative. Threatened and Endangered Species and Other Species of Special Concern: Same as Corridor Alternative.	Same as Corridor Alternative.
Purple Martin: Same as Corridor Alternative. Osprey: Same as Corridor Alternative.	Purple Martin: Same as Corridor Alternative. Osprey: Same as Corridor Alternative.	Same as Corridor Alternative. Same as Corridor Alternative.
Pileated Woodpecker: Same as Corridor Alternative.	Pileated Woodpecker: Same as Corridor Alternative.	Same as Corridor Alternative.
Western Pond Turtle: Same as Corridor Alternative.	Western Pond Turtle: Same as Corridor Alternative.	Same as Corridor Alternative.
Great Blue Heron: Same as Corridor Alternative.	Great Blue Heron: Same as Corridor Alternative.	Same as Corridor Alternative.

Table 3.4-3. Summary of Construction and Operation Effects on Wildlife, by Alternative (continued)

	by Antinative (continued)	
Construction	OPERATION	MITIGATION
EAST B ALTERNATIVE General Wildlife: Same as East A Alternative.	General Wildlife: Same as East A Alternative, except no effect where the County-owned corridor is closed to public recreational use. Less fencing than East A Alternative.	Same as East A, except no protection measures where corridor is closed to public recreational use.
Bald Eagle: Same as Corridor Alternative and East A Alternative. Threatened and Endangered Species and Other Species of Special Concern: Same as Corridor Alternative and East A Alternative.	Bald Eagle: Same as Corridor Alternative and East A Alternative. Threatened and Endangered Species and Other Species of Special Concern: Same as Corridor Alternative and East A Alternative.	Same as Corridor Alternative and East A Alternative.
Purple Martin: Same as Corridor Alternative and East A Alternative.	Purple Martin: Same as Corridor Alternative and East A Alternative.	Same as Corridor Alternative and East A Alternative.
Osprey: Same as Corridor Alternative and East A Alternative.	Osprey: Same as Corridor Alternative and East A Alternative.	Same as Corridor Alternative and East A Alternative.
Pileated Woodpecker: Same as Corridor Alternative and East A Alternative.	Pileated Woodpecker: Same as Corridor Alternative and East A Alternative.	Same as Corridor Alternative and East A Alternative.
Western Pond Turtle: Same as Corridor Alternative and East A Alternative.	Western Pond Turtle: Same as Corridor Alternative and East A Alternative.	Same as Corridor Alternative and East A Alternative.
Great Blue Heron: Same as Corridor Alternative and East A Alternative.	Great Blue Heron: Same as Corridor Alternative and East A Alternative.	Same as Corridor Alternative and East A Alternative.
CONTINUATION OF THE INTERIM USE TRAIL ALTERNATIVE General Wildlife: Same as Corridor Alternative, but limited to those few areas where new construction is required.	General Wildlife: Similar to but slightly less than Corridor Alternative, because the soft-surface trail would presumably not accommodate some of the faster and potentially noisier wheeled uses.	Existing and new fencing and signs. Replant disturbed areas with native species when possible, or work with adjacent landowners to reestablish vegetation.
Threatened and Endangered Species and Other Species of Special ConcernBald Eagle: Same as Corridor Alternative, but limited to those few areas where new construction is required.	Threatened and Endangered Species and Other Species of Special ConcernBald Eagle: Similar to but slightly less than Corridor Alternative, because the soft-surface trail would presumably not accommodate some of the faster and potentially noisier wheeled uses Same as Corridor Alternative.	None.

Construction	OPERATION	MITIGATION
Purple Martin: Same as Corridor Alternative, but limited to those few areas where new construction is required.	Purple Martin: Same as Corridor Alternative.	None.
Osprey: Same as Corridor Alternative, but limited to those few areas where new construction is required.	Osprey: Same as Corridor Alternative.	None.
Pileated Woodpecker: Same as Corridor Alternative, but limited to those few areas where new construction is required.	Pileated Woodpecker: Similar to but slightly less than Corridor Alternative, because the soft-surface trail would presumably not accommodate some of the faster and potentially noisier wheeled uses.	None.
Western Pond Turtle: Same as Corridor Alternative. Great Blue Heron:	Western Pond Turtle: Same as Corridor Alternative. Great Blue Heron:	None.
Same as Corridor Alternative. NO ACTION General Wildlife: No effect.	Same as Corridor Alternative. General Wildlife: Ongoing minor disturbance effects.	Existing fencing and signs; no new protection.
Bald Eagle: No impact to existing bald eagle nest sites. Threatened and Endangered Species and Other Species of Special Concern: No effect.	Threatened and Endangered Species and Other Species of Special ConcernBald Eagle: No impact to existing bald eagle nest sites or great blue heron rookery. The nesting osprey pair has demonstrated a tolerance to human trail use, so no impacts are anticipated. Potential long-term displacement of nesting and/or foraging pileated woodpeckers to surrounding areas. No impact to other sensitive species.	None.
Purple Martin: No impact to purple martin. Osprey: No impact to osprey.	Purple Martin: No impact to purple martin. Osprey: The nesting osprey pair has demonstrated a	None. None.
Pileated Woodpecker:	tolerance to human trail use, so no impacts are anticipated. Pileated Woodpecker:	None.
No impact to pileated woodpecker.	Similar to but slightly less than Corridor Alternative, because the soft-surface trail would presumably not accommodate some of the faster and potentially noisier wheeled uses.	
Western Pond Turtle: No impact to western pond turtle. Great Blue Heron:	Western Pond Turtle: No impact to western pond turtle. Great Blue Heron:	None.

3.4.6.1 Corridor Alternative

Construction Impacts

Under the Corridor Alternative, trail construction activities would involve widening and paving of the existing Interim Use Trail, as well as creating a separate, soft-surface trail adjacent to the paved trail, where possible. In addition, the alternative would include construction of a new trail segment north of NE 70th Street to Bear Creek.

Widening, paving, and retaining wall construction would involve noise and visual disturbance that could cause sensitive wildlife to be temporarily displaced to surrounding areas. However, the period of construction in any given trail segment (a segment is 0.5 to 1 mile in length, depending on the spacing of access points) would be short (i.e., no more than one month in segments with sensitive habitats). Most wildlife would be expected to return to their original use areas after construction was complete.

Wildlife that use portions of the project corridor where human activity is currently less common (i.e., the northern portion of the project area, near Marymoor Park) are expected to show a greater response to trail construction than wildlife in other portions of the project corridor where human disturbance is currently more common.

Effects of construction on wildlife in the area are expected to be negligible, given the weedy habitat conditions in these locations and the urban-adapted wildlife that are expected to occur in the vicinity.

Operation Impacts

The Corridor Alternative would result in permanent removal of non-native shrubs and trees, which currently provide habitat for those species adapted to the urban matrix cover type and to frequent disturbance. Loss of this cover type would not result in substantial changes to the type or numbers of species currently occupying the project vicinity.

The Corridor Alternative is expected to have a greater disturbance effect on wildlife than the No Action Alternative, or the Continuation of the Interim Use Trail Alternative because of the anticipated higher level of use of the trail under the Corridor Alternative.

However, considering existing auto and truck traffic, boating and jet skiing activities, the use of power lawn mowers, and the presence of dogs and other domestic animals, houses, and other facilities in the vicinity, increases in disturbance are expected to have only a minor effect on wildlife. Effects are more likely to occur to sensitive species in relatively intact habitats (i.e., in the Marymoor Park vicinity) compared to wildlife that inhabit areas adjacent to housing and other developed areas and consequently are already adapted to disturbance. Disturbance effects on larger mammals, such as deer, coyotes, and fox, may be moderated by the fact that these animals are active mostly in early morning, evening, and nighttime, when trail use is generally expected to be less intensive. Note that the trail would be open from dawn to dusk.

Increases in fencing, especially chain-link fencing, under the Corridor Alternative would result in additional restrictions on the ability of some animals to move through the landscape. However, areas without fencing or with only split-rail fencing would continue to provide wildlife access to key habitats. Split-rail fencing has the beneficial effect of restricting trail users from adjacent sensitive habitats while maintaining wildlife movement. Compared to the No Action Alternative, the Corridor Alternative would

have approximately 110 percent more (e.g., over twice as much) chain-link fencing and 25 percent less split-rail fencing (Table 2-3).

When considering the total trail length that would be bounded by chain-link fence on one or both sides, based on the EIS-level design, the Corridor Alternative would provide approximately 4.5 trail miles of this fencing compared to 2.3 miles under the No Action Alternative. This fencing would not be continuous and would only be placed in those areas as required in Section 2.5.6, Page 2-43. Most of these areas are in the urban matrix cover type, supporting species already adapted to urban and suburban conditions. While there are many small riparian corridors connecting the Sammamish Plateau to Lake Sammamish, the area around the trail corridor is typically developed to relatively tight densities with highly fragmented habitat. Segments of split rail fence and guard rail, and driveways, access roads, or other areas not requiring any type of fence would provide many gaps to maintain wildlife movement across the trail. Lesser amounts of chain-link fence are proposed in areas with relatively intact habitats. These habitats primarily occur at the south end of the trail in the vicinity of North Fork Issaquah Creek and Sammamish State Park, and at the north end of the trail near Marymoor Park.

3.4.6.2 East A Alternative

Construction Impacts

Construction-related effects on wildlife under the East A Alternative would be the same as the Corridor Alternative along the approximately 6.7 miles of trail where the two alternatives share the same alignment. Portions of the trail under the East A Alternative would be adjacent to East Lake Sammamish Parkway and East Lake Sammamish Place SE. Given the existing noise and vehicle traffic along the Parkway and East Lake Sammamish Place, trail construction in this area is expected to have a negligible effect on wildlife. The East A Alternative includes identical locations for restrooms and parking facilities as the Continuation of the Interim Use Trail Alternative and the Corridor Alternative, and construction effects on wildlife would be the same under these alternatives.

Operation Impacts

Because the number of trail users is expected to be the same for the East A Alternative and the Corridor Alternative, trail use effects on wildlife would be the same along the approximately 6.7 miles of trail where the two alternatives share the same trail location and configuration. For the portion of the corridor that would be used by all trail users under the Corridor Alternative, but only horses and pedestrians under the East A Alternative, disturbance impacts to wildlife are expected to be slightly less for the East A Alternative compared to the Corridor Alternative.

Where the East A Alternative would be located alongside East Lake Sammamish Parkway SE and East Lake Sammamish Place SE, disturbance impacts from trail use are not expected. Any wildlife in these areas is already adapted to existing bicycle and vehicle traffic, pedestrians (along East Lake Sammamish Place SE), and human activity around residences. Where the trail transitions between the Interim Use Trail alignment and the Parkway or East Lake Sammamish Place SE under the East A Alternative, disturbance effects to wildlife from trail use are expected to be similar to the Corridor Alternative because of the similarity in habitat.

The East A Alternative would result in more chain-link fencing than the Corridor Alternative, and quantities of split-rail and hand-rail fencing would be similar between these alternatives (refer to Table 2-3 in Chapter 2). The total chain-link fencing length is approximately 10 percent more under the East A Alternative compared to the Corridor Alternative, and the total length of trail with chain-link fence on one or both sides is 5.8 miles for the East A Alternative compared to 4.5 miles for the Corridor Alternative. Given the restriction on wildlife movement that Additional -chain-link fencing ereates, under the East A Alternative is expected to have a greater effect on the ability of wildlife to move through the landscape than the Corridor Alternative.

3.4.6.3 East B Alternative

Construction Impacts

Given the existing noise and vehicle traffic along the East Lake Sammamish Parkway and East Lake Sammamish Place, trail construction in this area is expected to have a negligible effect on wildlife. Because the equestrian/pedestrian trail is already in an urban setting, decommissioning activities associated with the closure of this portion of the Interim Use Trail (e.g., chain-link fence removal) would have no effect on wildlife. Other construction impacts would be the same as for the East A Alternative.

Operation Impacts

The impacts of operating the East B Alternative would be identical to the East A Alternative, except for sections of Interim Use Trail alignment that would be used by pedestrians and equestrians under the East A Alternative but would be closed to all users (with chain-link fencing removed) under the East B Alternative. These areas are characterized by highly developed residential properties. Consequently, elimination of trail user disturbance and chain-link fencing in this area would result in a minor benefit to wildlife movement relative to the East A Alternative.

3.4.6.4 Continuation of the Interim Use Trail Alternative

Construction impacts would be limited to the 2,300-foot northern trail extension and development of parking areas, restroom facilities, and access points. The activities would involve permanent vegetation removal associated with the trail extension and construction of parking and other facilities. Because vegetation in the area is mostly weedy, loss of habitat would be negligible. Due to the generally urban nature of the area, as well as the presence of SR 520 and other roadways, disturbance to wildlife from trail use is expected to be negligible as well. Split-rail fencing adjacent to sensitive wetland habitat near Bear Creek would provide habitat protection while still allowing movement of wildlife.

Operation of the Continuation of the Interim Use Trail Alternative may slightly disturb wildlife due to the presence of people and dogs on the trail and the noise they generate, and chain-link fences may impede the movement of wildlife through portions of the corridor. These impacts were described in the environmental documentation for the Interim Use Trail (King County, 2000; FHWA and WSDOT, 2002).

3.4.6.5 No Action Alternative

Under the No Action Alternative, no construction activities would occur. Use of the Interim Use Trail through 2015 may slightly disturb wildlife due to the presence of people and dogs on the trail and the noise they generate, and chain-link fences may impede the movement of wildlife through <u>portions of</u> the corridor. These impacts were evaluated in the environmental documentation for the Interim Use Trail (King County, 2000; FHWA and WSDOT, 2002).

3.4.6.6 Threatened and Endangered Wildlife Species and Other Wildlife Species of Concern

U.S. Fish and Wildlife Service (USFWS) was consulted under Section 7 of the Endangered Species Act during development of the Interim Use Trail. Prior to the delisting of the bald eagle, the USFWS concurred that the project-Interim Use Trail may affect, but is not likely to adversely affect, bald eagles. A new Biological Assessment will be prepared in conjunction with the preparation of the Master Plan Trail Final EIS, and USFWS will be consulted again. Bald eagles remain protected by the State Bald Eagle Protection Act, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. There are no impacts to current ESA-listed or candidate species or their habitat because habitat for these species is not present in the project vicinity. Compared to the Interim Use Trail, the Corridor or East Alternatives would generate more noise during retaining wall construction and trail paving; and it would be more heavily used by a wider variety of users. The proximity of and potential impacts to each species are discussed further below.

Proximity of Species

The distance of the trail from the known bald eagle nest sites, purple martin nest sites, heron rookeries, osprey nest site, and recorded occurrences of western pond turtles are the same among the Build Alternatives.

The Lake Sammamish bald eagle nest on the eastside of Lake Sammamish and the great blue heron rookery are each approximately 0.25 mile from the trail alignment. Given these birds' demonstrated tolerance to recent activities in the vicinity (i.e., building construction and cell tower establishment within approximately 0.25 mile of the nest sites), trail construction (e.g., retaining wall construction, asphalt paving) and trail use under the Build Alternatives would not result in disturbance to these birds. The nesting habitat of these birds would remain unaltered.

The Marymoor Park bald eagles, the Eastside Lake Sammamish bald eagles in Marymoor Park and on the eastside of Lake Sammamish, purple martins, ospreys, and pileated woodpeckers are known to frequent or may nest close to (i.e., within 0.25 mile of) the trail, and consequently effects from trail construction and use are analyzed further for these species. Effects to western pond turtles are also described.

Marymoor Park Bald Eagle

Marymoor Parks

The Marymoor Park bald eagle nest in Marymoor Park is approximately 630 feet from the trail alignment (for all Build Alternatives). In 2000, WDFW indicated that the distance of the existing nest from the trail alignment should be adequate to protect the nest site from potential trail construction and use impacts (Negri, personal communication, 2000). However, WDFW was not aware of the need for retaining wall construction and asphalt paving as part of construction activities. Given the demonstrated tolerance of the Marymoor Park eagle pair at Marymoor Park to vehicular traffic on East Lake Sammamish Parkway and to model airplane noise and other human disturbance at Marymoor Park, prohibiting loud construction noises (such as pounding, asphalt paving) within 0.25 mile of the nest site during the more sensitive portion of the eagle nesting season (January 1 through May 31st) and prohibiting pile driving within 0.5 mile of the nest site during the entire nesting season (January 1 through August 15) should prevent impacts to these birds.

Eastside Lake Sammamish Bald Eagles

The Eastside Lake Sammamish bald eagle nest on the eastside of Lake Sammamish is approximately 500 to 600 feet from the trail alignment for the Build Alternatives. As with the Marymoor Park nest in Marymoor Park, theis nest is within site of the trail when deciduous trees do not have leaves, but is not within site of the trail when the trees are leafed out. Given the similar distance and visibility of the Eastside nest on the eastside of Lake Sammamish and the Marymoor Park nest in Marymoor Park, as well as the demonstrated tolerance of the Eastside birds to existing traffic along East Lake Sammamish Parkway, providing the same construction restrictions to the Eastside nest site on the eastside of Lake Sammamish as the Marymoor nest site in Marymoor Park should prevent impacts to the eagles. Specifically, loud construction noises (such as pounding, asphalt paving) would be prohibited within 0.25 mile of the Eastside nest site during the more sensitive portion of the eagle nesting season (January 1 through May 31) and pile driving would be prohibited within 0.5 mile of the nest site during the entire nesting season (January 1 through August 15).

Purple Martin

WDFW provides no guidelines for buffer distances to protect nesting purple martins from disturbance resulting from pile driving or other activities. However, WDFW urban biologist Tricia Thompson stated that at a distance of 650 feet from the trail (for all Build Alternatives), pile driving and other trail construction, as well as trail use, are not expected to have an effect on purple martins (Thompson, personal communication, 2004).

Osprey

The osprey nest site is approximately 30 feet from the trail alignment for all Build Alternatives. The birds associated with the nest site have a demonstrated tolerance to human activity. They nest in a light-industrial area and have continued to use the nest site despite the presence of recreational trail users associated with the Interim Use Trail. For these reasons, continued trail use under the Build Alternatives is expected to have no impact on the birds. To prevent impacts to the ospreys from construction activities such as widening of the trail and installation of fencing, these activities would be avoided during the nesting season (March 15 to August 31) within 300 feet of the nest site. To prevent impacts from pile driving and asphalt paving, these activities would be prohibited within 0.25 mile of the nest site during the nesting season, as recommended by WDFW (Thompson, personal communication, 2004).

Pileated Woodpecker

Trail construction under the Corridor, East A, and East B Alternatives could result in temporary displacement of pileated woodpeckers because of noise and visual disturbance. However, no known nest sites for pileated woodpeckers have been identified, and large trees providing potential nesting habitat are rare in the trail vicinity. The planned trail alignment and construction would be identical under the Corridor, East A, and East B Alternatives in the vicinity of pileated woodpecker habitat, and consequently any impacts from trail construction would be the same under these alternatives. No trail construction would occur in the vicinity of pileated woodpecker habitat under the Continuation of the Interim Use Trail Alternative, and hence trail construction would have no effect on these birds. Under the Build Alternative, effects of trail use on the birds are expected to be slightly greater than the No Action Alternative, given the anticipated greater level of recreational use of the trail.

Western Pond Turtle

Trail construction and use under the Build Alternatives are expected to have no effect on western pond turtles. Erosion-control measures would minimize impacts to water quality.

Great Blue Heron

The great blue heron rookery is approximately 0.25 mile from the trail alignment. Given these birds' demonstrated tolerance to recent activities in the vicinity (i.e., building construction and cell tower establishment within approximately 0.25 mile of the nest sites), trail construction (e.g., retaining wall construction, asphalt paving) and trail use under the Build Alternatives would not result in disturbance to these birds. The nesting habitat of these birds would remain unaltered.

3.4.7 Indirect or Secondary Impacts to Wildlife

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). The Master Plan Trail itself is not expected to have any indirect or secondary effects to wildlife.

3.4.8 Cumulative Impacts to Wildlife

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The project area has experienced residential and commercial growth over the past several decades and is expected to continue to do so with or without a trail. With this expected growth, habitat loss and changes in vegetation cover are expected to result in declines in native wildlife in the vicinity.

3.4.9 Mitigation Measures

3.4.9.1 Vegetation Mitigation Measures

During construction for any of the Build Alternatives, impacts to vegetation would be avoided and minimized wherever possible. Where temporary disturbance cannot be avoided, vegetation would be restored following construction.

Mitigation would also include the use of construction best management practices (BMPs) and application of the *Vegetation Management Plan* (see Chapter 2, Alternatives, for discussion). The plan would be updated to reflect current local regulations in conjunction with obtaining permits for the Master Plan Trail.

The impacts from long-term use of the trail by humans or pets would be mitigated as follows:

 Fences constructed for other purposes (e.g., delineation of edge hazards) would limit access to sensitive areas, as well as to some other areas with native vegetation, ornamental plantings and areas of mowed turf. The fencing would reduce the risk of trampling impacts from humans and pets. • Where impacts to visual and noise buffers (planted hedges) might occur, adjacent landowners could potentially replant similar vegetation as permitted by King County on a case-by case basis.

3.4.9.2 Wildlife Mitigation Measures

The project scope of work and construction specification will include measures, which will minimize potential impacts to wildlife, such as the following:

Bald Eagles

- Loud construction noises (e.g., asphalt paving) will be avoided within 0.25 mile of the Marymoor Park bald eagle nest sites in Marymoor Park and and the Eastside Lake Sammamish nest site on the eastside of Lake Sammamish during the more sensitive portion of the eagle nesting season (January 1 through May 31st), and pile driving will be avoided within 0.5 mile of the nest sites during the entire nesting season (January 1 through August 15).
- To ensure protection of the Marymoor Park and Eastside Lake Sammamish bald eagle nest sites at Marymoor Park and on the eastside of Lake Sammamish, cedar trees or other native evergreen vegetation will be included in the landscape plans to create a year-round screen between the nest sites and the trail. Deciduous trees currently serve as a screen during the growing season.

A Biological Assessment (BA) will be prepared in conjunction with and prior to issuance of the Final EIS. The BA findings/conclusion will be shared with USFWS through the Endangered Species Act, Section 7 consultation process as appropriate.

Ospreys

• Loud construction noises (i.e., pile driving and asphalt paving) will be avoided within 0.25 mile of the osprey nest site during the nesting season (March 15 to August 31), as recommended by WDFW (Thompson, personal communication, 2004). Other construction activities during the nesting season within 300 feet of the osprey nest site will be avoided.

General Wildlife

- In general, birds are most sensitive to disturbance during the early part of the nesting season. Because noise disturbance can cause some birds to abandon their nests, use of noise-producing equipment where the trail passes near Marymoor Park (where existing human disturbance is less intense than other parts of the project area, and where more sensitive wildlife are present) during the early part of the nesting season (February to May) will be avoided (see bald eagle and osprey discussions).
- BMPs designed to meet or exceed the guidelines of the 2005 Ecology manual will minimize or prevent water quality impacts.
- To minimize disturbance to wildlife and wildlife habitats from use of the trail, interpretive signs and trail boundary signs will be installed. Interpretive signs help educate trail users about the importance of protecting wildlife and their habitat. Trail boundary signs and fencing would discourage off-trail use and the resulting disturbance to wildlife and wildlife habitat.
- Restore wildlife habitat by replanting disturbed areas with native species when possible, or work with adjacent landowners to reestablish vegetation.
- During detailed design, opportunities will continue to be sought to reduce the amount of chainlink fence and to find an equivalent fence type that would allow wildlife movement. The use of

alternatives to chain-link fencing will be considered in order to maintain existing wildlife passage while still discouraging human passage intrusion and minimizing visual impacts.

3.4.10 Significant Unavoidable Adverse Impacts

3.4.10.1 Vegetation

None of the Build Alternatives are expected to result in significant, unavoidable, long-term adverse impacts to vegetation because the existing vegetation cover is largely urban matrix. Long-term impacts are expected to be mitigated through the continued implementation of the Vegetation Management Plan, which provides clear direction for appropriate vegetation management. All short-term construction related impacts would be rectified.

The No Action Alternative, as well as the Continuation of the Interim Use Trail, would not result in significant unavoidable long-term adverse effects to vegetation.

3.4.10.2 Wildlife

None of the Build Alternatives are expected to result in significant, unavoidable, long-term adverse impacts to wildlife. Most short- term, construction-related impacts can be mitigated. Long-term impacts of trail use are also not expected to be significant and can be partially mitigated as described earlier.

3.5 Fish Resources

This section includes information and an analysis of fish resources in the study area. The study area for this analysis includes Lake Sammamish and 46 streams crossed by the project corridor. These streams include nine streams known to support fish, 17 streams that potentially could support fish populations, and 20 smaller, unnamed streams that are not fish-bearing.

This section also identifies factors that limit fish resources in the study area and recommends mitigation for each project-related impact.

Figure 3.2-1 (pg 3.2-2) in Section 3.2 provides an overview of Lake Sammamish, the major fish-bearing streams, and the basins in the study area; minor streams are also shown but not labeled. Detailed background information about streams and fisheries is provided in the Fish and Fish Habitat Technical Report (Appendix D).

The project corridor crosses five basins, including (from north to south) the Bear Creek Basin, Sammamish River Basin, East Lake Sammamish Basin, Issaquah Creek Basin, and North Fork Issaquah Creek Basin (Figure 3.2-2 (pg 3.2-3)). The East Lake Sammamish Basin, which encompasses the central portion of the project corridor, is divided into several smaller subbasins (Figure 3.2-2 (pg 3.2-3)). These basins and subbasins are briefly referenced in this section; see Section 3.2, Surface Water and Water Quality, for a detailed discussion of basins and subbasins.

3.5.1 Studies and Coordination

The assessment of fish resources consisted of a review of available published information, field reconnaissance, and consultation with experts from King County, Washington Department of Fish and Wildlife (WDFW), and Native American tribes. Existing information on fish use of lakes and streams in the study area included stream and lake data, fish counts, and records of fish sightings. Field reconnaissance was performed to assess habitat features, fish barriers, or other physical factors that might limit fish occurrence.

3.5.2 Affected Environment

Provided below is an overview of regulations pertaining to fish in the study area. This is followed by a discussion of fish that occur in the study area (including federally and state-listed species), and a description of the fish-bearing lakes and streams in the study area. This section also includes a brief discussion of potential fish-bearing and non-fish-bearing streams in the study area.

Additional information on the lakes, streams, and drainage patterns in the study area can be found in Section 3.2, Surface Water and Water Quality. A more detailed description of the fish life histories, stock status, and distribution can be found in Appendix D.

3.5.2.1 Regulations

Various federal, state, county, and city regulations address the protection of fish and their habitats in the study area (Table 3.5-1). In most cases, city and county regulations reflect WDFW recommendations. "Threatened" species are those federally-listed species that are likely to become endangered within the foreseeable future. "Candidate" species are those species that federal agencies have concluded should be proposed for addition to the federal endangered species list. "Sensitive" species are those species native

to Washington that are vulnerable or declining and are likely to become endangered or threatened. State "priority" species include all state endangered, threatened, sensitive, and candidate species, and species of recreational, commercial, or tribal importance that are considered valuable.

Table 3.5-1. City, County, State, and Federal Regulations Pertaining to Fish

REGULATION	OVERSEEING AGENCY	SPECIES AND HABITATS ADDRESSED
Federal	•	
Federal Endangered Species Act (ESA)	National Oceanic & Atmospheric Administration (NOAA Fisheries); U.S. Fish and Wildlife Service (USFWS)	All federally listed threatened and endangered species and critical habitats.
National Environmental Policy Act (NEPA)	Federal Highway Administration (FHWA)	All fish.
Fish and Wildlife Coordination Act	USFWS; WDFW	All fish.
State		
Washington State Environmental Policy Act (SEPA)	King County	All fish and fish habitat.
Washington State Endangered Species Act	WDFW	All state-listed threatened and endangered species.
Washington State Fish and Game Code	WDFW	All state-listed Priority Habitats and Species.
Shoreline Management Act	Washington Department of Ecology	All fish and fish habitat.
County and City		
King County Comprehensive Plan	King County	Designated fish habitat conservation areas; habitats for state- or federally listed endangered, threatened, or sensitive species; habitat for species of local importance.
City of Redmond <u>Critical</u> Sensitive Areas -Ordinance, Code Chapter 20D.140	City of Redmond	Streams and associated buffers.
City of Redmond Comprehensive Plan	City of Redmond	Habitats for state- or federally listed endangered, threatened, sensitive, candidate, or other priority species; wetlands and streams.
City of Sammamish Comprehensive Plan	City of Sammamish	Provides general objectives and goals for protection of streams, wetlands, riparian areas, and other unique habitats. Specific standards and guidelines are provided in the City of Sammamish Environmentally Sensitive Areas Ordinance.
City of Sammamish Environmentally Citical Sensitive Areas Ordinance, Code Chapter 21A.50	City of Sammamish	Critical or outstanding habitat for state- or federally listed endangered or threatened species; designated stream and wetland habitats.
City of Issaquah Comprehensive Plan	City of Issaquah	Provides general objectives and goals for protection of streams, wetlands, riparian areas, and other unique habitats. Specific standards and guidelines are provided in the City of Issaquah Sensitive Areas Ordinance.
City of Issaquah Sensitive Areas Ordinance, Code Chapter 18.10.340	City of Issaquah	Streams and wetlands; especially state- or federally listed threatened or endangered species and their habitats; WDFW priority species.

3.5.2.2 Overview of Fish Occurrence in the Study Area

The project corridor crosses 46 streams and smaller drainages. Other than Bear Creek, which flows into the Sammamish River, all of these streams and drainages flow into Lake Sammamish. All of the streams that flow into Lake Sammamish, with a few exceptions (e.g., Bear and North Fork Issaquah Creeks), pass underneath East Lake Sammamish Parkway through one or more culverts upstream of the trail crossing. Most of the streams in the study area also pass through culverts under the Interim Use Trail (i.e., the former railbed). The *East Lake Sammamish Master Plan Trail Surface Water and Water Quality Discipline Report* (Parametrix, 2004) contains a complete list of culvert locations and their current conditions.

Table 3.5-2 summarizes potential fish occurrence in the study area. There is no documented information on fish presence or absence in 37 of the 46 streams present in the study area. Most of the study area streams are short, with silt or sand substrates, and flow through culverts or conduits that are barriers to fish passage. The quality and quantity of available fish habitat was evaluated in the field (where access allowed), and the likelihood of fish occurring in these streams was assessed using professional judgment. Because of limited property access, fish use in most of the individual streams crossed by the project corridor was estimated based on the available quantity and quality of fish habitat, not physical sampling for fish. All streams that contained even small amounts of marginal fish habitat were classified as potentially fish-bearing. Because it is unlikely that all streams that contain fish habitat features are currently occupied by fish, the estimates of fish presence are conservative and probably overestimate the presence of fish in individual streams.

These field evaluations were combined with stream classification codes from the appropriate municipal and county jurisdictions (if available) in order to classify these streams as either potentially fish-bearing or non-fish-bearing. A total of 26 streams were classified as either having known or potential fish use, while 20 other streams were classified as non-fish-bearing. Other drainageways in the study area, such as wet ditches and seeps, were not classified as streams and were not included in the analysis.

Information provided by WDFW (Priority Habitats database records) and King County (Surface Water Management Division) indicates that Lake Sammamish and nine of the study area streams are known or believed to support fish now or have supported fish in the recent past. In general, anadromous and resident fish are currently restricted to the lower reaches of these streams, typically below barriers located at or downstream of the Interim Use Trail or East Lake Sammamish Parkway (King County, 1990b). Streams with culvert barriers at the Parkway include George Davis Creek, Zaccuse Creek, and Tributary 0163 (King County, 1990b). In addition, several streams, including George Davis Creek, have multiple culvert barriers that can further isolate resident populations and may prevent upstream recolonization (King County, 1990b). The streams of the East Lake Sammamish Basin (in the middle of the project corridor) do not produce large numbers of anadromous fish compared to Bear Creek and North Fork Issaquah Creek.

Table 3.5-2. Summary of Potential Fish Occurrence in the Study Area

WATER BODIES WITH						
SPECIES	ANADROMOUS	RESIDENT	FEDERAL STATUS	STATE STATUS	POTENTIAL OCCURRENCE OF THIS SPECIES	
Chinook salmon	Х		Threatene d	Candidate	Lake Sammamish North Fork Issaquah Creek Bear Creek	
Coho salmon	X		Candidate	N/A	Lake Sammamish North Fork Issaquah Creek Bear Creek Laughing Jacobs Creek Stream No. 0163 Ebright Creek George Davis Creek Stream No. 0143 Zaccuse Creek	
Sockeye salmon	X		N/A	Priority	Lake Sammamish North Fork Issaquah Creek Bear Creek Laughing Jacobs Creek Pine Lake Creek Ebright Creek	
Steelhead	Х		Threatene <u>d</u> N/A	Priority	Lake Sammamish Bear Creek	
Cutthroat trout	Х	Х	N/A	Priority	All fish-bearing water bodies in study area	
River lamprey	X		Species of Concern	Candidate	Lake Sammamish Many perennial streams crossed by the project corridor Bear and North Fork Issaquah Creeks contain habitat	
Kokanee salmon		Х	N/A	Priority	Lake Sammamish North Fork Issaquah Creek Bear Creek Laughing Jacobs Creek Pine Lake Creek Ebright Creek Zaccuse Creek	
Rainbow trout		х	N/A	Priority	Bear Creek Stream No. 0163 Pine Lake Creek Ebright Creek George Davis Creek	
Largemouth bass		Х	N/A	Priority	Lake Sammamish Streams along project corridor	
Smallmouth bass		Х	N/A	Priority	Lake Sammamish Streams along project corridor	
Yellow perch		X	N/A	N/A	Lake Sammamish	
Brown bullhead		X	N/A	N/A	Lake Sammamish	

Table 3.5-2. Summary of Potential Fish Occurrence in the Study Area (continued)

SPECIES	Anadromous	RESIDENT	FEDERAL STATUS	STATE STATUS	WATER BODIES WITH POTENTIAL OCCURRENCE OF THIS SPECIES
Black crappie		Х	N/A	N/A	Lake Sammamish
Threespine stickleback		Х	N/A	N/A	Bear Creek
Prickly sculpin		Х	N/A	N/A	Bear Creek
Long-nosed dace		Х	N/A	N/A	Bear Creek
White sturgeon		Х	N/A	Priority	Believed to be rare in study area, but potentially present in Lake Sammamish and in streams along project corridor
Longfin smelt		Х	N/A	Priority	Lake Sammamish and streams along project corridor

N/A = not applicable

3.5.2.3 Fish Species in the Study Area with Federal Status

Fish species with federal status under the Endangered Species Act that are known to occur in the study area include Chinook salmon, coho salmon, steelhead, and river lamprey (see Table 3.5-2).

Although there are no known documented occurrences of bull trout (a federally threatened species) in the study area, anadromous adult bull trout may occasionally stray into the Lake Washington/Lake Sammamish system. Other than one unconfirmed anecdotal account, there is no documentation of bull trout presence in the Lake Sammamish Basin. Currently, culverts, low stream flows, unsuitable water quality, and degraded stream environments obstruct or deter bull trout movement into most, if not all, of the streams within the study area.

Pacific lamprey (a federally threatened species) is generally seen in area rivers and larger tributaries in May or June (WDFW file records, Mill Creek) but the species is believed to be unlikely to occur in the study area. No population information for this species is available within the Lake Washington/Lake Sammamish Basin.

3.5.2.4 Fish Species in the Study Area with State Status

State Priority Species include all state-listed endangered, threatened, sensitive, and candidate species and species of recreational, commercial, or tribal importance that are considered vulnerable. No state-listed sensitive, threatened, or endangered fish species occur within the study area; however, other fish species that are designated as State Priority Species (WDFW, 2000) may occur within the study area. The two fish species with state candidate status that occur in the study area (Chinook salmon and river lamprey) are also federally listed (see Table 3.5-2). Other State Priority Species that may occur in the study area are shown in Table 3.5-2.

3.5.2.5 Primary Fish-Bearing Lakes and Streams in the Study Area

Lake Sammamish and the primary streams that are known or believed to support fish populations are described below (in order from north to south), including their locations, which species are found and when, and the current conditions of the stream. Many of the 46 streams and smaller drainages that cross

the project corridor are not discussed in detail because they are non-fish-bearing or little information is available on fish use or instream conditions.

The description of the current conditions for each stream typically includes the following (when applicable to each stream):

- **Substrate:** Materials that compose the bed of the stream. Gravel and small cobbles are generally the most suitable for spawning, while large amounts of sediment and fine materials may smother fish eggs and fill pools.
- Channel morphology: The physical form of the stream, such as pools, riffles (turbulent areas), and glides (smooth, fast-flowing areas). Ideally, there is a 1:1 ratio for the numbers of pools to riffles. Channel morphology also concerns channel shape (e.g., U or V shaped) and whether the stream channel is incised (cut deeply into the ground surface), potentially preventing fish from accessing areas of the floodplain that might provide refuge during high flows.
- **Stability:** Whether the streambank is physically stable or showing signs of erosion, sloughing, or slumping.
- Large woody debris: Larger pieces of wood (logs, rootwads, etc.) within the stream that provide a diverse habitat for fish and contribute to the formation of habitat units (pools).
- Barriers: Potential barriers to fish passage such as culverts, waterfalls, etc.
- **Riparian vegetation:** Plants growing within the riparian area (immediately along the stream channel). A well-vegetated riparian zone provides shade and organic material to the stream, keeping stream temperatures at levels acceptable for salmonids and supporting the stream food web. Trees in the riparian area can eventually fall into the stream and contribute to the large woody debris described above.
- Classification: The classification of the stream as assigned by the municipal jurisdiction where the stream is located (King County, Redmond, Sammamish, or Issaquah). Class 1 streams are those classified as Waters of Statewide Significance under the state Shoreline Management Act of 1971. Class 2 streams are perennial OR support some salmonid fish use. Class 3 streams are intermittent AND have no fish use (Miller, personal communication, 2000).

Lake Sammamish

Both resident and anadromous salmonids use Lake Sammamish as a rearing environment and migratory pathway. Chinook, coho, sockeye, and kokanee salmon; steelhead; and coastal cutthroat trout are likely to be found in Lake Sammamish and its tributaries (King County, 1990b; Pfeifer, 1992). Lake Sammamish also contains a diverse population of resident non-salmonid species, including largemouth bass, yellow perch, brown bullhead, and black crappie (King County, 1990b).

Lake Sammamish is part of the usual and accustomed (U&A) fishing area of the Muckleshoot Indian Tribe. The Boldt Decision (Case number C70-9213, U.S. v. Washington) defined a U&A fishing area as the primary area in which a Treaty Tribe historically fished, has the right to continue to fish, and participates in the management of the resources fished. However, the tribe has avoided fishing in the Lake Sammamish Basin and in Lake Sammamish to conserve salmon stocks (Malcom, personal communication, 2000). WDFW and the tribe are co-managers of the salmon fishery within the U&A fishing area.

Bear Creek (Class 1)

Bear Creek is a tributary of the Sammamish River and is the main drainage for the Bear Creek Basin (Figure 3.2-1 (pg 3.2-2)). Bear Creek supports populations of fall Chinook, coho, kokanee, and sockeye salmon; winter steelhead; rainbow trout; and cutthroat trout (Williams et al., 1975; King County, 1990a). Salmon and trout spawn and rear throughout all accessible reaches of the stream, with kokanee and other salmon spawning from September through February (King County, 1990a; Egan, 1978). Steelhead and cutthroat trout spawn from late November into May (King County, 1990a). Non-salmonid species that inhabit the Bear Creek system include threespine stickleback, prickly sculpin, and longnose dace (Scott et al., 1982). Although other species are likely to exist, documentation is limited (King County, 1990a).

In the study area, the streambanks of Bear Creek consist primarily of riprap and are covered with grasses such as reed canarygrass and quackgrass, as well as overhanging vines (e.g., Himalayan blackberry). The floodplain is interspersed with shrubs and small trees such as red alder and large trees such as black cottonwood. Immediately downstream of the study area, many trees and shrubs have been planted in the floodplain as part of stream restoration. The channel substrate at the crossing of the former railbed is primarily cobble. Channel morphology in the vicinity of the trail is a glide/pool combination. Pool quality is good.

The Bear Creek stream crossing at the former railbed currently consists of a low-rise wooden span supported by wood pilings along both sides of the stream channel and an additional row of supports placed in the middle of the channel. There are no fish passage problems that require bridge replacement or modification. The bridge deck appears to be intact, and repairs to the bridge are not likely to require instream work. King County will be constructing a new bridge that spans Bear Creek.

A King County water quality sampling station is located immediately below the bridge crossing. Although Bear Creek has excellent water quality, within the project corridor, Ecology has listed it in the Category 5: Polluted Waters/303(d) List of Threatened and Impaired Water Bodies for temperature and fecal coliform, and in the Category 2: Waters of Concern for dissolved oxygen and pH (Ecology, 2004).

Stream No. 0143F (Type F [fish-bearing])

Stream No. 0143F lies in the Panhandle Subbasin (Figure 3.2-1 (pg 3.2-2)). It is classified as a salmonid-bearing stream, although salmonid use has not been documented in any stream in this subbasin (Ecology, 1994). This stream is notable because of the presence of a coho salmon egg incubator located downstream of the trail crossing. The incubator box, capable of hatching 50,000 coho salmon fry, is funded by the Mid-Sound Regional Fisheries Enhancement Group.

George Davis Creek (Type F [fish-bearing])

George Davis Creek lies in the Inglewood Subbasin and is identified as a salmonid-bearing stream (Figure 3.2-1 (pg 3.2-2)). The stream is believed to support late run kokanee salmon, coho salmon (rearing), cutthroat trout (spawning and rearing), and rainbow trout (spawning and rearing) (Williams et al., 1975; King County, 1990b; King County DNRP, 2003).

At one time George Davis Creek likely supported coho, kokanee, and/or sockeye salmon in the lower reaches. However, a section of the stream downstream of the Interim Use Trail (i.e., the former railbed) has been piped under a residential driveway and a house. Sedimentation and the stream culvert under the residence severely limit the amount of usable salmonid habitat in the portion of the stream below the Interim Use Trail. However, lakeshore spawning by kokanee salmon may occur near the outlet of the stream (Ecology, 1994). Near the Interim Use Trail, the channel has been deeply eroded (greater than 10 feet), exposing tree roots on the bank. Riparian vegetation consists of horsetail, Himalayan blackberry,

reed canarygrass, and red alder, all of which are typical of a disturbed riparian zone. The stream has downcut its channel and exposed a gravel/cobble substrate in the streambed near the Interim Use Trail.

Two culverts convey the stream underneath the Interim Use Trail. Pool quality and quantity in the immediate vicinity are poor. Upstream of the Interim Use Trail, a culvert under East Lake Sammamish Parkway also creates a barrier to salmonid migration, as does a second culvert at river mile (RM) 0.81 (King County, 1990b).

Zaccuse Creek (Type F [fish-bearing])

Zaccuse Creek lies in the Monohon Subbasin and is identified as a salmonid-bearing stream (Figure 3.2-1 (pg 3.2-2)). It likely supports cutthroat trout (spawning and rearing) and late run kokanee salmon, and may support coho salmon near the stream mouth (King County DNRP, 2003). In the past, the extent of accessible salmonid spawning and rearing habitat in Zaccuse Creek was likely much greater than at present, since a section of the stream downstream of the Interim Use Trail (i.e., the former railbed) now passes through a bridge (under a driveway) and a culvert (under a house) before emerging and flowing into Lake Sammamish.

Furthermore, the stream flows underneath the Interim Use Trail through a culvert that may act as a partial fish barrier (White, 1999). From the culvert, the stream drops 12 to 18 inches into a 3-foot by 10-foot plunge pool. This is the only pool within 100 feet of the project corridor. There is also a culvert barrier at East Lake Sammamish Parkway (King County, 1990b).

Riparian vegetation consists of horsetail, Himalayan blackberry, reed canarygrass, and red alder. Bigleaf maple and Scots broom are also present. Upstream of the Interim Use Trail, the stream channel is choked with Himalayan blackberry.

Severe incision has already occurred in this tributary as a result of road drainage (King County, 1990b). The geology of this stream includes easily erodible sand (Ecology, 1994). As a result, stream-channel incision is present upstream of the project corridor.

Ebright Creek (Type F [fish-bearing])

Located in the Thompson Subbasin, Ebright Creek is known to support late run kokanee spawning (King County DNRP, 2003) as well as potentially supporting some coho salmon (spawning or rearing) or sockeye salmon (spawning) in its lower reaches, downstream of a man-made fish barrier (Figure 3.2-1 (pg 3.2-2)). The entire length of Ebright Creek also supports cutthroat trout and rainbow trout spawning and rearing (King County, 1990b).

At the Interim Use Trail (i.e., the former railbed), the stream flows through two culverts that may block fish migration during high flows (White, 1999). The gravel and small cobble substrate provides suitable habitat for salmonid spawning. However, at the tail end of the pool, immediately downstream of the culverts crossing the Interim Use Trail, more than 80 percent of the substrate was observed to be composed of sediment and "fines" (very fine grained substrate less than 0.65 mm in size). Although the stream does not appear to be downcutting its bed in the area, the plunge pool below the culverts is retaining sediment, sand, and fines transported from upstream sources, potentially limiting successful salmonid spawning.

Pine Lake Creek (Type F [fish-bearing])

Pine Lake Creek, located in the Pine Lake Subbasin, supports late run kokanee salmon spawning (King County DNRP, 2003) in the lower reach (Figure 3.2-1 (pg 3.2-2)). In addition, sockeye salmon or stray

Chinook salmon may also utilize the lower reaches of the stream. Resident cutthroat trout (spawning and rearing) and rainbow trout (spawning and rearing) are reportedly found throughout the stream all the way to its headwaters, with only resident fish present above RM 1.80 (King County, 1990b).

Excellent riffle/pool habitat remains in the lower reaches of Pine Lake Creek, especially where the stream descends from the plateau to Lake Sammamish. Immediately downstream of the Interim Use Trail are two root wads. In 1999, King County DNRP placed approximately 10 logs in and across the stream channel in this reach and planted riparian vegetation in an effort to increase habitat diversity. Downstream riparian vegetation consists of black cottonwood, reed canarygrass, horsetail, ferns, and Himalayan blackberry. Approximately 100 feet downstream of the Interim Use Trail, the stream passes through a culvert under a residential driveway. Downstream of the residential driveway, King County DNRP has placed pieces of large woody debris within the stream, as part of a rehabilitation restoration project. The stream empties into Lake Sammamish approximately 500 feet downstream of the Interim Use Trail.

At the Interim Use Trail, the stream flows under the railroad ballast through two culverts. Channel morphology in the Interim Use Trail vicinity consists of combinations of riffles, glides, and pools. Substrate composition is suitable for salmonid spawning upstream of the Interim Use Trail. However, the plunge pool immediately downstream of the Interim Use Trail culverts appears to contain only silt and sand. Approximately 50 feet upstream of the Interim Use Trail, the stream flows under East Lake Sammamish Parkway. As part of its stream habitat improvement project, King County replaced this culvert and the crossing is now fully fish passable.

Stream No. 0163 (Type F [fish-bearing])

Tributary No. 0163 lies in the Monohon Subbasin and is identified as a salmonid-bearing stream. It is believed to be suitable for coho salmon (rearing), cutthroat trout (spawning and rearing), and rainbow trout (rearing) (King County, 1990b) (Figure 3.2-1 (pg 3.2-2)). Prior to the creation of the fish barrier(s) near the Parkway, this stream likely supported kokanee and/or sockeye salmon. It may still support some cutthroat and kokanee below the Parkway.

The stream has two forks that join a short distance downstream of East Lake Sammamish Parkway (Figure 3.2-1 (pg 3.2-2)). The north fork (0163A) carries far less volume than the south fork (0163B), is not believed to support fish, and is not accessible to fish because it is piped underneath the Interim Use Trail (i.e., the former railbed). The south fork (0163B) is 0.70 mile in length with only about 0.10 mile accessible to non-resident fish (King County, 1990a). The south fork passes under the Interim Use Trail, 206th Avenue NE, and East Lake Sammamish Parkway in pipes, none of which are fish barriers. However, a culvert just upstream of the Parkway may be a barrier at times.

Riparian vegetation in the vicinity of the Interim Use Trail and Parkway consists of Himalayan blackberry, reed canarygrass, red alder, and a black cottonwood tree. There are 10 to 15 ornamental cedar trees screening the residential driveway 15 feet to the west of the Interim Use Trail. Bank stability is poor immediately downstream of the Parkway (100 percent sand and silt). No large woody debris is present in this reach. Pool quality in this stream is poor overall.

Downstream of the Interim Use Trail, the stream flows in an artificially constructed channel, passing through the backyards of three residences before emptying into Lake Sammamish. No trees or shrubs are present in the riparian zone and there is no large woody debris in this reach.

Laughing Jacobs Creek (Class 2 with Salmonids)

Laughing Jacobs Creek lies in the Laughing Jacobs Subbasin of the East Lake Sammamish Basin (Figure 3.2-1 (pg 3.2-2)). The stream supports late run kokanee salmon spawning (King County DNRP,

2003), as well as cutthroat trout spawning and rearing (throughout most of its length). Some coho (spawning and rearing) and sockeye salmon may also utilize the lower reach (Williams et al., 1975; King County, 1990b). A series of cascades in a steep ravine at RM 0.57 (upstream of the study area) serves as a natural barrier to upstream fish migration (Williams et al., 1975). Below the barrier, the stream possesses characteristics that support salmonid habitat (King County, 1990b).

The Interim Use Trail crossing of the stream consists of a low-rise, 45-foot wooden span supported by wood pilings set along both sides of the stream channel with additional supports placed in the middle of the channel. The bridge appears to be in good condition and would not likely require extensive retrofitting. Fish habitat appears adequate, with suitable flows and cover present in this reach. Channel morphology is primarily glide, with one pool immediately below the Interim Use Trail. Just upstream from the crossing, Laughing Jacobs Creek flows underneath East Lake Sammamish Parkway through two open-bottom culverts.

Riparian vegetation in the study area consists of red alder, Himalayan blackberry, reed canarygrass, and horsetail. Overhanging vines and branches form a thick canopy just downstream from the bridge.

North Fork Issaquah Creek (Class 2 with Salmonids)

The North Fork of Issaquah Creek lies in the North Fork Issaquah Creek Subbasin (Figure 3.2-1 (pg 3.2-2)). Stream habitat is of high quality (King County, 1991). Coho, kokanee, and sockeye salmon, as well as cutthroat trout, potentially use the lower reach of North Fork Issaquah Creek (Williams et al., 1975; King County, 1991). An impassable falls/cascade is located approximately 0.5 mile upstream of the Interim Use Trail crossing, with concentrated salmonid spawning areas downstream of the barrier. Upstream of East Lake Sammamish Parkway are two impassible barriers.

The stream crossing at the Interim Use Trail consists of a low-rise wooden span supported by wood pilings set along both sides of the stream channel. The stream crossing does not appear to impede fish passage (White, 1999). The channel substrate at the bridge crossing is composed of 40 percent silt/sand, 40 percent gravel, 10 percent boulder, and 10 percent cobble. Directly beneath the crossing, the cobble is embedded. Bank stability in this reach is good, except for erosion of the clay streambank beneath the north end of the railroad trestle.

The channel morphology in this reach consists of pools and glides. There are two good-quality pools 100 to 150 feet upstream of the study area. Large woody debris includes a black cottonwood in the stream channel 100 feet upstream of the rail bridge; three or four live black cottonwood trees in the riparian zone may provide large wood to the stream channel in the future. There is a 10-foot by 10-inch log below the trestle. In addition, four creosote pilings beneath the bridge have been cut off at the low-flow waterline. Riparian vegetation in the immediate vicinity of the bridge is primarily reed canarygrass and horsetail with thick overhanging Himalayan blackberry. Black cottonwood and red alder are the primary tree species.

3.5.3 Direct Impacts

The direct project impacts on fish are generally expected to be similar for the Corridor, East A, and East B Alternatives. However, as discussed in the sections that follow, overall the East A and East B Alternatives would have slightly more potential over the long term to adversely affect stream habitat conditions within the study area because these alternatives would (1) affect more currently undisturbed area, (2) require more stream crossings, and (3) result in greater loss of open channel habitat. The Corridor and both East Alternatives would result in slightly beneficial effects on fish passage conditions. All other construction and operation impacts would be similar.

Direct impacts to fish are expected to be very similar for the Continuation of the Interim Use Trail and the No Action Alternatives. These two alternatives would have no effect on aquatic habitat within the trail corridor and are not expected to negatively impact fish populations. All other construction and operation impacts would be similar.

3.5.3.1 Corridor Alternative

Construction Impacts

Construction of the Corridor Alternative could result in temporary impacts on streams. These potential impacts include instream sedimentation resulting from erosion and runoff; disturbance of fish due to instream work, stream diversions, and dewatering activities; changes in stream hydrology; spills of hazardous materials (e.g., oil and gasoline); displacement of spawning fish by construction noise; and disturbance or removal of riparian vegetation. These types of impacts are discussed in detail below.

Instream Sedimentation. The implementation of recommended mitigation techniques and strict adherence to project best management practices (BMPs) would reduce the risk of erosion, and minimize the chance that sediments, chemical contaminants, nutrients, and other materials would enter waters in the study area during construction. Otherwise, the introduction of fine sediments through erosion and runoff to the streams can reduce the suitability of spawning gravels. These effects are usually greatest in stream reaches inhabited by salmonids during critical spawning and rearing periods where blankets of fine sediment can diminish the abundance and diversity of invertebrates that live in the stream bottom and provide a food source for fish. Sedimentation can reduce a stream's suitability for fish spawning, unless fall and winter flows clear away the newly introduced sediments.

For the Corridor Alternative, sedimentation at stream crossings could potentially be caused by (1) the construction of new culvert and bridge crossings and culvert extensions that would require dewatering; (2) laying of the base trail surface prior to final trail surfacing; and (3) hole excavation for fencing, signposts, and bollards.

Culvert Replacements and Extensions. The Corridor Alternative includes the replacement of some culverts and the extension of others during the widening of the Interim Use Trail and/or roadway prism. Culvert extensions and replacements would occur in 18 streams, 10 of which are considered fish-bearing. Potential construction impacts from these activities would include increased short-term sedimentation and direct impacts to fish due to instream work and dewatering activities.

For streams designated as fish-bearing or potentially fish-bearing and considered by WDFW to contain suitable fish habitat upstream and/or downstream of the crossing, the culvert extensions would likely be designed and constructed to be fully fish passable. For streams designated as perennial fish-bearing streams, the stream would need to be temporarily diverted around the construction area prior to culvert replacement or extension. The diversions would occur during the driest time of the year and over the shortest time period feasible. The construction area would be screened off prior to and during the stream diversion and all fish would be removed prior to dewatering.

Construction of Retaining Walls. Retaining walls would be required along some segments of the project to minimize the trail footprint and reduce the impacts of fill on sensitive areas. However, retaining wall construction could have temporary indirect impacts on streams. Excavating to reach soil of sufficient bearing strength to support a retaining wall may require temporarily disturbing stream channels and dewatering the construction areas. Dewatering and stream diversions could lead to fish stranding and would create a temporary barrier to fish migration. The BMPs to reduce these potential impacts are described in the mitigation section below.

Construction of Related Facilities. All the Build Alternatives have potential impacts associated with the construction and modification of facilities such as crosswalks, sidewalks, curbs and gutters, and parking areas. However, the majority of streams located near these facilities are non-fish-bearing streams. Under the Corridor Alternative, construction of the facilities would not result in direct physical impacts (such as fill or channel relocation) to any streams within the corridor. Furthermore, appropriate BMPs would be implemented during construction to maintain water quality and minimize sedimentation. For these reasons, construction of these facilities is not expected to negatively affect water quality, fish species, or aquatic habitats.

Spills of Hazardous Materials and Construction Noise. Other potential short-term construction impacts include accidental spills of hazardous materials (e.g., oil and gasoline) and displacement of spawning fish by construction noise. Control of hazardous materials is a standard provision in construction contracts and permits. Construction noise should not occur for more than a few days in the vicinity of any given stream crossing. For all instream work, the timing of the work would be specified in permits. This would normally eliminate the potential impact of noise since spawning fish would not be present during those allowed work windows.

Disturbance of Riparian Vegetation. Some riparian areas may be temporarily disturbed. These areas are, in general, dominated by herbs and shrubs that provide limited riparian functions such as stream shading and large woody debris. Where there are temporary disturbances or where riparian vegetation is removed (such as the areas immediately adjacent to the trail fill slope), the disturbed area would be replanted with native vegetation.

Operation Impacts

Operation of the Corridor Alternative would involve the following:

- replacement or extension of existing culverts,
- creation of new impervious surfaces,
- permanent removal of riparian vegetation in order to widen the corridor, and
- ongoing trail use and maintenance.

These actions could potentially cause impacts on fish-bearing streams (e.g., new barriers to fish passage, the loss of instream fish habitat, potential changes in hydrologic regimes, and the loss of riparian vegetation). However, as discussed in further detail below, careful project design and the implementation of avoidance and mitigation strategies would minimize or eliminate negative effects on fish or aquatic habitat within the project corridor. In some cases, activities such as the replacement of existing undersized culverts with fish passable structures would improve fish habitat under the Corridor Alternative.

Culvert Replacements or Extensions. The Corridor Alternative would require replacing existing culverts with longer culverts or adding extensions to existing culverts. In general, culverts would be extended by only several feet in length. Table 3.5-3 provides information regarding probable locations of culvert extensions and lists which alternative (Corridor Alternative or East Alternatives) would have the greatest potential impacts on fish resulting from the loss of open water habitat to extend or replace culverts.

Table 3.5-3. Comparison of Culvert Extension and Replacement Impacts between Corridor and East Alternatives

STREAM	POTENTIALLY FISH-BEARING?	CORRIDOR ALT. STATION NUMBER	CULVERT EXTENDED?	EAST ALTS. STATION NUMBER	CULVERT EXTENDED?	ALTERNATIVE WITH GREATEST FILL IMPACTS ON FISH
Unnamed Stream	YES	145+00	YES	145+00	YES	Identical impacts
Many Springs	YES	211+90	NO	212+20 and 211+15	YES	East Alternatives ¹
Tributary to 0163	YES	237+45	NO	236+50 and 237+00	YES	East Alternatives
Stream 0163	YES	239+00	NO	239+10	YES	East Alternatives ²
Unnamed Stream	NO	254+20	YES	254+50	YES	Identical impacts
Stream 0162A	NO	287+90	YES	288+60	YES	East Alternatives
Unnamed Stream	NO	364+50	NO	363+90	YES	East Alternatives
Pine Lake Creek	YES	376+15 and 376+10	NO	375+50	YES	East Alternatives ⁴
Stream 0155	YES	381+20	YES	380+60	YES	Identical impacts
Zaccuse Creek	YES	421+10	YES	420+90	YES	Identical impacts
Unnamed Stream	NO	429+40	YES	429+30	YES	East Alternatives ⁵
George Davis Creek	YES	437+94 and 437+90	YES	437+90	YES	East Alternatives ⁶
Unnamed Stream	YES	446+45	YES	445+75	YES	East Alternatives ⁷
Unnamed Stream	YES	449+50	YES	N/A	N/A	Corridor Alternative
Unnamed Stream	YES	452+40	YES	452+40	NO	Corridor Alternative
Stream 0143K	NO	470+50	YES	469+00	YES	East Alternatives ⁷
Stream 0143J	YES	484+10	YES	483+10	YES	Identical impacts
Unnamed Stream	NO	489+70	YES	488+90	YES	Identical impacts
Stream 0143H	YES	494+60, 496+20, and 499+85	YES	493+85, 495+50, and 499+00	YES	Identical impacts
Stream 0143M	NO	507+55	YES	506+55	YES	Identical impacts

Table 3.5-3. Comparison of Culvert Extension and Replacement Impacts between Corridor and East Alternatives (continued)

STREAM	POTENTIALLY FISH-BEARING?	CORRIDOR ALT. STATION NUMBER	CULVERT EXTENDED?	EAST ALTS. STATION NUMBER	CULVERT EXTENDED?	ALTERNATIVE WITH GREATEST FILL IMPACTS ON FISH
Stream 0143F	YES	525+10	YES	524+25	YES	Identical impacts
Stream 0143E	NO	530+80	YES	530+00	YES	Identical impacts
Unknown Drainage	NO	556+40	NO	555+40	YES	East Alternatives
Unknown Drainage	NO	593+90	YES	593+10	YES	Identical impacts

NOTE: Station numbers can be found on the respective trail plan set for each Alternative.

¹ Installation of box culvert under the East Alternatives would result in some fill of open channel and stream realignment on this salmonid-bearing stream. However, habitat quality is relatively poor in and downstream of fill location.

² Salmonid-bearing stream. Loss of fair to good quality habitat. Some habitat elements would be maintained by countersinking the box culverts and placing natural substrate throughout.

³ Although East Alternatives may fill constructed pond and channel adjacent to East Lake Sammamish Parkway, this waterbody is non-fish-bearing and classified as a wet ditch, downstream

⁴ Salmonid-bearing stream. Under the East Alternatives some fill would occur in area recently undergoing stream restoration due to placement of box culvert, resulting in the loss of fair to good quality habitat, including newly established riparian vegetation. The culverts under the Interim Use Trail may need to be moved to the north and the channel realigned to match.

⁵ All Build Alternatives would require a culvert extension resulting in the loss of some open channel habitat, although the East Alternatives would result in more lineal feet of channel fill. However, the stream is classified as non–fish-bearing, with no fish habitat upstream or downstream of the Interim Use Trail.

⁶ Salmonid-bearing stream. Fill of fair quality open channel habitat would occur under all Build Alternatives; however, the East Alternatives would result in more channel fill in a steeper gradient reach of the stream (may also require weirs at culvert outlet to ensure fish passage). Fish passage conditions would be improved by use of box culvert with natural substrate throughout and removal of trash rack on East Lake Sammamish Parkway culvert outlet.

⁷Salmonid-bearing stream. Loss of open channel habitat would occur under all Build Alternatives; however, the East Alternatives would result in more lineal feet of channel fill as compared to the Corridor Alternative.

Although some of the stream crossings listed in Table 3.5-3 would be impacted under any of the Build Alternatives, permanent negative impacts due to culvert extension would be less pronounced for the Corridor Alternative than for the East Alternatives, because the Corridor Alternative would require fewer lineal feet of fish-bearing stream channel to be filled.

For streams designated as fish-bearing or potentially fish-bearing and considered by WDFW to contain suitable fish habitat upstream and/or downstream of the crossing, the culvert extensions would likely be designed and constructed to be fully fish passable. This would ensure better fish passage than the current pipes, which are mostly round concrete culverts with small diameters. Although some open-channel habitat would be lost with installation of longer metal or concrete culverts, King County would make a concerted effort to maintain or improve fish passage at fish-bearing stream crossings that require culvert extensions or replacements. In most cases, these improvements in fish passage would likely offset any channel loss impacts by allowing fish access to upstream habitat. The County would strictly adhere to all WDFW and U.S. Army Corps of Engineers permit conditions and requirements, as well as negotiated Endangered Species Act conservation measures, during culvert replacements.

The decisions regarding what type of culverts would be used would be finalized during the design and permitting phase of the projects. These decisions would consider fish presence; the type, quality, and quantity of upstream and downstream fish habitat; and the type, size, and location of additional structures that would be required to restore or maintain full fish passage (e.g., multi-stepped fish weirs or fish ladders). Design of fish passage structures would take into account the primary species of concern present within project area streams, such as kokanee and coho salmon, to adequately address passage of these species. In addition, potential impacts to downstream properties such as localized flood and sediment deposition would be evaluated and avoided during the design phase.

New Impervious Surface. The Corridor Alternative would result in an increase of approximately 18.8 acres of new non-pollution-generating impervious surface along the project corridor due to the construction of the trail surface, sidewalks, curbs and gutters. Of this area, approximately 10.8 acres is considered effective impervious area that has a potential to impact streams or ditches (see Section 3.2, Surface Water and Water Quality, for further details). Runoff from these areas would not contain the types of pollutants that are typically associated with the use of motorized vehicles (oil, metals, etc.). In addition, 1.2 acres of pollution-generating impervious surface would be added for the construction of the parking area and restrooms. Although the additional impervious surfaces have the potential to increase peak flows and reduce base flows in ditches and streams within the project corridor, the effects of the Corridor Alternative on stream hydrology would be expected to be minimal. No adverse changes in stream sedimentation, bank erosion, or lower streamflows during dry periods would be expected due to the following factors:

• As discussed in Section 3.2, Surface Water and Water Quality, the amount of new impervious surface that would be created along the project corridor is small enough (in comparison to drainage basin areas) that wetlands and streams would not be measurably affected by an increase in flow rates or flow volumes. In areas that drain into wetlands or streams, there is the potential to slightly increase peak flows or reduce groundwater recharge and summer low flow. However, stormwater runoff would be discharged within the same subbasin where it originates and would not be conveyed to a different subbasin, thus emulating natural runoff patterns. Much of the runoff from the Corridor Alternative would drain to non-fish-bearing ditches or streams running parallel to the Interim Use Trail, many of which eventually drain directly to Lake Sammamish via pipes, ditches, or open channels. Design features that would further minimize any potential effects on water quantity (e.g., pervious pavement, stormwater treatment facilities) would be evaluated during the detailed design phase of the project.

- Vegetated clear zones, vegetated buffers, and gravel shoulders are all part of the design of the trail cross section. The vegetated clear zones and buffers would be pervious surfaces. The gravel shoulders were classified as impervious for the calculation of impervious area but would allow some infiltration. These features would be located adjacent to the 12-foot-wide paved trail and are designed to aid in the infiltration of surface runoff from the paved portions of the trail.
- The amount of stormwater that would be generated by the Corridor Alternative is relatively small in comparison to existing conditions (runoff from high levels of existing impervious surfaces located within the Sammamish Plateau and along East Lake Sammamish Parkway), and it is not expected to have a measurable effect on fish or fish habitat. Likewise, the impervious surfaces of the trail are not expected to substantially affect stream base flows. In some cases, drainage improvements that are part of the project would benefit hydrologic conditions.
- Runoff from the additional impervious surfaces associated with restroom and parking facilities would undergo stormwater management. In addition, the proposed project may include detention and would provide water quality treatment to meet the applicable standards (see Section 3.2, Surface Water and Water Quality). Stormwater from the parking facilities would not be discharged into fish-bearing streams.

Removal of Riparian Vegetation. For the Corridor Alternative, riparian buffer impacts are defined as the portion of the riparian buffer that would be permanently cleared of vegetation in order to accommodate the widened trail. The width of the buffer is defined by the critical areas ordinance of the applicable local jurisdiction.

For the Corridor Alternative the total area of buffer impacts along the entire trail alignment would be approximately 130,671 square feet (or 3.00 acres). Areas that are classified as wetland or as wetland buffer are not included in the totals of impacted riparian buffers because these areas would receive mitigation based on wetland regulations. Of the total area of impacted riparian buffer, 72,560 square feet (or 1.67 acres) would be along known or potential fish-bearing streams, and 58,111 square feet (or 1.33 acre) would be along non-fish-bearing streams. Areas of impacts to the buffers of individual streams range from under 10 square feet to over 19,000 square feet.

Of the 34 streams that would experience impacts to their riparian buffers, 15 would experience impacts to less than 2,500 square feet (or 0.06 acre). Of the remaining streams, the largest buffer impacts typically occur where a stream (e.g., Stream 0143H) flows parallel to the project corridor for some portion of its length (Table 3.5-4). The existing riparian conditions along the streams vary, but most of these riparian buffers are already moderately to severely degraded.

Although clearing vegetation along streams could result in the loss of some instream cover, riparian functions such as providing large woody debris to the stream, contributing organic material to the stream, and regulating stream temperatures through shading would not be substantially affected. In cases where impacts to riparian vegetation in the stream buffers would be large or would affect trees or large shrubs that provide substantial shading, mitigation would occur where feasible (see mitigation section for details).

Table 3.5-4 Individual Streams with the Largest Riparian Buffer Impacts for the Corridor Alternative and East Alternatives

			BUFFER IMPACTS		
STREAM NAME/ NUMBER	CORRIDOR AND EAST ALTERNATIVES STATION NUMBER	STREAM TYPE	CORRIDOR ALTERNATIVE (SQUARE FEET)	EAST ALTERNATIVE (SQUARE FEET)	
Unnamed	314+50 Corridor 313+70 East	Potentially Fish Bearing	19,333	19,333	
Bear Creek	617+00	Documented Fish Bearing	11,838	11,838	
0143H	500+35, 499+50, 497+10, 494+60, and 496+20 Corridor 499+50, 498+70,496+30, 493+70, and 495+40 East	Documented Fish Bearing	11,806	11,808	
0143G	522+60 Corridor 521+75 East	Potentially Fish Bearing	10,214	10,202	
Unnamed Stream	452+40	Potentially Fish Bearing	10,012	8,118	
Unnamed Stream	254+20	No Fish	7,353	7,360	
George Davis	437+94 and 437+90	Documented Fish Bearing	5,368	3,423	
Tributary to 0163	239+00	Potentially Fish Bearing	5,059	4,738	
0143L (north branch)	460+95 Corridor 457+40 East	Potentially Fish Bearing	2,582	5,353	
0143K	470+50 Corridor	No Fish	2,209		
0143J	484+10 Corridor 438+10 East	Potentially Fish Bearing	8,045	8,045	
	Total of 11 streams with largest area of riparian impact	Total	93,819	90,218	
	Total of all streams with riparian impacts	Total	130,671	134,925	

Trail Use. In the absence of mitigation measures, increased human use of and access to fish-bearing streams could cause sloughing or eroding of trail shoulders; disturbance to spawning fish by humans, horses, and pets at stream crossings; fish poaching; trash and debris in the streams; and untreated pet or horse waste entering streams.

For all Build Alternatives, trail design elements (stabilization, signs, retaining walls, and fencing) and human behavior controls (regulations) would be put in place and enforced to minimize and mitigate these impacts. Inappropriate pet waste disposal along the trail alignment could cause an increase in nutrient

enrichment and fecal coliform bacteria and thereby degrade water quality. However, trail design elements such as pet waste disposal boxes, clear zones, and planting strip areas adjacent to the trail would minimize the potential impacts from animal waste. Furthermore, because the No Action Alternative already also allows pets on the trail, the Corridor Alternative is not expected to cause a major increase in instream pet waste compared to existing conditions.

Horse manure is not expected to result in a substantial increase in nutrient enrichment of streams within the East Lake Sammamish/Bear Creek Basins because (1) fences would prevent horses from entering wetlands and streams; (2) vegetation located between the trail and waterbodies (streams, wetlands, and Lake Sammamish) can filter nutrients and sediment, thereby protecting water quality; and (3) most of the horses using the trail are expected to come from within the East Lake Sammamish/Bear Creek Basins, and thus their potential for contributing nutrients to in-basin streams and Lake Sammamish already exists. Further evaluation of the risk to water quality and water resources from horse manure is provided in Section 3.2, Surface Water and Water Quality.

Trail Maintenance. Maintaining the trail would require removing sediment and vegetation to prevent blockage at ditches, culverts, and underneath bridges. While culvert and bridge maintenance typically improves streamflows and fish passage, it can potentially disturb sediments and debris and release them downstream. This can impact fish. To a large degree, these impacts are linked to the existing water conveyance facilities of the former railbed, many of which are outdated. These impacts would be reduced by the fact that most (but not all) large accumulations of sediment and vegetation develop in the smaller watercourses, not in the fish-bearing streams, where high flows flush these accumulations.

3.5.3.2 East A Alternative

Construction Impacts

The East A Alternative proposes the extension or replacement of culverts in 22 different streams, with 12 of the streams considered fish-bearing. These culverts currently pass under East Lake Sammamish Parkway or the Interim Use Trail (i.e., the former railbed), and they need to be lengthened in order to accommodate the increased width of the trail and the shifting of portions of the trail to the east. As discussed under the Corridor Alternative, the replacement and extension of culverts could have direct impacts on fish, including removing fish and diverting the streamflow from construction areas, sedimentation, and disturbance of fish by humans or equipment. Because the East A Alternative proposes extensions or replacements of culverts in five more fish-bearing streams than the Corridor Alternative, slightly more potential direct impacts to fish would result from the East A Alternative.

Operation Impacts

When compared to the other alternatives, both of the East Alternatives would have a slight potential for greater impacts to stream habitat conditions within the study area over the long term for several reasons:

- The East A Alternative would require the maintenance of more culverts, ditches, and vegetation than the Corridor Alternative, resulting in a slight chance of negative effects to fish and fish habitat (from sedimentation, in-water work, etc.). More maintenance is required because portions of the paved multi-use trail leave the existing Interim Use Trail alignment and run along the Parkway while pedestrians and equestrians would continue to use the Interim Use Trail alignment. Both areas would need to be maintained.
- The direct impacts of culvert extension would likely be greater for the East A Alternative than for the Corridor Alternative because more culverts would be extended (Table 3.5-3). This would lead

to more impacts on fish-bearing streams. However, as with the Corridor Alternative, culvert design, BMPs to control sediment and erosion, and careful timing of work would seek to minimize impacts of culvert replacement and extension activities.

• For the East A Alternative, riparian buffer impacts are defined as the portion of the riparian buffer that would be permanently cleared of vegetation in order to accommodate the widened trail. The width of the buffer is defined by the critical areas ordinance of the applicable local jurisdiction.

For the East A Alternative, the total area of buffer impacts along the entire trail alignment would be approximately 134,925 square feet (or 3.10 acres) (Table 3.5-4). These buffer impacts are expected to be similar but slightly greater than those for the Corridor Alternative. Of the total riparian buffer impact area, 77,924 square feet (or 1.79 acres) represent impacts to streams classified as potentially or documented fish-bearing, while 57,001 square feet (or 1.31 acre) represent impacts to non-fish-bearing streams. The area of clearing varies widely along individual streams, ranging up to as much as 19,000 square feet (or 0.44 acre). Of the 33 streams that would experience impacts to their riparian buffers under the East A Alternative, 16 would experience impacts to less than 2,500 square feet (or 0.06 acre). The remaining 16 streams would experience the largest areas of buffer impacts, primarily because most of these streams (i.e., Stream 0143H) flow parallel to the alignment for some of their length (see Table 3.5-4).

- Under the East A Alternative, several streams, including Pine Lake Creek and Many Springs
 Creek, would need to be permanently shifted to accommodate the new location of a wider trail
 alignment.
- The East A Alternative proposes an additional 18.4 acres of new non-pollution-generating impervious surface along the project corridor due to the construction of the trail surface, sidewalks, curbs and gutters. Of this area, approximately 12.7 acres is considered effective impervious area that has a potential to impact streams or ditches (see Section 3.2, Surface Water and Water Quality, for further details). Runoff from these areas would not contain the types of pollutants that are typically associated with the use of motorized vehicles (oil, metals, etc.). In addition, 2.3 acres of pollution-generating impervious surface would be added for the construction of the parking area and restrooms. The effective impervious surface area is similar to (only 1.5 acre more) than the Corridor Alternative, and indirect effects would likely be similar to those discussed for the Corridor Alternative.

3.5.3.3 East B Alternative

Construction Impacts

Potential construction impacts due to the East B Alternative are identical to those described for the East A Alternative.

Operation Impacts

The potential impacts of the East B Alternative are identical to those of the East A Alternative with the following exception. The East B Alternative proposes closing portions of the existing Interim Use Trail. This would reduce operation impacts in these closed portions. However, most of these operation impacts (such as the generation of horse manure) would simply be shifted east to the trail alignment along the Parkway. King County would continue to maintain the corridor in the portions closed to the public.

3.5.3.4 Continuation of the Interim Use Trail Alternative

Construction Impacts

The Continuation of the Interim Use Trail Alternative proposes construction of parking and trail access features. Because appropriate BMPs would be applied during construction, and these facilities would not be located on or adjacent to existing fish-bearing streams, no impacts to streams are expected.

In addition, a length of trail extending north beyond the current terminus of the Interim Use Trail would be constructed as part of this alternative. Some portion of the trail under SR 520 would be paved. However, the paved distance would be relatively short, and stormwater runoff would not be in a location or of a magnitude to deleteriously affect the hydrology of Bear Creek. Careful placement of gravel ballast along the proposed corridor would minimize impacts to Bear Creek. Even if a small amount of this clean gravel were to enter the stream, no negative impacts to fish species would be expected. No inwater work would occur within Bear Creek and only minor alterations to the existing footbridge over Bear Creek would be made (e.g., installation of hand railings or replacement of surface).

Operation Impacts

The potential operation impacts to fish resources and aquatic habitat under the Continuation of the Interim Use Trail Alternative would be similar to those for the No Action Alternative. The primary differences would be the extension of the trail from NE 70th Street to the Bear Creek vicinity, the addition of parking and restroom facilities, and the operation and maintenance of the trail beyond the year 2015. This alternative would not extend any culverts or create new impervious surface outside of these facilities.

3.5.3.5 No Action Alternative

Construction Impacts

The No Action Alternative would have no construction impacts.

Operation Impacts

The impacts under the No Action Alternative are not expected to differ from those described in the SEPA EIS (King County, 2000) and NEPA EA (FHWA and WSDOT, 2002) for the Interim Use Trail. These impacts were primarily the potential for instream sedimentation due to eroding trail ballast and ongoing maintenance, and the potential increases in human disturbance within project area streams. Impacts would be associated with the maintenance and operation of the Interim Use Trail through 2015.

3.5.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Potential long-term, indirect impacts, such as impacts to stream hydrology due to changes in stormwater runoff, were discussed above as direct operation impacts. No other indirect impacts are anticipated.

3.5.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result

from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Overall, the proposed project would not add substantially to the cumulative effects of past, present, and future actions on fish resources and aquatic habitat. The form and function of the aquatic habitat and fisheries resources in the study area have been affected by a variety of past actions. The construction and operation of the railroad and East Lake Sammamish Parkway have been a major cause of the degradation and isolation of habitats. Implementation of the Master Plan Trail would incrementally add to the degradation in the watershed as a whole; however, overall the proposed project would not substantially add to the cumulative impacts in the watershed.

Furthermore, streams that could be affected by the project lie partially or wholly within a designated Urban Growth Area. Urban growth and development, including the construction of an extensive road network, have had large impacts on the study area. Extensive residential development on the Sammamish Plateau has substantially altered stream hydrology, erosion, and sedimentation.

If the proposed East Lake Sammamish Master Plan Trail is constructed and maintained as described in the Build Alternatives, the cumulative impact of trail bed construction, ditch and culvert maintenance, and operation of the trail under the Build Alternatives could lead to a slight alteration of stream hydrology and a temporary increase in localized sediment production in some study area streams. However, this would not be expected to adversely affect local fish resources. In some cases (the Corridor and East Alternatives), some habitat conditions, such as fish passage, would improve. As part of the proposed Build Alternatives, mitigation measures would be implemented to offset potential impacts.

3.5.6 Mitigation Measures

The mitigation approach would be created based on regulations, guidance, and consultations with local, state, and federal resource protection agencies. The design and regulation process would ensure that adverse impacts would be mitigated so that no significant unavoidable adverse impacts would result. Strategies to avoid and minimize stream and buffer impacts were guiding principles in the preliminary design stage of this project and are incorporated in the plans shown in Volume II. These multiple strategies (such as using retaining walls, reducing trail widths, shifting alignments) are directly applicable to streams and stream buffers and are discussed in detail in Section 3.3, Wetlands. King County would continue to apply these strategies and those discussed below to reduce impacts during the design, permitting and construction phases of the project. Most of the mitigation measures discussed below could be applied to all Build Alternatives, although the amount of mitigation needed varies by alternative, depending on the magnitude of the impacts (e.g., amount of riparian clearing).

3.5.6.1 Erosion Control during Construction

BMPs would be implemented as necessary to control erosion and protect water quality in compliance with the Washington Administrative Code and/or the construction NPDES permit. Care would be taken while laying asphalt around stream crossings and while installing temporary fences to prevent silt, asphalt, or concrete from entering stream channels. Trail shoulders would be stabilized where needed in areas adjacent to streams prior to trail surfacing to prevent erosion and sloughing. Refer to Sections 3.1 and 3.2 of this EIS for a more detailed discussion of measures to prevent sedimentation impacts.

3.5.6.2 Protection of Fish during Stream Diversions

BMPs to reduce potential impacts include dewatering during the driest time of the year when many ephemeral streams have stopped flowing and when migrations of salmonids are least likely. Diversions of streams around instream work areas (e.g., during culvert extensions or replacements) would be designed to both minimize sedimentation and ensure the removal of fish. The work area would be screened off to remove any fish prior to dewatering and to prevent recolonization prior to completing construction. Instream work would occur over the shortest period possible, limiting the duration of the diversion.

3.5.6.3 Construction Timing

Construction activities in or near fish bearing stream crossings (e.g., culvert extensions or replacements) would be completed during summer low-flow periods to the extent practical, and outside of the fish-spawning period, to reduce the potential disturbance to spawning or migration of salmonid species. All wWork windows would beare established in consultation with WDFW (as listed within the Hydraulic Project Approval permits) and with U.S. Fish and Wildlife Service and NOAA Fisheries (during consultation on the effects of the project on species listed under the Endangered Species Act). These work windows should also be adequate to address noise impacts to spawning fish.

3.5.6.4 Revegetation of Disturbed Riparian Areas

All of the local municipalities with jurisdiction over stream buffer mitigation require that (1) there be no net loss of stream functions and no impact on stream functions above or below the site due to approved actions, and (2) buffer areas should be replanted with native vegetation which replicates the optimal in species, sizes and densities. These requirements equate to a 1:1 ratio for riparian buffer disturbance to buffer replacement/enhancement. The Corridor and East Alternatives would require similar areas for buffer mitigation: 3.00 acres for the Corridor Alternative and 3.10 acres for the East Alternatives. Buffer mitigation would not be required for the Continuation of the Interim Use Trail and No Action Alternatives.

Two approaches could be used to mitigate the effects of clearing riparian vegetation. The first approach would involve planting or underplanting native riparian vegetation to improve habitat and provide stream shading along each of the streams that would be affected by clearing within the riparian buffer. The extent of riparian planting would be dictated by the extent of the clearing impacts. In many cases, the limited size of the right of way may preclude planting riparian vegetation in reaches where none currently exists. Therefore, it is possible that the primary focus of this mitigation approach would be on the underplanting of currently vegetated areas, increasing plant density, or increasing numbers of native trees and shrubs.

The second approach to mitigating impacts to riparian buffers involves larger-scale revegetation along fish-bearing streams outside the study area (either upstream or off-site within the Lake Sammamish drainage basin). This approach has several advantages:

- The mitigation efforts could be concentrated along a stream where salmonid use is confirmed and where stream reaches have been identified as lacking in riparian vegetation, stream shading, large woody debris, or bank stability.
- The revegetation efforts can be large enough to improve important stream processes and functions, such as stream temperature, large woody debris input to streams, nutrient cycling, bank stabilization, and floodplain functions, in a meaningful and measurable way.
- Maintenance, monitoring, and adaptive management techniques would be more efficient and effective on one or two large parcels than on dozens of small parcels.

Many of the individual streams affected by the Build Alternatives would undergo small amounts (less than 2,000 square feet) of clearing in the riparian buffers due to construction of the proposed project. The small size of these individual impact areas, coupled with the fact that many of these streams do not contain salmonids, indicates that effects to fish from clearing would be small in magnitude and difficult or impossible to measure. Mitigation for small buffer impacts to individual fish-bearing streams and clearing impacts at all non-fish-bearing streams may consist of the revegetation of an off-site area (either upstream or in another stream basin along the project corridor) where riparian restoration has a greater chance to improve the functions and processes of fish-bearing streams.

At fish-bearing streams with larger buffer impacts, priority would be given to revegetate the remaining stream buffer on-site. However, this may not be possible in all cases because the scope of on-site mitigation activities may be limited to the King County right of way in some cases.

The combination of both on-site mitigation (where it is both feasible and beneficial) and off-site mitigation could allow King County to meet the 1:1 stream buffer mitigation requirement and maintain existing riparian functions of fish-bearing streams along the project alignment, all while substantially improving riparian quality and fish habitat at one or several other areas either within or outside the alignment corridors.

3.5.6.5 Timing of Culvert Maintenance

For all alternatives, all routine instream culvert maintenance would occur between June 15 and September 15, unless otherwise authorized by WDFW and the local jurisdiction, to avoid sediment impacts to streams during critical salmonid spawning and incubation periods.

3.5.6.6 Measures to Minimize Disturbance of Streams during Trail Operation

The trail would be fenced or screened at stream crossings to protect fish from human disturbance and to maintain riparian vegetation. Entry of trail users to streambanks and stream channels would be prohibited to prevent disturbance and erosion. Leashes would be required to prevent dogs from entering streams and harassing fish. Appropriate signs would be placed at stream crossings to explain the reasons for restrictions.

3.5.7 Significant Unavoidable Adverse Impacts

None of the alternatives are expected to result in significant, unavoidable, long-term adverse impacts to fish. Most short-term, construction-related impacts can be mitigated. Long-term operation impacts from trail use are also not expected to be significant and can be mitigated as described earlier.

3.6 Land Use and Shorelines

This chapter describes existing land use and shoreline issues and regulations in the project vicinity. It then evaluates potential impacts of the project alternatives and describes potential mitigation measures.

3.6.1 Studies and Coordination

Information was compiled from a variety of sources, including King County and local government sources. Information on existing conditions was verified through site visits.

3.6.2 Affected Environment

3.6.2.1 Current Land Use

The Master Plan Trail alternatives pass through the Cities of Issaquah, Sammamish, and Redmond. Single-family residential use is the predominant land use along all of the alternative alignments. The majority of the area adjacent to the proposed Master Plan Trail is urban-density residential, with a density of 4 dwelling units per acre (King County, 2003). Private beaches and undeveloped properties are located among the single-family residences. Commercial and industrial businesses are located adjacent to the proposed trail in the Cities of Issaquah and Redmond; a single commercial business property is adjacent to the proposed trail in Sammamish.

3.6.2.2 Historical and Existing Uses of the Railroad Right of Way

The Seattle, Lake Shore, and Eastern Railway incorporated in 1885 and began serving Issaquah in 1888 to ship coal and provide passenger service. The line became part of Northern Pacific around 1892 and eventually the Burlington-Northern Railroad about 1970 (Issaquah Historical Society, 2000).

In 1981, Burlington-Northern announced that the Redmond-Issaquah line was under consideration for abandonment (Issaquah Historical Society, 2000). As of 1994, the Issaquah Darigold plant used the line three times a week, but no passenger service existed at this time. In 1996, Burlington-Northern stopped using the railroad right of way. The corridor was subsequently railbanked and King County purchased the railbanked corridor in 1998 as discussed in Chapter 1, Section 1.3.2.

In 2003 and 2004, the County developed the Interim Use Trail in the Cities of Issaquah and Redmond. Construction of the Interim Use Trail in the City of Sammamish was completed in 2006. The Interim Use Trail is now open to public use.

3.6.2.3 Local Comprehensive Plans, Land Use, and Shorelines

The following section discusses the Comprehensive Plans and shoreline regulations for the Cities of Redmond, Sammamish, and Issaquah. Comprehensive Plans were examined for applicable policies related to land use, parks/recreation, transportation, and capital facilities. This section also discusses land use and zoning designations for the proposed Master Plan Trail and adjacent land uses. Finally, shoreline management master programs were reviewed for each of the cities and King County. Table 3.6-1 summarizes the current land uses, zoning, and shoreline designations of each trail segment.

Table 3.6-1. Land Use Characteristics in Cities along Project Corridor

LAND USE	Zoning	SHORELINE DESIGNATION
City of Issaquah		
Community Facilities and Future East Lake Sammamish Trail. Lowdensity residential, park and open space, industrial, and commercial.	Future East Lake Sammamish Trail, and Single Family Suburban, Single Family Small Lot, Retail, and Light Industrial. Trails are generally permitted in these zones.	Conservancy Riparian designation. Shoreline substantial development permit would be needed.
City of Sammamish		
Low-density residential (1 to 6 dwelling units per acre), medium-density residential (12 dwelling units per acre), and park and open space.	Urban Residential of varying densities (R-1, R-4, R-6, and R-12) but predominantly R-4 (4 dwelling units per acre). Trails are allowed in all zones.	Conservancy and Rural designations; public pedestrian and bicycle trails are allowed adjacent to water bodies as long as recreational development is permitted in the underlying zoning. No filling, excavating, or regrading of more than 25 percent of the portion of the site within the Conservancy Environment. Shoreline substantial development permit would be needed.
City of Redmond		
Low- to moderate-density residential, moderate-density residential, park and open space, manufacturing park, commercial, and city center.	R-4 (low- to moderate-density housing), R-8, R-12 (moderate-density housing), GC, GC/C (general commercial), MP (manufacturing park), and BP (business park). Trails are allowed within these zones.	Rural designation; public pedestrian and bicycle trails are allowed adjacent to water bodies as long as recreational development is permitted in the underlying zoning. Shoreline substantial development permit would be needed.

City of Issaquah

Approximately 2.2 miles of the proposed Master Plan Trail are located within the City of Issaquah. Existing land uses in the area along the proposed Master Plan Trail include residential, commercial, office, and quarry mining. The City's future plans for the area are for mixed-use development that includes increased housing and provision of transportation alternatives other than single-occupancy vehicles. Based on the City's stated projections, the population of the City of Issaquah is projected to increase at a 0.5 percent annual growth rate from 2001 to 2022 (City of Issaquah, 2005).

In May 2003, the City of Issaquah's citizens voted to annex a portion of unincorporated King County land northeast of Lake Sammamish State Park and adjacent to the City of Sammamish—the Providence Point/Hans Jensen Annexation. The annexation became effective in August 2003. The area's zoning is comparable to the County's previous zoning. In Issaquah's municipal code (18.06.070), a newly annexed area must have the most comparable City zoning to what was in effect under the County's jurisdiction.

City of Issaquah Comprehensive Plan

The transportation policies included in the City of Issaquah Comprehensive Plan encourage "preservation of the existing Burlington-Northern Rail facilities for rail transportation purposes." The City's Urban Trails Plan, which was adopted as part of the Comprehensive Plan, specifically designates the rail corridor as part of the City's non-motorized transportation trail system.

The City's Comprehensive Plan also states that there should be regional coordination and cooperative planning efforts with other jurisdictions in order to provide recreational facilities that are beyond jurisdictional boundaries.

Although the proposed trail would be managed by King County, the City of Issaquah would provide additional recreational facilities to accommodate future growth within its limits. The City of Issaquah adopted level of service standards for parks in December 1999 that would include the proposed trail in calculations of recreation supply for future planning purposes (City of Issaquah, 2005).

City of Issaquah Land Use

The land use designations for the proposed Master Plan Trail are Community Facilities and Future East Lake Sammamish Trail (City of Issaquah, 2005). The current land use is the Interim Use Trail. Land uses adjacent to the proposed trail are open space and recreation, residential, commercial (office and retail), and industrial.

City of Issaquah Zoning

The zoning on the former rail corridor is predominantly Conservancy Recreation with a Future East Lake Sammamish Trail designation. One of the purposes of the Conservancy Recreation zone is to "provide and preserve local, community and regional open space and environmentally critical areas, parks and the City's trailheads and related recreation areas" (City of Issaquah, 2005).

Short segments of the corridor within the recently annexed Providence Point/Hans Jensen area have Single Family Suburban and Single Family Small Lot zoning designations. Short segments of the corridor just to the north and south of I-90 have Retail (south of I-90) and Light Industrial (north of I-90) zoning designations. With an administrative review, trails are generally permitted in the residential, retail, and light industrial zones.

The City of Issaquah has enacted limitations on land uses based on the number of peak hour trips added to the City's transportation system. The regulations are part of the Transportation Concurrency Management section of the Issaquah Municipal Code (IMC 18.15, Division II). The limitations are more restrictive for new development than for redevelopment of a site. The transportation concurrency review is to be completed before application for any Development Review Permit.

City of Issaquah Shoreline Regulations

The City's Shoreline Master Program, adopted in October 1990, establishes goals and policies, designates shoreline environments, and sets shoreline standards and uses. The proposed trail is adjacent to wetlands associated with Issaquah Creek and is designated Conservancy Riparian. Recreational uses are permitted in this environmental designation. The North Fork of Issaquah Creek would be crossed by the Master Plan Trail, in addition to wetlands that are within the proposed alignment and adjacent to the trail. Development within Shoreline areas is reviewed for consistency with the policies and procedures of the Shoreline Master Program for the City. The City will follow King County's Shoreline Regulations for areas recently annexed into the City until the City adopts its own regulations. The permitting requirements are essentially the same under either jurisdiction's regulations.

City of Sammamish

Approximately 7.2 miles of the proposed Master Plan Trail are within the City of Sammamish. The primary land use adjacent to the alternative alignments is single-family residential. The density is

typically 4 dwelling units per acre. Some areas along the waterfront adjacent to the proposed trail are private recreational properties, owned by individuals or community groups. The City is planning for an additional 3,000 to 5,000 housing units between 2001 and 2022 (City of Sammamish, 2004).

City of Sammamish Comprehensive Plan

The City of Sammamish land use planning goals and policies promote connectivity between neighborhoods and state that the City should plan urban trail systems for multi-modal access to existing and new parks as an alternative to automobile access. According to the Final Parks, Recreation and Open Space Plan and the Trails, Bikeways and Paths Plan (both adopted in December 2004), the City's trail system should provide public access and visual corridors, link neighborhoods, activity centers, natural areas, and parks together. Sidewalks, bike paths, and trails should be designed to provide safe linkages between residential and non-residential areas.

One of the City's transportation goals is to create desirable, safe, and convenient environments that are conducive to walking and bicycling or other non-motorized uses, that address commuter and recreational bicyclist needs, and that provide for travel throughout the City as well as connections to local parks and regional facilities. City policy states that separation of pedestrian facilities from traffic should be incorporated in City design standards (City of Sammamish, 2004).

City of Sammamish Land Use

The Comprehensive Plan land use designations adjacent to the East Lake Sammamish Trail alternative routes are mostly low-density residential (1 to 6 dwelling units per acre). There are some areas of medium-density residential (12 dwelling units per acre). One property along East Lake Sammamish Parkway near SE 33rd Street is designated Neighborhood Business. The current land uses adjacent to the alternative alignments are single-family detached residential uses and one commercial property.

City of Sammamish Zoning

The City of Sammanish zoning designations in the area surrounding the alternative routes are almost exclusively Urban Residential (UR) with densities varying between 1 and 12 dwelling units per acre, with the most common being R-4 (4 dwelling units per acre). One property along East Lake Sammanish Parkway SE near SE 33rd Street is zoned Neighborhood Business (NB). There is also a Special Overlay District that pertains to erosion hazards near a sensitive water body (SMC 21A.10).

Trails are permitted uses in all zones subject to an administrative code compliance review (SMC 21A.100) (City of Sammamish, 2003).

City of Sammamish Shoreline Regulations

The City is in the process of updating the Shoreline Master Program to be in compliance with the Washington State Shoreline Management Act and the state shoreline management guidelines adopted in 2003. December 2009 has been targeted as an adoption date of the City's updated Shoreline Master Program. The City's current shoreline regulations are part of the Sammamish Municipal Code (SMC Title 25). The area's shoreline designations are Conservancy Environment and Rural Environment. Within the Conservancy and Rural Environments, public pedestrian and bicycle pathways are allowed adjacent to water bodies but must be permitted by the underlying zoning (SMC 25.20.170, 25.25.120, and 25.30.120). Within the Conservancy Environment, recreational development is limited to filling, excavating, or regrading of no more than 25 percent of the portion of the site within the Conservancy Environment.

Both the Conservancy and Rural shoreline designations require that developments maintain setbacks, provide easements, or otherwise permit a trail to be constructed or public access to continue where there is a proposed trail. These policies also pertain to sites that are presently being used and have historically been used for public access (SMC 25.25.030 and 25.30.030).

City of Redmond

Approximately 1.6 miles of the proposed trail are located within the City of Redmond. All Build Alternative alignments follow the same route within the Redmond city limits. Existing land use adjacent to this portion of the proposed trail is primarily commercial and park use, but some light industrial and residential uses are also present. Approximately 15 commercial/business park buildings and 4 residential dwellings are within 200 feet of the proposed trail. Marymoor Park is located to the west of the proposed trail. By 2012, the City of Redmond anticipates a maximum population of 56,550 residents, an approximate 60 percent increase over its 1990 population of 35,800.

Redmond Community Development Guide (RCDG) and Comprehensive Plan

The City of Redmond Land Use Policies state that trail and pathway systems should be used to provide transportation links and visual corridors to tie the City together. Sidewalks, bike paths, and trails should link residential, commercial, and manufacturing areas.

The bicycle and pedestrian transportation element of the Comprehensive Plan recognizes that developing safe, attractive, and efficient bicycle and pedestrian circulation environments in the City is important to provide alternatives to the automobile. The bicycle and pedestrian transportation element also identifies the proposed East Lake Sammamish Master Plan Trail as a Class I pathway. A Class I pathway is described as a bicycle facility that is physically separated from motorized traffic and has a minimum width of 5 feet when used exclusively by bicyclists (one-way travel), 8 feet for two-way bicycle travel, and 12 feet when shared with pedestrians.

The City of Redmond Trails Plan has recreation as its main objective, with transportation being secondary. Trail policies call for using both paved and unpaved pathways that are separate from streets and road pavement when possible. When there is no option but to locate a trail on a street right of way, the Bicycle Way Plan (located in the transportation element) is followed. Within the Trails Plan, the East Lake Sammamish Trail is identified as a proposed multi-use trail.

The proposed trail is located in the Southeast Redmond Neighborhood as designated by the City's Comprehensive Plan. Policies for Southeast Redmond promote travel via bike, walking, and transit to reduce reliance on single-occupancy vehicles. Bicycle/pedestrian connections from the planning subarea to downtown Redmond are encouraged.

The City's service standard for trails is 0.25 mile per 1,000 population.

City of Redmond Land Use

According to the City of Redmond Comprehensive Land Use Plan Map (2004), the City's land use designations for areas adjacent to the proposed trail are low- to moderate-density residential, moderate-density residential, park and open space, manufacturing park, and commercial (City of Redmond, 2004). Existing land uses are primarily commercial and park use, but some light industrial and residential uses are also present.

City of Redmond Zoning

The City's zoning code is a component of the RCDG. The zoning designations along the proposed trail are low- to moderate-density housing (R-4), moderate-density housing (R-8, R-12), general commercial (GC, GC/C), and manufacturing park (MP). Trails are permitted within all of these zoning designations.

City of Redmond Shoreline Regulations

The City's Shoreline Master Program (RCCP 20B.95) is included in the Comprehensive Plan and codified in the RCDG (Title 20D.150). Shorelines that are governed by the City's shoreline regulations are all lands within 200 feet of the line of ordinary high water on Lake Sammamish, the Sammamish River, Bear and Cottage Creeks, the 100-year floodplain in designated areas, and associated wetlands (RCDG 20B.95.010). Lake Sammamish and its shore are considered shorelines of statewide significance under the state's shoreline regulations (RCW 90.58.030).

Redmond's Shoreline Master Program also contains policies on public access and recreation within a shoreline. Linking shoreline parks and public access points is encouraged through the use of hiking and bicycle paths (RCCP 20B.95.070 (20)(c) and 20B.95.070(40)(e)). A portion of the proposed trail is located within the rural shoreline designation area. Recreation is allowed in all designated shoreline environments (RCDG 20D.150.10-170).

3.6.3 Direct Impacts

Construction of the trail would result in short-term direct impacts to adjacent land uses, such as noise and dust from construction equipment and disruption of local traffic. These impacts would cease once construction is completed. Over the long term, the trail may or may not be consistent with adopted local land use plans and policies depending on the alternative selected, and the operation of the trail may affect overall land use trends. These various types of potential impacts are discussed below for each alternative.

3.6.3.1 Impacts Common to All Build Alternatives

Consistency with the GMA and Adopted Plans and Policies

The proposed trail would be located in the Cities of Issaquah, Sammamish, and Redmond. All three of these cities have developed Comprehensive Plans in accordance with the GMA. The base zoning of all the jurisdictions affected by the proposed Master Plan Trail allows trail uses. There is support for a trail in all of the jurisdictions' Comprehensive Plans. Supporting goals and policies are found not only in the land use elements of local Comprehensive Plans but also in the recreation, capital facilities, and transportation elements. The proposed Master Plan Trail would provide access to local and regional recreation opportunities, connectivity between neighborhoods, and links between neighborhoods and services. The proposed trail also supports the Comprehensive Plan policies of all three cities to promote an increase in alternative modes of transportation.

Shoreline Impacts

The proposed trail alternatives are allowed in each jurisdiction's shoreline regulations. Shoreline substantial development permits would be needed for Issaquah, Sammamish, and Redmond because portions of all four alternative trail alignments are within 200 feet of the shoreline, and the project would exceed \$2,500 in cost.

3.6.3.2 Corridor Alternative

For the Corridor Alternative, land acquisition would not be required and therefore would not impact adjacent land uses or zoning designations. There are no other land use or shoreline impacts beyond those common to all of the Build Alternatives as described above.

3.6.3.3 East Alternatives

From a land use perspective, the impacts of the East Alternatives (East A and East B) are the same. The temporary construction impacts of the East Alternatives would be greater than with the Corridor Alternative because of the greater amount of construction needed adjacent to East Lake Sammamish Parkway.

The East Alternatives would require the acquisition of additional right of way or easements that may impact adjacent land uses (see Section 3.8, Socioeconomics, for further details). The East Alternatives would result in the conversion of a residential use to a recreational use. This would result in the displacement of several residences that are located within the areas affected. While this conversion would result in the permanent reduction of residentially zoned land supply in the local area, it would not significantly impact the local supply of residential land as designated in local Comprehensive Plans. Refer to Section 3.8, Socioeconomics, for further discussion.

Although the East Alternatives are allowed by the zoning of affected properties, the Comprehensive Plan policies for two of the jurisdictions tend to favor separated alignments for non-motorized transportation. For example, the Redmond Comprehensive Plan states: "Trail policies also call for using both paved and unpaved pathways that are separate from streets and road pavement...". The City of Issaquah Comprehensive Plan Land Use Designation Map and City Zoning Map identify the rail corridor as the Future East Lake Sammamish Trail.

There are no other land use or shoreline impacts for the East Alternatives beyond those common to all four Build Alternatives as discussed earlier.

3.6.3.4 Continuation of the Interim Use Trail

For this alternative, land acquisition would not be required and therefore would not impact adjacent land uses or zoning designations. There are no other land use or shoreline impacts beyond those common to all four Build Alternatives.

3.6.3.5 No Action Alternative

Construction and Maintenance

Under the No Action Alternative, the proposed Master Plan Ttrail would not be constructed and use of the Interim Use Trail would end in 2015 without additional environmental review. No construction activities related to building of a trail would result. For as long as King County retains ownership, the County would continue to maintain drainage through the corridor.

Consistency with the GMA and Adopted Plans and Policies

The No Action Alternative is not consistent with several of the Comprehensive Plan goals and policies and land use designations of the Cities of Issaquah, Sammamish, and Redmond. Numerous Comprehensive Plan policies in all of the jurisdictions support separated, non-motorized trail systems for

pedestrian and bicycle access for both recreation and as alternative modes of transportation. Some policies specifically call for development of the proposed Master Plan Trail. For example, the City of Issaquah Comprehensive Plan and Zoning Map specifically designates the railroad right of way as the Future East Lake Sammamish Trail.

A requirement of the GMA is to provide adequate facilities, such as parks and trails, to meet the demands of future growth. Additional recreational areas within the cities and unincorporated King County would need to be found to accommodate future growth. The No Action Alternative does not meet the intent of any of the jurisdictions for providing local and regional recreational opportunities, connectivity between neighborhoods and services, and alternative modes of transportation, as stated in their adopted Comprehensive Plans.

Railbanking Status

Under the No Action Alternative, in 2015 in the event of no additional environmental review the railbanked status of the Interim Use Trail would no longer meet the provisions of Section 8(d) of the National Trails System Act (16 USC §1247(d) and 49 CFR §1152.29). As described in Section 2.5.4, No Action Alternative, if King County did not operate a trail on this corridor beyond 2015, it would be offered to other non-profit organizations or government agencies for operation of a trail. If no other non-profit organization or government agency wanted to operate a trail, King County would request that the federal Surface Transportation Board vacate the federal Notice of Interim Trail Use. At that time, Burlington Northern Santa Fe would be allowed to dispose of the property.

3.6.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). The East Alternatives would require the acquisition of additional right of way or easements that may impact adjacent land uses. While the trail would be allowed by the zoning designations of affected properties, the acquisition of additional right of way may impact future development plans on the properties where right of way acquisition or easements are necessary.

3.6.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7)

Increased population growth in the region may lead to traffic, parking, access, and circulation problems. To a great extent these impacts are already anticipated and addressed in the local jurisdiction Comprehensive Plans that plan for and accommodate growth. The local jurisdiction Comprehensive Plans and ordinances call for suitable land uses in areas supported by transportation facilities. The local plans also allow for increased multi-use transportation facilities to serve future growth.

The proposed Master Plan Trail would provide expanded multi-use transportation facilities which would help to relieve the potential negative impacts associated with growth, as anticipated in the Comprehensive Plans. When considered in combination with the encroaching urbanization of the corridor, the proposed Master Plan Trail would not add to adverse cumulative impacts in the corridor and vicinity but instead

would help to relieve traffic congestion by providing an alternative option for transportation and recreation.

3.6.6 Mitigation Measures

Few negative land use or shoreline impacts would result from the proposed Master Plan Trail. Impacts would be associated primarily with temporary construction activity. The following mitigation measures could be used to address the impacts on land use and shorelines resulting from the Build Alternatives.

- Plan and construct the trail in accordance with adopted land use plans and policies.
- Coordinate with all other state and local agencies regarding permits and approvals required in constructing the proposed trail.
- Work closely with affected neighborhoods to minimize land use impacts during construction by notifying businesses and residents of the construction schedule.
- Install signs to delineate the edge of public use and as needed at the beginning of private property.
- Maintain access to residential areas and commercial businesses in the vicinity of the corridor during construction.

3.6.7 Significant Unavoidable Adverse Impacts

The magnitude of the property acquisitions that would occur under East A and East B Alternatives would be a significant unavoidable adverse impact to displaced residents.

No significant unavoidable adverse land use impacts are anticipated from the construction or operation of the Corridor or Continuation of Interim Use Trail Alternatives.

3.7 Recreation

This chapter describes existing park and trail resources in the project vicinity and evaluates potential impacts of the project alternatives. Potential impacts to existing recreational uses, the regional and local trail supply, and recreational demand are discussed for each action alternative and the No Action Alternative. Potential impacts related to trail safety are also discussed. Mitigation measures are identified.

3.7.1 Studies and Coordination

Information was compiled from King County, state, and local government sources, geographic information systems (GIS), and field visits. The evaluation included trails, developed parks, and potential park and open space areas (although some of these land uses may not have been specifically designated as a park or recreation facility by the local jurisdiction). Relevant plans, policies, and regulations are discussed for all jurisdictions that would be crossed by the proposed trail.

3.7.2 Affected Environment

3.7.2.1 Current Use of Project Corridor

The project corridor is currently designated as the Interim Use Trail. The Interim Use Trail allows public pedestrian and bicycle use of the railbanked corridor until such time that planning for and implementation of the long-term, permanent trail can be completed. The trail is completed and open to the public.

3.7.2.2 Regional Trail System

King County owns and manages many local and regional trails. At present, there are over 175 miles of improved multi-purpose trails and over 300 planned miles of regional trails (King County, 2004). An additional nearly 70 miles of right of way, which are within public domain awaiting improvement, will connect to existing trails in the region and create a continuous network of non-motorized transportation corridors. Connections to the regional trail system are described in Chapter 1 and illustrated in Figure 1-1 (pg 1-2).

Of the existing trails within the King County trails system, the Burke-Gilman and Sammamish River Trails are perhaps the most well-known and most highly used paved trails. User counts and surveys have been conducted for these trails every five years from 1980 to 2005. Use of these trails has increased over the years since the trails opened. The most notable increases have occurred as the undeveloped gap between the Burke-Gilman and Sammamish River Trails was developed for use in two phases between 1985 and 1993. For this study, the two trails were treated as a single unit for data collection and evaluation purposes.

Weekend cyclists on the Burke-Gilman and Sammamish River Trails make up approximately 72 percent of the users, while pedestrians make up approximately 25 percent (Moritz, 2005). Use is primarily recreational on weekends. Bicyclists average between 11 and 18 miles per trip and pedestrians average between 4 and 5 miles per trip (King County, 2004). The number of trail users passing data collection locations on a Saturday in May 2005 was 9163; an increase of 861 trail users since the 2000 survey. The number of trail users passing data collection locations on Tuesdays in May 2005 was 8010; an increase of 1,249 trail users since the 2000 survey (Moritz, 2005).

3.7.2.3 Existing Parks, Recreational Areas, and Open Space in Project Vicinity

Figures 3.7-1 (pg 3.7-3) and 3.7-2 (pg 3.7-4) illustrate the existing parks, recreational areas, and open space in the vicinity of the proposed East Lake Sammamish Master Plan Trail.

Issaquah Segment

Lake Sammamish State Park is located at the southern portion of the corridor. This park contains approximately 519 acres and 6,858 feet of waterfront. The park provides many recreational amenities and opportunities such as swimming and picnicking. The park contains restroom facilities, a 2,300-space day-use parking lot, and a 250 boat-trailer parking area at the boat launch, which is adjacent to the project corridor. Peak usage typically occurs on weekends during summer months. Usage is weather-related; on a sunny summer weekend day the boat launch parking area is at or near 100 percent capacity between 8:30 and 9:00 a.m. and remains filled until approximately 6:00 to 7:00 p.m. (Oakley, personal communication, 2003).

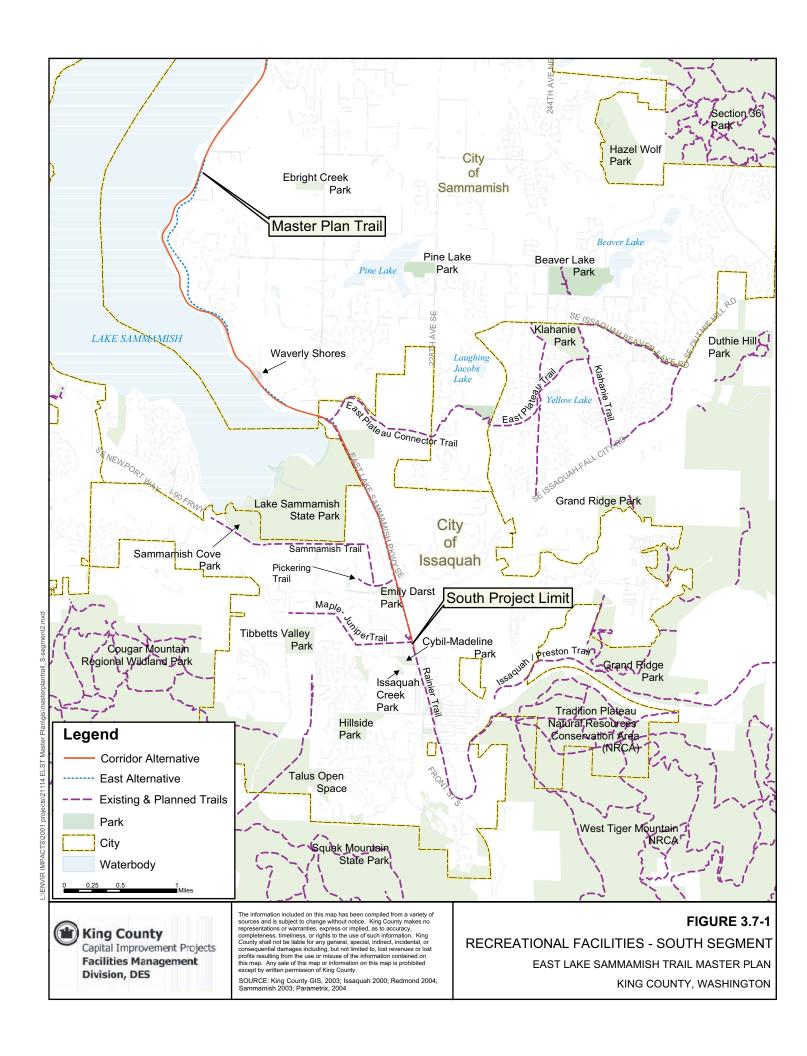
Washington State Parks has begun a facilities development plan for Lake Sammamish State Park. Several development scenarios include changes to the boat launch area of the park, which is near the project corridor (WSP&RC, 2004). Consideration and adoption of a final concept plan by the Washington State Parks and Recreation Commission is expected in 2005 with further planning and environmental review to follow (Herzog, personal communication, 2004).

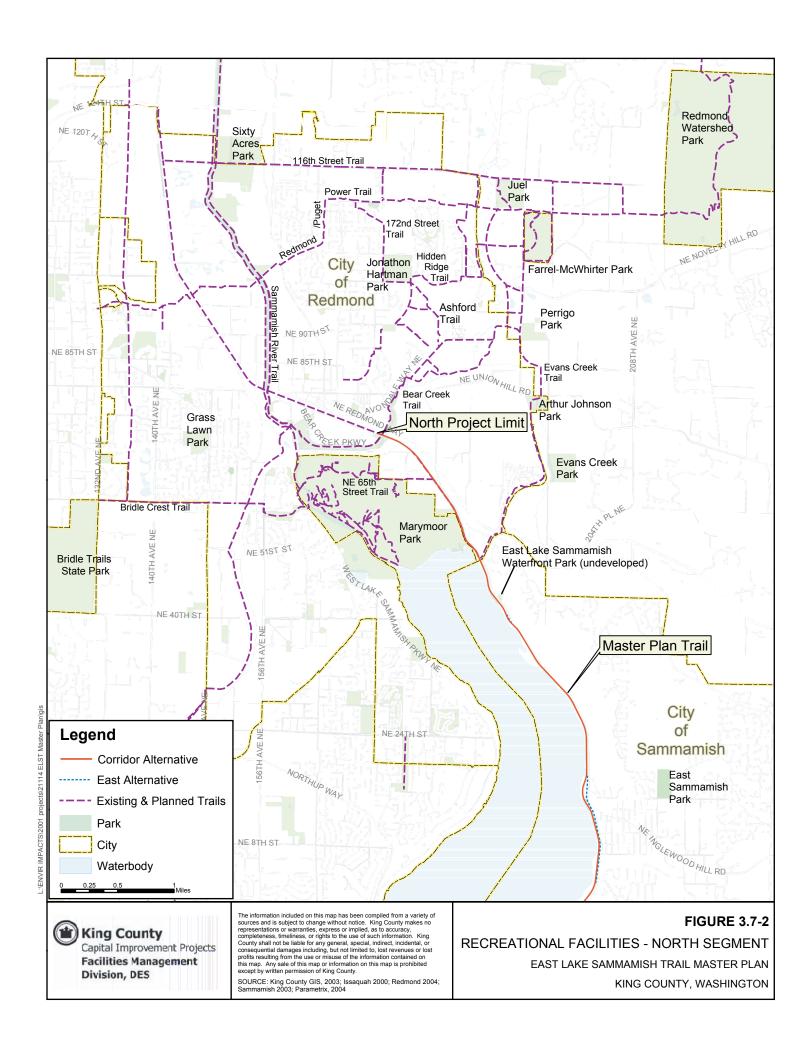
Sammamish Cove Park is a 20.65-acre park located adjacent to the southwest boundary of Lake Sammamish State Park. This King County park is reserved as open space/wildlife habitat with no plans for future facilities.

City of Issaquah parks in the vicinity of the proposed trail include Pickering Farm (a multi-purpose facility) and Emily Darst Park (undeveloped open space). In addition, Pickering Trail is an 8-foot-wide asphalt trail connecting to the Interim Use Trail south of the footbridge over Issaquah Creek. The Pickering Trail connects to the City of Issaquah's Sammamish Trail on the north, which provides walking and bicycle access to Lake Sammamish State Park. Other local trails providing connections with the Interim Use Trail include the Rainier Trail, extending from the southern terminus of the Interim Use Trail (at Gilman Boulevard) along the former railroad corridor, and providing a connection with the Highpoint/Issaquah-Preston Regional Trail to the east. The Maple-Juniper Trail, an east-west trail connection to Issaquah's historic Olde Town, is located within 0.25 mile of the Interim Use Trail.

Sammamish Segment

Recreational facilities in the vicinity of the Sammamish segment are public parks and parkland, some of which are still in the early development stage. The City of Sammamish and the City of Redmond both own undeveloped parkland along the Lake Sammamish shoreline. Future options for these properties include the establishment of the East Lake Sammamish Waterfront Park. This new park would be located just south of NE 49th Place and would utilize a portion of the county-owned trail corridor. The park is envisioned as an open space waterfront access park and may be implemented through a partnership between the Redmond, Sammamish, and King County jurisdictions (Gorremans, personal communication, 2003).





The largest percentage of existing trails in the City of Sammanish are owned by private homeowner associations. The majority of these trails are exclusively for residents of the private community associations that own and maintain these trails. The western portion of the City of Sammanish between 212th Avenue and East Lake Sammanish Parkway (nearest the Sammanish segment of the proposed Master Plan Trail) contains the fewest trails in the City (City of Sammanish, 2004c).

There are up to 10 private beach clubs along the eastern shoreline of Lake Sammamish within the vicinity of the corridor. The Waverly Shores Homeowners Association Private Boat Launch for members who live on Waverly Hills is located along the shoreline of Lake Sammamish adjacent to the proposed trail. The private beach can be accessed via a residential path that crosses the corridor as well as from East Lake Sammamish Shore Lane via SE 33rd Street. Residents tow their boats on boat trailers from Waverly Hills to the boat launch, crossing the corridor (Miglorie, 1999). Inglewood Beach Club and View Point Park Club are examples of community beaches. These private beach clubs are typically owned and maintained by local homeowner groups and are used for swimming, picnicking, and passive recreation activities, such as bird watching and enjoyment of the lake view.

Redmond Segment

King County's Marymoor Park is located at the north end of the corridor. According to the City of Redmond's *Parks*, *Recreation*, *and Open Space Plan* (2004) demand analysis survey results, Marymoor Park is used "considerably more" than any other Redmond city park. This 640-acre park contains a variety of recreational amenities and is bordered by a portion of the corridor for the proposed Master Plan Trail. Marymoor Park has four restroom facilities, each containing 3 to 4 stalls per gender, which can be used by future trail users who access the corridor at its north end. The park has a total of 1,351 parking spaces (641 paved and 710 gravel). At present, parking at Marymoor Park can reach capacity during peak weekend usage periods, and during concerts and other events. During some evenings in the spring and summer months, parking occurs in unauthorized grassy areas (Claussen, personal communication, 2003). King County recently constructed the "Marymoor Connector Trail", which connects the Sammamish River Trail to the East Lake Sammamish Trail via an alignment through Marymoor Park. The connection to East Lake Sammamish Trail would occur south of NE 65th Street in Redmond.

The City of Redmond has over 1,000 acres of developed park land and 17 miles of developed trails. Other trails in the vicinity of the Redmond segment include the King County Sammamish River Trail, which is a major backbone multi-use trail extending from Marymoor Park to the Burke-Gilman Trail in Bothell. A major project sponsored by the City of Redmond is the Bear & Evans Creek Trail & Greenway, a connected habitat, open space, and recreation corridor containing a 9-mile multi-use, non-motorized trail. When completed, the project and its connections to King County trails and other Redmond trails will create 5-, 10- and 20-mile loops in and around the city. The trail and greenway consist of over 100 acres and connect numerous public parks. The project has two main segments with numerous small trail sections being constructed in phases. The Bear Creek Trail segment will ultimately connect the Sammamish River Trail and downtown Redmond to the Evans Creek Trail just west of Perrigo Community Park. A 1-mile portion, currently called the Town Center Trail, extends between the Sammamish River Trail and Redmond Way. Planned construction in 2005 would extend the trail Trail construction in 2006 extended the trail across Redmond Way to the existing underpass at Union Hill Road. The northern terminus of the Master Plan Trail, regardless of Build Alternative, is located 300 feet northwest of Bear Creek, which is the approximate location of the Bear Creek Trail.

The Evans Creek Trail segment will eventually provide a connection from Farrell—McWhirter Park and the Redmond/Puget Power Trail south to the Master Plan Trail corridor at NE 187th Street, utilizing an existing tunnel under East Lake Sammamish Parkway. Between Union Hill Road and NE 95th Street a

1-mile section of the trail <u>wasis being</u> constructed in 2004-2005 with a connection to Perrigo Community Park where parking and restroom facilities are located. <u>Lakeside developers constructed a 1-mile section</u> between the Redmond/Fall City Road and the northern boundary of the subdivision in 2000.

3.7.2.4 Local Equestrian Trails

Most of the equestrian linkages to the proposed Master Plan Trail are in the vicinity of the Redmond segment. The City of Redmond trail system includes Bridle Crest Trail, a 3-mile, soft-surface, multi-use trail linking Marymoor Park to Bridle Trails State Park, a 480-acre park with 28 miles of pedestrian/equestrian trails; and Redmond/Puget Power Trail, a 4-mile multi-use trail linking Farrel_McWhirter Park, Redmond Watershed Preserveark, and several existing and proposed trails to the Sammamish River Trail.

Equestrians are allowed on the Sammamish River Trail between NE 175th Street in Woodinville to Marymoor Park where a separate soft-surface equestrian trail exists (numbers for equestrian use on the trail are not available). The Farrel McWhirter Park trails and the Redmond Watershed Park trail system are designated equestrian/hiker trails.

The Tolt Pipeline Trail is a popular regional trail with access to Redmond Watershed Park to the east and Sammamish River Trail to the west. Other popular equestrian trails in the area include Cougar Mountain, Tiger Mountain, Taylor Mountain, and Squak Mountain trails south of the Issaquah segment.

There are no designated equestrian trails in the City of Sammamish, though informal equestrian use of city parks and trails does occur (Gibson, personal communication, 2004). Beaver Lake Trail serves as a hub to other local trails at Klahanie Park, Hazel Wolf Park, and Dunthie Hill Park. The *City of Sammamish Draft Parks, Recreation, and Open Space Plan* (City of Sammamish, 2004b) includes a preliminary trail classification system providing Class VII designation for equestrian trails. Class VII Trails are intended to draw users from within and around Sammamish and accommodate property owners raising and stabling horses. Trail designations will be further developed as part of a City trails plan. There are currently no trails meeting the preliminary Class VII trail designation in Sammamish.

The City of Issaquah discourages equestrian use on city trails and city downtown areas (MacLeod, personal communication, 2004). Horses are prohibited in city parks and/or playfields without prior approval by the Park Department (Chapter 9.25 City of Issaquah Criminal Code). Horses are not allowed in state parks unless the parks are designated and posted to specifically or conditionally permit such activity (WAC 353-32-070). Horse use has not been designated at Lake Sammamish State Park.

Planned Equestrian Parks and Trails

Planned equestrian parks and trails include a 28-acre equestrian park at Redmond Ridge, a planned community north of Novelty Hill Road and sited near equestrian trails at Redmond Watershed Park. An extension of the Redmond/Puget Power Trail east from Farrel-McWhirter Park through Redmond Watershed Park and with a connection to the 28-acre equestrian park is also planned. Portions of this trail have been developed. An equestrian trail is planned through Dunthie Hill Park and Grand Ridge Park with a connection to the Issaquah-Preston Regional Trail. The West Sammamish Trail, located on the west shoreline of the Sammamish River, is planned as a soft-surface trail for pedestrian and equestrian use from Marymoor Park to Blythe Park in Bothell where it would eventually connect to the Tolt Pipeline Trail. Once completed, the Master Plan Trail would provide an-access to the Evans Creek Trail system, link between Marymoor Park and the Bear Creek Trail systems, linking the existing and planned equestrian trails described above.

3.7.2.5 Relevant Recreation Plans

City of Issaquah

The City of Issaquah has set forth goals and policies for its Parks and Recreation Department for the continued provision of adequate park and recreation facilities in its *City of Issaquah Comprehensive Plan* (2005). Relevant recreation goals and policies are discussed in Section 3.6, Land Use and Shorelines.

The City's *Park*, *Recreation*, *and Open Space Plan* (PRO Plan) (City of Issaquah, 2004) develops a strategy for meeting the City's future park and recreation needs identified directly or indirectly through these goals and policies. The PRO Plan also identifies the *Urban Trails Plan* (City of Issaquah, 1995) and the *Issaquah Area Wildlife and Recreation Trails Plan* (City of Issaquah, 1992), which outline the City's goals for developing an interconnected network of non-motorized trails that promote a pedestrian and bicycle friendly environment in the urban area with connections to other local, regional, and state trail systems. The *Urban Trails Plan* is currently being updated and is expected to be part of the City's Transportation Plan (Smith-Leeson, personal communication, 2003). The associated planning activities are anticipated to enable the City of Issaquah to "promote a pedestrian and bicycle friendly atmosphere in the urban environment with connections to the forested and less urbanized areas within and surrounding the City" (City of Issaquah, 2005).

As part of the development of the PRO Plan (2004), the City undertook a public participation process and community survey. In response to a question about the ranked importance of recreational facilities, trails ranked second highest in importance by surveyed city and non-city residents. Off-street trails were cited by 54% of the survey respondents as being needed within the city (City of Issaquah, 2004).

The City of Issaquah adopted new level of service standards for parks in December 1999 that include the Interim Use Trail in calculations of recreation supply for future planning purposes (Ordinance 2257, effective 12/20/99). Based on these standards, the City is currently meeting and exceeding the level of service for the provision of trails and trailheads. However, based on the public survey, residents have indicated that additional trails and trail connections are needed.

With the completion of two planned urban villages and future annexations, the population of Issaquah is expected to grow from 15,100 (in 2003) to 25,530 in 2022 (City of Issaquah, 2004). The anticipated population increases in the City of Issaquah and the greater Issaquah areas are expected to result in increased demand for recreational trail facilities within and surrounding the City in the future (City of Issaquah, 2004a).

City of Sammamish

The City of Sammamish has set forth goals and policies for its Park and Recreation Department to develop and improve its system of parks, trails, and open space. Relevant recreation goals and policies are discussed in Section 3.6. Land Use and Shorelines.

The *Parks, Recreation, and Open Spaces Plan* (PRO Plan) (City of Sammamish, 2004b) develops a strategy for meeting the City's future park and recreation needs identified directly or indirectly through these goals and policies. As part of the development of the PRO Plan, the City undertook an extensive public participation process and community survey. When participants at one of the workshops were asked to rank individual activities and recreation categories in order of importance, trails and pathways ranked first followed by passive/leisure activities (City of Sammamish, 2004b).

The City has developed a draft *Trail, Bikeway and Paths Master Plan* (2004). A public hearing related to this plan was held on October 21, 2004. Upon adoption, the plan will become an amendment to the City's Comprehensive Plan. The associated planning activities are anticipated to enable the City of Sammamish to achieve "a complete, continuous network of trails and non-motorized facilities throughout the City" (City of Sammamish, 2004c).

Continued population growth will likely lead to an increasing demand for park and recreation facilities within the Sammamish area.

City of Redmond

The City of Redmond has set forth goals and policies for its Parks and Recreation Department to develop and improve an integrated system of parks, trails, and open space (City of Redmond, 2003). Relevant recreation goals and policies are discussed in Section 3.6, Land Use and Shorelines.

The *Parks*, *Recreation*, *and Open Spaces Plan* (PRO Plan) (City of Redmond, 2004) develops a strategy for meeting the City's future park and recreation needs identified directly or indirectly through these goals and policies. As part of the PRO Plan, a user survey was conducted to determine park and recreation facility needs. Acquiring open space for greenways and trails was identified as the most important need by the majority of the respondents to the surveys (86 percent telephone survey, 97 percent FOCUS on Redmond respondents use trails) (City of Redmond, 2004).

In 1995, the Redmond City Council adopted a figure of 0.25 mile per 1,000 population as a level of service standard for trails within the City of Redmond. Additionally, the Park Board and the Trails Commission have identified "Planning Targets" (0.5 mile/1,000 population).

Based on this information, the City of Redmond has determined future trail mile needs. By 2012, the City of Redmond anticipates a population of 56,000 residents. Compliance with the city standards would indicate a need for 11.5 miles of multi-use trails and a future need of 14 miles (2012). The city currently has fully developed 10 miles of trails (this does not include the Interim Use Trail). An additional 4 miles is needed by 2012 for conformance with the city level of service standard. Conformance with Planning Targets would indicate a 2004 need of 23 miles of trails, with 28 miles needed for 2012 conformance (City of Redmond, 2004).

King County

As early as 1971, planning documents for King County and incorporated jurisdictions identified the project corridor as a future regional trail facility. The proposed East Lake Sammamish Master Plan Trail has been mentioned in various planning documents as a key section in the completion of a fully connected regional trail system. The various documents that specifically identify the corridor as a potential East Lake Sammamish Trail are described in the environmental documents for the Interim Use Trail (King County, 2000; FHWA and WSDOT, 2002) and the King County Regional Trail Inventory and Implementation Guidelines (King County, 2004).

3.7.2.6 Conflicts Between Trail Users

The environmental documents for the Interim Use Trail (King County, 2000; FHWA and WSDOT, 2002) discuss conflicts on multi-use trails for the range of users, except equestrians (equestrians are not permitted on the Interim Use Trail). Accidents that occur on multi-use trails result from various factors. These include reckless and irresponsible behavior, poor user preparation or judgment, and unsafe trail conditions (Craig and Wake, 1993; Moore et al., 1992; Moore, 1994).

Of the existing trails within the King County trails system, the Burke-Gilman and Sammamish River Trails are the most highly used multi-use paved trails. Surveys performed for these trails as reported in *Summary Report, Burke-Gilman/Sammamish River Trails, User Counts and Survey Results* (Moritz, 1995) and in a 2000 survey show the most common accidents on these trails are falls and riding into a fixed object (Moritz, 2003). Respondents of the 2000 survey ranked inattentive walkers and intersections as the top perceived safety problems along the trails, followed by speeding cyclists and failure to warn. There were no reported crashes or injury involving equestrian use (Moritz, 2003).

It is usually not desirable to mix horseriding and bicycle traffic on the same shared use path. A bridle trail separate from the shared use path is recommended (AASHTO, 1999). While phone interviews with local equestrian groups revealed few trail user conflicts on area trails, certain conflicts can occur. The conflicts typically mentioned as the biggest concern are conflicts with motorized users, high-speed bikes, and dogs off leash (Burlingame, personal communication, 2004; Kagen, personal communication, 2004; Willman, personal communication, 2004). Also, areas where line of sight or narrowness of the trail inhibits passing a horse or provides an opportunity to startle a horse (e.g., a bike traveling down a narrow trail at a high speed, with no escape route for either the bicyclist or the equestrian) were mentioned as areas of concern. A typical horse has an average tread width of 12 to 24 inches (distance between hind legs as measured from the outside of the shoe). Where there is adequate line of sight distance, a minimum 3- to 4-foot shoulder, or a 2-foot shoulder with a low vegetated buffer is considered adequate to accommodate equestrians in a single line for the range of tread widths (Barnfather, personal communication, 2004).

For high-volume trails, King County strives to provide separated modes of use to the greatest extent possible to promote safety and a positive trail experience. When trails generate volumes of over 2,000 users per day, or are estimated to do so, King County recommends a paved surface at least as wide as that recommended in the current guidelines in the *Guide for the Development of Bicycle Facilities* (AASHTO, 1999) for shared-use trails, and a separated pedestrian facility to the greatest extent possible along the length of the trail (King County, 2004). AASHTO guidelines recommend a 12-foot-wide paved surface trail with minimum 2-foot shoulders and 1-foot clear zones for multi-use and shared-use trails (AASHTO, 1999). Since these guidelines were published, a number of communities and advocate groups have called for a paved surface of 14 feet, or separating uses by separating facilities.

3.7.3 Direct Impacts to Existing Recreational Uses

3.7.3.1 Corridor Alternative

Construction Impacts

Impacts to Existing Recreational Uses. Recreational users along the Interim Use Trail would be impacted by trail closures during the construction period. Due to the length of the trail, construction sequencing and timing, and the multiple jurisdictions affected by the Master Plan Trail, the trail would likely be constructed in sections or segments (see Chapter 2). The segment of the Interim Use Trail under construction would be closed off through the use of removable traffic barricades and signs. Closure for construction would typically last for two to three months if 1 or 2 miles of the Master Plan Trail were completed at a time. Trail users would be rerouted or would be notified that sections of the trail would be closed during construction.

Impacts would occur during construction if roadways or paths providing access to community beaches and recreational facilities were disrupted, or if fugitive dust, odors from paving operations, noise, or construction light and glare affect existing recreational facilities. Residents along the corridor would

likely experience some disruption to recreational activities within their yards and on their boat docks. Construction equipment would move down the trail within the corridor and would create a potential hazard for people and animals crossing or using the corridor. However, because of the short duration of construction at any given location, no substantial impacts are expected.

Operation Impacts

Impacts to Existing Recreational Uses. Although the proposed trail would not physically infringe upon other recreational facilities, existing recreational activities of adjacent property owners may be disrupted because the presence of trail users may be distracting to some people. Passive recreation such as sitting on decks may be disturbed by the passage of trail users. Activities of adjacent property owners that could injure or be a nuisance to trail users (e.g., playing catch across the trail) would be inhibited because those participating in the activity would need to remain alert to the presence of trail users. Some activities would be curtailed or prevented by the presence of security fencing that would create a barrier between the trail and Lake Sammamish (see Section 3.9, Visual Quality and Aesthetics). The presence of trail users would disturb some people more than others; this concern has been voiced by homeowners along the project corridor.

King County is anticipating trail use to be similar to current use along the Burke-Gilman / Sammamish River Trail. This estimate is based on the similarities between the trails (e.g., location along a water body, location between highly populated municipalities, and the high population base of the area adjacent to the proposed trail). Based on King County's user counts and surveys, the County anticipates the Master Plan Trail would attract up to 2,500 users a day during peak weekdays and up to 4,000 users a day during peak weekend days. The majority of users are expected to be bicyclists (approximately 70 percent of total use) and walkers with a smaller percentage of joggers, in-line skaters, and wheelchair users. Until additional connections with other trails that carry equestrian use are established, equestrian use along the Master Plan Trail is not anticipated to exceed 3 percent of total use (Eksten, personal communication, 2003). Equestrian linkages are primarily in the Redmond segment, which suggests that equestrian use may be higher along the northern segment of the proposed trail. Equestrian use is proposed for the Redmond segment only.

With the proposed restroom facilities and parking, trail use is anticipated to be more or less uniform along the approximately 11-mile length of the trail. Parking and restroom facilities would be available at several locations along the corridor (see Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7)). Existing parking facilities at Marymoor Park and along NE 65th Street would be available. The proposed parking facilities would be located between NE 70th and NE 65th Streets (44 parallel parking spaces), north of Inglewood Hill Road (20 spaces), and at SE 33rd Street (30 spaces). Restrooms would be located north of Inglewood Hill Road, and at SE 33rd Street, approximately 3 to 3.5 miles apart. The distance between restroom locations is consistent with other existing trails in the region. Parking and restroom facilities would be designed to be accessible by disabled persons.

Natural access points at the southerly and northerly end of the corridor include Lake Sammamish State Park and Marymoor Park, respectively. Potential use of parking areas by trail users at these parks could reduce available parking for park users, especially on busy summer weekends when parking capacity would be met. Trail users would likely use park facilities such as parking, restrooms, and garbage receptacles. An increase in use of restroom facilities and garbage receptacles might require more frequent cleaning and increased garbage hauling from these parks.

The day-use parking lot at Lake Sammamish State Park includes approximately 2,300 regular parking spaces and is connected to the project corridor by approximately 0.5 mile of paths through the park. A fee is currently charged for the day-use parking area. Use of this parking area for the trail would require

State Parks' approval. The boat launch area is located adjacent to the project corridor and includes 250 boat/trailer parking spaces. The boat-launch area parking is frequently used to capacity by boaters on spring/summer weekend days and would not be available to trail users. Existing parallel parking along NE 65th Street may help to reduce the parking pressure on Marymoor Park (refer to Section 3.11, Transportation, for further discussion of parking). Because parking is currently in high demand and at or over capacity during times of peak usage at both Lake Sammamish State Park and Marymoor Park, additional signage and parking enforcement by park officials would likely be needed to manage the parking (refer to Section 3.11, Transportation, for further discussion of parking).

The impacts of potential illegal parking on neighborhoods and communities (not recreational resources) are discussed in Section 3.11, Transportation.

In cases where existing trails leading from East Lake Sammamish Parkway to private beaches, private beach clubs, or community beaches cross over the Interim Use Trail, King County would work with beach clubs and community groups during detailed design to assess the requirements for pedestrian access across the trail.

Consistency with Recreation Plans. Under the Corridor Alternative, the proposed Master Plan Trail would provide access to local and regional recreation opportunities consistent with local Comprehensive Plans (see Section 3.6, Land Use and Shorelines). As the population of Issaquah, Sammamish, Redmond, and the surrounding area continues to grow, demand for trails is expected to increase. The Corridor Alternative is compatible with the intent of regional and local plans, and would improve the physical connection between parks.

Trail User Conflicts and Safety Issues. By design, multi-use trails accommodate a variety of trail users. Trail user conflicts can result in disruption and negative effects on trail user experiences, as well as potential safety issues. User conflicts occur when there is competition or perceived incompatibility of use by different types of users. Types of conflicts include speed of travel and safety issues, such as hikers or horses being startled by bikers. Accidents that occur on multi-use trails result from such factors as reckless and irresponsible behavior, poor user preparation or judgment, and unsafe trail conditions (Moore et al., 1992; Moore, 1994). The potential for conflicts between trail users and vehicles is evaluated in Section 3.11, Transportation.

One of the main complaints of residents living next to the Burke-Gilman Trail is the speed of bicyclists on the multi-use trail (City of Seattle, 1987; Conklin, 1998). Similar to the Burke-Gilman Trail, the East Lake Sammamish Master Plan Trail would be open to all forms of non-motorized transportation (including equestrians). The range of user speeds is quite broad, sometimes contributing to accidents between users, as on the Burke-Gilman Trail. The 2000 Burke-Gilman/Sammamish River Trail Survey indicated that 295 (or 11.4 percent) of the 2,585 bike users who responded to the survey had experienced a bicycle accident within the previous 12 months of the survey year. Similar concerns and complaints have been recorded for other rail-trails in the United States (Craig and Wake, 1993; Moore et al., 1992).

Because the proposed trail would be a multi-use facility (for walkers, joggers, bicyclists, (and equestrians in the Redmond segment only)), the paved surface proposed for the Master Plan TrailCorridor Alternative would benefit some users and hinder others. According to the *Guide for the Development of Bicycle Facilities* (AASHTO, 1999), hard pavement surfaces provide a higher level of service and require less maintenance than crushed aggregate surfaces. However, with a hard pavement surface bicyclists' speeds are reportedly higher, creating potential user conflicts and safety problems.

To help minimize some of the potential conflicts, the Corridor Alternative would be developed to provide the greatest amount of separation between trail users based on current King County guidelines (King

County, 2004). The trail would include adequate width to provide operating space for bicycle riders and other users (including equestrians) to avoid user conflicts. This includes a 1-foot clear zone, 3- to 4-foot soft-shoulder pedestrian/equestrian trail, 3-foot vegetated buffer, 2-foot gravel shoulder, 12-foot paved trail, 2-foot gravel shoulder, and 3-foot vegetated clear zone (see figures in Chapter 2). Faster modes of travel (bicycling and rollerblading) would occur on the paved section of the trail, and slower modes of travel (pedestrian and, where allowed, equestrian) would occur on the soft-shoulder section of the trail. At its narrowest, the trail under the Corridor Alternative would be 18 feet wide in order to avoid existing structures, preserve access to adjacent properties, avoid and minimize impacts to sensitive areas, and increase safety at vehicle crossings. To accommodate the narrower trail, uses may be combined in areas; however, the paved portion of the trail would never be less than 12 feet wide, with each shoulder never less than 2 to 3 feet wide.

In Issaquah and Sammamish, two thirds of the total trail length would be at the narrowest configurations (2- to 3-foot shoulders). In contrast, in Redmond, two thirds of the total trail length would have a separated soft-surface trail for equestrians and pedestrians. Overall, less than a third of the trail would have a separated soft-surface for equestrians (in the Redmond segment) and pedestrians. Adequate line of sight would be maintained for the areas where the trail narrows. At every location along the alignment, the widest section practical would be applied to alleviate safety concerns.

The trail widths that can be accommodated under the Corridor Alternative are expected to minimize the potential for trail user conflicts. Only where necessary to avoid and minimize impacts would the trail narrow as described above. This alternative substantially meets current King County and AASHTO guidelines for ideal trail widths on multi-use trails (King County, 2004).

3.7.3.2 East A Alternative

Generally, impacts to recreation under the East A Alternative would be similar to those described for the Corridor Alternative. The discussion below is focused on differences between the East A Alternative and the Corridor Alternative. Some differences in impacts would occur due to the location of a portion of the Master Plan Ttrail along East Lake Sammamish Place SE and East Lake Sammamish Parkway.

Construction Impacts

Impacts to Existing Recreational Uses. Bicyclists and walkers who are currently using East Lake Sammamish Parkway and East Lake Sammamish Place SE would have their activities curtailed while construction occurs. Construction along portions of these roads would require more intensive activity for construction of retaining walls, and could disrupt passive recreation occurring in the area. Some property owner access would be altered temporarily during construction (refer to Section 3.8, Socioeconomics, for further discussion of property impacts).

Under East Alternative A, construction would not occur on the Interim Use Trail alignment in areas where the multi-use trail would be located along public roads. Therefore, there may be less disruption to existing recreational use of adjacent properties and properties divided by the Interim Use Trail alignment under East Alternative A.

Operation Impacts

Impacts to Existing Recreational Uses. Similar types of disruption resulting from recreation use along the proposed trail would occur under the East A Alternative as for the Corridor Alternative. Under the East A Alternative, less trail use would occur on areas of the Interim Use Trail where the main multi-use trail would be transitioned to public roads (see Figure 2-1D (pg 2-15)). Pedestrian/equestrian

use would remain on the Interim Use Trail. Bicyclists would be detoured onto the bypass. However, total trail use on these bypassed portions of the Interim Use Trail would be less, resulting in less disruption to existing recreational activities of nearby property owners.

The proposed transition, which would bring the trail alignment up to East Lake Sammamish Parkway and East Lake Sammamish Place SE, would be designed with the intent to meet all applicable accessibility standards including the Americans with Disabilities Act Accessibility Guidelines and the Recommendations for Accessibility Guidelines for Outdoor Developed Areas under the Architectural Barriers Act.

Consistency with Recreation Plans. As described above for the Corridor Alternative, the proposed Master Plan Ttrail under the East A Alternative would provide access to local and regional recreation opportunities consistent with local Comprehensive Plans and regional plans, except for those plans which specifically call for development of the trail on the railroad corridor (see also Section 3.6, Land Use and Shorelines). The East A Alternative would not fully provide an off-street trail, which was indicated as being important by local respondents in a survey conducted by the City of Issaquah (City of Issaquah, 2004) (see Section 3.7.2.5, Relevant Recreation Plans).

Trail User Conflicts and Safety Issues. Under the East A Alternative, the potential for trail user conflicts could be less than described for the Corridor Alternative in areas where equestrians/pedestrians would be separated from higher speed trail users in segments where the paved portion of the trail transitions to the roadway. Horses and pedestrians would travel along the 8- to 12-foot-wide, 5/8-inchminus gravel trail. This trail meets recommended standards for tread width, surfacing, and line of sight for equestrian use.

The East A Alternative would provide the most separated soft-surface trail for equestrians and pedestrians and would have the lowest potential for generating trail user conflicts. Overall, more than half of the total trail length would have a separated soft-surface trail.

The number of residential driveway crossings would be greater under this alternative. With the proximity of a portion of the trail to public roads, trail user safety concerns are higher under this alternative. See Section 3.11, Transportation, for additional discussion.

3.7.3.3 East B Alternative

Construction Impacts

Construction-related impacts to recreation under the East B Alternative would be the same as those described for the East A Alternative.

Operation Impacts

Generally, impacts to recreation under the East B Alternative would be similar to those described for the East A Alternative. This alternative may minimize disruption to existing private recreational uses that are located adjacent to the areas of the Interim Use Trail where pedestrian/equestrian use would be transitioned up to public roads.

Consistency with Recreation Plans. As described above for the Corridor Alternative, the proposed Master Plan Ttrail under the East B Alternative would provide access to local and regional recreation opportunities consistent with local Comprehensive Plans and regional plans, except for those plans which specifically call for development of the trail on the railroad corridor (see also Section 3.6,

Land Use and Shorelines). Similar to the East A Alternative, the East B Alternative would not fully provide an off-street trail, which was indicated as being important by local respondents in the survey conducted by the City of Issaquah (City of Issaquah, 2004) (see Section 3.7.2.5, Relevant Recreation Plans).

Trail User Conflicts and Safety Issues. The potential for trail user conflict would be higher under the East B Alternative than the Corridor and East A Alternatives since there would be substantially less separation between equestrian/pedestrian use and higher speed trail users through the Sammamish segment. The amount of separation through the Issaquah segment would be the same as provided under the Corridor Alternative, and the amount of separation through the Redmond segment would be the same as provided under both the Corridor and East A Alternatives.

Equestrian/pedestrian use would also occur in proximity to a high-volume arterial. For safety, soft-surface multi-use trails in corridors separate from road rights of way are generally preferred for equestrian/pedestrian trails. AASHTO guidelines recommend a minimum 2-foot shoulders and 1-foot clear zones for multi-use and shared-use trails (AASHTO, 1999). A minimum separation of 8 feet between vehicles and horses would be provided under the East B Alternative; however; site constraints dictate a less than optimal 2-foot shoulder and at times shared use on the paved multi-use trail.

Under the East B Alternative, equestrians would be exposed to more residential driveway crossings and other potential distractions. The East B Alternative is less than optimal for accommodating equestrian use because of the following: (1) it has the least amount of separated soft-surface trail for equestrians and pedestrians; (2) the trail's proximity to the road right of way; (3) potential distractions; and (4) the minimal width of the shoulder. Equestrian groups in the area indicate that the trail under this alternative would likely not receive as much use by equestrians (Willman, personal communication, 2004; Barnfather, personal communication, 2004).

3.7.3.4 Continuation of Interim Use Trail

Construction Impacts

Under the Continuation of Interim Use Trail Alternative, the Interim Use Trail would continue to operate beyond 2015. No impacts to existing recreational uses associated with construction would occur.

Operation Impacts

Impacts to Existing Recreational Uses. Trail amenities would be improved with the addition of restroom and parking facilities, and equestrian use could be allowed. There would be a continued and possible increased potential for disruption to passive recreation activities at adjacent residences due to the addition of equestrian use. "Passive recreation" such as sitting on decks would continue to be disturbed by the passage of trail users. Activities of adjacent property owners that could injure or be a nuisance to trails users (e.g., playing catch across the trail) would continue to be inhibited. Some activities would continue to be curtailed or prevented by the presence of security fencing.

Consistency with Recreation Plans. The Continuation of the Interim Use Trail Alternative would not meet regional plans and policies for a long-term Master Plan Trail. Because the trail is narrow (8 to 12 feet) and has a soft surface, it would not accommodate the variety and volume of users predicted.

Trail User Conflicts and Safety Issues. The Continuation of the Interim Use Trail Alternative would provide the least separation between equestrians/pedestrians and bicyclists. Under this alternative, equestrian use could be accommodated on the existing Interim Use Trail. Equestrian use would not be

accommodated on a separate shoulder, but rather would occur on the shared 8- to 12-foot-wide multi-use trail. This situation is less than optimal for minimizing trail user conflicts. Potential conflicts could occur between equestrians and bicycles, if trail users do not properly yield to horses. Most bicyclists would not be as likely to use the trail due to the gravel surface, except those on wide-tread bikes (e.g., mountain bikes). The Continuation of the Interim Use Trail Alternative, as a shared multi-use trail, would not meet minimum recommended standards for providing separation between higher speed trail users and equestrians and pedestrians.

3.7.3.5 No Action Alternative

Construction Impacts

Under the No Action Alternative, the Interim Use Trail would continue to operate until 2015. No impacts to existing recreational uses associated with construction would occur under the No Action Alternative.

Operation Impacts

Consistency with Recreation Plans. The No Action Alternative would not be consistent with adopted plans and policies for providing a regional trail that accommodates a variety of users.

Trail User Conflicts and Safety Issues. There would be a continued potential for accidents between trail users, and incidents or accidents between trail users and residents. Because of the narrower width and soft surface, the trail would not likely attract the volumes anticipated with a wider, paved trail. Higher volumes of users would potentially result in more trail user conflicts.

The No Action Alternative is not consistent with several of the Comprehensive Plan goals and policies and land use designations of the Cities of Issaquah, Sammamish, and Redmond. Numerous Comprehensive Plan policies in all of the jurisdictions support separated, non-motorized trail systems for pedestrian and bicycle access both for recreation and as alternative modes of transportation. Some policies specifically call for development of the proposed Master Plan Trail. For example, the City of Issaquah Comprehensive Plan and Zoning Map specifically designates the railroad right of way as the Future East Lake Sammamish Trail in its Comprehensive Plan.

A requirement of the GMA is to provide adequate facilities, such as parks and trails, to meet the demands of future growth. Additional recreational areas within the cities and unincorporated King County would need to be found to accommodate future growth. The No Action Alternative does not meet the intent of any of the jurisdictions for providing local and regional recreational opportunities, connectivity between neighborhoods and services, and alternative modes of transportation, as stated in their adopted Comprehensive Plans.

3.7.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). The No Action Alternative would not be consistent with adopted plans and policies for providing a regional trail that accommodates a variety of users. Impacts related to consistency with adopted plans and policies would worsen after 2015, at the potential closing of the Interim Use Trail, and would likely entail reprioritizing park, recreation, and trail development documents, including capital improvement plans. Each jurisdiction that currently includes a portion of the proposed East Lake Sammamish Trail in its level of service standards would also be required to reprioritize its funding for recreational facilities to meet the increasing demand.

3.7.5 Cumulative Impacts

No cumulative impacts related to recreation are anticipated.

3.7.6 Mitigation Measures

3.7.6.1 Existing Recreational Uses

The following mitigation measures could be used to minimize impacts on existing recreational activities:

- Notify all adjacent property owners about the proposed construction schedule.
- Limit the hours of trail operation to daylight hours only for safety.
- Utilize construction best management practices (BMPs) such as wetting and covering disturbed soils, washing tires and undercarriages of vehicles, and shutting off idling equipment to control fugitive dust and vehicle emissions.
- In cases where existing trails leading from East Lake Sammamish Parkway to private beaches, private beach clubs, or community beaches cross over the Interim Use Trail, work with beach clubs and community groups during detailed design to assess the requirements for access across the trail.

3.7.6.2 Trail User Conflicts and Safety Issues

The following mitigation measures could be used to minimize trail user conflicts and enhance safety:

- Install signage indicating limits of the trail right of way, trail etiquette, warnings to trail users to be aware of residents and pets crossing the corridor, and yield protocols.
- Provide signage at critical intersections, including Waverly Shores Private Boat Launch at 33rd Street, warning trail users that they are approaching a dangerous intersection.
- Design the trail to meet applicable accessibility guidelines, including grade requirements and current design standards for curves and sight distance, based on a design speed for the fastest users, cyclists.
- Install a 5-foot chain-link fence or split-rail fencing in areas where the trail poses potential safety hazards such as falling off a retaining wall or down a slope.
- Along areas of the trail adjacent to roads, residential driveways, or parking areas, install a guardrail or approved equivalent to separate the trail from areas used by vehicles (except on a case-by-case basis where line of sight distance would be impaired).
- Trim and remove vegetation and/or revegetate with suitable plants adjacent to the trail where
 necessary in order to maintain sight distances on the approaches to an intersection, where
 vegetation could potentially prevent a vehicle or trail user from identifying an obstruction and
 stopping in time to prevent an accident.
- Trim vegetation to maintain vertical and horizontal clearances from the trail for the safety of trail users.

3.7.7 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse recreation impacts are anticipated from the construction or operation of any of the Master Plan Trail alternatives.

3.7.8 Section 4(f) Compliance

The East Lake Sammamish Master Plan Trail project is a transportation and recreation project which has had partial funding from the federal Transportation Equity Act (TEA-21) and may benefit from future funding. Section 4(f) of the federal Department of Transportation Act of 1966 (23 CFR 771.135; 49 USC 303) directs that highway projects shall not "use" any "publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by such national, state, or local officials having jurisdiction thereof, or any land from an historic site of national, state, or local significance. "Use" of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility or substantially impairs recreational activities.

Of the alternatives evaluated in this EIS, the following alternatives would temporarily affect all or portions of the existing Interim Use Trail, which is the 4(f) property at issue for the project. Impacts would be temporary and occur only during construction.

- The Corridor Alternative has been selected as the Preferred Alternative for the project. Under this alternative, a Master Plan Trail would be located almost entirely within the former railroad right of way (referred to as the "corridor") currently developed as the Interim Use Trail.
- The East A Alternative would utilize all of the existing corridor but would also require extensive development outside of the corridor. The East B Alternative would not use all of the existing corridor and would also require extensive development outside of the corridor.

The Corridor (Preferred), East A, and East B Alternatives would convert the existing gravel Interim Use Trail, into a long-term, paved trail. The proposed Master Plan Trail would not impair the use of any 4(f) properties because it would continue the use of the former railroad corridor as a public trail and alternative non-motorized transportation corridor. Impacts to the gravel Interim Use Trail would be temporary and occur only while the Master Plan Trail is being widened and paved. The construction of concern will actually be improving the existing resource. Accordingly, King County has prepared a de minimis 4(f) determination below.

Request for the use of the De minimis (4f) exemption

July 2009

TO: Peter A. Jilek, Urban Area Engineer

FHWA, MS 40943

FROM: Trevin M. Taylor

H&LP Environmental Engineer HQ Highways & Local Programs

SUBJECT: King County Facilities Management Division

East Lake Sammamish Master Plan Trail

De minimis 4(f) Evaluation Federal Aid # STPE-2017(045)

Please provide a copy of this document for the minutes to be filed within your local forum. Please provide a second copy to the Highways & Local Programs for their records. This document is intended to provide a written account of your public outreach for the use of the de minimis (4f) determination.

Project description

Please provide a clear description of your project include a description of the effected 4(f) property.

• The project proposes to further develop an alternative transportation corridor and recreation trail along approximately 11 miles of former railroad corridor on the east side of Lake Sammamish. The trail would extend along the eastern side of Lake Sammamish from Gilman Boulevard in the City of Issaquah north, through the City of Sammamish, to the Bear Creek Trail in the City of Redmond. Portions of the former railroad corridor have already been developed into an Interim Use Trail that was completed and opened to the public in April 2006.

The purpose of the proposed project is to design and construct an alternative non-motorized transportation corridor and a multi-use recreational trail along the former Burlington-Northern Santa Fe railroad corridor on the east side of Lake Sammamish. The Master Plan Trail would provide access to recreation, employment, and retail centers in the Cities of Redmond, Sammamish, and Issaquah and complete a link in the King County regional trails system. The Master Plan Trail is intended to safely accommodate a variety of user groups such as bicyclists, pedestrians, runners, wheelchair users (including those with motorized wheelchairs), in-line skaters, and equestrians (Redmond Trail Segment only), and different ages and skill levels within those groups.

King County has considered several alternatives for the project. Of these alternatives, the following alternatives would temporarily affect all or portions of the existing Interim Use Trail, which is the 4(f) property at issue for the project:

• The <u>Corridor Alternative</u> has been selected as the Preferred Alternative for the project. Under this alternative, a Master Plan Trail would be located almost entirely within the

former railroad right of way (referred to as the "corridor") currently developed as the gravel Interim Use Trail.

• The <u>East A Alternative</u> would utilize all of the existing corridor but would also require extensive development outside of the corridor. The <u>East B Alternative</u> would not use all of the existing corridor and would also require extensive development outside of the corridor.

Applicability

Please provide answers to the following questions, your answers will aid FHWA in making a determination for de minimis (4f).

1. Is the purpose of the project is to make Operational Improvements on Essentially the Same Alignment?

Yes, the project would improve the existing Interim Use Trail so that it can safely accommodate a variety of user groups.

- 2. Are affected lands publicly owned or recreational in their nature?
 - Yes, the affected 4(f) lands consist of the existing Interim Use Trail operated by King County and used by the public.
- 3. Please provide the amount and location of land to be used. Does your project impair the use of the remaining properties?

The Interim Use Trail is located on the east side of Lake Sammamish. The Corridor (Preferred), East A, and East B Alternatives would convert the existing gravel Interim Use Trail, into a long-term, paved trail. The proposed Master Plan Trail would not impair the use of any 4(f) properties because it would continue the use of the former railroad corridor as a public trail and alternative non-motorized transportation corridor. Impacts to the gravel Interim Use Trail would be temporary and occur only while the Master Plan Trail is being widened and paved. The construction of concern will actually be improving the existing resource.

- 4. Does your project adversely affect a historic property (National Register eligible property)?
 - The project would not directly affect known properties that are listed on or eligible for listing on the National Register. The project has the potential to affect unrecorded, buried cultural resources; monitoring by a professional archaeologist will occur during construction.
- 5. Official jurisdiction (*i.e.*, *Park Manager*, *SHPO*, *Nature Reserve Ranger etc*) must concur & agree the project is a de minimis take. Please have the resource steward provide correspondence explaining why this project is de minimis to their resource.
 - A copy of the letter from Kevin Brown, King County Parks Director is attached for reference.

Measures to Minimize Harm

Implementation of the Corridor Alternative will include the mitigation measures listed below. These measures focus upon minimizing the temporary construction impacts as well as the operational safety of the trail.

Surface Runoff and Erosion

The following measures are designed to control runoff and minimize erosion during construction and maintenance of the trail.

- Develop and implement a temporary sediment and erosion control plan, a spill
 containment and countermeasures plan, and a stormwater pollution prevention plan for
 the project. These plans would outline the best management practices (BMPs) that would
 be used during construction.
- Conduct construction activities in accordance with requirements outlined in the NPDES permit issued for the project.
- Time construction activities and ditch maintenance to occur during drier periods, when possible.
- Cover or mulch exposed soils, slopes, and graded areas as appropriate.
- Use silt fences, temporary sedimentation ponds, or other suitable sedimentation control devices.
- Minimize areas of soil exposure and retain vegetation where possible. Seed or plant appropriate vegetation on exposed areas as soon as work is completed.
- Route surface water through temporary drainage channels away from disturbed soils or exposed slopes.
- Use clean soils containing little or no silt and clay as fill to reduce the potential for erosion.
- Use a truck tire wash to reduce the potential for turbid runoff from roads.
- Perform hydraulic modeling during the detailed design phase of the project (subsequent to the Master Plan Trail Final EIS) to determine the adequacy of the existing drainage system along the Interim Use Trail, East Lake Sammamish Parkway SE, and East Lake Sammamish Place SE (i.e., ditches and culverts). Improvements would be incorporated during the final design phase where appropriate.
- Provide permanent stormwater management facilities as required by permitting agencies.
- Perform water quality monitoring during construction in accordance with Ecology's standards.

Trail Safety, Fencing, and Signage

The following measures would benefit adjacent property owners and the safety of trail users:

- Install fencing and signs adjacent to sensitive areas (wetlands and streams).
- Install signage indicating limits of the trail right of way, trail etiquette, warnings to trail users to be aware of residents and pets crossing the corridor, and yield protocols.
- Provide signage at critical intersections, including Waverly Shores Private Boat Launch at 33rd Street, warning trail users that they are approaching a congested intersection.
- Design the trail to meet applicable accessibility guidelines, including grade requirements and current design standards for curves and sight distance, based on a design speed for the fastest users, cyclists.

- Install a 5-foot chain-link or split-rail fence in areas where the trail poses potential safety hazards such as falling off a retaining wall or down a slope.
- Along areas of the trail adjacent to roads, residential driveways, or parking areas, install a guardrail or approved equivalent to separate the trail from areas used by vehicles (except on a case-by-case basis where line of sight distance would be impaired).
- Trim and remove vegetation and/or revegetate with suitable plants adjacent to the trail where necessary in order to maintain sight distances on the approaches to an intersection and to maintain vertical and horizontal clearances from the trail for the safety of trail
- Limit trail use to daylight hours for safety.
- King County regulates trails as linear parks. Trails are subject to usage restrictions per King County Rule for Use of Facilities (King County Code Section 7.12.480) and local leash laws (Issaquah Municipal Code 6.08.020, Sammamish Municipal Code 11.05.010, Redmond Municipal Code 7.04.200).
- Provide maps of all trail access points and master keys to locked bollards to all emergency service agencies serving the corridor.
- Install sidewalks and crosswalks at congested public access locations to provide for public safety.
- Limit speed for bicyclists per King County's Trail Use Ordinance 8518, which establishes a speed limit of 15 mph for all trails.
- Notify adjacent property owners of the construction schedule.

Traffic and Parking

In addition to the signage measures described above, the following measures would minimize traffic and parking impacts during construction and operation.

- Implement standard construction measures such as installation of advanced warning signs, highly visible construction barriers, and the use of flaggers.
- Provide alternate access and/or parking in individual cases where driveway access cannot be maintained during construction.
- Signs would be appropriately placed to prevent trail users from parking in private or restricted parking lots located near the trail access points.
- Bollards, striping, and warning bands would be installed at trail/roadway crossings for all Build Alternatives. A different trail surfacing material (i.e., a textured material to alert bicyclists) would be applied to intersections with driveways. Informational and regulatory signs would also be installed at all such crossings for trail users and roadbased vehicles.
- Guardrails would be used to delineate the trail edge where the trail surface is contiguous with driveways.

Neighborhood Concerns

In addition to the fencing/signage, safety, and traffic/parking measures discussed above, the following measures would help minimize impacts on nearby neighborhoods and businesses during construction and operation of the trail.

- Notify businesses and residents of the construction schedule.
- Maintain access to residential areas and commercial businesses in the vicinity of the corridor during construction.

- In cases where existing trails leading from East Lake Sammamish Parkway to private beaches, private beach clubs, or community beaches cross over the former railbed, work with beach clubs and community groups during detailed design to assess the requirements for access across the trail.
- Coordinate closely with utility providers and property owners to identify and physically
 locate utilities prior to the initiation of any construction activity. Notify property owners
 in advance of breaks in service to affected utilities.
- Comply with local regulations regarding construction noise.
- Require construction contractors to take measures to reduce construction noise (e.g., turning off idling equipment, using proper mufflers on equipment, locating equipment and staging areas far from residences, using portable noise barriers).
- Provide litter receptacles, doggy litter bag boxes, and trail etiquette signs at public access points.

Coordination

The environmental review process for the East Lake Sammamish Trail project has occurred in two phases. Phase 1, the Interim Use Trail and Resource Protection Plan, was followed by Phase 2, the Master Plan Trail. Table 1 summarizes the dates key environmental documents were released for public review and the associated public meetings held on both projects to date. King County has taken into account all comments received on the East Lake Sammamish Trail project since 1999. Further detail can be found in Chapter 5 of the EIS.

Table 3.7-1. Environmental Review Process and Associated Public Meetings

DATE	EVENT					
November 2, 1999	Determination of Significance and Request for Comments of Scope of Interim Use Trail and Resource Protection Plan EIS					
November 17, 1999	Public Scoping Meeting (Open House)					
May 19, 2000	Interim Use Trail and Resource Protection Plan Draft EIS Issued					
June 20, 2000	Interim Use Trail and Resource Protection Plan Draft EIS Public Hearing					
August 25, 2000	Interim Use Trail and Resource Protection Plan Final EIS Issued					
October 31, 2000	Determination of Significance and Request for Comments of Scope of Master Plan Trail Draft EIS					
November 15, 2000	Master Plan Trail SEPA Scoping Meeting					
February 20, 2001	Master Plan Trail NEPA Scoping Meeting					
May 10, 2002	Interim Use Trail and Resource Protection Plan NEPA EA Issued					
June 12, 2002	Interim Use Trail and Resource Protection Plan NEPA EA Public Hearing					
March 13, 2003	Finding of No Significant Impact (FONSI) on the Interim Use Trail and Resource Protection Plan NEPA EA					
October 20, 2006	NEPA/SEPA Draft Environmental Impact Statement published for Master Plan Trail					
November 2, 2006	Public Hearing for the Draft Environmental Impact Statement for Master Plan Trail					

Conclusion / Concurrence

Based upon this analysis we request concurrence from FHWA that:

- 1. The project meets the applicability requirements.
- 2. Coordination with state and / or federal agencies has or will be completed before any project commencement.
- 3. All reasonable and appropriate measures to minimize harm to Section 4(f) lands are incorporated into the project.

Please feel free to contact me at (360) 753-9550 should you have any questions regarding this evaluation. Thank you.

FHWA Approval: Sharon P. Love

Peter A. Jilek, P.E.
Northwest Region, Urban Area Engineer

Federal Highway Administration, Washington Division

3.8 Socioeconomic Resources

This section describes existing neighborhood characteristics in the project vicinity; discusses applicable local, state, and federal regulations; and evaluates potential impacts of the project alternatives related to neighborhood characteristics, public safety, property values, property acquisition, and economic issues. The environmental justice analysis addresses effects on minority and low-income populations, which are protected by environmental justice laws and regulations.

3.8.1 Studies and Coordination

Information used to characterize the affected environment was compiled from a variety of sources including federal laws, U.S. Census data, information from the King County Assessor's Office and local and regional government organizations, and recent studies and reports. Information on existing conditions was verified through site visits.

The evaluation of potential property acquisition impacts is based on (1) the preliminary design of each alternative (shown on the drawings in Volume II of the EIS), (2) King County GIS data depicting parcel boundaries, and (3) field inspection of potentially affected areas. The field inspections were made from the existing rights of way of the rail corridor, East Lake Sammamish Parkway, and East Lake Sammamish Place SE.

3.8.2 Affected Environment

3.8.2.1 Population and Community Character

The proposed 11-mile Master Plan Trail would be located in the Cities of Issaquah, Sammanish, and Redmond, an area that has experienced rapid growth in population and employment over the last 30 years. As of 2000, the combined population of the three cities was 90,572 with the highest population occurring in Redmond (45,256) followed by Sammanish (34,104).

The longest section of the proposed trail traverses the City of Sammamish. Employment is concentrated in the Cities of Issaquah and Redmond, while the City of Sammamish is primarily residential. All three cities have a median family income of over \$75,000, approximately 13 percent higher than the median family income for King County overall, with over 70 percent of the total population in each city earning over \$50,000 (U.S. Bureau of the Census, 2002).

Environmental Justice Study Area and Demographics

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994), requires each federal agency to achieve environmental justice as part of its mission to the greatest extent practicable and permitted by law. The President's Council on Environmental Quality (CEQ) and several federal agencies, including the U.S. Department of Transportation (DOT Order 5610.2, 1997) and the Federal Highway Administration (FHWA Order 664.23), issued guidance on how to implement Executive Order 12898 and to conduct environmental justice analysis. Agencies are to identify and address as appropriate any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations, including interrelated social and economic effects.

FHWA guidance defines "disproportionately high and adverse effects on minority and low-income populations" as an adverse effect that:

- a) is predominately borne by a minority and/or a low-income population; or
- b) will be suffered by the minority and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority and/or non-low-income population (Federal Highway Administration Washington Division Office, 2003).

FHWA views environmental justice as an extension of Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (42 USC 200(d) et. seq.), which prohibits discrimination against persons because of race, color, national origin, sex, disability, and age.

Study Area

For purposes of environmental justice analysis, the study area is defined as the limits of potential construction activity and potential operational project impacts. It was reasoned that most of the environmental effects resulting from this project would be limited to the properties in the immediate vicinity, within 0.25 mile of the project corridor.

Detailed information about populations within the 0.25-mile-wide study area can be compared to the larger population that is likely to benefit or otherwise be affected by the project. For purposes of this analysis, this larger population is defined as the combined Cities of Issaquah, Sammamish, and Redmond, though project benefits are expected to accrue to populations throughout King County.

Data and Methodology

One source of demographic data for an area is school districts. Schools maintain and report information to the Washington State Office of Superintendent of Public Instruction. The study area is within the Issaquah and Lake Washington School Districts. There are 12 schools with buses utilizing East Lake Sammamish Parkway SE. Table 3.8-1 summarizes demographic information for these schools as of October 2003.

These schools serve a much larger population than that which would be directly affected by the trail. In order to more specifically assess populations in the study area, the distribution of minority and lowincome populations residing in the study area was mapped using data from the 2000 U.S. Census. For the minority and low-income populations, 2000 Census data at the Block Group level were analyzed and mapped for all Block Groups that are within the study area. According to the U.S. Bureau of the Census 2000 geographic boundaries, the study area boundaries are located within Census Tract 321.03, Block Groups 1 and 3; Census Tract 322.10, Block Group 2; Census Tract 322.08, Block Groups 1, 3 and 4; Census Tract 322.07, Block Group 3; Census Tract 322.03, Block Groups 3 and 4; Census Tract 323.16, Block Groups 1 and 3; and Census Tract 323.13, Block Groups 2 and 3 (Figure 3.8-1 (pg 3.8-4)).

Table 3.8-1. School District Minority and Low-Income Demographics

STUDENT DEMOGRAPHICS	SUNNY HILLS ELEMENTARY	ENDEAVOR ELEMENTARY	DISCOVERY ELEMENTARY	PINE LAKE MIDDLE	SKYLINE HIGH	BLACKWELL ELEMENTARY	SMITH ELEMENTARY	MCAULIFFE ELEMENTARY	INGLEWOOD JUNIOR HIGH	EASTLAKE HIGH	REDMOND HIGH	REDMOND JUNIOR HIGH
Student Enrollment	601	617	675	945	1,699	636	673	649	1,156	1,267	1,386	872
American Indian or Alaska Native	1.0%	0.3%	0.4%	0.5%	0.7%	0.5%	0.3%	1.1%	0.2%	0.8%	0.7%	0.6%
Asian or Pacific Islander	14.1%	16.2%	19.3%	13.8%	14.8%	12.4%	14.6%	13.3%	9.1%	6.7%	11.5%	14.6%
Black	1.3%	1.1%	0.4%	0.9%	1.5%	2.2%	1.6%	2.8%	1.3%	1.2%	3.0%	2.9%
Hispanic	11.0%	3.2%	3.7%	1.3%	2.3%	2.0%	1.2%	1.4%	1.8%	2.4%	4.9%	5.9%
Free or Reduced-Price Meals	3.5%	8.2%	1.1%	3.9%	No information	1.4%	3.2%	1.5%	3.0%	No information	9.2%	16.1%
Transitional Bilingual	0.9%	2.6%	0.5%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	3.2%	4.8%
Migrant	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: OSPI website: http://reportcard.ospi.k12.wa.us/default.aspx. October 2003 data.

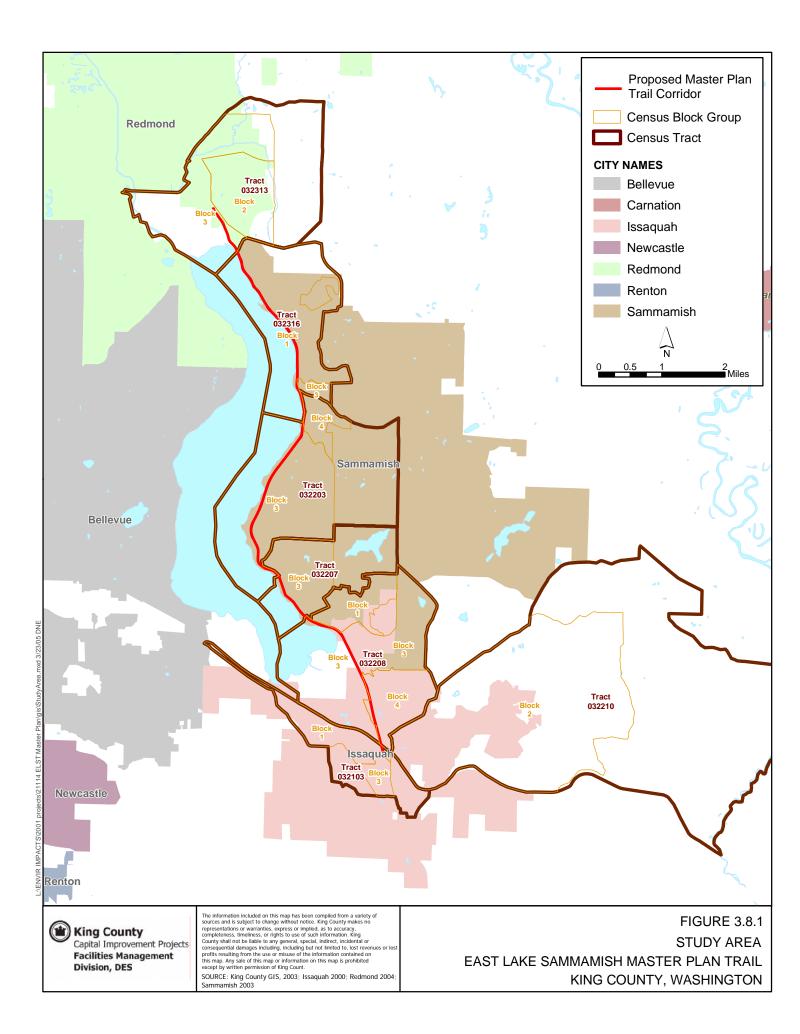


Table 3.8-2 identifies the number of individuals and percentage of the total population representing low-income and minority populations in the study area using Census data. Minority populations are defined as any readily identifiable group of minority persons (Black or African American, Hispanic or Latino, Asian, American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, or individuals identified as belonging to some other race or two or more races).

Approximately 18.1 percent of the total population within the study area is non-white or of two or more races. The highest percentage of minority populations are located in the northern portion of the study area (Census Tract 323.13, Block Group 2) where the alignment of the trail would be the same under all Build Alternatives. Approximately 4.3 percent of the total population in the study area is considered low-income individuals. Low-income populations are defined as a readily identifiable group of individuals whose median income is below the U.S. Department of Health and Human Services (DHHS) poverty guidelines. Again, while the Census data in some cases show a lower proportion of minority and low-income populations in the study area than the school district data, the school district data encompass a larger area that extends beyond the 0.25-mile project corridor.

According to the Census data, when compared with the Cities of Issaquah, Sammamish, and Redmond as a whole, the study area has a slightly higher percentage of both low-income individuals (4.3 percent compared to 3.9 percent), American Indian and Alaska Native (0.5 percent compared to 0.4 percent), Native Hawaiian or other Pacific Island (0.2 percent compared to 0.1 percent), Hispanic or Latino (5.2 percent compared to 4.4 percent), and two or more races (3.4 percent compared to 2.9 percent). The study area has a slightly lower percentage of Black or African American individuals (0.8 percent compared to 1.2 percent), Asian individuals (7.0 percent compared to 10.2 percent), and other (1.0 percent compared to 1.6 percent).

Table 3.8-2. Number of Individuals and Percentage of Total Populations Representing Low-Income and Minority Populations in the Study Area

CITY OR CENSUS TRACT AND BLOCK GROUP		BELOW POVERTY LEVEL ²		BLACK OR AFRICAN AMERICAN		AMERICAN INDIAN AND ALASKA NATIVE		ASIAN		NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER		HISPANIC OR LATINO		OTHER		Two or More RACES	
Citour	Total Population ¹	Count	% Of Total ³	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total
Issaquah	34104	525	2	99	0.90	71	0.60	677	6.00	12	0.10	555	5.00	164	1.50	328	2.90
Sammamish	45256	674	4.90	289	0.80	99	0.30	2690	7.90	30	0.10	853	2.50	206	0.60	840	2.50
Redmond	11212	2362	5.30	687	1.50	203	0.40	5893	13.00	82	0.20	2538	5.60	1114	2.50	1409	3.10
Tract 321.03 Block Group 1	581	22	3.73	6	1.03	2	0.34	48	8.26	1	0.17	50	8.61	0	0	6	1.03
Tract 321.03 Block Group 3	1248	150	11.73	14	1.12	11	0.88	33	2.64	0	0	128	10.26	2	0.16	43	3.45
Tract 322.10 Block Group 2	948	16	1.69	2	0.21	8	0.84	40	4.22	2	0.21	22	2.32	6	0.63	16	1.69
Tract 322.08 Block Group 4	866	22	2.60	14	1.62	2	0.23	40	4.62	2	0.23	28	3.23	0	0	22	2.54
Tract 322.08 Block Group 3	1536	42	2.67	12	0.78	8	0.52	134	8.72	6	0.39	27	1.76	0	0	33	2.15
Tract 322.08 Block Group 1	1068	24	2.59	3	0.28	0	0	55	5.15	0	0	8	0.75	0	0	10	0.94
Tract 322.07 Block Group 3	1001	10	0.97	8	0.80	2	0.20	49	4.90	0	0	19	1.90	0	0	17	1.70
Tract 322.03 Block Group 3	1908	13	0.68	4	0.21	16	0.84	89	4.66	1	0.05	39	2.04	6	0.31	20	1.05
Tract 322.03 Block Group 4	1115	35	3.02	5	0.45	9	0.81	56	5.02	5	0.45	49	4.39	0	0	28	2.51
Tract 323.16 Block Group 3	348	0	0	2	0.57	0	0	19	5.46	0	0	11	3.16	0	0	3	0.86
Tract 323.16 Block Group 1	3190	128	4.04	23	0.72	9	0.28	304	9.53	1	0.03	58	1.81	11	0.34	87	2.73
Tract 323.13 Block Group 3	1075	38	3.76	7	0.65	2	0.19	44	4.09	0	0	175	16.28	134	2.50	215	4.01
Tract 323.13 Block Group 2	1914	208	11.02	38	1.99	17	0.89	269	14.05	14	0.73	267	13.95	7	0.37	64	3.34

¹ Source: Census 2000 Summary File 1 - 100-Percent Data - Race and Hispanic or Latino status.

² Source: Census 2000 Summary File 3 - Sample Data - Population for whom poverty status is determined.

³ Total population per tract for "population for whom poverty status is determined" differs from total population for race in certain tracts.

FHWA is using criteria similar to the Department of Justice guidelines to evaluate projects that have the potential to affect "Limited English Proficient" (LEP) persons. These guidelines provide that public outreach materials be translated for "each eligible LEP language group that constitutes 5 percent of 1,000 [persons], whichever is less, of the population of persons eligible to be served or likely to be affected or encountered" for the proposed project (Federal Register Volume 67, No. 117, June 18, 2002). Table 3.8-3 contains Census 2000 data which identifies the "ability to speak English" for persons living in the project study area. The Census data categorize information obtained during the 2000 Census as an ability to speak English "very well," "well," or "not at all" for each language group that speaks a language other than English, grouped into the following categories: Spanish, other Indo-European languages, Asian and Pacific Island languages, and all other languages. The information is assembled at the Census Tract level. The information is not available at the Block or Block Group level. Based on the Census 2000 data, no LEP language groups are known to be in the area that would meet the 5 percent or 1,000 persons threshold established by the Department of Justice (Federal Register Volume 67, No.117, June 18, 2002).

Table 3.8-3. Populations with Limited English Proficiency in the Study Area by Census Tract

Census Tract	TOTAL POPULATION OVER 5 YEARS	SPEAK SPANISH	SPEAK OTHER INDO- EUROPEAN LANGUAGES	SPEAK ASIAN AND PACIFIC ISLAND LANGUAGE	SPEAK OTHER LANGUAGES
321.03	4191	171/ 4.08%	15/ 0.36%	64/ 1.53%	0/ 0%
322.10	1894	0/ 0%	8/ 0.42%	6/ 0.32%	0/ 0%
322.08	4151	9/ 0.22%	36/ 0.87%	24/ 0.58%	0/ 0%
322.07	2657	8/ 0.30%	10/0.38%	57/ 2.15%	0/ 0%
322.03	4814	16/ 0.33%	30/ 0.62%	38/ 0.79%	0/ 0%
323.16	3889	19/ 0.49%	71/ 1.48%	67/ 1.72%	0/ 0%
323.13	3465	158/ 4.56%	61/ 1.76%	119/ 3.43%	0.40%

3.8.2.2 Regional and Local Economy

Increasing employment levels in the region have coincided with a rapidly increasing population. This has resulted in the development of new retail, commercial, and office centers at the north and south ends of the project corridor. The local economy for each segment of the proposed project corridor is described below.

Issaquah Segment

Issaquah is located in the I-90 business corridor and contains the headquarters for some of the region's largest retail, corporate, and manufacturing firms. As of 2002, the City of Issaquah had 15,802 covered jobs (PSRC, 2004). ("Covered employment" is the number of jobs covered by state unemployment insurance; it excludes corporate officers, sole proprietors, and some others.) The proposed trail would provide access to office and retail centers along East Lake Sammamish Parkway and Gilman Boulevard to the south. Issaquah is also the site of two "urban villages": Issaquah Highlands and East Village-Cougar Mountain, which are expected to contribute to population and employment growth in the city (City of Issaquah, 2004). The median household income in Issaquah (\$57,892 for 2000) was slightly higher than that of King County (\$53,157 for 2000) (U.S. Census Bureau, 2000). The businesses located within the Issaquah segment are listed in Volume III, Appendix D.

Sammamish Segment

The City of Sammamish is primarily a bedroom community, with residents commuting to employment centers outside of the city. As of 2002, the City had only 4,070 covered jobs (PSRC, 2004). Sammamish is characterized by suburban residential development patterns, supporting two primary commercial centers that meet the local goods and service needs of the community. Community-based employment is primarily in the lower to middle wage jobs of retail, education, and government (City of Sammamish, 2003). The median household income in Sammamish (\$101,592 for 2000) was nearly twice that of King County (\$53,157 for 2000) (U.S. Census Bureau, 2000). The businesses located within the Sammamish segment are listed in Volume III, Appendix D.

Redmond Segment

Economic activity in the Redmond segment consists of a mix of high-tech, light manufacturing, distribution, and retail activities. As of 2002, the City of Redmond had 65,871 covered jobs (PSRC, 2004). Major software companies and research and development firms involved in biotechnology, avionics, electronics, and space technology compose a large portion of the city's economic base. The city has two major regional growth centers: downtown Redmond and the Overlake area. The majority of the city's employment growth in the past decade has occurred in these two centers (PSRC, 2002). The median household income in Redmond (\$66,735 for 2000) was higher than that of King County (\$53,157 for 2000) (U.S. Census Bureau, 2000). The businesses located within the Redmond segment are listed in Volume III, Appendix D.

3.8.2.3 Neighborhood Characteristics

Multi-family residential and urban residential areas are located in the Issaquah and Redmond segments of the project corridor, although surrounding neighborhoods in these segments are predominantly retail, commercial, and office centers. The Sammamish segment of the project corridor is characterized by residential neighborhoods on the waterfront and the hills overlooking Lake Sammamish.

Access to properties is typically via neighborhood streets and residential driveways that connect to local access streets and East Lake Sammamish Parkway. Local access streets typically have two lanes with intermittent shoulders and limited sidewalks, and a posted speed limit of 25 mph (NE 70th Street, NE 65th Street, SE 33rd Street, SE 56th Street). Many of the driveways are relatively steep, approaching or exceeding the recommendations of the local jurisdictions (e.g., City of Sammamish recommends 15 percent or less), due to topography and space constraints.

Issaquah Segment

The southern portion of the Issaquah segment is primarily adjacent to commercial uses. The proposed trail alignment is common for all Build Alternatives. From approximately 1,000 feet south of SE 56th Street and continuing north, the proposed trail alignment is parallel to East Lake Sammamish Parkway. The rights of way for the rail corridor and the Parkway are contiguous, with no private property between the two. Residential development in the immediate project vicinity is limited to the area just south of the boundary with the City of Sammamish, where private property and associated homes are located between the rail right of way and Lake Sammamish. These homes are accessed via driveways that cross the rail right of way from East Lake Sammamish Parkway.

Sammamish Segment

In the Sammamish segment, neighborhoods are characterized by single-family properties with lots of varying sizes, though typically in the range of 0.25 to 0.5 acre. Newer homes (less than 20 years old) are one to three stories high, with a large footprint (typically 3,000 to 10,000 square feet), and fill the lot to the minimum permitted offsets (15 feet). Older homes are typically smaller in footprint (typically less than 3,000 square feet), one- or two-story structures. Most lots are afforded views of Lake Sammamish and are typically partially wooded and/or have lawns and ornamental landscaping. In several neighborhoods, the landscaping of the yards is of professional quality, with ornamental landscaping up to and sometimes encroaching over or onto the rail corridor.

In the southern 1.3 miles of the Sammamish segment, the rights of way for the rail corridor and the Parkway are contiguous, with no private property between the two. Residential neighborhoods are located between the rail right of way and Lake Sammamish. These residences are primarily waterfront homes, the majority of which are further separated from the rail corridor by East Lake Sammamish Shore Lane SE, a local access street that connects to East Lake Sammamish Parkway via a series of driveways. Where broader land areas exist between the corridor and the lake, neighborhood cul-de-sacs are present such as Alexander's by the Lake near 206th Avenue SE. In some areas, particularly between SE 32nd Street and SE 24th Way, some homes have been permitted to be located relatively close to the former railbed, in some instances less than 20 feet (see Section 3.9, Visual Quality).

From approximately SE 24th Way and continuing north through approximately SE 16th Street, residential neighborhoods and private property occur between the rail right of way and parallel road rights of way, as well as between the rail right of way and Lake Sammamish. The terrain around many of these homes is steep. Access to these homes is provided from East Lake Sammamish Parkway and East Lake Sammamish Place SE. Properties divided by the public right of way typically consist of a house to the east of the corridor, with a yard sloping down to the former railbed and continuing to the west and a residential dock/beach along the shore of Lake Sammamish. Access occurs via unconfined areas across the rail corridor or through private trails that cross the rail corridor. The paths provide property owners access to East Lake Sammamish Parkway, residences, beaches, and parking areas (Figure 3.8-2 (pg 3.8-10)).

From approximately SE 16th Street to just south of Inglewood Hill Road, the rights of way for the rail corridor and the Parkway are contiguous, with no private property between the two. Instead, residential neighborhoods are located between the rail right of way and Lake Sammamish. Near SE 8th Street and other areas, the rail corridor is separated from nearby residences by wetlands or forested drainages. Further north, many of these residences are separated from the rail corridor by East Lake Sammamish Shore Lane SE, a local access street that connects to East Lake Sammamish Parkway via a series of driveways.

From just south of Inglewood Hill Road north through NE 18th Place, the rights of way for the rail corridor and the Parkway briefly diverge with private property and homes located between the two, as well as between the rail corridor and Lake Sammamish. Proceeding north, the two rights of way converge. Residential properties become less dense as the land area narrows west of the former railbed, except for the Weber Point community which is located west of the former railbed. Numerous small beachfront properties, many with private docks or small cabins, and community beaches such as the Inglewood Beach Club, are located in this portion of the Sammamish segment. Access to these beachfront properties is from trails leading from East Lake Sammamish Parkway across the former railbed (Figure 3.8-2 (pg 3.8-10)).

Within the City of Sammamish, the rail corridor divides approximately 75 properties.



Private Property Access Across Rail Corridor



Access Trail Across Rail Corridor

Redmond Segment

The southern portion of the Redmond segment is adjacent to Marymoor Park and a large forested wetland. The rail right of way and the Parkway right of way are contiguous, with no private property between the two. Proceeding north, commercial and industrial uses are located west of the rail corridor. The rail corridor diverges from the Parkway at approximately NE 65th Street, with commercial and industrial uses between the two rights of way.

3.8.2.4 Property Values

The average home price for addresses located on East Lake Sammamish Parkway and East Lake Sammamish Place SE in the period from January 1, 2001, to December 31, 2002, was \$823,349 (King County, 2003). An important concern about the proposed trail expressed by adjoining property owners is the effect of the trail on their property values and quality of life. Purchasers of property abutting a rail corridor accept a vulnerability to potential future uses of the corridor—including potential conversion to a trail—as a pre-existing condition of the purchase. The effect of this uncertainty on the purchase price cannot be exactly determined, but several studies provide some information about this issue, as discussed below.

Review of studies of other rail-trails in the United States showed that a large percentage of trail neighbors view trail development as having either no effect or a positive effect on the value of their property and the ability to sell it (Indiana University, 2001; Greer, 2001; NARPO, 1997; Feeney, 1997; The Conservation Fund and Colorado State Parks, 1995; PFK Consulting, 1994; Moore et al., 1992; Miller-Murphy, 1992; and City of Seattle, 1987). The trails seem to be viewed as desirable quality of life enhancements that, despite occasional problems, make homes and property more desirable and improve the quality of neighborhood life. Commonly cited studies on the effect of rail-trails on property values were summarized in the NEPA EA for the Interim Use Trail and Resource Protection Plan (FHWA and WSDOT, 2002). None of those sources indicated that the presence of a rail-trail would be expected to result in a reduction in property values (City of Seattle, 1987; Miller-Murphy, 1992; Moore et al., 1992; Feeney, 1997; NARPO, 1997). Additional studies published since the issuance of the Interim Use Trail EA are summarized below.

In 2001, the University of Nebraska conducted a survey to determine the effect of an existing trail system on property values and public safety (Greer, 2001). The survey included 67 miles of recreational trails within metropolitan Omaha. Of the respondents who purchased their homes after the trail existed, 67 percent indicated that the trail positively influenced their purchase decision, and 81 percent felt that the trails' presence would have a positive effect or no effect on the ease of selling their homes.

The Indiana Trails Study (2001) interviewed trail neighbors and local realtors to determine the effect of rail-trails on property values (Indiana University, 2001). The survey included six rail-trails covering a total of 51 miles. Between 86 percent and 95 percent of trail neighbor respondents indicated the trail had no effect or a positive effect on their property values. Between 81 and 93 percent of respondents indicated the trail had no effect or made it easier to sell their property. Of the realtors interviewed, most did not see any major increase in property values or ease in property sales as a result of trail development. The biggest disadvantage of trail development noted in the study was reduced privacy near homeowner yards.

3.8.2.5 Safety and Security

People have expressed concerns about the safety of the proposed trail in public comments and at scoping meetings. These concerns have been recorded in the *East Lake Sammamish Trail Interim Use and*

Resource Protection Plan, Appendix E: Public Record (King County, 1999), in public comments on the SEPA EIS for the Interim Use Trail (King County, 2000), and at various public scoping meetings, including a public scoping meeting in February 2001 as part of this Master Plan Trail EIS. In addition to reviewing these records, literature on previously established trails and other information sources were consulted to assess trends in public safety concerns related to increased crime on other trails.

The concerns people have expressed fall into two interrelated types of safety and security risks often associated with trails:

- **Public safety risks inherent in the operation of the trail.** This could include conflicts between trail users because of crowding, blind curves, grades and trail speeds, and intersection problems.
- **Personal safety and security risks to residents near the trail.** These risks include a perceived greater crime risk associated with increased public access along the trail.

For discussion of public safety risks related to trail user conflicts see Section 3.7, Recreation. Public safety issues related to automobile and intersection accidents are discussed in Section 3.11, Transportation. Personal safety and security issues relating to perceived crime risk are discussed below.

Existing Local Crime Statistics

To characterize the potential for crime along the proposed trail, existing crime data for the region are first provided below, followed by crimes reported in jurisdictions along the corridor and in other areas where trails are located.

Table 3.8-4 compares crime data among the three cities along the project corridor and for King County. The data indicate that crime rates for the three cities are generally lower than for King County in general, which includes incorporated as well as unincorporated areas. These numbers may suggest that residents in these jurisdictions are less at risk of experiencing a violent crime or property crime than King County residents in general.

CRIME	REDMOND	SAMMAMISH	ISSAQUAH	KING COUNTY
Population	46,480	35,930	15,110	1,794,745
Violent ¹ (Total/Rate per 1,000)	90/1.9	13/0.4	22/1.5	7,182/4.0
Property ² (Total/Rate per 1,000)	1,859/40.0	500/13.9	839/55.5	99,639/55.5

Source: Crime in Washington: 2003 Annual Report (Washington Association of Sheriffs and Police Chiefs, 2003)

To establish a baseline for crimes and incidents reported by residents along East Lake Sammamish Parkway, incident report data were obtained from King County Police for the years 1999 through September 2003 (Table 3.8-5). Traffic accidents along East Lake Sammamish Parkway were the most commonly reported incidents, followed by trespassing and larceny. The crime and incident statistics

¹ Violent crimes include murder, rape, robbery, and aggravated assault.

² Property crimes include arson, burglary, larceny (theft), and vehicle theft.

suggest that crime along East Lake Sammamish Parkway is a small percentage of total crimes relative to the city or county jurisdictions in the vicinity of the corridor.

Table 3.8-5. Crimes and Incidents Along East Lake Sammamish Parkway in the Vicinity of the Corridor (1999 through 2003)

TYPE OF REPORTED INCIDENT	1999	2000	2001	2002	2003
Trespassing	15	8	11	11	12
Burglary	1	4	5	5	4
Larceny	3*	16	13	13	12
Vandalism	2	6	7	7	7
Fire	1	3	2	2	0
Accident	72	43	53	53	32
Hit and Run	7	3	4	4	1
Random shots fired	1	0	0	0	0
Injured Deer	10	0	0	0	0

^{*}Auto theft not included for year 1999.

Existing Trail Crime Statistics

Prior to the opening of the Interim Use Trail to public use in March 2004, there was a report of a death threat made to a reporting party by an unknown person jogging along the railbed corridor in April 2003 (KC Incident Report 03-119876). In July of the same year, a report of an assault occurring on the railbed was filed by the King County Sheriff's Office (KC Incident Report 03-219720).

Although the Interim Use Trail is open in Redmond and Issaquah, the trail has not been open long enough to gather statistics on crime occurring on the trail. Therefore, the discussion of safety and security issues in this EIS relies primarily on information available from other local trails.

Information on existing crime related to other trails in the region is limited. Crimes and calls for service are not necessarily tracked by the local police departments according to where the crime occurred, and database queries are sometimes inconclusive about crime type or location. Of existing trails in the area, only crime and incident data specific to a portion of the Burke-Gilman Trail in Seattle were available. Although this information is not directly comparable to the proposed Master Plan Trail because the Burke-Gilman Trail is located within a university campus, it is representative of activities that could take place along an urban trail. Approximately 3 miles of the trail fall within the jurisdiction of the University of Washington Police Department. This section of the Burke-Gilman Trail is almost entirely urban and non-residential and serves an average of 2,000 to 3,000 users per day depending on season, weather, and day of the week. The University of Washington segment is also located in a much higher density setting than the single-family residential sections located along the East Lake Sammamish Trail project corridor. Several thousand students and other residents are housed in the vicinity of the Burke-Gilman Trail.

The University of Washington Police provided incident report data for the University of Washington's section of the Burke-Gilman Trail for 1995 through 2002. During this period, a total of 92 crimes and incidents were reported on this section of the Burke-Gilman Trail. The three most common types of reports were for accidents (11 incidents), suspicious circumstances or persons (34 incidents), and first aid or injury (14 incidents), with the other 33 of the 92 reports consisting of burglary, trespass, vandalism,

property damage, fire hazard, assault, lewd conduct, or drug use. These data are for reported incidents only. It is believed that perpetrators of these crimes use the Burke-Gilman Trail as a means of entry and exit because of the availability of numerous easy escape venues such as major streets and sidewalks (Girts, personal communication, 2000; Goble, personal communication, 2003).

Calls for service along the Sammamish River Trail compiled by the Redmond Police Department for the years 2000 through 2003 were also reviewed. The Sammamish River Trail through Redmond is bounded by areas of moderate and high-density residential, business/commercial, city center, and urban recreation areas. Due to the differences in adjacent land use, it is not directly comparable to the proposed Master Plan Trail. However, it is an example of the type and level of incidents that have been reported on a nearby urban trail. Suspicious circumstances, found property, safety checks, theft (from vehicles), and minor in possession were the most common calls for service along the Redmond portion of the Sammamish River Trail. There were three calls for service related to indecent exposure along the trail during this period (City of Redmond, 2003). The data did not indicate if the incident originated from the trail or from an adjacent roadway; therefore an accurate tally of incidents on the trail was not possible.

The local media have reported other incidents on trails. However, without detailed information about trail location, the type of neighborhood, and the local experience of similar crimes, it is difficult to draw an association directly to the proposed trail from these reports.

Published Reports on Urban/Suburban Trails and Crime

Several studies have characterized and evaluated the effects of rail-trails on surrounding communities. Commonly cited studies on the effects of rail-trails on crime were summarized in Section 3.10, Public Services and Utilities, of the Interim Use Trail SEPA EIS (King County, 2000). Overall, the results indicate that typical concerns associated with proposed trail facilities (e.g., increase in crime and vandalism) have not materialized in any substantial way, although isolated incidents have occurred (City of Seattle, 1987; The Conservation Fund and Colorado State Parks, 1995; Feeney, 1997; Tracy and Morris, 1998; Indiana University, 2001; Greer, 2001). Additional studies published since the issuance of the Interim Use Trail FEIS are summarized below.

In 2001, the University of Nebraska studied the effect of the Omaha Recreational Trails on public safety. The survey sought to record residents' experiences with trail-related theft and property damage. Property theft by a trail user was reported by 4.0 percent of the survey respondents, and property vandalism by a trail user was reported by 4.7 percent of respondents. Most of these incidents were of relatively minor nature. The trails were generally viewed as desirable quality of life enhancements to area residents (Greer, 2001).

In 2001, Indiana University conducted research on neighbor attitudes along six rail-trails in suburban, urban, and rural settings in Indiana: Rivergreenway Trail, City Greenway Trail, Cardinal Greenway Trail, Pennsy Rail-Trail Greenfield, Prairie Duneland Trail, and Mason Trail (Indiana University, 2001). Of the six communities questioned, only respondents from a commercial area reported burglary as a frequent problem. The most common problems reported by the trail neighbor respondents were illegal vehicle use on the trail, followed by unleashed pets, litter from trail users, and excessive noise (reported in two of six cities) (Indiana University, 2001).

3.8.3 Direct Impacts to Neighborhood Characteristics

3.8.3.1 Corridor Alternative

Construction Impacts

In commercial areas of Issaquah and Redmond, construction at trail crossings would require detours and travel restrictions that would temporarily change access to businesses. These impacts would be temporary and not substantial.

Construction of the Corridor Alternative would occur near existing neighborhoods and residences. Construction equipment and trucks may operate for up to several weeks in any given location. Operation of construction equipment and vehicles in residential areas would have a number of temporary impacts including noise, exhaust fumes, increased traffic, traffic delays, tracked dirt and mud on residential streets, and visual impacts. The operation of construction equipment would create a potential hazard for people and animals crossing or using the corridor. During construction, portions of the Interim Use Trail would be closed.

Owners of properties divided by the trail would be provided access to their property during the course of construction. A number of methods could be used to provide access during construction (e.g., construction sequencing, diversions, temporary crossings). These methods would be determined during detailed design.

Construction at driveway crossings would affect any given homeowner for a period of one to two weeks. Access through driveways and roads would be maintained during construction. Vehicle and pedestrian access to homes along the trail would be maintained through use of traffic control devices and traffic control personnel who would conduct traffic through work zones. Individuals would have to remain alert to the presence of equipment and construction activity and monitor the whereabouts and activities of children, the hard-of-hearing, and pets within and near the corridor. Construction-related impacts would be temporary and would be minimized through proper traffic control, signage, and homeowner notification. Because of the short duration of construction, these impacts would not be substantial.

Operation Impacts

Impacts to neighborhood characteristics once the Corridor Alternative has been constructed and is in use include a permanent change in access to some properties, reduced privacy, permanent loss of some parking, and the economic impacts associated with these project impacts. Neighborhood characteristics would also be affected by impacts to private property. These impacts are discussed in Section 3.8.6, Direct Private Property Impacts.

Change in access. Altered access due to traffic controls and signage at trail crossings is not expected to meaningfully alter travel times to businesses or residences along the project corridor. The proposed trail would result in enhanced connectivity within and between the neighborhoods along the corridor for pedestrians, bicyclists, and other non-motorized trail users. Improved mobility along the corridor could open the existing businesses to a larger customer base and shorten the commute time through the area. The improved functionality of the corridor may encourage redevelopment of adjacent properties.

Loss of parking. Three new <u>accessible parking areas and two new <u>accessible restroom facilities</u> would be provided for trail users. In addition, existing parking and restroom facilities at Marymoor Park and existing on-street parking along NE 65th Street would be available. The proposed parking facilities at</u>

SE 33rd Street, Inglewood Hill Road, and south of NE 65th Street are located approximately 3 to 3.5 miles apart. There are no proposed parking facilities at the southern end of the corridor, which could put parking pressure on nearby commercial and office parking lots from unauthorized parking by trail users. Existing parking facilities located in Issaquah may be available to trail users through agreements with property owners (see Chapter 2).

In residential areas, adjacent neighborhoods may experience increased traffic and a shortage of parking caused by people seeking access to the trail. These impacts are evaluated in Section 3.11, Transportation. Although the Corridor Alternative is aligned to reduce these impacts to the extent possible, small pockets of permitted, residential parking within the King County corridor may be impacted because the Corridor Alternative is wider than the existing Interim Use Trail. For example, some adjacent "nose in" parking may be converted to parallel parking, reducing the number of spots available.

The provision of parking areas along the project corridor is expected to offset potential impacts to parking. These parking areas are proposed at intersections with East Lake Sammamish Parkway to avoid and minimize traffic and on-street parking impacts in neighborhoods.

Reduced privacy. In some areas, the proposed trail would be at the same elevation as nearby homes. The trail and associated safety fences along the corridor would remove the sense of freedom people from the neighborhood now find in unrestricted access to the railroad right of way. Neighbors would have ready access to the trail but would also experience more people in their neighborhoods. Although access points to the trail would be provided for corridor residents, the presence of the trail and safety fencing may seem to some residents to separate adjoining residences. Where the trail and safety fences are present, beach club members may have a reduced sense of freedom in accessing beach properties. In cases where existing trails leading from East Lake Sammamish Parkway to private beach clubs or community beaches cross over the railbed, King County would work with the each of the clubs and community organizations to assess the needs for access.

Residents may experience reduced privacy due to the presence of the trail and trail users. This reduced sense of privacy would be more pronounced in areas where less than 25 feet would exist between the proposed trail and a home. As discussed in Section 3.9 (Visual Quality), approximately one-quarter of the homes built in the Sammamish segment are inside or directly adjacent to the King County right of way and another quarter of the total homes are within 25 feet of the right of way. Consideration of reduced privacy impacts in these cases is tempered by the fact that some property owners applied for variances to reduce or eliminate code required setbacks from the right of way, in order to build or expand residences, with knowledge that King County had trail plans for the right of way. Further, many property owners participated in King County's Special Use Permit process, which allowed homeowners to build and maintain fences, landscaping, and other improvements on the right of way.

This reduced sense of privacy would also be more pronounced in areas where the trail divides the property. In these areas, black-coated chain-link fencing 5 feet high would be used to provide a physical separation. However, voices and the physical proximity of trail users would be considered an intrusion by many of these residents. Some residents may be less inclined to spend time in portions of their yards that are in view of the trail and may curtail their outdoor activities. Some residents may also consider the need to cross the trail to access their beach or dock an infringement on their privacy. Voices from trail users may be audible inside adjoining residences where a window is open near the trail (refer to Section 3.12, Noise, for further discussion).

3.8.3.2 East A Alternative

Construction Impacts

Construction of the East A Alternative would occur on sections of the Interim Use Trail and sections of East Lake Sammamish Place SE and East Lake Sammamish Parkway. Construction along the Interim Use Trail would be the same as discussed under the Corridor Alterative. For the East A Alternative, construction activity would occur along approximately 4 miles of roadway as compared to approximately 300 feet for the Corridor Alternative. Construction activity at any given location along the trail would last approximately two to three months. Construction along the roadway shoulder would create temporary disruptions to access of residents' driveways or homes. Owners of properties divided by the trail would be provided access to their properties during the course of construction. A number of methods could be used to provide access during construction (e.g., construction sequencing, diversions, temporary crossings). These methods would be determined during detailed design. Where driveway access cannot be maintained during construction, suitable temporary off-street parking would be provided for impacted residents.

In areas where the trail would be located along the roadway, owners of properties divided by the Interim Use Trail would not experience construction impacts between their homes and the water, but construction would take place on the roadway side of the homes. Construction equipment would create a potential hazard for people and animals crossing construction areas to access their homes. Altered access to garbage service, mail, or on-street parking may require crossings of the road and/or the construction area. Individuals would have to remain alert to the presence of equipment and construction activity and monitor the whereabouts and activities of children, the hard-of-hearing, and pets within and near the construction area. Noise, dust, and odors associated with paving operations would be noticeable to adjacent residents (refer to Section 3.12, Noise, for discussion of noise impacts).

Operation Impacts

Long-term impacts for the East A Alternative would be similar to the Corridor Alternative, except where the alignment is located immediately adjacent to the roadways. Although pedestrian/equestrian use would continue on the existing Interim Use Trail, properties divided by the corridor in this location would not experience as many impacts related to beach/dock access and reduced privacy. Conversely, residents of homes adjacent to East Lake Sammamish Place SE and East Lake Sammamish Parkway along the East Alternative alignment would experience a reduced level of privacy, especially in areas where the trail would be at a similar elevation to yards facing the road. Where the East A Alternative is located on East Lake Sammamish Parkway, on-street parking would not be possible on the west side of the street. Trail users would be prohibited from parking on East Lake Sammamish Place with the East A Alternative.

3.8.3.3 East B Alternative

Construction Impacts

Construction-related impacts would be the same under the East A and East B Alternatives.

Operation Impacts

The East B Alternative would have impacts similar to those of the East A Alternative. Some differences in impacts for the East B Alternative would occur due to the location of pedestrian/equestrian use along East Lake Sammamish Place SE and East Lake Sammamish Parkway; no pedestrian/equestrian use would occur on those portions of the Interim Use Trail. Properties divided by the corridor or homes in close

proximity to the Interim Use Trail along those portions of the trail would not experience any impacts related to beach/dock access. Reduced privacy impacts would be less than the East A Alternative due to trail closures in some areas.

3.8.3.4 Continuation of Interim Use Trail Alternative

Construction Impacts

Construction for vehicular parking and restrooms, and for the diversion to Redmond Way at SR-520, would have short-term impacts to neighborhood characteristics in areas where construction activity would alter access to neighborhoods and area businesses (refer to Section 3.11, Transportation, for further discussion). Noise, dust, and odors associated with paving operations would be noticeable to adjacent residents and businesses (refer to Section 3.12, Noise, for further discussion).

Operation Impacts

This alternative includes vehicular parking, which would reduce the likelihood of unauthorized parking by trail users on commercial parking lots or along local access streets or residential driveways. Operational impacts would likely be similar to the Corridor Alternative. However, if fewer people use the narrower gravel trail, then the impacts would be slightly less.

3.8.3.5 No Action Alternative

Construction Impacts

The No Action Alternative would not require any construction and thus would not result in any short-term neighborhood impacts.

Operation Impacts

Under the No Action Alternative, the Interim Use Trail would continue to remain open to public use through 2015, at which time the permitted operation of the trail would expire. The No Action Alternative would provide no long-term benefits of increased connectivity within and between neighborhoods.

3.8.4 Indirect or Secondary Impacts to Neighborhood Characteristics

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Under the Corridor Alternative, indirect economic impacts to affected businesses could result from the potential use of commercial and office parking lots by trail users. These impacts would vary depending on the type of business and customer visit patterns. Negative impacts could include a reduction in customers and revenue and/or changes to timing of customer visits as customers change their habits to compensate for parking difficulties.

However, spending by local residents and visitors on trail-related activities and products can help to support businesses and would be an indirect effect of any of the Build Alternatives. A community with a high quality of life is attractive to companies interested in establishing or relocating. A potential indirect impact of the proposed trail is that of enhanced community character and therefore enhanced quality of life could attract businesses, which in turn creates jobs and improves the local economy.

3.8.5 Cumulative Impacts to Neighborhood Characteristics

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Sidewalk and bicycle lane improvements are included as part of roadway widening projects along East Lake Sammamish Parkway and Inglewood Hill Road, and as part of a curb, gutter, sidewalk project along 212th Way SE. These projects in combination with the trail would be beneficial, resulting in better pedestrian connections to neighborhoods in the study area. None of the projects described would impact neighborhood characteristics as a result of construction or long-term operation of the Master Plan Trail. However, final design and construction of the various projects will be coordinated to optimize connectivity and minimize impacts during construction.

Cumulative impacts associated with the proposed trail would mainly be the result of increasing urbanization in the project vicinity. Growing numbers of residents would likely result in greater demand for trail resources in the region, and an increase in use of the Master Plan Trail could be expected as the region's population grows.

3.8.6 Direct Private Property Impacts

Private property would be directly impacted whenever the project limits for an alternative would extend beyond public property. Even where the project limits would not extend beyond the public right of way, private property would also be impacted where the project modifies or eliminates access. The trail width and configuration for each alternative are based on AASHTO recommendations for a multi-use trail. Where private property could potentially be affected, the narrowest configurations for the trail have been applied. In addition, during the preliminary design, retaining walls have been incorporated to avoid and minimize impacts to private property.

Not all properties that could be impacted by the proposed trail under the Build Alternatives would need to be fully acquired. Full acquisition would likely occur when the project substantially interferes with and thus damages the property to a degree that it removes all economic value. These constraints include when a portion of the house would have to be removed or if access to the property via a legally vested property interest was eliminated and could not be replaced, full acquisition is assumed.

In addition, for safety reasons, a number of constraints exist for an intersection of a driveway and a trail. For example: (1) drivers should be at eye level with the trail before crossing; (2) no vehicle should back across a trail when sight distances are inadequate; and (3) the grades for modified driveways should be functional and safe. If access to a property that complies with these criteria cannot be provided, then full acquisition of the property is assumed. Partial acquisitions occur when only a portion of the property is required by the project and the remaining portion of the site retains its economic value.

To determine potential property impacts, the project limits for each alternative (including cut and fill lines or retaining walls) were compared to parcel boundaries for adjacent properties. The guidelines identified above were used to distinguish full from partial property acquisitions. Prior to completing final plans for the construction of the project, determining whether or not an impact will cause a full acquisition is difficult. For the purpose of this document, when in doubt, full acquisition was assumed. Therefore, property acquisitions discussed in this document are preliminary and conservatively high estimates. In some areas, full acquisition may be avoided through negotiation with property owners. Property

acquisitions would occur after an alternative has been selected, engineering designs are complete, and negotiations between individual property owners and King County have concluded.

King County would follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24) and the Washington State law covering property acquisition and relocation assistance (Chapter 8.26 RCW, Title 468-100 WAC). These laws would apply to all property acquisitions. Appropriate compensation would be provided consistent with applicable laws and procedures and would be available to all property owners affected by acquisition. King County would develop a relocation plan that would comply with these laws. The initial phase of the relocation plan would involve contacting and interviewing the current occupants, assessing any special needs they may have (e.g., handicap accessibility, environmental concerns), and developing an inventory of merchandise, business-owned property (e.g., furniture), and site improvements. The occupant(s) would be responsible for locating a new site but would receive assistance from King County or the County's relocation consultant. The occupant would be entitled to receive relocation benefits following the formal purchase offer to the property owner. Monetary benefits would also be available for moving and reestablishment expenses up to specific limits. Relocation resources would be available without discrimination to all parties who need to be relocated.

Table 3.8-6 summarizes the property relocations and acquisitions that would be required for each alternative.

Table 3.8-6. Private Property Relocations and Acquisitions Required for Each Alternative

ALTERNATIVE	APPROX. NO. RELOCATIONS	APPROX. No. PARTIAL ACQUISITIONS	APPROX. No. FULL ACQUISITIONS
Corridor	0	0	0
East A	12-15	58-61	15-18
East B	12-15	58-61	15-18
Continuation of Interim Use Trail	0	0	0
No Action	0	0	0

Note: Number of *relocations* relates to the number of family units that would need to be relocated. Number of *acquisitions* relates to the number of properties that would need to be acquired.

3.8.6.1 Corridor Alternative

Based on preliminary investigations, the Corridor Alternative would not require the partial or full acquisition of any private properties along the alignment. At the northern end of the alignment, where the trail jogs over to Redmond Way and passes under SR 520, easements from the City of Redmond and/or WSDOT would be necessary. Where the proposed access improvements (e.g., sidewalks, crosswalks) occur outside the King County corridor, easements or agreements with other public agencies would be necessary. Where residential driveways must be regraded or reconstructed to maintain access, easements or agreements with the property owners would be necessary for any work outside the King County corridor.

3.8.6.2 East Alternatives

Based on preliminary investigations, private property acquisition would occur in the form of approximately 58 to 61 partial acquisitions and 15 to 18 full acquisitions, the latter for which relocations would be required. The partial acquisitions range from 25 to 4,500 square feet, averaging 4 percent of the total parcel area. Access to these partially impacted parcels can be maintained as is, along the west side of East Lake Sammamish Place SE. The trail footprint would directly impact building structures associated with several of these parcels. However, the more frequent issue is the inability to maintain safe access to the parcels due to the lack of space and/or topography and the need to provide adequate sight distances for vehicles crossing the trail. The remaining parcels that may be fully acquired are located along the west side of East Lake Sammamish Parkway. Some of these property impacts may potentially be avoided through the mitigation measures described in Section 3.8.20.2. If one of these alternatives is selected, King County would work closely with the City of Sammamish through the design process to reduce and avoid these impacts.

These acquisition quantities exclude public rights of way. As with the Corridor Alternative, easements or agreements with other public agencies would be necessary when the trail or associated improvements occur in another right of way. Many more such agreements would be necessary under the East Alternatives, due to the use of road right of way for the trail alignment.

As described above, King County would follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24) and the Washington State law covering property acquisition (Chapter 8.26 RCW, Title 468-100 WAC).

3.8.6.3 Continuation of Interim Use Trail Alternative

No project-related acquisitions or relocations would occur as a result of the Continuation of Interim Use Trail Alternative. Public right of way easements may be required from both the City of Redmond and WSDOT where the trail is diverted around SR-520 to Redmond Way.

3.8.6.4 No Action Alternative

No project-related acquisitions or relocations would occur as a result of the No Action Alternative.

3.8.7 Indirect or Secondary Impacts to Private Property

Construction of the East Alternatives would require the full or partial acquisition of some properties along the trail corridor, resulting in the relocation of some residents. There may be some reduction in property tax revenues for the jurisdictions where these properties are located.

3.8.8 Cumulative Impacts to Private Property

Other proposed development projects in Issaquah and Redmond are not expected to result in acquisition or relocation impacts. Should any of the other commercial development projects result in substantial acquisition and relocation impacts, these impacts could, in combination with acquisition impacts from the trail, aggravate housing supply shortages. Several development projects, including the Overlake Park Neighborhood, would increase the available housing stock in the area and could offset impacts from acquisitions.

3.8.9 Direct Impacts to Property Values

3.8.9.1 Corridor Alternative

It is unclear whether construction of the <u>Master Plan TrailCorridor Alternative</u> would have a negative or positive impact on the values of abutting properties. The majority of studies indicate that the value of property near or adjacent to rail-trails remains the same or increases as a result of the presence of the trail. A location adjacent to the trail may be perceived as a benefit to some and, to others, an adverse impact.

As demonstrated in the studies described earlier, a large percentage of trail neighbors view trail development as having either no effect or a positive effect on their property values and on the salability of their property (Indiana University, 2001; Greer, 2001; NARPO, 1997; Feeney, 1997; The Conservation Fund and Colorado State Parks, 1995; PFK Consulting, 1994; Moore et al., 1992; Miller-Murphy, 1992; and City of Seattle, 1987). It is unknown what effect a trail would have on the property values of those properties it divides because the commonly cited studies address trails that are located adjacent to but do not divide residential properties. Some buyers may consider the location of the trail an intrusion of privacy, while others may be attracted by the proximity to the trail for recreational and transportation uses. A number of factors influence the value of any given property including employment patterns, market demand, development patterns, individual buyer preferences, and infrastructure improvements. These factors are both local and region-wide and are not related to adjacency to a recreational trail.

3.8.9.2 East Alternatives

Impacts related to property values under the East Alternatives would be similar to the Corridor Alternative.

3.8.9.3 Continuation of Interim Use Trail Alternative

Impacts related to property values would be similar to those discussed for the Corridor Alternative.

3.8.9.4 No Action Alternative

Potential impacts to property values would be similar to those discussed for the Corridor Alternative but would occur only as long as the trail remains in operation (potentially ending in 2015).

3.8.10 Indirect or Secondary Impacts to Property Values

No indirect impacts to property values are anticipated as a result of any of the alternatives.

3.8.11 Cumulative Impacts to Property Values

No cumulative impacts to property values are anticipated as a result of any of the alternatives.

3.8.12 Direct Impacts to Safety and Security

3.8.12.1 Corridor Alternative

Construction Impacts

Construction equipment and trucks would access the project corridor from public streets. The operation of construction equipment would create a potential hazard for people and animals crossing or using the Interim Use Trail. During construction, portions of the Interim Use Trail would be closed to pedestrians.

Construction at driveway crossings would affect any given homeowner for a period of one to two weeks. Individuals would have to remain alert to the presence of equipment and construction activity and monitor the whereabouts and activities of children, the hard-of-hearing, and pets within and near the corridor. Construction-related impacts would be temporary and would be minimized through proper traffic control, signage and homeowner notification. Because of the short duration of construction, these impacts would not be substantial.

Operation Impacts

Following construction, long-term impacts to residents along the project corridor include the increased potential for collisions with trail users, particularly for young children and the hard-of-hearing. Residents crossing the corridor to access their homes or private beaches/docks would need to remain alert to the presence of trail users, and use caution when crossing the corridor to avoid collisions with walkers, joggers, wheelchair users, in-line skaters, bicyclists, or equestrians. The potential for collisions at intersections would be reduced through the use of signage, bollards, warning bands, and pavement markers where appropriate.

Because dogs would be allowed to accompany their owners on the proposed Master Plan Ttrail, there would be the potential for incidents between trail users and dogs on the trail, between residents and dogs on the trail, between residents' and trail users' dogs, and between dogs and horses. Both trail users and residents would need to maintain control of their pets and would not be able to allow them to roam untethered along or within the corridor according to local leash laws (Issaquah Municipal Code 6.08.020; Sammamish Municipal Code 11.05.010; and Redmond Municipal Code 7.04.200) and King County Rule for Use of Facilities (King County Code Section 7.12.480).

Over the long term, the Master Plan Trail is not expected to substantially impact public safety or security based on data from other paved, multi-use trails in the County. There are no reported data to indicate the proposed trail would result in a substantial increase in crime. However, individually affected property owners would likely view any increase in crime as being problematic.

Property owners adjacent to the Interim Use Trail perceive the potential for increased trespass or vandalism. Occasional incidents of trespass or private property vandalism could occur but would not be expected to exceed existing conditions. Some trespass or vandalism may be associated with a trail, but public use of a trail may discourage vandals near homes as well. With the incorporation of adequate public safety mitigation measures (discussed later in this section), public safety impacts are not expected to be substantial. Residents' perception of safety issues would likely change over time if the threats they anticipate to their safety do not materialize.

This evaluation of the public security issues relies on existing information from other trails. As demonstrated in the studies described earlier, trails within urban and suburban areas do not experience disproportionately high rates of crime relative to other type of recreational venues or meeting places. Crime rates are generally considered low on rail trails and the development of rail trails does not generate an increase in crime (Greer, 2001; Indiana University, 2001; Tracy and Morris, 1998; City of Seattle, 1987, Feeney, 1997; The Conservation Fund and Colorado State Parks, 1995). Similar to the Burke-Gilman Trail in Seattle, the proposed trail comes quite close to homes in many locations, separates parking areas from homes in some places, and is adjacent to waterfront properties. The development of the Burke-Gilman Trail was not found to generate an increase in crime (City of Seattle, 1987). These studies are typically based on survey and interview data, not scientific surveys. The trails seem to be viewed as desirable quality of life enhancements that, despite occasional problems, make homes and property more desirable and improve the quality of neighborhood life.

These studies indicate that crime does not necessarily result from trail proximity. Other factors not related to the trail, such as the location of property and the presence of a wooded area, may also influence the possibility of criminal activity. Some crime may be associated with a trail, but public use of a trail may discourage vandals near homes as well. Restroom locations were selected, in part, near East Lake Sammamish Parkway to be relatively visible to law enforcement officers and the general public, thus reducing the potential for vandalism and other illegal activity at those locations.

3.8.12.2 East A Alternative

Construction Impacts

Construction-related safety and security impacts would be similar to those discussed for the Corridor Alternative. Construction equipment would create a potential hazard for people and animals crossing a construction area to access their homes. Individuals would have to remain alert to the presence of equipment and construction activity and monitor the whereabouts and activities of children, the hard-of-hearing, and pets within and near the construction area.

Operation Impacts

Long-term impacts for the East A Alterative would be similar to the Corridor Alternative, except where the alignment is located immediately adjacent to the west side of East Lake Sammamish Parkway and East Lake Sammamish Place SE. Trail user safety may be lower along these sections because of the reduced separation between vehicles and trail users. Safety risks would be highest during peak traffic periods and/or periods of reduced visibility.

The American Association of State Highway and Transportation Officials (AASHTO) recommends a "suitable barrier" if the distance between the edge of the road shoulder and the path is less than 5 feet. This alternative includes a 4-foot planting strip between the road curb and the trail edge to meet the criteria for a "suitable barrier" and includes a guardrail or suitable fencing along the roadside edge of the planting strip. These barriers would be provided in areas where the trail transitions from the Interim Use Trail to the roadway and along public roads. In areas where sight distance would be impaired by fencing, no fencing would be provided (see Figure 2-9 (pg 2-25)).

Despite the proposed safety features, the trail's proximity to a busy arterial under this alternative could reduce the usage of the Master Plan Ttrail by some groups, particularly people with small children.

Over the long term, motorists would need to maintain awareness of the presence of trail users, and trail users would need to be educated regarding safe trail use along the busy roadway. Refer to Section 3.11, Transportation, and Section 3.10, Public Services and Utilities, for a further discussion of safety impacts associated with the East A Alternative.

3.8.12.3 East B Alternative

Construction Impacts

Construction-related impacts would be the same as discussed for the East A Alternative.

Operation Impacts

Safety concerns would be similar to those for the East A Alternative, though increased due to equestrian use along the East Lake Sammamish Parkway and East Lake Sammamish Place SE. Equestrian use would occur on the 2-foot soft shoulder on the west side of the multi-use trail, farthest from public roads. At

road and driveway crossings, equestrian use would share the multi-use paved portion of the trail for short distances. Although equestrians often ride along the sides of roads, typically this occurs on local streets with low traffic volumes. East Lake Sammamish Parkway is a busy arterial that could present safety issues with equestrian use occurring in close proximity to traffic.

3.8.12.4 Continuation of Interim Use Trail Alternative

Construction Impacts

An extension of the northern terminus under this alternative includes additional construction in commercial areas of Redmond, which could increase the potential for safety hazards in those areas. These hazards would be short-term and localized.

Operation Impacts

Under this alternative, equestrians would share the multi-use gravel trail with other users. Refer to Section 3.7, Recreation, for a further discussion of trail user safety impacts associated with the Continuation of Interim Use Trail Alternative.

3.8.12.5 No Action Alternative

Construction Impacts

The No Action Alternative would not require any construction and thus would not result in any short-term safety and security impacts.

Operation Impacts

Long-term impacts would be similar to those discussed above for the Corridor Alternative, with the exception of potential collisions with equestrians, who would not be allowed on the trail under the No Action Alternative.

3.8.13 Indirect or Secondary Impacts to Safety and Security

No indirect safety or security impacts are anticipated.

3.8.14 Cumulative Impacts to Safety and Security

Other proposed development projects are not expected to result in safety and security impacts that could, in combination with the Master Plan Trail, exacerbate safety and security risks. Cumulative impacts related to safety and security within Issaquah, Sammamish, and Redmond are also not anticipated.

3.8.15 Direct Liability Impacts

3.8.15.1 Corridor Alternative

Trespassing trail users could pose a liability issue for property owners if users are not warned that they are leaving the public right of way. Appropriate risk management strategies to minimize the potential for liability concerns includes careful design of trail-roadway and trail-residential driveway crossings, maintenance of the trail surface, and signage indicating rules and regulations See Section 3.11, Transportation, for discussion of roadway and residential driveway crossings. In addition, the use of

fencing and signage identifying the trail boundaries, as proposed, would discourage trespassing onto private property. The <u>Master Plan Trail Corridor Alternative</u> would include a 5-foot chain-link fence in areas adjacent to docks and waterfront property where there is a safety, liability, proximity and trespass, and/or privacy concern.

3.8.15.2 East A Alternative

For portions of this alternative that are on the Interim Use Trail, the potential liability impacts would be the same as discussed for the Corridor Alternative. Moving a portion of the trail immediately adjacent to East Lake Sammamish Parkway and East Lake Sammamish Place would potentially increase liability concerns due to increased roadway and residential driveway crossings. Appropriate risk management strategies would be the same as those discussed above for the Corridor Alternative.

3.8.15.3 East B Alternative

Impacts related to liability would be similar to those for the East A Alternative. Under the East B Alternative, portions of the Interim Use Trail would be closed to public use, reducing liability concerns of adjacent homeowners in those areas.

3.8.15.4 Continuation of Interim Use Trail Alternative

Liability issues would be similar to those described for the Corridor Alternative.

3.8.15.5 No Action Alternative

Liability issues would be similar to those described above for the Corridor Alternative but would end upon closure of the trail (potentially in 2015).

3.8.16 Indirect or Secondary Liability Impacts

No indirect liability impacts are anticipated.

3.8.17 Cumulative Liability Impacts

No cumulative impacts related to liability have been identified.

3.8.18 Environmental Justice

The primary data sources for the environmental justice analysis were the results of the various environmental analysis conducted for this EIS and the results of a demographic analysis conducted using data from the 2000 U.S. Census (see Section 3.8.2.1). This section was prepared in accordance with Executive Order 12898.

3.8.18.1 Corridor Alternative and East Alternatives

The results of Census data analysis summarized in Section 3.8.2.1 indicate the population affected by the Master Plan Ttrail is expected to be predominately non-minority and non-low-income. Under all Build Alternatives, the trail would pass through neighborhoods that have middle and upper income levels. None of the alternatives would have a disproportionately high and adverse impact on minority or low-income populations because there are no groups affected by these alternatives that could be identified as

predominantly minority or low-income, and no indication from field investigations or project scoping of such groups. Further, there are no adverse effects that would be suffered by a minority population and/or low-income population that would be appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority and/or non-low-income population. The Master Plan Trail would also not affect any resources that are particularly or uniquely important to a minority or low-income population. This information suggests that the project will affect minority and low-income populations, but that impacts of the proposed project would not be "predominantly borne" by an environmental justice populations to the degree that it would represent a "disproportionately high and adverse impact."

Pursuant to USDOT Order 5610.2 (8)(b), the benefits of a project can also be taken into account in making a final determination. As described in Sections 1.1 and 1.2, the Master Plan Trail would provide an important transportation and recreation benefit that would accrue to the general traveling and recreating public, including minority and low-income populations. Additionally, no appreciable impacts to local businesses, including those where minority and/or low-income persons may be employed, are expected. The existence of the trail should draw more people to the area, increasing demand for goods and services. Local industry may benefit from the alternative transportation option the trail offers to employees.

As discussed in Section 3.8.2.1, no "Limited English Proficient" (LEP) language groups are known to be in the area that would meet the 5 percent or 1,000 persons threshold established by the Department of Justice (Federal Register Volume 67, No.117, June 18, 2002). Considering the demographic composition and LEP analysis result for the area, no special public outreach efforts have specifically targeted minority or low-income populations.

3.8.18.2 Continuation of Interim Use Trail Alternative

No effects relating to environmental justice are anticipated under this alternative. The analysis of the northern extension of the trail under this alternative would be the same as described above for the Corridor Alternative and East Alternatives.

3.8.18.3 No Action Alternative

No effects relating to environmental justice are anticipated under the No Action Alternative.

3.8.19 Indirect or Secondary Environmental Justice Impacts

No indirect impacts to minority and low-income populations are anticipated.

3.8.20 Cumulative Environmental Justice Impacts

No cumulative impacts to minority and low-income populations have been identified.

3.8.21 Mitigation Measures

3.8.21.1 Neighborhood Characteristics Mitigation Measures

Construction mitigation measures related to neighborhood characteristics could include:

• Restrict construction activity to regular daytime hours in compliance with applicable local codes. Refer to Section 3.12, Noise.

- Sweep streets daily to keep roadway surfaces clean during construction.
- During construction, provide at least one open lane of traffic on public roads at all times.
- King County would work closely with affected neighborhoods to minimize impacts from construction by notifying businesses and residents of the construction schedule, and addressing access concerns.
- Provide alternate access or parking, in individual cases where driveway access cannot be maintained during construction.
- Utilize standard construction safety measures such as installation of advanced warning signs, highly visible construction barriers, and use of flaggers.
- Establish staging areas for construction equipment and materials at the location of the proposed parking areas near East Lake Sammamish Parkway, and thus away from residences and businesses.
- During construction, portions of the Interim Use Trail would need to be closed to trail users for up to three months. The Interim Use Trail would be closed by using removable traffic barricades and signs, in accordance with the Manual of Uniform Traffic Control Devices (6D.01).

Operation mitigation measures related to neighborhood characteristics could include:

- Provide parking near East Lake Sammamish Parkway to avoid and minimize traffic and on-street parking impacts in the hearts of neighborhoods.
- Maintain access to residential areas and commercial businesses in the vicinity of the proposed trail.
- Place fences in accordance with the fencing scheme described in Chapter 2 where there is a safety, liability, proximity, trespass, and/or privacy concern.
- Replant landscaping where possible to provide visual screens and/or restore trail edge plantings.
- Limit trail use to daylight hours per King County regulations for safety.
- Provide litter receptacles, doggy litter bag boxes, and trail etiquette signs that cite applicable leash laws at public access points (KCC 7.12, Rules for Use of Facilities).
- Post signs to delineate the edge of public use.
- Post signs to prevent trail users from parking in private or restricted parking lots located near trail
 access points.
- Provide gates to allow access to waterfront property and to the trail for owners of divided properties.
- Post signs to designate public access points and to discourage access across private property.

3.8.21.2 Private Property Mitigation Measures

If an alternative is selected that has property acquisition impacts, the following measures to avoid or reduce the impacts would be considered in conjunction with detailed design:

• If one of the East Alternatives is selected, King County and the City of Sammamish would closely coordinate the detailed design of the trail with roadway design to identify and implement

features that would reduce or eliminate acquisition impacts. Roadway modifications that could reduce impacts include:

- The elimination of parking in some areas along East Lake Sammamish Place SE.
 Considerations would include parking needs and roadway geometry facing the east side of the roadway.
- The conversion of East Lake Sammamish Place SE to a one-way street. (The direction by the City of Sammamish assumes two-way use.) Considerations would be the turn geometry at either end of the Place, driveway access, and impacts to East Lake Sammamish Parkway traffic.
- The elimination of a center turn lane or median in some areas along East Lake Sammamish Parkway. (The direction provided by the City of Sammamish for East Lake Sammamish Parkway assumes a continuous center turn lane or center median.)
 Considerations would include turning needs and roadway geometry.
- O The shifting of the roadway as far east within the right of way as possible. (The direction by the City of Sammamish assumes the center paint stripe of East Lake Sammamish Parkway would remain in the same location.) This option by itself would likely not eliminate private property impacts because the combined widths of the potential future improvements to the roadway and the trail may exceed the current right of way width. Other considerations would include the roadway geometry and impacts on the east side of the roadway.
- Use of a barrier (e.g., guard rail) and a reduction in the City's buffer between vehicular use of East Lake Sammamish Place SE and adjacent trail use. Considerations would include identification of a barrier that does not impair sight distances.

These roadway modifications would require the concurrence of the City of Sammamish, which has jurisdiction over the roadway.

In conjunction with the design phase of the project, a real estate assessment would be conducted. King County would mitigate the impacts of property acquisition associated with the proposed Master Plan Trail by acquiring all necessary property at fair market value and providing relocation assistance to property owners and qualified tenants. As noted earlier, the County would follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24) and the Washington State law covering property acquisition (Chapter 8.26 RCW, Title 468-100 WAC) to provide consistent treatment, to minimize hardship of persons displaced as a direct result of the project, and to seek cooperative settlements of property acquisitions and relocation claims.

3.8.21.3 Safety and Security Mitigation Measures

King County could implement the following mitigation measures related to safety and security, which have proven effective in providing reasonable public safety in other King County parks:

- Limit trail use to daylight hours. King County regulates trails as linear parks; trails are subject to use restrictions per King County Code Section 7.12.480.
- Implement trail patrols by volunteer trail ranger programs.
- Monitor crime rates in the area; provide additional coordination with law enforcement if crime rates increase.

- Maintain the trail in a safe and clean manner including regular vegetation pruning per identified standards.
- Provide master keys to open locked bollards to all emergency service agencies serving the corridor.
- Provide fencing per project fencing schemes for each alterative (refer to Chapter 2).
- Provide guardrail to separate vehicles from trail users where the trail is immediately adjacent to a driveway.
- Provide trail planting strip barriers per AASHTO recommendations.
- To avoid the possibility for personal injury, the trail design includes fencing along steep slopes.
- Provide signage and enforcement of trail rules and etiquette.
- Provide signage along the corridor to educate trail users about the limits of public right of way and to warn against trespass onto private property.
- Locate access points where the trail crosses existing public streets and public property, or at locations where access ramps/connector trails can be created within public rights of way in order to connect with existing streets or other public areas for safe access. Recommended traffic controls to improve safety are evaluated as part of this EIS (refer to Section 3.11, Transportation).
- Provide sidewalks and crosswalks at many of the public access locations in order to provide for public safety (refer to Table 2-2 in Chapter 2).
- Limit speed for bicyclists per King County's Trail Use Ordinance 8518, which establishes a speed limit of 15 mph for all trails.
- Notify adjacent property owners of the construction schedule.

3.8.21.4 Liability Mitigation Measures

King County could implement the following mitigation measures related to liability concerns:

- Provide signage and enforcement of trail rules.
- Provide signage along the trail to educate trail users about the limits of public right of way and to warn against trespass onto private property.
- Provide 5-foot chain-link fence in areas adjacent to docks and waterfront property where there is a liability concern.

3.8.22 Significant Unavoidable Adverse Impacts

Under the East A and East B Alternatives, adverse impacts could result in the Sammamish segment due to the trail passing very close to several residences. Depending on the proximity impacts, 15 to 18 acquisitions of the full property and 12 to 15 relocations may be required. Impacts could also consist of 58 to 61 partial acquisitions, including the removal of portions of front yards and driveways, vegetation on the slopes between lots, and on-street parking. The property acquisitions and relocations discussed in this document are preliminary and conservatively high estimates. In some areas, full acquisition may be avoided through negotiation with property owners. Property acquisitions would occur after an alternative has been selected, engineering designs are complete, and negotiations between individual property owners and King County have concluded.

King County would follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24) and the Washington State law covering property acquisition and relocation assistance (Chapter 8.26 RCW, Title 468-100 WAC). These laws would apply to all property acquisitions. Appropriate compensation would be provided consistent with applicable laws and procedures and would be available to all property owners affected by acquisition. King County would develop a relocation plan that would comply with these laws. The initial phase of the relocation plan would involve contacting and interviewing the current occupants, assessing any special needs they may have (e.g., handicap accessibility, environmental concerns), and developing an inventory of merchandise, business-owned property (e.g., furniture), and site improvements. The occupant(s) would be responsible for locating a new site but would receive assistance from King County or the County's relocation consultant. The occupant would be entitled to receive relocation benefits following the formal purchase offer to the property owner. Monetary benefits would also be available for moving and reestablishment expenses up to specific limits. Relocation resources would be available without discrimination to all parties who need to be relocated.

Considering the proposed mitigation measures and financial compensation, these impacts do not constitute significant unavoidable adverse socioeconomic impacts.

3.9 Visual Quality

This section summarizes the results of the visual quality and aesthetics assessment for the proposed Master Plan Trail (Visual Quality and Aesthetics Technical Report, Appendix F). This section describes the visual character of the landscape as it exists before the project, assesses the potential visual impacts on that landscape due to the proposed alternatives, and identifies possible mitigation measures, if needed. The proposed mitigation measures include ways to avoid or minimize visual quality impacts and to restore or enhance visual quality.

3.9.1 Studies and Coordination

3.9.1.1 Analysis Methodology

This visual quality assessment used the Federal Highway Administration (FHWA) *Visual Impact Assessment for Highway Projects* (FHWA-HI-88-054) methodology. The FHWA assessment methodology was developed by FHWA on behalf of communities adjacent to proposed transportation projects as a way to adequately and objectively consider the potential visual impacts resulting from highway projects. The FHWA methodology has become an accepted framework for describing and analyzing the subjective visual experience and for developing the social and physical contexts for visual impact analyses. This methodology was developed for roadway projects, but it is applicable to any linear transportation facility, such as the East Lake Sammamish Trail.

This assessment also uses the Washington State Department of Transportation's Discipline Report Environmental Checklist for Visual Quality (WSDOT, 2004) to ensure that the information gathered is adequate to contribute to the decision-making process.

The FHWA methodology is a six-step evaluation process that has its own terminology and tools. Once these are understood, the FHWA methodology provides a clear and straightforward visual assessment process. The terms introduced here will be defined and discussed in sections to follow. The evaluation sequence is:

- 1. Establish the project's visual limits.
- 2. Determine who has views of and from the project ("viewers").
- 3. Describe and assess the visual context that exists before the project ("affected environment").
- 4. Assess the response of viewers looking at and from the project, for before and after conditions ("viewer sensitivity").
- 5. Determine and evaluate views of and from the project area for before and after views.
- 6. Describe the potential changes in the visual context that will result from the proposed alternatives.

The first three steps establish baseline existing conditions and the extent of the project's visibility. From this baseline, the potential changes to the visible landscape due to the proposed project were identified. Simulations based on photographs are one of the primary tools used to illustrate what the probable "after" conditions look like. During the assessment, mitigation measures were identified and are presented below.

Light, shadow, and glare are also typically evaluated for roadway projects. However, light and glare are not expected to change from existing conditions because the trail would be closed from sundown to sunrise and would not be illuminated.

3.9.1.2 Visual Simulations

In the course of site analysis and other existing conditions research, views were identified that would be useful for simulations of "before and after" conditions. Photographs were taken of the views and used as the base for the computer-generated simulations. While the simulations are limited in their field of view due to the camera lens (35 mm), the overall visual analysis considers the entire field of view. Photographs do, however, provide an accurate representation of the scale of a structure in relation to other objects seen from the viewpoint. The primary purpose of a simulation is to illustrate the effect of adding or removing key objects (such as trees or buildings) and the difference in scale or character of the new features relative to the old. Selection criteria for the simulations were:

- 1. The view is similar to other landscapes and house-to-trail relationships in the project area; the viewpoint is a location where there are many viewers of moderate to high sensitivity, or
- 2. The view is a location of potential high visual impact and has a large number of viewers with high sensitivity.

3.9.2 Affected Environment

This section describes the existing visual context of the East Lake Sammamish Trail. The baseline existing condition is that the Interim Use Trail has been constructed in the King County right of way.

3.9.2.1 Overall Landscape Character and Viewshed

The landscape character of the project vicinity is a glacial plateau and valley sloping down to the shoreline of Lake Sammamish. The native vegetation was historically a Douglas fir-dominated forest; however, the area is now mostly developed with single-family homes and commercial or business establishments. Natural vegetation has been reduced to small pockets. Larger commercial centers are located at either end of the project corridor. Scenic views across Lake Sammamish from the residences on the shoreline or hillsides and from East Lake Sammamish Parkway are memorable and vivid.

Three characteristic landscape types exist in the study area: (1) Lake Sammamish and the shoreline between the lake and East Lake Sammamish Parkway; (2) the steep hillsides east of the Parkway; and (3) the flatter valleys at the north and south ends of the project corridor. Lake Sammamish State Park on the south and Marymoor Park on the north contain wooded areas, lakeshore, open grassy areas, wetlands, and recreational facilities.

The project corridor passes through areas with markedly different visual contexts. On the west side of the project corridor, there are occasional open views across Lake Sammamish. East Lake Sammamish Parkway is a physical and visual divider between the lake and the hillsides. In built or wooded areas, views are limited by vegetation or structures.

There are seven distinct subareas along the alternative alignments: I-90/Industrial-Commercial, Commercial/Business Campus, Lake Sammamish State Park, Sammamish Shoreline, Marymoor Park, SR 520/Industrial-Commercial, and Bear Creek. These subareas are described individually in Section 3.9.2.3.

3.9.2.2 Visual Simulations

Six simulations were selected according to the criteria given in Section 3.9.1.2. Table 3.9-1 lists the viewpoints and views for each simulation. Simulations were not created for public parks or natural areas (Lake Sammamish State Park, Marymoor Park, Bear Creek) where the trail alignment fits with existing natural and park-like surroundings, or for the industrial-commercial areas (SR 520 and I-90) where there are few sensitive viewers.

Table 3.9-1. Simulation Viewpoints and Views

FIGURE No.	ALTERNATIVE	VIEWPOINT	VIEW
3.9-1	Corridor	Sammamish Place neighborhood (Sta _{COR} 356)	Looking north from corridor alignment in north-end Sammamish Place neighborhood
3.9-2	Corridor	Mint Grove entrance (Sta _{COR} 370)	Looking south from corridor alignment at Mint Grove entrance
3.9-3	Corridor	Shoreland entrance (Sta _{COR} 417)	Looking north from corridor alignment just south of Shoreland entrance
3.9-4	Corridor	NE 33rd Place (Sta _{COR} 519)	Looking northwest from corridor alignment and driveway across from NE 33rd Place
3.9-5	East	East Lake Sammamish Place SE (Sta _{EASTA} 332)	Looking north from about 2100 block on East Lake Sammamish Place SE
3.9-6	East	Inglewood Hill Road (Sta _{EASTA} 458)	Looking south from first driveway south of Inglewood Hill Road

3.9.2.3 Visual Quality

The existing visual quality of each distinct subarea is discussed in this section. The discussion includes a physical description of the subarea (terrain and vegetation or open space, built structures) as well as its viewers and the visual characteristics of the views.

I-90/Industrial-Commercial. The terrain remains fairly level from the terminus of the trail at NW Gilman Boulevard to SE 56th Street. The area south of I-90 is low-density, small-scale commercial with low-rise, small-footprint buildings. The area north of I-90 is a moderate-density industrial and commercial area, with low-rise, large-footprint box buildings. Businesses range from small to large and include vehicle and boat lots, a lumberyard, mini-storage, construction supplies, and a shopping center with cafes, groceries, and retail outlets. The Interim Use Trail contrasts with the industrial character of the area, but near SE 62nd Street the trail is in harmony with the natural-appearing, open landscape.

Open space consists of undeveloped, occasionally untended space between the commercial buildings and under the highway. There is a sense of openness since many of the structures are set back from the trail alignment. At NW Gilman Boulevard the vegetation reflects a neighborhood quality with planted street medians and tree-lined sidewalks. From NW Gilman Boulevard to the I-90 overpass the area is open, without structures or vegetation. The trail passes beneath the I-90 overpass, then through the wetland just north of I-90, an open, natural-appearing area. Vegetation north of I-90 consists primarily of street trees, patches of blackberries, and commercial landscaping. The project corridor passes behind the buildings fronting on East Lake Sammamish Parkway and has chain-link fencing on both sides.

Viewers in this area are primarily trail users because the trail is not visible from most roads. Trail users are likely to be sensitive to the visual quality of views from the trail because of its distance from high traffic volume roads and high concentrations of people, and the variety of scenery in this subarea. The I-90 overpass dominates the view at the south end of this subarea; otherwise there are no features that create memorable or dramatic views.

Commercial/Business Campus. This subarea lies between the southern boundary of Lake Sammamish State Park and SE 56th Street. The terrain rises gently to the west and the buildings of the Siemens/Microsoft campus are on this western knoll. The campus subarea consists of two- to six-floor building complexes that are separated by roadways and parking lots. Vegetation within the campus consists of formal landscaping. The tree border along the Parkway and on the berms between the Parkway

and the buildings screens views of the trail from within the campus and vice versa. The gravel surfaces and split-rail fences of the Interim Use Trail are in harmony with the surroundings.

The viewer groups in this area are (from largest to smallest) motorists on East Lake Sammamish Parkway, workers at or visitors to the campus, and trail users. Motorists and campus visitors will likely be focused on traffic conditions and their destination, and therefore are not sensitive to visual quality. Sensitivity of trail users to the visual quality of the trail area is likely to be reduced by the proximity of high traffic levels on the Parkway. There are pleasant long-distance views of hilltops to the south.

Lake Sammamish State Park. The Interim Use Trail travels along the eastern edge of the park paralleling East Lake Sammamish Parkway. The terrain of this subarea is level with stands of native deciduous forest, emergent wetlands, and large tracts of turf for play areas and between parking strips. The only structures are public restrooms, a pier near the parking lot, and a paved boat launch beach. The formal entrance to the park is from East Lake Sammamish Parkway. At the south end of the park, views to the west are limited by the forest. At the north end of the park, views from the trail open west across the emergent wetland. The gravel surfaces and split-rail fences of the Interim Use Trail are in harmony with these surroundings.

Traffic volumes are high on the Parkway throughout the day; consequently motorists are the primary viewers in this subarea. Park and trail users compose a smaller group; however, since most park users will drive to the park, they are also part of the motorist group. Sensitivity of trail users to the visual quality of the trail area is likely to be reduced by the presence of high traffic levels on the Parkway. The same is true for motorists, who will be focused on traffic conditions, but could enjoy the drive along the park with its views and wooded character.

Some views into the park at the north end are memorable. However, the Parkway dominates most views and disrupts the continuity of the forest on both sides of East Lake Sammamish Parkway.

Sammamish Shoreline. This subarea has a repeating pattern of remnant shoreline forested areas and wetlands, with enclaves of single-family homes. Shoreline terrain varies from steeply to gently sloped, with a matrix of deciduous forest and wetlands that were largely cleared for the houses. Small stands and hedges of conifers are intermittent throughout the subarea and primarily associated with residential landscaping. The width of area between the shoreline and the Parkway varies considerably.

Numerous roads and residential driveways extend off of the Parkway, some of which traverse the very steep grades between the shore and the Parkway. The Interim Use Trail's elevation relative to that of the houses changes throughout this subarea, varying from points where the trail is at the same level as the houses to points where the trail is above house level, allowing trail users to look over the rooftops. The varying width of the land between the shore and the Parkway also affects the trail-to-house relationship. Approximately one-quarter of the homes built in this subarea are inside or directly adjacent to the King County right of way and another quarter of the total homes are within 25 feet of the right of way. Approximately one-fifth of the residences in this subarea are greater than 100 feet from the right of way.

The homes in this subarea are of various ages and sizes. Newer homes (less than 20 years old) are one to three stories high, with a large footprint (typically 3,000 to 10,000 square feet), and fill the lot to the minimum permitted offsets (15 feet). Older homes are typically smaller in footprint (typically less than 3,000 square feet), one- or two-story structures. Additional features adjacent to or within the King County right of way throughout this subarea include retaining walls, wood and chain-link fences, paved parking and driveway areas, gardens and other landscaping, private docks, and storage sheds. The King County right of way is often used as storage or parking for the residences.

Residents and trail users are the primary viewers in this area. Both groups are likely to be sensitive to visual quality because of the views toward Lake Sammamish. In most cases, the Interim Use Trail is not visible from the residences because it runs behind the homes. There are residences where the trail is

adjacent to the front yard, however, and visible to homeowners. Sensitivity may depend on the views available from the home or yard and the proximity of the Interim Use Trail. For trail users, use of the King County right of way for residential storage has reduced the visual quality of the trail. There are memorable views throughout this unit across Lake Sammamish and to the hills and shoreline to the west.

Marymoor Park. The visual character of this subarea is wooded floodplain and shoreline. The Interim Use Trail passes along the eastern edge of the park but is not visible from East Lake Sammamish Parkway due to blackberry thickets along the road and because the trail is substantially below the level of the Parkway. Vegetation consists of native deciduous forest and wetlands. An occasional driveway enters the park or approaches the shoreline. The gravel surfacing and split-rail fences of the Interim Use Trail are compatible with the park-like character of the corridor. The Interim Use Trail connects to the SE Redmond Trail via a pedestrian underpass at SE 187th Avenue NE.

While there are many motorists on East Lake Sammamish Parkway, motorists and their passengers have limited views of the trail. As a result, trail users are the largest group of viewers in this subarea. They are likely to be sensitive to visual quality because the Interim Use Trail passes through an intact, natural wooded landscape. There are no features along the trail that create dramatic or memorable views, and views from the trail toward Lake Sammamish are screened by the deciduous trees lining the trail, especially in summer when the trees are in full leaf. Nevertheless, the Interim Use Trail offers a pleasant visual environment.

SR 520/Industrial-Commercial. The visual character of this subarea is characterized by medium-scale, moderate-density, one- and two-story box commercial and industrial buildings. The terrain is gently rolling with an overall slope toward Lake Sammamish to the south. Vegetation consists primarily of street trees, conifer screens, patches of blackberries, and commercial ornamental landscaping. Stands or screens of conifers and buildings limit views from East Lake Sammamish Parkway and the Interim Use Trail. Businesses include a car wash, fast food purveyors, mini-storage facilities, vehicle and boat lots, a tire store, and a lumberyard. The area beneath the overpass is open, without vegetation or structures other than support piers. The Interim Use Trail is at grade through the industrial district, but below the level of the Parkway south of NE 65th Street. There is a sense of openness through the industrial area because the structures are low (one to three floors), and many are set back from the project corridor.

Interim Use Trail users are the largest group of viewers in this subarea. While there are many more patrons of the businesses and motorists along Redmond Way and East Lake Sammamish Parkway, they have only intermittent or partial views of the trail. In the north end, the Interim Use Trail is only visible from cross streets. Motorists and business patrons are not likely to be sensitive to view quality here because they are focused on traffic conditions or their business activity.

Trail users are likely to be somewhat sensitive, especially if their purpose is recreation. However, the industrial-commercial character of the area dominates most views. Most of the buildings face away from the trail, so people using the trail see back lots and the backs of the buildings. However, the gravel surface and split-rail fence give the Interim Use Trail a rural quality and create visual continuity between Marymoor Park and Bear Creek.

Bear Creek. This subarea is a short portion of the eastern end of the Bear Creek corridor, adjacent to the SR 520 overpass. It is a remnant of natural open space just across SR 520 from the north edge of Marymoor Park. The terrain is flat and level and consists mostly of wetland/riparian open space with stands of deciduous forest. The only transportation structures are SR 520 and the Bear Creek Trail.

The majority of viewers in this area are Bear Creek Trail users and motorists on the on/off-ramps of SR 520. Bear Creek Trail is screened from Redmond Way by the deciduous forest along Bear Creek. Trail users are likely to be somewhat sensitive to the visual quality of the area. Though they are traveling through a natural-appearing, open landscape, it is located between a busy highway and a shopping center.

Drivers are likely to be less sensitive because their attention is on traffic conditions. Passengers, however, can look around and are likely to be more sensitive than drivers to the quality of the view.

Trees and structures limit views within the Bear Creek subarea, and the visual quality of the views is reduced because of the dominance of the SR 520 highway. There are no elements in this subarea that would create memorable views, but the creek corridor is still essentially natural and intact, without built facilities other than the Bear Creek Trail.

3.9.3 Direct Impacts

This section summarizes the potential visual and aesthetic impacts of the proposed trail alternatives in each of the subareas introduced in the previous section. Simulations are provided for specific locations to illustrate those impacts and are referred to in the discussion below. Visual impacts are rated as low, moderate, or high changes according to the following definitions:

- Low contrast between scale and/or character of proposed facilities and the existing environment is not noticeable; viewers are not likely to perceive a visual change or expect scenic views.
- **Moderate** contrast between scale and/or character of proposed facilities is somewhat noticeable; viewers are somewhat aware of and sensitive to visual change.
- **High** contrast between scale and/or character of proposed facilities and existing environment is very noticeable; viewers are sensitive to visual change and expect attractive views or surroundings.

3.9.3.1 Corridor Alternative

Construction Impacts

Visual impacts due to construction would include the presence of small- to medium-sized equipment, excavation of soil, and storage of construction materials for short periods. These impacts would be temporary since all construction equipment and materials would be removed when the project was completed.

Construction of retaining walls would occur from the road or corridor alignment and is not expected to generate additional impacts beyond those mentioned above.

Operation Impacts

Operation impacts common to all subareas would result from removal of vegetation (native vegetation, weeds, residential gardens, and landscaping) and/or structures (fences, walls, sheds, and irrigation systems) in the County-owned corridor. Removal of vegetation or structures could be necessary because the Corridor Alternative is wider than the Interim Use Trail. Some private residences have evergreen hedges for screening and/or landscaped and paved areas in the County-owned corridor that would likely be removed for the trail. The increased visibility or loss of landscaping, which has functioned in some locations as private yards, would change the visual character.

I-90/Industrial-Commercial. There would be no visual impacts in this subarea because the addition of asphalt paving over the gravel surface would not produce a noticeable visual change.

Commercial/Business Campus. There would be no visual impacts in this subarea because the widening of the trail and addition of asphalt paving over the gravel surface would not make a substantial visual change. Trail users are likely to see what small visual change does occur as positive because it would define a safe and pleasant space for walking in a very busy traffic corridor.

Lake Sammamish State Park. Visual impacts in this subarea would be low because the widening of the trail and addition of asphalt paving over the gravel surface would not make a noticeable visual change. As with the other subareas, the split-rail fence would fade to gray in time and blend with the forest and wetland edges.

Sammamish Shoreline. Visual impacts in this subarea would result from the close proximity of the trail to houses and/or yards in some places; the removal of residential landscaping and fences if they fall within the trail limits; and the use of safety structures, such as retaining walls, chain-link fences, split-rail fences, and guardrails (Figures 3.9-1 to 3.9-4 (pgs 3.9-8 to 3.9-11)). Overall, the asphalt paving of the trail, low retaining walls (less than 4 or 5 feet high), and split-rail fences would not create a major change in the visual environment, because these elements are consistent with the rural and suburban character of this area. Privately constructed concrete and block retaining walls are already in place throughout the corridor to support driveways or steep slopes, or for beach control. Many driveways and entrances are concrete paved. Chain-link fence (on top of the retaining walls) is not common throughout this subarea, but the black finish of the new fence would reduce its visibility.

Retaining walls would be used where the uphill slope is very steep or to reduce the trail footprint. Visual impacts would vary with the height of the wall and whether it could be seen from a sensitive location. In some places, the retaining walls may be 6 to 8 feet high and could create a substantial visual change. However, these taller walls would be used primarily in wooded areas that have no residences (for example, in the Adelaide area). Taller walls would be made of reinforced concrete or soldier pile, and shorter walls could be made of block. New materials would contrast with the surroundings because of their lighter color, but their impact could be lessened by weathering of the wall surface over time and replanting near the wall. In all cases, a wall type would be used that is appropriate and sensitive to the context.

Visual impacts due to walls and chain-link fences would be moderate to high in areas where the wall is visible from a sensitive view, such as in the Sammamish Place area, or where the wall is very close to the house, such as in the 205th Avenue SE area. View impacts could be positive in places where the project corridor is currently used for storage (garbage, construction materials, vehicles, yard waste, etc.).

Chain-link fences, installed to protect private property in some areas, would have a low to moderate impact on view quality (Figure 3.9-3 (pg 3.9-10)). Most new chain-link fences are not visible from sensitive view locations and are intended to deter trespass by the public on private property. Chain-link fences between the trail and scenic views to the west would have a moderate to high impact on view quality for the trail user. Split-rail fences would have a low visual impact because they are consistent with the rural character of the shoreline residential areas, would not obstruct views, and would age to a gray color.

The proposed parking and restroom facilities just north of Inglewood hill Road would have a moderate visual impact. There are no other existing parking lots or large, paved tracts in this vicinity; therefore the parking area would introduce a new visual element. However, the parking area would not be visible from the trail and there are no homes along the shoreline from which to see the parking area or vehicles parked there. The parking area is not out of character with the overall nature of the Parkway, and vegetation could screen and soften the appearance of the parking area.

The second parking area at SE 33rd Street would have low to moderate visual impact. There are no homes between the proposed parking area and East Lake Sammamish Parkway. Views from residences north of SE 33rd Street and east of the Parkway may include the parking area, but Lake Sammamish is not visible from these homes so the impact on the quality of the view is less. The parking area would be visible from the trail. There is an existing strip mall with parking south of SE 33rd Street and east of the Parkway.



Looking north from railbed in north-end Sammamish Place neighborhood.



Corridor Alternative; Looking north from railbed in north-end Sammamish Place neighborhood. Paved path is 12 ft. wide with 3 ft. shoulder on left and 2 ft. gravel shoulder on right.



King County Capital Improvement Projects **Facilities Management** Division, DES

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SOURCE: Parametrix, 2004

FIGURE 3.9-1 SIMULATION, CORRIDOR ALTERNATIVE STATION 356 + 00 EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON



Looking south from railbed at Mint Grove entrance.



Corridor Alternative; Looking south from railbed at Mint Grove entrance. Paved path is 12 ft. wide with 2 ft. gravel shoulder on left and 5 ft. shoulder on right.



Capital Improvement Projects
Facilities Management
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SOURCE: Parametrix, 2004

FIGURE 3.9-2 SIMULATION, CORRIDOR ALTERNATIVE STATION 370 + 00 EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON



Looking north from railbed just south of Shoreland entrance.



Corridor Alternative; Looking north from railbed just south of Shoreland entrance. Paved path is 12 ft. wide with 2 ft. gravel shoulders and 4 ft. shoulder on right.





Looking northwest from railbed and driveway across from NE 33rd Place.



Corridor Alternative; Looking northwest from railbed and driveway across from NE 33rd Place. Paved path is 12 ft. wide with 2 ft. gravel shoulders.



Capital Improvement Projects Facilities Management Division, DES

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SOURCE: Parametrix, 2004.

FIGURE 3.9-4 SIMULATION, CORRIDOR ALTERNATIVE STATION 519 + 00 EAST LAKE SAMMAMISH TRAIL MASTER PLAN KING COUNTY, WASHINGTON Marymoor Park. This subarea would experience low to moderate visual impacts. The gravel paving and fencing would be appropriate to the natural-appearing landscape of the park edge, and the addition of asphalt paving would not substantially alter the visual character. In time, the wood of the split-rail fence would fade to gray and blend with the vegetation of the area. The retaining wall with chain-link fencing (to prevent beach access) would alter the trail user's view but would not block views into the forest. Generally, the trail is not visible from East Lake Sammamish Parkway, so motorists would not see the fences.

SR 520/Industrial-Commercial. There would be no or low visual impacts in this subarea. Trail users may view the addition of paving and signage as an improvement in existing conditions, and these features would not conflict with the industrial-commercial character of the area. Patrons of the commercial establishments are not likely to notice or be sensitive to the changes.

Bear Creek. There would be no or low visual impacts in this subarea. Bear Creek trail users and motorists would notice the addition of the asphalt surfacing, but the paving and fencing would be appropriate to the surrounding landscape. In time, the color of the wood fence would fade to gray and blend with the vegetation of the area.

3.9.3.2 East A Alternative

Construction Impacts

Visual impacts due to construction would include the presence of small- to medium-sized equipment, excavation of soil, and storage of construction materials for short periods. These impacts would be temporary since all construction equipment and materials would be removed when the project was completed. Retaining walls would be constructed from the road; therefore, construction is not expected to generate additional impacts beyond those described here.

Construction impacts may be less for this alternative than for the Corridor Alternative because there would be no construction along the rail corridor in areas where the multi-purpose trail diverts to the roadway. This would reduce the degree of visual impacts for residences on the west side of the roadway in these locations with views to the water.

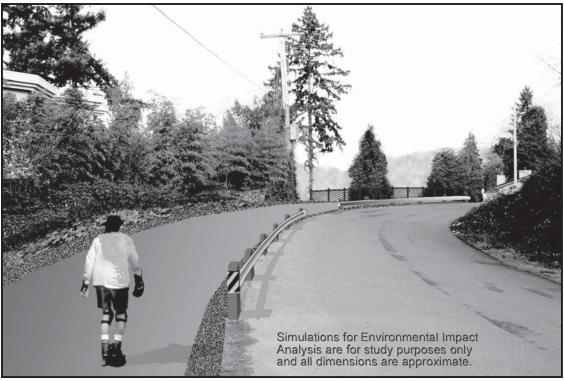
Operation Impacts

Impacts of the East A Alternative would be the same as those of the Corridor Alternative for all subareas. Operation impacts would result in removal of vegetation (native vegetation, weeds, residential gardens and landscaping) and/or structures (fences, walls, sheds, and irrigation systems) along East Lake Sammamish Parkway and/or East Lake Sammamish Place. Some residences have evergreen hedges for screening and/or landscaped and paved areas that would be removed or modified for construction purposes. The increased visibility or loss of landscaping in or near some yards would change their character.

The Sammamish Shoreline subarea would sustain additional operation impacts, due to the close proximity of the trail to houses and/or yards in some places (Figure 3.9-5 (pg 3.9-13)); the removal of private residential landscaping and fences that fall within the trail limits; and the installation of safety structures, such as retaining walls, chain-link fences, split-rail fences, and guardrails (Figure 3.9-6 (pg 3.9-14)). Low visual impacts would result from placing the trail along East Lake Sammamish Parkway because the trail would appear as an expansion of the existing on-street bike path. However, the quality of experience for the trail user in these places would be lower than in the off-street portions of the trail because of the presence of vehicular traffic. The views for trail users would be similar to those for motorists, both having occasional views of Lake Sammamish.



Looking north from about 2100 block on E Lake Sammamish Place SE.



East Alternative; Looking north from about 2100 block on E Lake Sammamish Place SE. Paved path is 12 ft. wide with 2 ft. shoulders.





Looking south from first driveway south of Inglewood Hill Road.



East Alternative; Looking south from first driveway south of Inglewood Hill Road. Paved path is 12 ft. wide with 2 ft. gravel shoulders.



Division, DES

Overall, the wider trail, asphalt paving, and low walls would result in low visual impacts since these elements are consistent with the suburban and transportation corridor character of this area. Privately constructed concrete and block retaining walls are already in place throughout the corridor to support driveways and steep slopes, and for beach control. Many driveways and entrances are concrete paved.

In the Sammamish Place neighborhood, visual impacts would be high due to the removal of front yard landscaping, vegetation on the slopes between lots, parking spaces, and driveways. The East A Alternative would come very close to several residences, resulting in changes to the visual quality of views from and to the front yard and house. High visual impacts could result from the addition of a barrier between the trail and roadway. The barrier could be a low guardrail, which would contrast with the neighborhood character of the street.

Retaining walls 10 to 15 feet high could be required to support the fill prism for the East A Alternative. In some cases, the base of the retaining wall may be close to an existing residence. There would be a moderate to high change in visual character for views of retaining walls and chain-link fences from residences below the trail. Shrubs and trees could screen the wall if there is sufficient planting area at the base of the wall.

The impacts associated with the two proposed parking and restroom facilities would be the same as those for the Corridor Alternative (see Section 3.9.3.1).

3.9.3.3 East B Alternative

Construction Impacts

Construction impacts would be the same as for the Corridor and East A Alternatives, with the addition of small equipment for removing chain-link fences and signage along portions of the County-owned corridor that would be closed (see below).

Operation Impacts

Impacts of the East B Alternative would be the same as those of the East A Alternative except where the paved portion of the alignment leaves the existing Interim Use Trail alignment, the County-owned corridor would be closed to public use. Removal of the chain-link fence and trail etiquette and traffic control signs would result in low, beneficial impacts to visual quality by reducing the number of built features in the landscape.

As with the East A Alternative, the quality of experience for the trail user where the alignment is next to East Lake Sammamish Parkway would be lower than in the portions of the trail located on the Interim Use Trail alignment because of the close proximity of vehicular traffic. The views for trail users would be similar to those for motorists, both having occasional views of Lake Sammamish.

3.9.3.4 Continuation of the Interim Alternative

Construction Impacts

The construction impacts associated with the two proposed parking and restroom facilities would be the same as those for the Corridor Alternative (see Section 3.9.3.1). Otherwise, there would be no trail construction impacts associated with this alternative.

Operation Impacts

There would be no visual impacts since the Interim Use Trail is already in place. Operation of the soft-surfaced trail would continue beyond 2015.

3.9.3.5 No Action Alternative

Construction Impacts

There would be no construction impacts from this alternative.

Operation Impacts

There would be no visual impacts along the trail alignment under the No Action Alternative; the visual context would remain as it currently is through 2015. Existing conditions and uses allowed by the Interim Use Trail would continue, including residential parking and storage, landscaping, and driveway crossings.

3.9.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Under all the Build Alternatives, indirect visual impacts could result if adjacent property owners construct new fences, walls, or vegetation on their properties to visually screen views of the trail or to prevent public access to yards and homes. Otherwise, the Master Plan Trail is not expected to have any indirect or secondary impacts on visual quality.

3.9.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The railroad right of way was in place as a transportation corridor for a century prior to its conversion to a bicycle-pedestrian trail. The railroad contributed to past growth. Future transportation projects that contribute to growth in this area would also bring increased use of the trail, along with associated visual impacts. These transportation projects include widening East Lake Sammamish Parkway and the Millennium Trolley in the I-90 vicinity. Widening East Lake Sammamish Parkway could bring the roadway closer to the Interim Use Trail corridor. In the Bear Creek area, both SR 520 and Bear Creek Parkway are designated and funded for widening, and some of this widening will occur in the area between the two roadways. This area contains trails, Bear Creek, and a number of planned enhancements. The widening projects would detract from the natural-appearing character of the Bear Creek corridor by reducing the size of the open space and bringing vehicles closer to the trails.

3.9.6 Mitigation Measures

Mitigation concepts would be developed using the principles of context sensitive design (FHWA, 2004) to identify design solutions that are site-appropriate and that reflect the preferences and requirements of community members, property owners, and other stakeholders. General concepts to be considered include:

- Reinstall landscaping where possible to provide visual screens and/or restore trail edge plantings.
- Choose retaining wall materials that are appropriate to the particular location.
- Use funds from the 1 percent art tax to develop and construct art or interpretive elements at sensitive locations such as gates, transition nodes or entrances, and at special environmental or natural features.

A Vegetation Management Plan developed for the East Lake Sammamish Interim Trail will be a primary reference for mitigation and maintenance actions. This plan (Parametrix, 2002) describes Best Management Practices for addressing hazard trees and other conditions, maintenance of safe sight distance, control of noxious weeds, drainage maintenance, vegetation replacement, access, and monitoring along the trail. This document will be updated to reflect changes in management practices and permit conditions.

3.9.7 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse visual impacts would occur for the Corridor, No Trail, and No Action Alternatives.

Under the East A Alternative, significant unavoidable adverse impacts could result in the Sammamish Place neighborhood due to the trail passing very close to several residences. Depending on the proximity impacts, acquisition of the full property may be required (see Section 3.8, Socioeconomics, for further discussion). Impacts could consist of the removal of portions of front yards and driveways, vegetation on the slopes between lots, and on-street parking. In some places, retaining walls may be required in close proximity to residences. If these properties are not acquired for the project, significant unavoidable changes in visual quality of views from the residences would result.

Impacts of the East B Alternative would be the same as those of the East A Alternative in the places these alternatives have in common. Where the paved portion of the trail leaves the existing Interim Use Trail alignment, there would be no significant unavoidable impacts.

3.10 Public Services and Utilities

This section discusses existing public services and utilities in the project vicinity, potential impacts related to construction and operation, and potential mitigation measures. Public services include educational facilities, fire and police protection, emergency medical response, religious and social institutions, cemeteries, government institutions and facilities, military facilities, libraries, public transit, and mail and newspaper delivery. Recreational facilities are discussed in Section 3.7. Utilities discussed include water, wastewater, solid waste, electricity, natural gas, telephone, television cable, and fiber optic services.

3.10.1 Studies and Coordination

Information was collected from various utility and public service providers via information requests to the Cities of Redmond, Sammamish, and Issaquah, and individual utility websites and site visits.

3.10.2 Affected Environment: Public Services

3.10.2.1 Overview of Emergency Response Services

Emergency calls to 911 from the project vicinity are dispatched from the Bellevue Dispatch Center. The dispatch center decides which station is closest and available and dispatches the appropriate station. In the case of a medical emergency, fire department aid cars would respond first. A private ambulance may later be requested depending on the situation, the wishes of the injured party, or if additional patient transportation is required. Paramedic units are also available to respond to medical emergencies along the corridor. These units are located at Fire Station #11 in Redmond at 8450 – 161st Avenue NE (Evergreen Medic Unit 19) and at Fire Station #72 in Issaquah (part-time Bellevue Fire Department unit) (Altenburg, personal communication, 2000; Carolan, personal communication, 2000). Emergency response vehicles typically transport injured patients to Overlake Hospital Medical Center in Bellevue or Harborview Medical Center in Seattle.

3.10.2.2 City of Issaquah

Emergency Fire, Police, and Medical Response

Eastside Fire and Rescue District provides fire and emergency medical response to the City of Issaquah. The City of Issaquah Police Department provides police service to the City of Issaquah.

Schools

The segment of the project corridor in the City of Issaquah is located within the Issaquah School District (ISD) (District #411). No schools are located along East Lake Sammamish Parkway SE or adjacent to any portion of the project corridor. School bus stops are located along East Lake Sammamish Parkway. Issaquah School District buses utilizing the Parkway serve Sunny Hills Elementary, Endeavour Elementary, Discovery Elementary, Pine Lake Middle School, and Skyline High School. Buses serving these schools operate along the Parkway throughout the school day, with the heaviest traffic during weekday mornings and weekday afternoons.

Public Transportation

King County Metro provides public bus service throughout the City of Issaquah. Two Metro bus routes provide service along a portion of East Lake Sammamish Parkway adjacent to the project corridor in the City of Issaquah. Three Metro bus stops are located along the Parkway in the City of Issaquah. Metro bus routes stop on NW Gilman Boulevard and Front Street, near the beginning of the project corridor in the City of Issaquah. Routes also travel along NW Sammamish Road, west of East Lake Sammamish Parkway SE in the City of Issaquah.

Other Public Facilities/Services

The Issaquah Division of King County's District Court is located in the City of Issaquah, within a business park adjacent to the existing Interim Use Trail. Covenant Presbyterian Church lies on the east side of East Lake Sammamish Parkway. The Issaquah Chamber of Commerce is located near the southern terminus of the Master Plan Trail alternatives.

3.10.2.3 City of Sammamish

Emergency Fire, Police, and Medical Response

Eastside Fire and Rescue Department provides fire and emergency medical services along the City of Sammamish portion of the trail. Fire stations that would likely respond to a fire or medical emergency are Fire Station #221 (located at 212th Avenue and SE 20th Street), Fire Station #223 (located at 232nd Avenue NE), and/or Fire Station #72 (located at 175 Newport Way NW). The City of Sammamish contracts with the King County Sheriff's Office for police services.

Schools

The City of Sammamish is in the Lake Washington School District (LWSD) (District # 414) and the Issaquah School District (ISD) (District # 411). With the exception of the Lakeside Montessori Sammamish Campus (pre-school and kindergarten), no schools are located along East Lake Sammamish Parkway SE or adjacent to any portion of the proposed trail alternatives.

LWSD and ISD buses have several school bus stops along East Lake Sammamish Parkway. LWSD buses utilizing the Parkway serve Blackwell Elementary (and kindergarten), Samantha Smith Elementary (and kindergarten), McAuliffe Elementary (and kindergarten), Inglewood Junior High, and Eastlake High School, all located in the City of Sammamish. ISD buses utilizing the Parkway serve Sunny Hills Elementary, Endeavour Elementary, Discovery Elementary, Pine Lake Middle School, and Skyline High School. Buses operate along the Parkway throughout the school day, with the heaviest traffic during weekday mornings and weekday afternoons.

Public Transportation

King County Metro provides public transit in the City of Sammamish. However, there are no public transportation bus stops, park-and-ride lots, or transit center facilities located along or adjacent to any proposed trail alternative in the City of Sammamish (City of Sammamish, 2003).

3.10.2.4 City of Redmond

Emergency Fire, Police, and Medical Response

The Redmond Fire Department provides fire and emergency medical response services in the Redmond portion of the project corridor. Personnel from Fire Station #16, located at 185th Avenue NE and NE 67th Street, would likely be the first to respond to an emergency situation along the northern portion of the project corridor. A paramedic unit is also available at Fire Station #11 at 8450 - 161st Avenue NE (Evergreen Medic Unit 19). The City of Redmond Police Department provides police services within the City.

Schools

The portion of the City of Redmond in the project corridor is within the Lake Washington School District (LWSD) (District # 414). No schools are located along East Lake Sammamish Parkway or adjacent to any portion of the proposed trail alternatives. However, LWSD buses serve East Lake Sammamish Parkway with several school bus stops. LWSD buses utilizing the Parkway serve Redmond High School and Redmond Junior High School, both located in the city. LWSD buses utilizing the Parkway include large buses and smaller, special-needs buses. Buses serving schools located in Redmond operate along the Parkway, during weekday mornings and weekday afternoons.

Public Transportation

There are no public transportation bus stops, park-and-ride lots, or transit center facilities located along the project corridor in the City of Redmond. King County Metro transit routes stop on Redmond-Fall City Road (SR 202) less than 0.25 mile from the project corridor.

3.10.3 Affected Environment: Utilities

Because the project vicinity is highly urbanized, numerous utilities are located in the area. The following section describes the utilities currently identified within or adjacent to the corridor. Additional site-specific identification of utilities would be required prior to construction. Only the locations of utilities that would potentially be disrupted or relocated by the project are discussed in this section.

3.10.3.1 City of Issaguah

The City of Issaquah Public Works Department provides sanitary sewer and potable water service within the City limits. A wastewater line is located within East Lake Sammamish Parkway SE right of way north of SE 56th Street. The line turns west at SE 56th Street and crosses under the Interim Use Trail. Underground wastewater pipelines also intersect the corridor where the Interim Use Trail intersects NE Gilman Boulevard. No water mains fall within or cross the Interim Use Trail within the City of Issaquah. However, numerous individual pipes cross the corridor to connect individual customers with the water main under East Lake Sammamish Parkway. The City maintains a water supply intertie with the Sammamish Plateau Water and Sewer District (SPWSD) at NW Sammamish Road (SE 56th Street) and 221st Place SE west of the trail corridor and the Parkway.

Storm drainage collection is also provided by the City of Issaquah Public Works Department. Storm drainage pipes exist at the northwest intersection of East Lake Sammamish Parkway SE and SE 56th Street. A stormwater pipeline also extends for a short length as it parallels the Interim Use Trail corridor where it intersects with NE Gilman Blvd. Storm drainage problems have resulted in occasional flooding on the Parkway between SE 51st Street and SE 56th Street. King County and the City of Issaquah are currently coordinating efforts to address these issues.

Solid waste collection (garbage, recycling, and yard waste) is also provided by the City of Issaquah. Garbage is transferred to the Cedar Hills Landfill, which is owned and operated by King County.

Puget Sound Energy provides natural gas and electrical service to customers within the City of Issaquah. Numerous individual lines cross the Interim Use Trail to provide natural gas and electrical service to individual customers adjacent to the trail, west of East Lake Sammamish Parkway. The Pickering Electrical Substation is located directly north of where the Interim Use Trail intersects with SE 62nd Street. The substation services cross under and over the project corridor to serve businesses and residential developments east of the Parkway.

Qwest provides telecommunications service to customers in the City of Issaquah. The main overhead cable is located in the right of way for East Lake Sammamish Parkway SE. The service area extends from Issaquah to SE 16th Street in Sammamish. Lines cross overhead and underneath the Interim Use Trail at a number of locations, including SE 51st Street, SE 56th Street, SE 62nd Street, and NW Gilman Boulevard. A cellular phone tower owned by T-Mobil is located on the Pickering Substation property. Television cable and cable-internet service are provided by Comcast.

3.10.3.2 City of Sammamish

Northeast Sammamish Sewer and Water District (NESSWD) and Sammamish Plateau Water and Sewer District (SPWSD) both supply sanitary sewer service and potable water service to residents adjacent to the project corridor. Water and wastewater pipelines are located in, and cross, the East Lake Sammamish Parkway right of way throughout the City of Sammamish. NESSWD maintains lines buried in East Lake Sammamish Parkway right of way only. Numerous SPWSD pipelines cross and run within the boundaries of the Interim Use Trail to provide service to private residences from the main line along the Parkway.

King County Wastewater Treatment Division is planning to construct a regional wastewater conveyance pipeline, located in either the East Lake Sammamish Parkway SE right of way or the East Lake Sammamish Trail right of way. The pipeline would be constructed from Inglewood Hills Road north and connect to the NE Lake Sammamish Interceptor near the northern terminus of the proposed Master Plan Trail alternatives. Construction of the pipeline is anticipated to begin in 2009.

Stormwater runoff management facilities are located along East Lake Sammamish Parkway in the City, including retention/detention facilities. The City currently contracts with King County to maintain the stormwater management system.

Solid waste collection service (garbage, recycling, and yard waste) is provided by two local hauling entities within the City of Sammamish. Rabanco Connections serves customers south of NE 8th Street, and Waste Management/Sno-King serves customers north of NE 8th Street. Solid waste is transferred to facilities owned or operated by King County.

Puget Sound Energy provides electrical and natural gas to residences in the City of Sammamish. The Williams Pipeline Corporation maintains the natural gas distribution lines in the City of Sammamish. A number of corridor crossings exist to serve properties west of the project corridor.

Verizon provides telephone service to the northern portion of the City, and Qwest provides service to the southern portion of the City. Qwest utilizes fiber optic lines to deliver telephone service, including along East Lake Sammamish Parkway from the southern city limits to approximately SE 24th Way. A cellular tower is located along East Lake Sammamish Parkway south of NE Inglewood Hill Road. AT&T has applied for permits to install cellular tower equipment in the vicinity of SE 8th Street. Comcast provides television and internet cable service to customers in the City of Sammamish. Distribution cables are

typically located on poles owned by Puget Sound Energy and/or Quest Communications, or they are located underground (City of Sammamish, 2003).

3.10.3.3 City of Redmond

Wastewater and potable water lines owned by the City of Redmond are located underground along East Lake Sammamish Parkway NE in the City of Redmond. Water lines cross the Interim Use Trail to access individual residences at NE 65th Street and NE 70th Street. A wastewater line crosses the Interim Use Trail to access residences at NE 65th Street.

A wastewater conveyance line owned by King County is located within the railroad right of way from 170th Avenue (Bear Creek Parkway) near the north terminus of the Interim Use Trail, extending to approximately 1,000 feet south of NE 70th Street.

Solid waste collection service (garbage, recycling, and yard waste) is provided by Waste Management/ Sno-King in the City of Redmond. Solid waste is transferred to facilities owned or operated by King County.

A number of electrical and natural gas lines owned by Puget Sound Energy cross the project corridor to serve properties west of the Interim Use Trail.

Verizon and Qwest provide telephone service within the City of Redmond. Three buried telephone lines cross the Interim Use Trail, and numerous overhead crossings exist to access individual customers along the corridor. Comcast provides local cable service and utilizes overhead utility lines that connect individual customers from the main power line along East Lake Sammamish Parkway. A cellular phone tower owned by T-Mobil is located adjacent to the corridor near the intersection with NE 70th Street in Redmond.

3.10.4 Direct Impacts to Public Services and Utilities

3.10.4.1 Corridor Alternative

Emergency Fire, Police, and Medical Response

Construction Impacts. Access to properties for all emergency response services would be maintained during construction of the trail. A number of methods could be used to provide access to individual properties during construction (e.g., construction sequencing, diversions, temporary crossings). These methods would be determined during detailed design. Access to some residences could be delayed during construction as a result of construction-related traffic, but this would be minimized through the use of proper traffic control and signage (see Chapter 2 and Section 3.11, Transportation). Construction activity at individual roadway and driveway crossings is anticipated to last for one to two weeks.

Operation Impacts. Impacts to fire, police, and emergency medical response services from operation of the Corridor Alternative would not be expected. As described in the *East Lake Sammamish Interim Use Trail and Resource Protection Plan Final EIS* (King County 2000), the City of Redmond Police Department, the Sammamish Police Department (King County Sheriff's Office providing law enforcement services in the City of Sammamish), and the Issaquah Police Department would not anticipate substantial increases in demand for law enforcement services as a result of the trail. The City of Redmond Police Department experienced little increase in demand for services with the opening of the Sammamish River Trail. The Issaquah Police Department does not foresee the need to increase the number of personnel to serve the trail. For the portion of the trail in the City of Sammamish, the King

County Sheriff's Office typically provides six deputies per shift to the unincorporated patrol districts of Precinct Two. These officers would likely be dispatched to most calls for service on the trail but may receive back-up assistance from officers working in the City of Sammamish. The Sammamish Police Department maintains three bicycle units. All officers are trained and equipped as bicycle unit officers. These units may provide occasional patrol and back-up response services to incidents occurring on the trail (Baranzini, personal communication, 2004).

Increased trail use anticipated with the Corridor Alternative would increase the potential for conflicts between trail users and vehicles at Interim Use Trail intersections with roadways and driveways but is not anticipated to impact levels of public services. Fire department personnel have reported that emergency calls increased along the Sammamish River Trail following its initial opening but decreased over time due to trail improvements such as trail markers, installation of a walking path, and resting areas for horses (Altenburg, personal communication, 2000). Similar features could be incorporated into the Corridor Alternative as measures to minimize the potential for accidents.

In the event of an accident, emergency medical response vehicles would access the completed trail via a cross street or residential access road or driveway. Vehicular access onto the trail itself would be provided by removable bollards at a number of locations along the trail corridor. Emergency response providers serving the area would be provided with maps of all vehicular access locations and keys to the removable bollards prior to trail opening. If the injured party could not be reached by vehicle, the emergency personnel would reach the incident location on foot. Where terrain is too unstable or if an instance arises where an injury is too serious, the medical transport helicopter from Harborview Medical Center would be used (Altenburg, personal communication, 2000). For additional discussion on trail user and public safety, see Section 3.7, Recreation.

Schools

During construction of the Corridor Alternative, school buses traveling on East Lake Sammamish Parkway SE may experience occasional delays resulting from truck traffic and use of traffic control devices and flaggers. As stated in Section 3.11, Transportation, impacts to traffic flow along the Parkway during construction are not expected to be substantial. Construction of the Corridor Alternative would not require detour routing of school buses. One bus stop, at SE 33rd Street, would be permanently relocated from the north side to the south side of SE 33rd Street to accommodate construction of the parking lot at that location. The new bus stop location south of SE 33rd Street would have sidewalk access.

Mail and Newspaper

During construction of the Corridor Alternative, impacts to traffic may result in temporary delays for mail and newspaper delivery to homes and businesses along the trail. Operation of the trail under the Corridor Alternative would not impact mail and newspaper delivery services in the area.

Other Services

King County may pursue an option to use the King County District Court parking lot to provide parking for trail users. Use of the lot would not impact employees or citizens traveling to and from the District Court House because trail user parking would be restricted to evenings and weekends only, when the District Court is closed. Parking impacts are further discussed in Section 3.11, Transportation.

Utilities

Construction Impacts. The greatest potential for disruption of utilities during construction would result from excavation for retaining walls, and grading and construction of two parking and restroom facilities and driveways from East Lake Sammamish Parkway SE. Some grading would occur to widen the trail, and some minor excavation would be needed to install fence posts, signposts, and bollards. All underground utilities would be located prior to construction activities that more than superficially disturb the soils.

The King County Wastewater Treatment Division regional wastewater conveyance pipeline, planned to be located in either the East Lake Sammamish Parkway SE right of way or the East Lake Sammamish Trail right of way, is anticipated to begin construction in 2009. Efforts would be made to coordinate pipeline construction with construction of the proposed Master Plan Trail.

Operation Impacts. Operation of the Corridor Alternative could result in the relocation of sewer manholes. Several sewer lines are located within the Interim Use Trail right of way, or cross the project corridor. Widening the Interim Use Trail could impact access to these facilities via existing manholes. Relocating manholes would be difficult, particularly at sewer line junctions. If possible, access points to existing manholes would be offset to remove the manholes from the center of the trail.

Operation of the Corridor Alternative would not impact utility levels of service. Electricity, water, and sewer service would be required at the restrooms. The trail and associated parking areas and restrooms would close at dusk. The parking areas and restrooms would be locked after hours of operation. Minimal lighting for security may be provided at the restrooms. The parking lots and trail would not be lighted.

3.10.4.2 East A Alternative

Emergency Fire, Police, and Medical Response

Construction Impacts. Impacts to public services related to the construction of the East A Alternative would include those described for the Corridor Alternative. However, construction of trail segments adjacent to (and at grade with) East Lake Sammamish Parkway SE in the City of Sammamish would have greater potential to affect response times by delaying emergency response vehicles using the Parkway. Construction of these segments would take at least four months in total, and would require temporary shoulder closures and use of flaggers for traffic management. However, as stated in Section3.11, Transportation, impacts to traffic flow and access along the Parkway during construction would be minimized by using traffic management BMPs. Despite the potential for delays, access to homes and properties for emergency response services would be provided during construction as described for the Corridor Alternative (e.g., construction sequencing, diversions, temporary crossings). These methods would be determined during detailed design.

Operation Impacts. Impacts to public services related to the implementation of East A Alternative would include those listed above for the Corridor Alternative. In addition, trail users may be less safe along sections of the trail immediately adjacent to the roadway because of the reduced separation between vehicles and trail users. Safety risks would be highest during peak traffic periods and/or periods of reduced visibility. An increase in the demand for ambulance and/or medic units may occur. Additional discussion of trail user safety along the East A Alternative is provided in Section 3.7, Recreation.

Schools

Construction Impacts. Construction of the East A Alternative would have greater impacts to school bus traffic than those described under the Corridor Alternative, due to the need for improvements and widening of portions of East Lake Sammamish Parkway SE, and construction of retaining walls to

support widening portions of East Lake Sammamish Place SE. The East A Alternative would require widening along the west side of the Parkway near SE 33rd Street, where Lakeside Montessori School is located. However, as stated in Section 3.11, Transportation, impacts to traffic flow along the Parkway during construction are not expected to be substantial. School bus stops located at driveways that would require regrading may need to be temporarily relocated during construction.

Operation Impacts. Numerous school bus stops are located along East Lake Sammamish Parkway. School buses stop in the main lane of traffic, rather than pulling off onto a shoulder for stops along the Parkway. Due to traffic volumes and concern for safety of school children, school bus stops are typically located at or very near existing driveways and intersections to avoid children having to walk along the Parkway (Nilsen, personal communication, 2004). Operation of the East A Alternative would not be expected to impact school bus operations or result in greater risk to school children's safety compared to the Corridor Alternative and existing conditions. However, the relocation of school bus stops along the southbound (west) lanes of traffic on East Lake Sammamish Parkway SE could be required. The need for relocation would be assessed during final design of the trail.

Mail and Newspaper Delivery

Mail and newspaper delivery service would be temporarily disrupted <u>during as a result of construction of the trailactivities</u> along East Lake Sammamish Parkway SE and East Lake Sammamish Place SE. Temporary mailboxes and newspaper tubes would need to be located outside of the limits of construction and made accessible to carriers during construction. <u>The temporary relocation would be provided by King County or it's contractor.</u>

Following construction, mailboxes and newspaper delivery tubes along portions of the trail that are at grade with the west lanes of East Lake Sammamish Parkway SE and/or East Lake Sammamish Place SE may need to be permanently relocated. If mailboxes or newspaper delivery tubes were moved from the west side to the east side of the Parkway, residents west of the Parkway would have to cross the Parkway or pull vehicles onto the east shoulder to collect their deliveries.

Utilities

Construction Impacts. Construction of the East A Alternative would have greater potential for impacts to utilities than the Corridor Alternative. In addition to the impacts described for the Corridor Alternative, construction of the East A Alternative would require widening East Lake Sammamish Parkway and East Lake Sammamish Place SE to accommodate the trail. Retaining walls would be installed at various locations along the Sammamish segment of the trail. This would likely require use of cranes and other heavy machinery from the roadway level, resulting in the potential for disruption of overhead light, power, and telephone poles and lines. Excavation and fill to accommodate widening and the installation of retaining walls would likely disrupt underground utilities, potentially including gas, water, and sewer lines. All underground utilities would be located prior to any excavation or earth moving.

Construction of the East A Alternative would temporarily disrupt solid waste, recycling, and yard waste collection services along segments of East Lake Sammamish Parkway SE and East Lake Sammamish Place SE during widening and installation of retaining walls. Construction duration for the Sammamish segment (7.2 miles) of the trail is anticipated to be at least 9 to 10 months. Disruptions of services would occur for shorter periods at specific locations.

Operation Impacts. Operation of the East A Alternative would have greater impacts to utilities than those described for the Corridor Alternative. The East A Alternative may require the permanent relocation of overhead light, power, and telephone poles, and manholes and underground utilities along East Lake Sammamish Parkway SE and East Lake Sammamish Place SE where the trail would be located at grade along the west side of the road.

Because solid waste, recycling, and yard waste receptacles are placed on the west side of East Lake Sammamish Parkway SE and East Lake Sammamish Place SE, collection locations would need to be relocated to the east side of the roadways. This would require property owners on the west side of the roadway to cross the street to deliver and collect their receptacles.

3.10.4.3 East B Alternative

Impacts to public services and utilities from the construction and operation of the East B Alternative would be consistent with those described for the East A Alternative. However, routing equestrian, bicycle, and all pedestrian trail traffic adjacent to (and at grade with) East Lake Sammamish Parkway SE and East Lake Sammamish Place SE could decrease trail user safety. This could increase the need for emergency medical response services. For additional discussion of trail safety, see Section 3.7, Recreation.

3.10.4.4 Continuation of the Interim Use Trail

Potential impacts to public services and utilities from construction and operation of the Continuation of the Interim Use Trail Alternative would typically be less than those described for the Corridor Alternative and the East Alternatives. Construction activity would be limited to the parking and restroom facility locations, and the northern extension of the trail. Accordingly, the duration of construction would be less, and the potential for delays for emergency response activities, school buses, and mail and newspaper carriers would be less than for the other Build Alternatives. Relocation of utilities would not be necessary because the Interim Use Trail would not be widened.

3.10.4.5 No Action Alternative

Under the No Action Alternative, the Interim Use Trail would continue to operate in its current condition until 2015. The volume of calls for emergency public services is not expected to be measurably affected by operation of the Interim Use Trail. The No Action Alternative would not result in the disruption, operation, or relocation of any public or private utility facilities.

3.10.5 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Given the lack of measurable impacts to public services and utilities anticipated from the operation of any of the trail alternatives, secondary or indirect impacts would not be anticipated.

3.10.6 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7)

Cumulative impacts related to public services and utilities serving Redmond, Sammamish, and Issaquah are anticipated to result from ongoing population growth and urbanization in these communities. Growth and increased urbanization are anticipated to result in increased demand for all public services and utility service capacity. However, implementation of any of the Master Plan Trail alternatives would not measurably contribute to this demand.

3.10.7 Mitigation Measures

3.10.7.1 Public Services Mitigation Measures

King County could implement the following mitigation measures related to police, fire/medic, and ambulance services:

- Limit trail use to daylight hours for safety. King County regulates trails as linear parks; trails are subject to usage restrictions per King County Code Section 7.12.480.
- Implement trail patrols by volunteer trail ambassador programs.
- Provide maps of all trail access points and master keys to locked bollards to all emergency service agencies serving the corridor.

3.10.7.2 Utilities Mitigation Measures

Mitigation measures related to utilities within and across the corridor could include:

- Hydraulic modeling during the detailed design phase of the project (subsequent to the Master Plan Trail Final EIS) to determine the adequacy of the existing drainage system along the Interim Use Trail, East Lake Sammamish Parkway SE, and East Lake Sammamish Place SE (i.e., ditches and culverts). Improvements would be incorporated during the final design phase where appropriate.
- Close coordination with utility providers to identify and physically locate utilities prior to the initiation of any construction activity.
- Notification of property owners prior to the initiation of any construction activity to obtain input on the locations of utility connections that may not be documented.
- Notification of property owners in advance of breaks in service to affected utilities.

3.10.8 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to public services or utilities are anticipated from the construction or operation of any of the Master Plan Trail alternatives.

3.11 Transportation

3.11.1 Studies and Coordination

Information reviewed for evaluating transportation impacts was obtained from existing printed documentation, and through discussions with King County, City of Redmond, City of Sammamish, and City of Issaquah staff. These information sources provided documentation of existing roadway characteristics, traffic volumes, transit service, non-motorized facilities, parking facilities, planned improvements, and historical accident data. This information was supplemented by site visits to the project area conducted from 1999 to 2003. Published trail user data compiled in 1995 and 2000 for the Burke-Gilman/Sammamish River Trail were also reviewed for trail usage and time-of-day usage patterns.

3.11.2 Affected Environment

3.11.2.1 Roadways

Major roadways in the project vicinity are shown in Figures 2-1A (pg 2-5), 2-1B (pg 2-6), and 2-1C (pg 2-7) in Chapter 2. Public streets crossing the alternative trail alignments include:

- Lake Sammamish State Park entrance, SE 51st Street, SE 56th Street, SE 62nd Street, and NW Gilman Boulevard in the City of Issaquah;
- SE 33rd Street in the City of Sammamish; and
- NE 70th and NE 65th Streets in the City of Redmond.

Public access to the various alternatives is provided at these public street crossings, as well as the additional locations identified in Chapter 2. State Route (SR) 520, Interstate 90 (I-90), SR 202, East Lake Sammamish Parkway, Inglewood Hill Road, Louis Thompson Road, East Lake Sammamish Place SE, and SE 43rd Way are other key roadways in the study area. These roadways either cross one or more of the proposed Master Plan Trail alternatives, are immediately adjacent to a proposed alternative, or tie into East Lake Sammamish Parkway immediately adjacent to the trail.

The key roadways in the study area are described below. Existing roadway characteristics are also summarized in Table 3.11-1. Roadway classifications and volumes were obtained from the City of Issaquah, City of Sammamish, and City of Redmond.

NW Gilman Boulevard, located south of I-90 in the City of Issaquah, is a four-lane minor arterial with a speed limit of 35 mph. The southern terminus for the proposed Master Plan Trail, regardless of alternative, would be located at NW Gilman Boulevard.

I-90 is the major east-west freeway for the northern United States. In the project vicinity, I-90 consists of six general-purpose lanes and has a speed limit of 60 mph. The interchanges nearest to the proposed Master Plan Trail, regardless of alternative, are Exit 17 (Front Street) and Exit 15 (SR 900). I-90 passes over the Interim Use Trail and King County right of way just west of Exit 17.

SE 62nd Street is a two-lane local access street with a speed limit of 25 mph. SE 62nd Street crosses East Lake Sammamish Parkway SE and the proposed Master Plan Trail, regardless of alternative.

NW Sammamish Road and SE 56th Street are functionally the same road, although the name changes at the East Lake Sammamish Parkway SE intersection. NW Sammamish Road, which connects East Lake Sammamish Parkway SE to West Lake Sammamish Parkway, is a four-lane principal arterial with a speed limit of 35 mph. SE 56th Street, which connects East Lake Sammamish Parkway SE to 230th Avenue SE, is a three-lane principal arterial with a posted speed limit of 25 mph. The proposed Master Plan Trail, regardless of alternative, would intersect with NW Sammamish Road just west of East Lake Sammamish Parkway SE.

East Lake Sammamish Parkway is a north-south minor arterial connecting the Cities of Redmond, Sammamish, and Issaquah, and providing access to both SR 520 and I-90. North of approximately 212th Way, East Lake Sammamish Parkway consists of two travel lanes, shoulders on both sides of the roadway, and a speed limit of 35 mph. South of 212th Way, the roadway widens to four lanes. Between SE 43rd Way and I-90, the number of lanes varies between two and five, the speed limit varies between 25 and 40 mph, and sidewalks exist near some intersections. The proposed Master Plan Trail, regardless of alternative, would parallel East Lake Sammamish Parkway from SR 202 to I-90.

SE 51st Street is a two-lane local access street with a speed limit of 25 mph. SE 51st Street ties into East Lake Sammamish Parkway SE and crosses the proposed Master Plan Trail, regardless of alternative.

SE 43rd Way is a three-lane principal arterial (two lanes eastbound, one lane westbound) with shoulders on the north side and a posted speed limit of 40 mph. SE 43rd Way connects to East Lake Sammamish Parkway SE at a signalized intersection and continues east to 228th Avenue SE. Because SE 43rd does not continue west of East Lake Sammamish Parkway SE, no intersection would exist with the Build Alternatives (located west of East Lake Sammamish Parkway SE).

212th Way SE is a two-lane collector arterial connecting East Lake Sammamish Parkway SE (at a signalized intersection) to 212th Avenue SE. 212th Way SE terminates where it intersects with East Lake Sammamish Parkway SE, and therefore does not intersect with the Build Alternatives located west of East Lake Sammamish Parkway SE. The posted speed limit is 25 mph, and no shoulders or sidewalks exist along the roadway.

206th Avenue SE is a two-lane residential local access street with no striping, shoulders, or sidewalks. 206th Avenue SE intersects with the Build Alternatives west of East Lake Sammamish Parkway SE. The posted speed limit is 25 mph.

SE 39th Street extended is a two-lane residential local access street with no striping, shoulders, or sidewalks. SE 39th Street intersects with the Build Alternatives west of East Lake Sammamish Parkway SE. The posted speed limit is 25 mph.

SE 33rd Street is a two-lane residential local access street with no striping, shoulders, or sidewalks. SE 33rd Street intersects with the Build Alternatives west of East Lake Sammamish Parkway SE. The posted speed limit is 25 mph.

East Lake Sammamish Place SE is an unstriped two-lane local access street serving residences west of East Lake Sammamish Parkway SE. The speed limit is posted at 25 mph, and intermittent shoulders and limited sidewalks exist. On-street parking occurs on some portions of this street. The East A and East B Alternative alignments are located within this roadway prism.

Louis Thompson Road is a two-lane collector arterial connecting East Lake Sammamish Parkway SE with 212th Way and has a speed limit of 35 mph. Louis Thompson Road terminates where it intersects with East Lake Sammamish Parkway SE, and therefore does not cross any of the Build Alternatives, which are located west of East Lake Sammamish Parkway SE.

Inglewood Hill Road is a two-lane minor arterial located east of East Lake Sammamish Parkway NE, with a speed limit of 35 mph. The Inglewood Hill Road/East Lake Sammamish Parkway NE intersection is signal-controlled. Inglewood Hill Road terminates at this intersection, and therefore does not intersect any of the Build Alternatives, which are located west of East Lake Sammamish Parkway NE.

NE 65th Street, located west of East Lake Sammamish Parkway NE, is a two-lane collector arterial with a speed limit of 25 mph. The NE 65th Street/East Lake Sammamish Parkway NE intersection is signal-controlled. The proposed Master Plan Trail, regardless of alternative, would intersect with NE 65th Street just west of East Lake Sammamish Parkway NE.

NE 70th Street is a two-lane collector arterial located west of SR 202 (Redmond-Fall City Road). NE 70th Street has a speed limit of 25 mph. The NE 70th Street/East Lake Sammamish Parkway NE intersection is signal-controlled. The proposed Master Plan Trail, regardless of alternative, would intersect with NE 70th Street just west of East Lake Sammamish Parkway NE.

SR 520 is an east-west freeway linking I-5 in Seattle to SR 202 in Redmond. In the project vicinity, SR 520 consists of four general-purpose lanes and has a speed limit of 60 miles per hour (mph). The north terminus of the proposed Master Plan Trail, regardless of alternative, would be located north of the SR 520/SR 202 interchange westbound on-ramp.

SR 202 (Redmond-Fall City Road) is a four-lane principal arterial connecting SR 520 in the City of Redmond with SR 203 in Fall City. SR 202 has a speed limit of 45 mph. The proposed Master Plan Trail, regardless of alternative, would be located just west of, and parallel to, SR 202 from SR 520 to East Lake Sammamish Parkway NE.

3.11.2.2 Traffic Volumes

Average weekday daily traffic (AWDT) volumes from 2001-2003 were obtained from the Washington State Department of Transportation, City of Redmond, City of Sammamish, City of Issaquah, and King County for the study area roadways. These traffic volumes are shown in Table 3.11-1. Most arterial roadways in the study area are operating near capacity, as described in the section below. Average daily traffic volumes on East Lake Sammamish Parkway range from 9,800 vehicles per day (vpd) south of East Lake Sammamish Place SE to 33,600 vpd north of SE 56th Street.

Table 3.11-1. Existing Roadway Characteristics

ROADWAY/SECTION	LANES	CLASSIFICATION	AWDT ^A	SPEED LIMIT	SIDEWALKS/SHOULDERS
NW Gilman Boulevard west of East Lake Sammamish Parkway SE	4	minor arterial	19,256	35 mph	sidewalk both sides
NW Gilman Boulevard east of East Lake Sammamish Parkway SE	4	minor arterial	9,717	35 mph	sidewalk south side
I-90 west of Exit 17 ramps	6	Interstate	39,000	60 mph	shoulder both sides
SE 62nd Street	2	local access	NA	25 mph	no sidewalk or shoulder
SE 56th Street west of East Lake Sammamish Parkway SE	3 to 6	principal arterial	38,120	25 to 40 mph	sidewalk both sides
SE 56th Street east of East Lake Sammamish Parkway SE	3	principal arterial	675	25 to 40 mph	sidewalk both sides
SE 43rd Way east of East Lake Sammamish Parkway SE	3	principal arterial	14,900	40 mph	shoulder both sides
212th Way SE northeast of East Lake Sammamish Parkway SE	2	collector arterial	NA ^δ	25 mph	no sidewalk or shoulder
206th Avenue SE	2	local access	NA	25 mph	no sidewalk or shoulder
SE 39th Street extended	2	local access	NA	25 mph	no sidewalk or shoulder
SE 33rd Street	2	local access	NA	25 mph	no sidewalk or shoulder
East Lake Sammamish Place SE	2	local access	NA	25 mph	no sidewalk or shoulder
Louis Thompson Road east of East Lake Sammamish Parkway SE	2	collector arterial	4,100	35 mph	shoulder both sides
Inglewood Hill Road east of East Lake Sammamish Parkway NE	2	minor arterial	14,100	35 mph	shoulder both sides
NE 65th Street west of East Lake Sammamish Parkway NE	2	collector arterial	4,700	25 mph	sidewalk both sides
NE 70th Street west of East Lake Sammamish Parkway NE	2	collector arterial	NA	25 mph	sidewalk south side
SR 520 before SR 202 ramps	4	State Highway freeway	63,000	60 mph	shoulder both sides
SR 202 (Redmond-Fall City Road) Near SR 520	4	State Highway principal arterial	38,000	45 mph	shoulder both sides
East Lake Sammamish Parkway	2	principal/minor arterial		25 to 40 mph	shoulder both sides
South of Gilman Boulevard	2 to 4	principal arterial	29,100	25 to 40 mph	sidewalk both sides
North of Gilman Boulevard	2 to 5	principal arterial	NA	25 to 40 mph	sidewalk both sides
South of SE 56th Street	2 to 3	principal arterial	28,400	25 to 40 mph	shoulder south side ^c
North of SE 56th Street	4 to 5	principal arterial	33,600	25 to 40 mph	sidewalk both sides
South of SE 43rd Way	4 to 5	principal arterial	30,400	25 to 40 mph	sidewalk both sides
North of SE 43rd Way	2	minor arterial	16,600	25 to 40 mph	shoulder both sides
South of SE 33rd Street	2	minor arterial	NA	35 mph	shoulder both sides
South of East Lake Sammamish Place SE	2	minor arterial	9,800	35 mph	shoulder both sides
South of Louis Thompson Road	2	minor arterial	NA	35 mph	shoulder both sides
North of Louis Thompson Road	2	minor arterial	14,200	35 mph	shoulder both sides
South of Inglewood Hill Road	2	minor arterial	12,300	35 mph	shoulder both sides
North of Inglewood Hill Road	2	minor arterial	18,600	35 mph	shoulder both sides
South of NE 65th Street	2	minor arterial	19,800	35 mph	shoulder both sides
North of NE 65th Street (south of Redmond-Fall City Road)	2	minor arterial	21,500	35 mph	sidewalk both sides
South of NE 70th Street (north of 180th NE)	2	minor arterial	45,100	35 mph	sidewalk both sides
North of NE 70th Street	2	minor arterial	NA	45 mph	sidewalk both sides

^a AWDT Average Weekday Daily Traffic

^bNA = Not Applicable

^c Sidewalks exist at some intersections in this segment

3.11.2.3 Level of Service

Level of service (LOS) is a means of estimating the quality and performance of transportation facility operations in a community. The LOS methodology described in the Transportation Research Board's *Highway Capacity Manual* is commonly used to analyze intersection and arterial operations. The degree of congestion and delay is rated using the letter "A" for the least amount of congestion, ranging to the letter "F" for the highest amount of congestion. LOS D or better is considered acceptable for most jurisdictions. At LOS E, intersections operate at capacity.

The Synchro 5.0 traffic analysis software program was used for evaluating existing PM peak hour LOS for the NE 70th Street/Redmond Way intersection, as well as for the following intersections along East Lake Sammamish Parkway: NE 65th Street, NE Inglewood Hill Road, SE 33rd Street, and SE 56th Street. An updated traffic analysis software program (Synchro 6 Build 614) was used for evaluating existing PM peak hour LOS at the SR 520 on- and off-ramp/Redmond Way intersections. The results of this analysis are shown in Table 3.11-2.

As shown in Table 3.11-2, all intersections evaluated currently operate at LOS D or better during the PM peak hour.

Table 3.11-2. Summary of Existing Weekday PM Peak Hour Level of Service

Intersection	EXISTING TRAFFIC CONTROL	LOS	DELAY (VEHICLES/ SECOND)
SE 56th Street/East Lake Sammamish Parkway SE	Signal Controlled	D	43.3
SE 33rd Street/East Lake Sammamish Parkway SE	Stop-Sign Controlled	C [*]	21.0
NE Inglewood Hill Road/East Lake Sammamish Parkway NE	Signal Controlled	С	25.4
NE 65th Street/East Lake Sammamish Parkway NE	Signal Controlled	<u>D</u> C	31.0 46.1
NE 70th Street/Redmond Way	Signal Controlled	D	<u>45.4</u> 54.7

Source: Parametrix, Inc., 2004 and 2007.

LOS results shown for eastbound approach.

3.11.2.4 Transit

At the southern end of the study area, King County Metro transit routes 200, 216, 269, and 927 stop adjacent to SE 56th Street, all within approximately 200 feet of the Master Plan Trail alternatives. At the northern end, routes 216, 253, 266, 268, 269, and 922 stop on SR 202 less than 0.25 mile from the Master Plan Trail alternatives. At the southern end of the study area, route 216 travels along East Lake Sammamish Parkway SE between SE 43rd Way and SE 51st Street; routes 217 and 269 travel along NW Sammamish Road just west of East Lake Sammamish Parkway SE; and routes 200, 209, 214, 269, and 271 stop on NW Gilman Boulevard and Front Street.

3.11.2.5 Non-Motorized Facilities

The primary non-motorized facility in the study area is the East Lake Sammamish Interim Use Trail. As mentioned previously, this trail consists of an 8- to 12-foot-wide gravel trail along approximately

11 miles of the former railbed for pedestrian and bicycle use. Equestrian use is not permitted on the existing Interim Use Trail.

In addition to the Interim Use Trail, roadway shoulders ranging from 5 to 10 feet wide exist on both sides of East Lake Sammamish Parkway and are used for bicycle and pedestrian travel, as well as vehicle parking in some areas. Sidewalks are provided: (1) between SE 43rd Way and NW Sammamish Road/SE 56th Street, and (2) north and south of the NW Gilman Boulevard/East Lake Sammamish Parkway SE intersection. Other than the on-street bicycle lane on SE 56th, no additional marked pedestrian or bicycle facilities are provided along roadways in the study area.

At the south end of the study area in Issaquah, the Sammamish Trail is a multiple-use trail located on the north side of SE 56th Street (see Figure 3.7-1 (pg 3.7-3)). The trail provides walking and bicycle access to Lake Sammamish State Park and connects to the Pickering Trail. The Pickering Trail is an 8-foot-wide asphalt trail that connects to the Sammamish Trail south of the footbridge over Issaquah Creek. From SE 56th Street, this trail extends approximately 0.75 mile to the south where it connects to the Interim Use Trail

At the north end of the study area in Redmond, an existing soft-surface pedestrian trail and a sidewalk connect the East Lake Sammamish Interim Use Trail to Marymoor Park's east entrance on the north and south sides of NE 65th Street. A new regional trail through Marymoor Park was recently constructed to connect East Lake Sammamish Trail with the Sammamish River Trail (see Section 2.6.5).

Section 1.2, Need for the Project, and Section 3.7, Recreation, of this EIS describe how the Interim Use Trail and proposed Master Plan Trail provide a link to the regional trail system, including existing facilities such as the Burke-Gilman and Sammamish River Trails, Bear Creek Trail, Evans Creek Trail, Bike 520 Trail at Leary Way, and other planned trails.

3.11.2.6 Vehicle Access

With the exception of King County maintenance vehicles and emergency vehicles, vehicle access to the Interim Use Trail is prohibited. Prior to construction of the Interim Use Trail and in some residential areas, vehicles were observed to be parked in the former railbed, particularly in areas where boundaries between the railbed and residential access driveways are not clearly delineated. Design features of the Interim Use Trail are intended to prevent such access. However, as of the date of this EIS preparation, the Interim Use Trail has not been in operation long enough to make any conclusions regarding the effectiveness of these design features at preventing vehicle access to the trail.

3.11.2.7 Parking

Existing public parking in the study area is available at Marymoor Park, along NE 65th Street, and on the roadway shoulder along East Lake Sammamish Parkway and East Lake Sammamish Place SE.

Marymoor Park, a King County regional park, is located at the north end of the trail and bounded by East Lake Sammamish Parkway NE, west Lake Sammamish Parkway NE, and SR 520. Marymoor Park has 641 paved parking spaces that are available year-round. The park also has 710 gravel spaces that are available in the drier times of the year. Parking can reach capacity during the weekends, during concerts and other events, and on some evenings during spring and summer. Users are charged a nominal fee for parking at Marymoor Park.

Thirty parking spaces are available along NE 65th Street. Parking is only available on the south side of the street. Shoulder parking is permitted on both sides of East Lake Sammamish Parkway NE/SE from

NE 65th Street to SE 43rd Way. Shoulder parking is permitting on both sides of East Lake Sammamish Place SE.

3.11.2.8 Existing Driveway Intersections and Sight Distance

As previously mentioned, seven public roads cross the study area and intersect with East Lake Sammamish Parkway. In addition, approximately 53 residential access driveways are located west of, and intersect with, East Lake Sammamish Parkway. Along the Interim Use Trail, approximately 52 residential driveways serving more than five private properties each, and approximately 81 access or foot paths exist. The residential paths provide property owners access to East Lake Sammamish Parkway, the Interim Use Trail, private residences, beaches, and parking areas. See Table 3.11-3 for the total number of public roads and driveways along the project corridor.

	APPROXIMATE NUMBER OF INTERSECTIONS WITH								
Type of Intersection	East Lake Sammamish Parkway	EAST LAKE SAMMAMISH PLACE SE	INTERIM USE TRAIL (I.E., THE RAILBED)						
Public Roads	7	0	7						
Residential Driveways	53 ^a	25	52						
TOTAL	60	25	59						

Table 3.11-3. Summary of Intersections with the Project Corridor

Sight distance was examined for all roadways and driveways crossing the Interim Use Trail corridor and East Lake Sammamish Parkway to determine locations where vegetation or terrain obstructs a driver's view of the former railbed. The methodology used to identify these locations is described in Section 3.11.3.1 under Interim Use Trail Crossings. Stop signs for autos exist at many driveway crossings of the Interim Use Trail (due to limited sight distance) and are provided at all intersections with East Lake Sammamish Parkway.

Of the 52 driveways and 7 public roads examined that cross the Interim Use Trail, approximately 50 had sight distance deficiencies for at least one corner of the intersection prior to construction of the Interim Use Trail. Of the 78 driveways and 7 roadways examined that intersect with affected areas of East Lake Sammamish Parkway and East Lake Sammamish Place SE for the East Alternatives, approximately 65 have sight distance concerns. An inventory of potential sight distance concerns at these driveway and roadway crossing locations is provided in Appendix G.

3.11.2.9 Existing Accidents

Accident records for East Lake Sammamish Parkway were reviewed for the most recent four-year period available in each jurisdiction, with the exception of the City of Sammamish, where only 3.5 years of data were available. Accident records include vehicle, pedestrian, and bicycle accidents.

In the City of Redmond, accident records were reviewed for the period between January 1, 1998, and December 31, 2001 for most locations. Accident data for the Redmond Way/SR 520 ramp intersections were reviewed for the period between January 1, 2000, and December 31, 2003.

^a Of the 53 driveway intersections with East Lake Sammamish Parkway and 52 driveway intersections with the Interim Use Trail, approximately 50 driveway intersections are common. See Appendix G for the complete inventory.

The City of Sammamish provided records for the period from September 1, 1999, through December 31, 2002. The City of Issaquah data were provided by both King County and the City of Issaquah. However, most of the data were provided by King County, since a large portion of the study area between SE 43rd Way and I-90 was recently annexed from unincorporated King County by the City of Issaquah. This information was obtained for the period between January 1, 1997 and December 31, 2000. Accident rates and accident severity (property damage only, personal injury, fatality) were reviewed for all locations for which accident data were available. The results of this analysis are shown in Tables 3.11-4 and 3.11-5 for the City of Redmond, Table 3.11-6 for the City of Sammamish, and Table 3.11-7 for the City of Issaquah.

As shown in Tables 3.11-4 and 3.11-5, the highest number of accidents in Redmond occurred at the East Lake Sammamish Parkway NE/Redmond-Fall City Road intersection. In the City of Redmond, this intersection serves the highest traffic volume in this segment of East Lake Sammamish Parkway NE. Very few accidents were recorded in other areas of East Lake Sammamish Parkway NE within the City of Redmond. No fatalities or accidents involving pedestrians or bicycles were recorded in this segment.

As shown in Table 3.11-6, the highest accident frequencies in the City of Sammamish were reported at the NE Inglewood Hill Road/East Lake Sammamish Parkway NE Intersection. Inglewood Hill Road serves the highest traffic volumes within this segment of East Lake Sammamish Parkway. Although the highest average accident rate from 1999 to 2002 in terms of accidents per million entering vehicles occurred at the East Lake Sammamish Parkway/SE 16th Street intersection, it is primarily the result of an unusually high number of accidents that occurred in the year 2000, which did not appear to be a typical year.

As shown in Table 3.11-7, the highest accident frequency in the City of Issaquah was reported at Issaquah/Fall City Road, which has a high volume of daily traffic. One fatality was also reported at the SE 43rd Way/East Lake Sammamish Parkway SE intersection in December 1999. This fatality resulted when a vehicle struck a fixed object.

Table 3.11-4. East Lake Sammamish Parkway NE Four-Year Accident History for City of Redmond

LOCATION	YEAR				4-Yr Total by Damage Type*				Avg.	RATE*
LOCATION	1998	1999	2000	2001	PDO	ı	F	TOTAL ALL TYPES	(ACC/YEAR)	*
Redmond-Fall City Road Intersection	9	12	21	12	39	15	0	54	13.5	0.85
South of Redmond-Fall City Road	0	1	1	0	2	0	0	2	0.5	0.91
North of NE 65th Street	1	0	1	0	1	1	0	2	0.5	
NE 65th Street Intersection	1	0	4	5	7	3	0	10	2.5	0.30
South of NE 65th Street Intersection	0	2	2	0	4	0	0	4	1.0	0.26
North of 187th Avenue NE	0	1	1	0	1	1	0	2	0.5	
187th Avenue NE Intersection	2	0	2	1	3	2	0	5	1.25	0.21
South of 187th Avenue NE	0	0	0	0	0	0	0	0	0	0.00

Source: City of Redmond Public Works - Transportation Division (2003)

^{*}PDO = Property damage only; I = Personal injuries; F = Fatalities

^{**} Rates are listed at intersections in units of accidents per million entering vehicles and at segments in units of accidents per million vehicle miles.

Table 3.11-5. Redmond Way Four-Year Accident History for City of Redmond

	YEAR				4-YR TOTAL BY DAMAGE TYPE*				Avc	
LOCATION	2000	2001	2002	2003	PDO	I	F	TOTAL ALL Types	AVG. (ACC/YEAR)	RATE**
Redmond Way/ SR 520 WB On-Ramp	4	1	6ª	5 ^c	14	2	0	16	4	0.21
Redmond Way/ SR 520 EB On-Ramp	4	3	4 ^b	7 ^d	15	3	0	18	4.5	0.25

Source: City of Redmond Public Works - Transportation Division (2003)

Table 3.11-6. East Lake Sammamish Parkway Four-Year Accident History for City of Sammamish

	YEAR				вү		R TOT	AL T YPE*	Avo	
LOCATION	1999^	2000	2001	2002	PDO	I	F	TOTAL ALL TYPES ^B	AVG. (ACC/YEAR)	RATE**
At NE 49th Place	0	0	0	2	2	0	0	2	0.67	0.10
At 196th Avenue NE	0	0	0	2	2	0	0	2	0.67	0.10
At NE 33rd Place	0	1	0	0	1	0	0	1	0.33	0.05
South of NE 33rd Place	0	0	1	0	1	0	0	1	0.33	0.05
At NE 30th Court	0	1	0	1	2	0	0	2	0.67	0.10
At NE 29th Street	0	0	0	1	1	0	0	1	0.33	0.05
At NE 28th Place	0	0	0	1	1	0	0	1	0.33	0.05
Between NE 28th Place and NE 18th Place	0	2	0	2	1	3	0	4	1.33	0.40
At NE 18th Place	0	2	0	3	3	2	0	5	1.67	0.25
At NE 16th Street	0	3	0	0	3	0	0	3	1.0	0.15
At NE Inglewood Hill Road	2	7	1	11	14	7	0	21	6.33	0.77
Between NE Inglewood Hill Road and Louis Thompson Road	0	4	1	2	4	3	0	7	2.33	0.74

^{*}PDO = Property damage only; I = Personal injuries; F = Fatalities

^{**} Rates are listed at intersections in units of accidents per million entering vehicles.

^a The accident type was not identified for two collisions in Year 2002. These accidents were assumed to be PDO as this is consistent with the other accidents during this period.

^b The accident type was not identified for one collision in Year 2002. These accidents were assumed to be PDO as this is consistent with the other accidents during this period.

^c The accident type was not identified for four collisions in Year 2003. These accidents were assumed to be PDO as this is consistent with the other accidents during this period.

^d The accident type was not identified for five collisions in Year 2003. These accidents were assumed to be PDO as this is consistent with the other accidents during this period

Table 3.11-6. East Lake Sammamish Parkway Four-Year Accident History for City of Sammamish (continued)

	YEAR				4-Yr Total by Damage Type*				Ava	
LOCATION	1999 [^]	2000	2001	2002	PDO	I	F	TOTAL ALL Types ^B	Avg. (ACC/YEAR)	RATE**
At E Lake Sammamish Shore Lane SE	0	0	1	0	1	0	0	1	0.33	0.07
At Louis Thompson Road	2	2	2	1	5	2	0	7	1.67	0.37
At Main Street	0	0	1	0	1	0	0	1	0.33	0.09
At SE 16th Street	0	9	0	3	8	4	0	12	4	1.10
At SE 22nd Place	0	0	0	1	1	0	0	1	0.33	0.09
At SE 24th Way	0	2	5	1	3	5	0	8	2.67	0.73
At SE 26th Street	0	1	0	0	0	1	0	1	0.33	0.09
At SE 32nd Street	0	1	1	3	4	1	0	5	1.67	0.46
At SE 33rd Place	0	2	0	4	4	2	0	6	2.0	0.55
At 205th Avenue SE	0	0	0	1	0	1	0	1	0.33	0.09
At 206th Avenue SE	0	0	1	0	1	0	0	1	0.33	0.09
At 212th Way SE	1	4	2	7	10	4	0	14	4.33	0.58

Source: City of Sammamish (2003b)

Table 3.11-7. East Lake Sammamish Parkway SE Four-Year Accident History for City of Issaquah^a

	AR		4-Y	EAR	Гота	L BY DAM	AGE TYPE*			
LOCATION	1997	1998	1999	2000	PDO	I	F	4- YEAR TOTAL	AVG. (ACC/YEAR)	RATE**
At SE 43rd Way	4	7	5	1	10	6	1	17	4.25	0.38
At SE 51st Street	1	1	1	2	2	3	0	5	1.25	0.10
At Issaquah/Fall City Road	9	8	15	0	19	1 3	0	32	8.0	0.49
At 228th Avenue SE	0	0	0	0	0	0	0	0	0	0.00
At 229th Avenue SE	1	0	0	0	1	0	0	1	0.25	0.02

Source: King County Department of Transportation (2003), City of Issaquah Public Works – Engineering Department (2004b)

^{*}PDO = Property damage only; I = Personal injuries; F = Fatalities

^{**} Rates are listed at intersections in units of accidents per million entering vehicles and at segments in units of accidents per million vehicle miles.

^a September through December 1999.

^b September 1999 through December 2002.

^cThree-year average from January 2000 through December 2002.

^{*}PDO = Property damage only; I = Personal injuries; F = Fatalities

^{**} Rates are listed at intersections in units of accidents per million entering vehicles.

^aData from King County were used for all the locations with the exception of Year 2000 data at SE 51st Street, where the data were provided by the City of Issaquah.

3.11.3 Direct Impacts

3.11.3.1 Corridor Alternative

Construction Impacts

Approximately 32,500 cubic yards (cy) of excavation, 21,500 cy of fill, and 22,000 cy of surfacing materials would be needed to build the entire Corridor Alternative (Table 3.11-8). Approximately 5,900 round trip truck trips (3,400 bringing materials in and 2,500 hauling materials out) would be generated. If these trips were spread out over 9 to 10 months, approximately 30 one-way truck trips per day would be generated assuming no hauling on weekends. As described in Chapter 2, construction of the Corridor Alternative would likely be phased over a number of years, and the number of truck trips would largely be dependent on the schedule for a particular construction segment.

Table 3.11-8. Comparison of Excavation, Fill and Truck Trips for Each Build Alternative

ALTERNATIVE	EXCAVATION (CUBIC YARDS)	FILL (CUBIC YARDS)	SURFACING MATERIAL (CUBIC YARDS)	TRUCK TRIPS PER DAY (ONE-WAY)
Corridor	32,500	21,500	22,000	30
East A	43,500	51,500	22,800	47
East B	43,500	51,500	22,800	47
Continuation of the Interim Use Trail	6,100	8,500	4,180	17

Trucks would access the project corridor primarily from public streets. The Corridor Alternative would have fewer access points compared to the East Alternatives, which are immediately adjacent to a public street in many areas. Access points for trucks would be determined jointly by King County and the contractor depending on construction needs. Temporary easements could be required for use of residential driveways and would be negotiated with property owners as part of developing the construction staging plan. Improvements to these driveways could be required to accommodate the truck traffic and/or to restore the driveways after construction.

Traffic flow and public access could temporarily be disrupted during construction; however, traffic control measures and other best management practices (BMPs) would be employed to minimize the impact. Potential impacts to roadways from construction vehicles would be minimized using normal construction haul route procedures.

The approach to trail construction and related temporary traffic control measures would depend on the surrounding conditions. As described in Chapter 2, the following three types of temporary traffic control would be used:

- 1. Interim Use Trail Closure The Master Plan Ttrail would be constructed in phases resulting in rolling closures of the Interim Use Trail using removable traffic barricades and signing. Closure for construction would typically last one to three months for every 1- to 3-mile length of the Master Plan TrailCorridor Alternative.
- 2. Driveway and Road Crossings Access through driveways and roads would be maintained during construction. Vehicle and pedestrian access to homes along the trail would be maintained through the use of traffic control devices and traffic control personnel who would conduct traffic

through the work zones. Construction activities would be temporary and would be minimized through proper traffic control, signage, and homeowner notification. Construction at driveway and road crossings would typically last from one to two weeks per crossing.

3. Along Roadways – During construction, the roadway shoulder would be closed, construction fencing and traffic control devices would be placed, and in some situations, the adjacent roadway may be temporarily restriped. Along with the traffic control devices, flaggers would be situated to direct oncoming traffic through and around the work zone. For the Corridor Alternative, this type of construction activity would only occur in a few locations (less than 300 feet in length along the roadway).

To reduce construction time and cost, efforts would be made to coordinate both design elements and construction schedules with city, county, and state sponsored projects in the vicinity. Refer to Section 3.11.4, Cumulative Impacts, for additional information about these projects.

Operation Impacts

Traffic Volumes

Daily trail user volumes are expected to range from 2,500 users on a peak weekday to 4,000 users on a peak weekend day, based on user counts from the Sammamish River Trail (Moritz, 1995) Trail usage on the East Lake Sammamish Trail is expected to be similar to usage on the Burke-Gilman/Sammamish River Trail since both trails are major continuous regional trails.

Data from the Sheridan Beach area of the Burke-Gilman/Sammamish River Trails were obtained to estimate the increase in vehicular traffic generated from the proposed Master Plan Trail. Approximately 23 percent of those trail users drove to the trail from outside the immediate area in the years 1995 and 2000 (Moritz, 1995; Moritz, 2004). Assuming a similar percentage of East Lake Sammamish Trail users would drive to the trail, the Corridor Alternative would generate an estimated 575 one-way daily vehicle trips on a weekday during the summer and 920 one-way daily vehicle trips on a summer weekend day. Trail usage during summer months was used for the impact analysis since the number of users is typically the highest during warm dry weather.

Based on studies conducted for the Burke-Gilman/Sammamish River Trails in the years 1995 and 2000, weekday trail usage is generally highest during the AM and PM commute periods, with approximately 16 percent of the total daily volume occurring during the trail peak hour (6 to 7 p.m.) on a typical weekday. Weekend peak volumes typically occur during the midday hours and taper off in the evening; approximately 11 percent of the total daily volume occurred during the peak hour (12 to 1 p.m.) on a typical weekend day.

Assuming that these patterns would also be true for the East Lake Sammamish Trail, approximately 90 one-way vehicle trips would be expected during the weekday PM peak hour, and approximately 105 one-way vehicle trips would be expected during the weekend peak hour. These trips, which would be spread out over the entire length of East Lake Sammamish Parkway, would have a negligible effect on traffic along the project corridor but could affect ease of turning at intersections near existing and proposed parking facilities.

Level of Service

Traffic volumes in the study area are anticipated to increase by the year 2015 regardless of whether the Master Plan Trail is constructed. Consistent with historical growth patterns provided by the City of Redmond, traffic volumes on East Lake Sammamish Parkway in the northern portion of the study area (i.e., near NE 70th and NE 65th Streets) are expected to increase by approximately 3.2 percent per year. Near Inglewood Hill Road and Louis Thompson Road, an average annual growth rate of approximately 2.8 percent per year is expected. Based on conversations with King County staff, traffic volumes along the southern sections of East Lake Sammamish Parkway would increase at a rate of approximately 1.23 percent per year in the near future (Walker, personal communication, 2003). These growth rates were applied to existing traffic volumes to estimate year 2015 traffic volumes with the No Action Alternative. Project trips were then added to these traffic volumes to develop year 2015 traffic volumes for the Build Alternatives.

To provide for a conservative analysis of future traffic impacts, the Continuation of the Interim Use Trail Alternative was assumed to generate the same number of vehicle trips as the Corridor and East Alternatives. In actuality, the narrower width and gravel surface of this alternative would likely generate slightly fewer vehicle trips than the Corridor and East Alternatives.

Weekday PM peak hour LOS was evaluated for intersections near and along East Lake Sammamish Parkway that could potentially be affected by vehicle trips to and from the East Lake Sammamish Trail. These intersections were identified for their proximity to existing and future parking facilities near the proposed trail. Existing turning movement counts for these locations were forecast to the year 2015 based on historical traffic volume trends in the Cities of Redmond and Sammamish, and growth projections provided by King County staff. Project trips were then added to these No Action growth forecasts to develop year 2015 traffic volumes with the project. The results of the traffic analysis are summarized in Table 3.11-9.

As shown in Table 3.11-9, three out of the five intersections evaluated would operate at LOS E or F in the year 2015 regardless of whether the project is built. Minimal increases in delay (less than one second) are expected to result from the Build Alternatives. Intersection delays with the Continuation of the Interim Use Trail Alternative would likely be similar to or slightly lower than the Build Alternatives. The SE 33rd Street/East Lake Sammamish Parkway intersection would operate at acceptable levels as an unsignalized intersection with the No Action Alternative, and would operate at LOS A as a signal-controlled intersection with the Build Alternatives.

In general, the amount of traffic generated by the project would not have a substantial impact on roadway congestion or intersection operations, particularly since these trips would be spread out over the entire length of East Lake Sammamish Parkway. LOS was not evaluated for the weekend peak hour since study area intersections currently operate quite well during this period and project trips are unlikely to result in substantial increases in delay.

As described in the section discussing cumulative impacts and shown in Table 3.11-12, the Cities of Redmond, Sammamish, and Issaquah have plans to widen East Lake Sammamish Parkway from two to three lanes. In addition, the City of Issaquah plans to make improvements to the East Lake Sammamish Parkway/SE 56th Street intersection. With the proposed improvements, this intersection would operate at LOS D in the year 2015 with all alternatives.

Table 3.11-9. Year 2015 Weekday PM Peak Hour Vehicle Level of Service Summary –
No Action and Build Alternatives^a

Intersection	I -	No Action LTERNATIVE	ALL BUILD ALTERNATIVES ^b		
INTERSECTION	LOS	DELAY (VEHICLE/SEC)	LOS	DELAY (VEHICLE/SEC)	
SE 56th Street/East Lake Sammamish Parkway	Е	60.1	Е	60.3	
SE 33rd Street/East Lake Sammamish Parkway	Dc	26.2	A^d	0.9	
NE Inglewood Hill Road/East Lake Sammamish Parkway	D	36.2	D	36.7	
NE 65th Street/East Lake Sammamish Parkway	F	126.3	F	126.4	
NE 70th Street/Redmond Way	F	145.2	F	145.9	
Redmond Way (SR 202)/Eastbound SR-520 Off-Ramp ^e	<u>D</u>	<u>49.6</u>	<u>D</u>	<u>49.8</u>	
Redmond Way (SR 202)/Westbound SR-520 On-Ramp ^e	<u>C</u>	<u>26.0</u>	<u>C</u>	<u>26.0</u>	

Source: Parametrix, Inc.

Parking

Based on projected trip generation estimates, which assume an average vehicle occupancy of two passengers, a daily parking demand of up to 290 vehicles could be expected on a summer weekday and 460 vehicles could be expected on a summer weekend day. Assuming that an average trail user would remain on-site for three hours, parking demand during the weekday PM peak period could range from 80 to 130 vehicles at any given time, and parking demand during the weekend peak midday period could range between 130 and 155 vehicles at any given time.

In addition to the existing parking supply located in Marymoor Park and along NE 65th Street, new parking lots would be provided along East Lake Sammamish Parkway for trail users. These new accessible parking facilities would be located near the East Lake Sammamish Trail at the following locations:

- At SE 33rd Street 30 spaces
- North of Inglewood Hill Road 20 spaces
- West side of the trail alignment between NE 70th Street and NE 65th Street 44 spaces

King County is also working with the City of Issaquah to establish an additional parking area for trail users. A segment of Zetech Road between Gilman Boulevard and I-90 would be available to trail users for

^a The planned transportation improvements shown in Table 3.11-12 were not included in this analysis.

^b Analysis conservatively assumes that the Continuation of the Interim Use Trail Alternative would result in similar intersection LOS and delays as the Corridor and East Alternatives.

^c Analysis assumes that this intersection would be stop-controlled with the No Action Alternative. LOS results shown are for the eastbound approach.

^d Analysis assumes that this intersection would be signal-controlled with the Build Alternatives.

^e Analysis assumes that the SR 202 to SR 520 flyover ramp would be constructed and signal timing would be adjusted because of the traffic volume decrease on the westbound approach.

parallel parking. Trail users could access 16 parking spots via one-way vehicular access from Gilman Boulevard to the new connector road.

The combination of existing and new parking facilities would provide sufficient parking supply to accommodate the peak parking demand generated from the proposed trail on most days. However, potential use of parking areas at Marymoor Park could reduce available parking for park users, especially on busy summer weekends when parking capacity at these sites would be met. Approximately 5 to 10 days out of the year, Marymoor Park hosts large events that may discourage trail users from parking on-site. In addition, higher parking fees and limited space may further discourage trail users from parking onsite.

There is some potential for parking impacts near businesses in Issaquah because limited parking is currently available for trail users near the south terminus of the trail. If shared parking agreements are established, additional parking supply could be available for weekend use at the existing Microsoft campus (approximately 1,000 parking spaces) and Issaquah District Court (80 parking spaces). These agreements would be pursued during the design and permitting phase of the project.

With Washington State Parks approval, additional parking may also be available at Lake Sammamish State Park. Lake Sammamish State Park has approximately 2,300 regular parking spaces near the picnic/swimming area available for general public use (located approximately 1 mile west of the proposed trail on the north side of SE 56th Street), and 250 boat-trailer parking spaces (located just west of the proposed trail and south of SE 43rd Way). Users are charged a permit fee for parking at Lake Sammamish State Park. The boat-trailer parking area is frequently at capacity on spring and summer weekend days and would not be available for trail users. Washington State Parks approval for use of the 2,300 regular parking spaces by trail users would be pursued during the design and permitting phase of the project.

Trail users would be discouraged from parking on the shoulders of East Lake Sammamish Parkway because there are few public access points to the trail, and pParking on the Parkway would encourage illegal access in some areas. There is some potential for illegal parking activity as trail users could attempt to access the trail via driveways. However, Ppublic parking is currently prohibited along driveways near the proposed Master Plan TrailCorridor Alternative alignment. However, there is some potential for illegal parking activity as trail users could attempt to access the trail via these driveways.

Interim Use Trail Crossings

The project would increase the potential for conflicts between trail users and vehicles at intersections with roadways and driveways, compared to the existing Interim Use Trail. This is because of the increased trail use and the likelihood that some trail users would travel at higher speeds on a paved surface than they do on the existing gravel surface. Due to the close proximity of the alignment to residential driveways and East Lake Sammamish Parkway in many locations, in the absence of appropriate mitigation measures, sight distance would be limited for vehicles as well as for pedestrians and bicycles using the trail.

Sight distance is a principal consideration for roadway and path intersection design. Stopping sight distance, which is the distance required for a vehicle or bicycle to react to the unexpected, is most important at intersection locations where stop or yield signs would not be present. Based on the *Guide for the Development of Bicycle Facilities* (AASHTO, 1999), a 125-foot minimum stopping sight distance would be required for a bicycle traveling at a design speed of 20 mph (posted speed limit would be 15 mph). For vehicles traveling at 20 mph, 115 feet of stopping sight distance would also be required, based on *A Policy on Geometric Design of Highways and Streets* (AASHTO, 2001).

The Washington State Department of Transportation (WSDOT) *Design Manual* (2006) also provides a method for determining the minimum required sight distance for motor vehicles approaching intersections. Based on WSDOT's methodology, drivers of vehicles approaching from a distance 10 feet away from a trail crossing should be able to see a trail user traveling at 20 mph approaching from a distance 250 feet away from the trail crossing. These sight distance criteria would apply in locations where vehicles would be required to yield to trail users. If sight distances do not meet these criteria, motor vehicles would be required to stop. The operator of an approaching vehicle would stop and remain stopped to allow a pedestrian or bicycle to cross the roadway within an unmarked or marked crosswalk when the pedestrian or bicycle is upon or within one lane of the half of the roadway upon which the vehicle is traveling or onto which it is turning (RCW 46.61.235(1)).

At locations where the roadway is given the right of way and trail users are required to stop, sufficient crossing maneuver sight distance should be provided. Crossing sight distance is the distance required for a pedestrian or bicyclist to make a safe crossing maneuver after coming to a complete stop. Based on *Trail Intersection Design Guidelines* (North Carolina Highway Safety Research Center, 1996), a crossing sight distance of approximately 341 feet would be required for pedestrians crossing a 16-foot roadway with oncoming vehicular traffic traveling at 30 mph. A crossing sight distance of approximately 295 feet would be required for bicyclists crossing under similar conditions. Due to the sharp turns, steep grades, and narrow widths of some residential driveways and the close proximity of homes to the project corridor, vehicles approaching most of the East Lake Sammamish Trail intersections would be traveling at considerably lower speeds. Therefore, pedestrian and bicycle crossing sight distance requirements would be expected to be lower for the Master Plan TrailCorridor Alternative.

Sight distance observations were conducted along the entire length of the project corridor to identify the locations along the Build Alternative alignments where sight distance concerns exist. Sight distance deficiencies were identified in the field based on information provided in the published guidelines mentioned above. The Trail Intersections Appendix (Appendix G) lists all impacted driveways and roadways, and identifies the locations where sight distance concerns exist.

Based on the surveys, sight distance limitations exist at approximately 39 of the estimated 52 total driveway crossings. Without improvements, there is a greater potential for accidents to occur at intersections with sight distance deficiencies. The Corridor Alternative includes the installation of informational and regulatory signs for trail users and road-based vehicles.

In locations where trail users would have the right of way, yield signs for vehicles would be placed at crossings without major sight distance concerns. Stop signs would be required for vehicles at crossings where sight distance deficiencies exist. Vegetation management would also be required in many locations to maintain adequate sight distances. In locations where vehicles have the right of way, trail users would be required to stop.

Trail signing plans were developed to be consistent with the most recent version of the Manual of Uniform Traffic Control Devices. Figures 2-12 through 2-17 (pgs 2-32 through 2-38) (in Chapter 2) show seven trail signing plans that would be implemented for improving vehicular and non-motorized safety, depending on available sight distance and traffic volumes at each crossing location. In most cases, trail signing plans are similar to existing conditions for the No Action and Continuation of the Interim Use Trail Alternatives. The trail signing plans, corresponding locations along the Corridor Alternative, and potential impacts associated with each crossing type are summarized in Table 3.11-10.

Table 3.11-10. Potential Impacts Associated with Different Trail Crossing

Types – Corridor Alternative

CROSSING TYPE	CORRESPONDING LOCATIONS	TRAFFIC CONTROL/SIGNING PLANS	POTENTIAL IMPACTS
Type 1 – High-Volume Street/Driveway Crossing (signals located in close proximity)	SE 51st Street SE 56th Street SR 520 NE 65th Street	Trail users directed to signalized crosswalk	Trail users may attempt to cross midblock with traffic volumes the main deterrent.
Type 2 – Low-Volume Street/Driveway Crossings	SE 62nd Street Lk. Samm. State Park Driveway SE 33rd Street NE 70th Street	Stop signs for trail users ^c	Minimal potential for safety impacts if clearly signed and if trail users obey signs.
Type 3 – Residential Driveway Crossings with Limited Sight Distance (>30 feet from Parallel Roadway Intersection)	Up to 41 Residential Driveways ^b	Stop signs for vehicles ^c , warning signs for trail users	Minimal potential for impacts if clearly signed, including advance warnings, and if vehicles obey signs.
Type 4 – Residential Driveway Crossings with Adequate Sight Distance (>30 feet from Parallel Roadway Intersection)	Up to 22 Residential Driveways ^b	Yield signs for vehicles ^c , warning signs for trail users	Minimal potential for safety impacts if clearly signed and if vehicles obey signs.
Type 5 – Residential Driveway Within 30 feet of Parallel Intersection with East Lake Sammamish Parkway	Not applicable for Corridor Alternative	Stop signs for trail users	See Table 3.11-11 for the East A Alternative.
Type 6 – Multiple Crossings of a Residential Driveway	Not applicable for Corridor Alternative	Appropriate signage at each crossing °.	Queuing between crossings for higher-volume driveways.
Type 7 – Frequent Residential Driveways (Distance between Crossings <200 feet)	Up to 10 Residential Driveways ^b	Frequent Driveways Ahead notice for trail users	Minimal potential for safety impacts if clearly signed

^a At NE 65th Street, the alternative of providing a safe crossing at the location of the Interim Use Trail crossing (i.e., the former railbed) would be considered during detailed design and permitting. Under this scenario, trail users would be required to stop (i.e., Type 2 crossing).

As shown in Table 3.11-10, the potential for safety impacts would be minimized through clear signing. For Type 1 crossings, some trail users may attempt to cross midblock. As shown in Figure 2-12 (pg 2-32), barriers would be placed at trail intersections and signs would be placed to direct trail users to signalized crosswalks. The entire length of the Corridor Alternative alignment would be separated from East Lake Sammamish Parkway, minimizing potential conflicts between trail users and vehicles that result from proximity. (The potential for conflicts due to proximity are discussed in evaluating the impacts of the East A Alternative.)

^b The totals shown assume that several of the 52 driveway locations could be grouped under more than one crossing type category.

^c Crossings will be designed so that vehicles can safely stop or yield. These include locations where steep grades currently exist.

For all Build Alternatives at the SR 520/Redmond Way interchange, the trail alignment would divert along the south side Redmond Way to cross at the signalized on-ramp and off-ramp intersections. This diversion would require easements with WSDOT and the City of Redmond. Because of the high vehicle volumes from SR 520 onto Redmond-Fall City Way, King County is proposing the following changes at this intersection:

- When the new flyover from westbound SR 202 to westbound SR 520 is completed by WSDOT, signal timing would be changed to allocate a higher percentage of green time to the right-turn movement from SR 520 to SR 202. This is possible because of the traffic volume decrease on the westbound approach.
- Prohibit right turn on red operation from the SR 520 eastbound off-ramp.

These improvements, implemented together, would result in a minimal delay increase for drivers at this intersection and would improve safety for trail users. However, the potential for conflict between vehicles and trail users would remain.

Vehicle Access

Bollards would be installed at all trail/roadway crossings. The placement of removable bollards would provide access for maintenance and emergency vehicles, but block the trail from use by other motor vehicles. According to King County staff, maintenance of the East Lake Sammamish Trail would be similar to that of the Snoqualmie Valley Trail. In the winter months, county staff estimates maintenance inspections would occur at least twice per month, and actual maintenance two to four times per month. In the growing season (March through October) maintenance inspections would be similar, and maintenance activities would occur at least one time per week. Access for all public service vehicles would be via public streets.

3.11.3.2 East A Alternative

Construction Impacts

The East A Alternative includes all of the construction, maintenance, and operation actions noted for the Corridor Alternative, but would also require several additional actions to allow for the construction of the trail along East Lake Sammamish Parkway and East Lake Sammamish Place. For the East A Alternative, construction activity would occur along approximately 4 miles of roadway as compared to approximately 300 feet of roadway with the Corridor Alternative.

Construction along the roadways would potentially require a combination of temporary rechannelization of the roadway and closure of the west side shoulder during construction. Construction work area needs may require the temporary closing of left-turn and/or right-turn pockets during construction. This may result in additional queuing in the northbound or southbound lanes during construction. Bicyclists and pedestrians using the roadway shoulder could also be impacted. Bicyclists could be required to share the roadway in these sections, and pedestrians could be diverted to the other side of the roadway.

Where construction is occurring along the roadway, construction vehicles would be entering and leaving the work areas along the roadway. The effect on traffic would be similar to the Corridor Alternative.

The proximity of the work areas along the roadway may increase the potential for dirt and debris to accumulate on the roadway compared to the Corridor Alternative and the Continuation of the Interim Use

Trail Alternative. Street sweeping equipment would be needed once or twice daily to keep the roadway surface clean during construction. Construction at any given location along the Parkway would last approximately two months.

Potential impacts to the roadway prism from other construction activities such as excavation would be reduced or avoided by using engineered shoring and limiting the duration of excavation at a given location.

As shown in Table 3.11-8, approximately 43,500 cy of excavation (export from the project area), 51,500 cy of fill (import to the project area), and 22,800 cy of surfacing materials (import to the project area) would be moved on the entire length of the project area for construction of the East A Alternative. Approximately 9,100 round trip truck trips (5,700 bringing materials in, 3,400 hauling materials out) would be generated in moving this material to and from the project area. These trips would be spread out over 9 to 10 months, resulting in an average of approximately 47 one-way truck trips per day assuming no hauling on weekends.

Trucks would access the project corridor from public streets, and the staging area for the removal and placement of materials would take place in the existing rail corridor, minimizing impacts to adjacent private property. Therefore, additional truck traffic is not expected to substantially disrupt traffic flow and public access.

As shown in Table 3.11-8, the overall number of truck trips would be higher for the East A Alternative than for the Corridor Alternative. However, fewer trucks would access the project corridor, since portions of the alignment would generally be accessed only from the roadway.

Construction types, staging areas, and project phases would be similar for both the Corridor and East A Alternatives and are discussed under the Corridor Alternative.

Operation Impacts

Long-term impacts for the East A Alternative would be similar to the Corridor Alternative, except where the alignment is located immediately adjacent to the roadways. Trail user safety would be lower along these sections because of the reduced separation between vehicles and trail users. Safety risks would be highest during peak traffic periods and/or periods of reduced visibility (see the Trail Crossings section below).

The additional improvements that would be provided at trail access points with the Continuation of the Interim Use Trail and Corridor Alternatives would also be provided with the East A Alternative, as would the new restroom and parking facilities. Similar to the other Build Alternatives, the diversion of the trail alignment near the SR 520 onramps and offramps would require easements with WSDOT and the City of Redmond. This is not expected to affect traffic operations in the area.

Traffic Volumes

Traffic volumes associated with the East A Alternative would be similar to those described for the Corridor Alternative.

Level of Service

Year 2015 weekday PM peak hour level of service impacts associated with the East A Alternative would be similar to those shown in Table 3.11-9 for the Corridor Alternative.

Parking

Parking demand and other parking impacts associated with the East A Alternative would be similar to those described for the Corridor Alternative. Where the East A Alternative is located on East Lake Sammamish Parkway, on-street parking would not be possible on the west side of the street.

The East A Alternative could encourage greater general public use of the East Lake Sammamish Parkway shoulders north and south of the segments where the paved trail would be located along East Lake Sammamish Parkway, as well as along East Lake Sammamish Place SE, since increased trail access opportunities would exist in these areas.

Trail Crossings

On the Interim Use Trail Alignment. For portions of this alternative that are on the Interim Use Trail alignment, impacts would be the same as discussed for the Corridor Alternative.

Adjacent to the Roadway. Moving a portion of the trail immediately adjacent to East Lake Sammamish Parkway and, to a lesser degree, East Lake Sammamish Place would have an impact on traffic operations. Travel speeds for vehicles turning from East Lake Sammamish Parkway across the trail would need to be much slower than for the Corridor or Continuation of the Interim Use Trail Alternatives, which could result in a higher risk of rear-end accidents where the trail is immediately adjacent to East Lake Sammamish Parkway.

Currently, no vehicle queuing space is available for southbound right-turning and northbound left-turning vehicles on East Lake Sammamish Parkway to pull out from through-traffic lanes. In addition, as described in the *Guide for the Development of Bicycle Facilities* (AASHTO, 1999), some operational problems are likely to occur when two-way shared use paths are located immediately adjacent to a roadway (East Lake Sammamish Parkway and East Lake Sammamish Place) and the trail. As described in the *Guide for the Development of Bicycle Facilities*, problems with paths located immediately adjacent to roadways and the proposed design solutions (described in italics) include the following:

- Unless separated, paths located immediately adjacent to roadways require one direction of bicycle traffic to ride against motor vehicle traffic, contrary to normal rules of the road.
 - A 4-foot planter or a barrier is proposed between the trail and adjacent vehicle use on East Lake Sammamish Parkway and East Lake Sammamish Place, respectively. Along East Lake Sammamish Place, the separation would not be provided as part of this project but as part of future City of Sammamish road improvements.
- When the path ends, bicyclists traveling against traffic will tend to continue to travel on the wrong side of the street.
 - For all Build Alternatives, the Master Plan Trail ends in a T-intersection at Gilman Boulevard and at a trail intersection in the north end. For trail users wishing to continue east (i.e., turn left) on Gilman Boulevard, either a pedestrian signal will be added at the trail terminus or the existing crossing west (i.e., to the right) of the terminus could be used.

• At intersections, motorists entering or crossing the roadway often will not notice bicyclists approaching from their right, as they are not expecting contra-flow vehicles. Motorists turning to exit the roadway may likewise fail to notice bicyclists. Even bicyclists coming from the left often go unnoticed, especially when sight distances are limited.

Trail users would be required to stop and vehicles given the right of way along East Lake Sammamish Parkway, where vehicular speeds are higher.

Stop signs are not as appropriate for trail users along East Lake Sammamish Place because (1) driveways currently occur frequently in a short span and trail users are less likely to obey the stop signs;(2) vehicle speeds are slower along the Place; and (3) most driveways provide access to just one or two residences.

Instead, the convention is for cars exiting a driveway onto a street to yield. Likewise, vehicles entering a driveway from a street with a trail or sidewalk are expected to yield to trail users. This type of crossing is not typically signed at each individual crossing. Instead, only advanced warning signs of multiple trail crossings are proposed for both vehicles and trail users. There remains some potential for conflicts between trail users and vehicles, primarily due to sight distance issues in this area.

- Signs posted for roadway users are backwards for contra-flow bike traffic; therefore these cyclists are unable to read the information without stopping and turning around. In other words, northbound trail users would not be able to read the signs for southbound roadway traffic.
 - No design solutions have been identified for this condition, which is expected to be more of an inconvenience than a safety issue. The counterpart condition is that the trail signs for southbound trail users could potentially confuse or distract southbound drivers. This is mitigated to some extent because the signs will be more than 20 feet from the southbound roadway edge.
- Many bicyclists will use the roadway instead of the shared use path because they have found the roadway to be more convenient, better maintained, or safer.
 - The local jurisdictions' future plans for East Lake Sammamish Parkway include bicycle lanes. Bicyclists will continue to have the option of riding on the roadway, regardless of the alternative selected.
- Although the multi-use trail should be given the same priority through intersections as the parallel roadway, motorists falsely expect bicyclists to stop or yield at all cross-streets and driveways.
 Efforts to require or encourage bicyclists to yield or stop at each cross-street and driveway are inappropriate and frequently ignored by bicyclists.
 - The proposed traffic control measures thought to best protect public safety would have trail users stop at cross-street and driveway intersections when the trail is closer than 30 feet to East Lake Sammamish Parkway. The potential for conflicts due to trail users ignoring the signage exists, in particular where there are frequent intersections in a short span.
- Stopped cross-street motor vehicle traffic or vehicles exiting side streets or driveways may block the path crossing.
 - Trail users are required to stop, and vehicles are given the right of way, when adjacent to East Lake Sammamish Parkway. Trail users may be obliged to wait until queued vehicular traffic moves out of the path crossing.
- Because of the proximity of motor vehicle traffic to opposing bicycle traffic, barriers are often necessary to keep motor vehicles out of shared use paths and bicyclists out of traffic lanes. These

barriers can represent an obstruction to bicyclists and motorists, and can complicate maintenance of the facility.

A 4-foot planter would contain low to medium height vegetation to minimize sight distance issues. Other barriers (e.g., guardrail) could be selected during detailed design based, in part, on sight distance concerns.

Similar to the Corridor Alternative, surveys were conducted to identify sight distance deficiencies for the East A Alternative, including portions of the trail on East Lake Sammamish Parkway and East Lake Sammamish Place. Appendix G lists the driveways and roadways along the Interim Use Trail corridor, East Lake Sammamish Parkway, and East Lake Sammamish Place that would be crossed by the East A Alternative, and identifies the locations where sight distance concerns exist.

As shown in Appendix G, sight distance limitations would exist at approximately 65 of the estimated 78 trail/driveway intersections along the Interim Use Trail corridor, on East Lake Sammamish Parkway, and on East Lake Sammamish Place. Vegetation management and/or other improvements such as grading would minimize or eliminate some of the sight distance deficiencies at the 65 identified locations.

The seven trail signing plans described for the Corridor Alternative and shown in Figures 2-12 through 2-17 (pgs 2-32 through 2-38) in Chapter 2 would also be implemented for the East A Alternative to improve vehicular and non-motorized safety, depending on available sight distance and traffic volumes at each crossing location. Where the alignments of the East A and Corridor Alternatives are the same, the signing plans are the same. Several of the trail signing plans, shown in Figures 2-16 (pgs 2-36) and 2-17 (pg 2-38) were specifically identified for segments of the East A Alternative located immediately adjacent to East Lake Sammamish Parkway. These trail signing plans, corresponding locations along the East A Alternative, and potential impacts associated with each crossing type are summarized in Table 3.11-11.

As shown in Table 3.11-11, the potential for safety impacts would be minimized through clear signing. For Type 1 crossings, some trail users may attempt to cross mid-block. As shown in Figure 2-12 (pg 2-32), barriers would be placed at trail intersections and signs would be placed to direct trail users to signalized crosswalks. The potential issues associated with Type 5 crossings are included in Table 3.11-11 and Figure 2-16 (pg 2-36). In areas where multiple crossings of a residential driveway would be provided (Type 6-See Figure 2-17 (pg 2-38)), some potential exists for queues to extend through both trail-driveway intersections along some higher volume driveways.

Vehicle Access

Vehicle use of the trail would be limited to emergency and maintenance vehicles only. Frequency and access are the same as discussed for the Corridor Alternative.

3.11.3.3 East B Alternative

The impacts associated with the construction and operation of the East B Alternative would be similar to those for the East A Alternative. However, the Type 6 trail crossing would not be applicable to the East B Alternative because there would not be any parallel use of a separated soft-surface trail when the paved portion of the trail is immediately adjacent to the roadway. Equestrian use of the trail would likely decrease with the East B Alternative, due to the trail's proximity to the road right of way, potential distractions, and the narrow width of the shoulder. This could result in a slight decrease in vehicle trips to and from proposed parking areas along the project corridor; however, any effects of this change on overall transportation impacts would be minimal.

3.11.3.4 Continuation of the Interim Use Trail Alternative

Construction Impacts

As shown in Table 3.11-8, approximately 6,100 cubic yards (cy) of excavation (export from the project area), 8,500 cy of fill (import to the project area) and 4,180 cy of surfacing materials (import to the project area) would be needed to complete construction from the existing Interim Use Trail north terminus north to the SR 520 crossing and for construction of the parking and restroom facilities. Approximately 1,500 round trip truck trips (1,000 bringing materials in, 500 hauling materials out) would be generated for these construction activities. If all three facilities and the trail were constructed together, these trips would likely be spread out over three to four months, resulting in an average of approximately 17 truck trips per day assuming no hauling on weekends. It is likely, however, that the facilities and the trail would be built in separate construction phases because they are spread out geographically and are in different jurisdictions.

Trucks would access the project corridor from public streets, and the staging area for gravel placement would be provided on the former railbed to the greatest extent possible to minimize adjacent private property impacts. Traffic flow and public access would not be disrupted. Therefore, the impacts related to truck traffic are expected to be minimal.

Table 3.11-11. Potential Impacts Associated with Different Trail Crossing Types – East A Alternative

CROSSING TYPE	CORRESPONDING LOCATIONS	TRAFFIC CONTROL/SIGNING PLANS	POTENTIAL IMPACTS	
Type 1 – High-Volume Street/Driveway Crossing (signals located in close proximity)	SE 51st Street SE 56th Street NE 65th Street ^a	Trail users directed to signalized crosswalk	Trail users may attempt to cross midblock with traffic volumes the main deterrent.	
Type 2 – Low-Volume Street/Driveway Crossings	SE 62nd Street Lk. Samm. State Park Driveway SE 33rd Street NE 70th Street	Stop signs for trail users	Minimal potential for safety impacts if clearly signed and if trail users obey signs.	
Type 3 – Residential Driveway Crossings with Limited Sight Distance (>30 feet from Parallel Roadway Intersection)	Up to 25 Residential Driveways ^b	Stop signs for vehicles, warning signs for trail users	Minimal potential for impacts if clearly signed, including advance warnings, and if vehicles obey signs.	
Type 4 – Residential Driveway Crossings with Adequate Sight Distance (>30 feet from Parallel Roadway Intersection)	Up to 12 Residential Driveways ^b	Yield signs for vehicles, warning signs for trail users	Minimal potential for safety impacts if clearly signed and if vehicles obey signs.	
Type 5 – Residential Driveway Within 30 feet of Parallel Roadway Intersection	Up to 52 Residential Driveways ^b	Stop signs for trail users	Where frequent driveways occur within a short span, trail users may be particularly inclined to disobey signs. Signs for southbound trail users may be a distraction for southbound vehicles. When trail users are already in the intersection, spillover queues may occur on the Parkway for higher volume driveways. A vehicle turning onto the Parkway may block the trail. This type of crossing is not practical for East Lake Sammamish Place, where single-residence driveways occur at relatively short distances.	
Type 6 – Multiple Crossings of a Residential Driveway	Up to 20 Residential Driveways ^b	Appropriate signage at each crossing	Queuing between crossings for higher-volume driveways	
Type 7 – Frequent Residential Driveways (Distance between Crossings <200 feet)	Up to 76 Residential Driveways ^b	Frequent Driveways Ahead notice for trail users	Minimal potential for safety impacts if clearly signed	

^a At NE 65th Street, the alternative of providing a safe crossing at the location of the Interim Use Trail crossing (i.e., the former railbed) would be considered during detailed design and permitting.

^b The totals shown assume that many of the 78 driveway locations would be grouped under more than one crossing type category. In some cases, two crossings of the same driveway would be provided.

Operation Impacts

Long-term impacts remain unchanged from those described and evaluated in the environmental documents for the Interim Use Trail (King County, 2001; FHWA and WSDOT, 2002). These include potential increases in illegal parking along the corridor and in conflicts between trail users and vehicles at intersections. The placement of new parking and restroom facilities along the project corridor could result in some redistribution of vehicle trips to and from the trail. This would not result in a substantial impact on roadway congestion or roadway operations. The potential for parking impacts along East Lake Sammamish Parkway and driveways near the East Lake Sammamish Trail would be reduced with the addition of these new facilities. Access, safety, and the user experience of the trail would be improved, compared to the existing Interim Use Trail, by the projects identified in Chapter 2, Table 2-1.

3.11.3.5 No Action Alternative

Construction Impacts

The No Action Alternative does not require any construction and thus would not result in any short-term construction-related traffic impacts.

Operation Impacts

Long-term impacts remain unchanged from those described and evaluated in the environmental documents for the Interim Use Trail (King County, 2001; FHWA and WSDOT, 2002) and would continue through 2015. Specifically, the Interim Use Trail would have no major impact on roadway congestion or operations; existing parking would be sufficient for trail users; informational and regulatory signs, as well as vegetation management, would improve sight distance conditions; and bollards would provide maintenance and emergency vehicle access, while blocking the trail from use by other motor vehicles.

3.11.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). The Master Plan Trail is not expected to have any indirect or secondary impacts on transportation.

3.11.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). The cumulative impacts described below are applicable to all Build Alternatives except where noted.

Transportation Improvement Projects

The City of Redmond, City of Sammamish, and City of Issaquah Six-Year Transportation Improvement Programs (TIPs) were reviewed to identify planned transportation improvements within the transportation study area. Planned improvements are identified, by jurisdiction, in Table 3.11-12. In addition, the Washington State Department of Transportation is designing improvements to SR 520 from West Lake Sammamish Parkway to SR 202. These improvements include widening the highway and other access improvements where the trail would intersect the highway.

As shown in Table 3.11-12, in addition to the East Lake Sammamish Trail, non-motorized improvements are also proposed for the Bear Creek Trail in Redmond. Sidewalk and bicycle lane improvements are included as part of roadway widening projects along East Lake Sammamish Parkway. These projects would result in better pedestrian and bicycle connections within the study area and provide links to non-motorized facilities outside the study area.

Roadway widening, intersection signalization, and channelization projects along East Lake Sammamish Parkway would also improve vehicle operations at many existing unsignalized intersections and reduce queues along this roadway corridor. The East Lake Sammamish Parkway/SE 56th Street intersection, which would operate at LOS E during the PM peak hour in the year 2015 if no improvements are made (see Table 3.11-9), would improve to LOS D with additional northbound and eastbound left-turn lanes.

None of the projects described above would be adversely affected by, or adversely affect, the construction or operation of the Corridor Alternative or the Continuation of the Interim Use Trail Alternative. Most of these projects could increase traffic volumes on roadways in the project area and could increase trail use.

With the East Alternatives, the potential for northbound queuing due to vehicles turning left at driveways along East Lake Sammamish Parkway would be reduced with the addition of a center two-way left-turn lane. The location of the East Alternatives with respect to the roadway is intended to accommodate the future roadway improvements. However, depending on the outcome of ongoing corridor studies and planning efforts by the local jurisdictions, the location may require some minor modifications.

 Table 3.11-12. Planned Transportation Improvements near the Proposed East Lake Sammamish Trail

LOCATION	То	From	PROJECT DESCRIPTION	PROPOSED COMPLETION YEAR
City of Redmond				
Bear Creek Class 1 Bicycle and Pedestrian Trail	Redmond Way	Union Hill Road		2006
Redmond Way, Stage II	East Lake Sammamish Parkway NE	East City Limits (187th Ave NE)	Additional lanes	2008
East Lake Sammamish Parkway NE @ 187th Avenue NE			Intersection improvement.	2010
East Lake Sammamish Parkway NE @ NE 65th Street			Intersection improvement.	2008
City of Sammamish				
East Lake Sammamish Parkway	NE Inglewood Hill Road	NE 26th Street	Widen to 3 lanes with bike lanes, curb, gutter, and sidewalk	2009
East Lake Sammamish Parkway NE	NE 26th Street	196th Avenue NE	Widen to 3 lanes with bike lanes, curb, gutter, and sidewalk	2011
East Lake Sammamish Parkway NE	196th Avenue NE	187th Avenue NE	Widen to 3 lanes with bike lanes, curb, gutter, and sidewalk	After 2011
East Lake Sammamish Parkway SE @ SE 24th Street Intersection			Construct turn lanes and traffic signal	2009
East Lake Sammamish Parkway SE	212th Avenue SE	South City Limits	Widen to 3 lanes with bike lanes, curb, gutter, and sidewalk	

Table 3.11-12. Planned Transportation Improvements near the Proposed East Lake Sammamish Trail (continued)

LOCATION	То	From	PROJECT DESCRIPTION	PROPOSED COMPLETION YEAR
City of Issaquah East Lake Sammamish Parkway @ SE 43rd Way			Install three-legged roundabout	After 2011
East Lake Sammamish Parkway SE @ SE 56th Street			Widen East Lake Sammamish Parkway SE to provide dual left-turn lanes in the northbound direction, and widen SE 56th Street to provide exclusive dual left-turn lanes in the eastbound direction. In addition, increase the curb radius at the southwest corner of the intersection.	2006
East Lake Sammamish Parkway SE	SE 56th Street	I-90	Add additional southbound through travel lane, bike lane, curb, gutter, and sidewalk on East Lake Sammamish Parkway SE. Requires modification of traffic signal at Black Nugget Road and at SE 62nd Street and restriping portions of roadway between Issaquah Fall City Road and I-90 for additional southbound approach lane.	2011
Front Street @ NW Gilman Blvd			Construct new eastbound left-turn lane on NW Gilman Blvd to provide dual left-turn approach and restripe westbound approach to provide exclusive right turn lane., Modify southbound right-turn lane and island on Front Street to provide for free right turn.	2005
I-90 Crossing Improvements	SE 56th Street	NW Gilman Boulevard	Provide new crossing of I-90 located at the existing undercrossing structure to connect north and south portions of the City, thus reducing congestion on the existing connections.	2007
WSDOT SR 520	West Lake Sammamish Parkway	SR 202	Add one lane in each direction on SR 520 and construct interchange improvements at Redmond Way	2008-2010

Sources: City of Redmond Six-Year Transportation Improvement Program (July 2005), City of Sammamish Six-Year Transportation Improvement Program (July 2005), and City of Issaquah Six-Year Transportation Improvement Program (February 2005).

3.11.6 Mitigation Measures

Construction Traffic

For all the Build Alternatives, some standard construction safety measures can be taken, such as installation of advanced warning signs, highly visible construction barriers, and the use of flaggers. In addition, a public information program regarding hours of construction or parking impacts could be instituted. Truck traffic would be required to use public roads or property to access the County-owned corridor, unless otherwise negotiated. Any impacts to roadways by truck traffic would be mitigated according to haul route agreements (e.g., restoration of road surface).

Traffic

The No Action Alternative would not require any new roads or streets, or improvements to existing roads or streets. As discussed previously, all Build Alternatives would include non-motorized access and safety improvements near the East Lake Sammamish Trail. As described previously, the East A and East B Alternatives would require several actions to allow for construction of a shared use trail immediately adjacent to a roadway. No roadway capacity improvements are needed to accommodate additional vehicular traffic generated by the Build Alternatives. Therefore, no mitigation is proposed.

Parking for Trail Users

Signs would need to be appropriately placed to prevent trail users from parking in private or restricted parking lots located near the trail access points. At the discretion of the local jurisdictions, parking mitigation measures could be implemented. For example, aA residential parking zone (RPZ) permit system could be considered on East Lake Sammamish Place to prohibit parking by trail users. In addition, parking on East Lake Sammamish Parkway shoulders could be prohibited in certain areas where sight distance is impacted for vehicles entering the Parkway, or if illegal access to the trail occurs across driveways or private property.

If parking supply becomes an issue in the future, the possibility for shared parking opportunities for trail users may exist at the Issaquah District Court or office park on SE 51st Street. At the office park location, the park owners/managers would need to be contacted to discuss the possibility of allowing some weekend and evening parking facility use. If a shared parking agreement is established at this location, King County would work with the office park owner/manager to install signs and develop an ongoing monitoring and enforcement program.

The possibility for trail users to park at Lake Sammamish State Park may also exist. The 2,300 regular parking spaces near the picnic/swimming area are currently available for general public use with purchase of a permit. These spaces may be available for use by trail users if Washington State Parks approval is obtained.

Driveway/Roadway Crossings

Bollards would be installed at trail/roadway crossings for all Build Alternatives. Informational and regulatory signs would also be installed at all such crossings for trail users and road-based vehicles. Appendix G identifies locations where sight distance improvements are needed, and provides signing recommendations for each individual driveway or roadway crossing. In general, vegetation growth would be monitored and managed near all trail crossings to maximize sight distances for trail users and vehicles, as also described in Section 3.4, Vegetation and Wildlife. Guardrails would also be used to delineate the

trail edge where the trail surface is contiguous with driveways. In addition, accident records would be monitored and problem areas addressed.

For those sections of the East A and East B Alternatives that would be immediately adjacent to East Lake Sammamish Parkway or East Lake Sammamish Place, a physical buffer (e.g., planted divider) or barrier (e.g., guard rail) would be constructed.

SR 520 Off Ramp Crossing

King County would further improve safety at this trail crossing by designing and constructing a grade-separated (i.e., elevated) structure across the off-ramp, if funding is available. WSDOT developed conceptual plans for such a structure several years ago in conjunction with SR 520 improvements; however, the crossing was never funded. King County would consider pursuing this crossing as a part of the East Lake Sammamish Trail project. Depending on construction funding and phasing, however, the at-grade crossing at the signal could be in place for some period of time before the grade-separated structure is built.

Marymoor Connector Trail

The planned Marymoor Connector Trail (see Section 2.6.5) offers a direct connection for trail users between East Lake Sammamish Trail and Sammamish River Trail. The connector trail could reduce the volume of trail users passing through the SR 520 interchange on the East Lake Sammamish Trail.

Vehicle Access

As described above, bollards would be installed at all trail crossings. The placement of removable bollards would provide access for maintenance and emergency vehicles, but block the trail from use by other motor vehicles. Where the trail is adjacent to a driveway, guard rail and potentially landscaping would also reduce the potential for conflicts between vehicles and trail users.

3.11.7 Significant Unavoidable Adverse Impacts

No significant unavoidable transportation-related adverse impacts would occur. Anticipated impacts would be largely eliminated or reduced by proposed mitigation measures. Refer to Section 3.8, Socioeconomics, for a discussion of potential property impacts due to eliminated access.

3.12 *Noise*

3.12.1 Studies and Coordination

The impact analysis for noise included measurements of baseline sound levels to characterize the existing acoustic environment in the study area, and a qualitative review of potential impacts resulting from the proposed project.

3.12.2 Affected Environment

3.12.2.1 Noise Terminology

The standard unit used to describe the intensity of sounds is the decibel (dB). The decibel scale is a logarithmic scale that provides a convenient system for considering the large range of audible sound intensities. On this scale, a 10 dB increase represents a perceived doubling of loudness to someone with normal hearing. For example, a 70 dB sound level will sound about twice as loud as a 60 dB sound level. A doubling of sound energy results in a 3 dB increase. Under ideal listening conditions, people generally cannot detect differences of 1 dB, while differences of 2 or 3 dB can usually be detected by people with normal hearing. In the outside environment, and especially near complex noise sources such as roads, sound level changes of 2 or 3 dB might not be noticeable to most people, while a 5 dB change would likely be perceived as a clear and noticeable change.

When addressing the effects of noise on people, one must consider the "frequency response" of the human ear, or those sounds that people hear best. To address the frequency response, instruments that measure sounds are designed to "weight" measured sound levels by emphasizing the frequencies people hear best and deemphasizing those frequencies people do not hear as well. The frequency weighting most often used to evaluate environmental noise is A-weighting, and measurements from instruments using this system are reported in "A-weighted decibels" or dBA. All sound levels in this section are reported in A-weighted decibels.

For any given noise source, several factors affect the transmission of sound from the source and the potential related noise impact. These factors include the distance from the source, the frequency of the sound, the absorbency of the ground surface, the presence or absence of obstructions and their ability to absorb or reflect sound, and the duration of the sound. The degree of impact on humans may also depend on existing sound levels and on who is listening. For example, if existing sound levels are high, introducing a new noise source tends to have less impact than in an environment where background noise levels are low. Typical sound levels of some familiar noise sources and activities are presented in Table 3.12-1.

Table 3.12-1. Sound Levels Produced by Common Noise Sources

THRESHOLDS/NOISE SOURCES	Sound Level (DBA)	SUBJECTIVE EVALUATIONS (A)	Possible Effects on Humans (A)	
Human threshold of pain	140			
Siren at 100 ft Loud rock band	130	De efeccion		
Jet takeoff at 200 ft Auto horn at 3 ft	120	Deafening	Continuous	
Chain saw Noisy snowmobile	110		exposure to levels above 70 dBA can cause hearing	
Lawn mower at 3 ft Noisy motorcycle at 50 ft	100	Very	loss in majority of population	
Heavy truck, maximum at 50 ft	90	Loud		
Pneumatic drill at 50 ft Busy urban street, daytime	80	Loud		
Normal automobile at 50 mph Vacuum cleaner at 3 ft	. 1 70		Speech	
Air conditioning unit at 20 ft Conversation at 3 ft	- I 60		interference	
Quiet residential area Light auto traffic at 100 ft	50	Moderate	Sleep interference	
Library Quiet home 40		Faint	Cloop interiored	
Soft whisper at 15 ft	30	T dilit		
Slight rustling of leaves	20		Little if any	
Broadcasting studio	10	Very Faint	interference	
Threshold of human hearing	0			

Source: EPA (1974) and Others

⁽a) Note that both the subjective evaluations and the physiological responses are continuums without true threshold boundaries. Consequently, there are overlaps among categories of response that depend on the sensitivity of the noise receivers

Many agencies use a set of standard "metrics" to characterize noise, and some of these metrics are used in this section to describe measured sound levels. For example, the equivalent sound level, or Leq, is the level of a *constant* sound that contains the same *energy* as the actual sound, which fluctuates with higher and lower sound-energy levels over time. The Leq can be thought of as a sound-energy average. But unlike a simple arithmetic average that can understate both the highest and lowest values of a range, the Leq considers *all* the sound energy that occurs during an interval (e.g., an hour). Thus, the Leq considers high sound levels more heavily because they contain more sound energy.

Another noise metric that is often used to represent the background sound level is the L90 percentile, or the level exceeded 90 percent of the time during an interval. Both of these metrics (Leq and L90) are used in this section to describe the measured existing levels.

3.12.2.2 Regulatory Overview

Environmental noise is typically regulated using one of two methods (or both): (1) prohibitions on nuisance noises, or (2) regulations that limit the levels of sound depending on the use or zoning of the sound source and that of the properties receiving the noise. The Cities of Issaquah, Sammamish, and Redmond will use a combination of these sorts of regulations to control noise from both construction activities and from users of the proposed trail. These regulations will provide a range of controls over noise sources associated with both trail construction and use, and they will allow each jurisdiction to take action against trail-related noise sources should they disrupt nearby uses. These regulations are summarized below.

The **City of Issaquah** requires that construction methods must "minimize noise" (Issaquah Municipal Code Chapter 9.22). Issaquah also restricts certain "public disturbance" noises, and defines a public disturbance as "sound from portable audio equipment, such as tape players, radios and compact disc players operated at a volume so as to be audible greater than 50 feet from the source, if not operated upon the property of the owner." Other types of public disturbance defined by the City include "yelling, shouting, hooting, whistling, or singing on or near the public streets, particularly between the hours of 11 p.m. and 7 a.m. or at any time and place so as to unreasonably disturb or interfere with the peace, comfort and repose of owners or possessors of real property."

The **City of Sammamish** limits construction to the hours of 7 a.m. to 8 p.m. on weekdays and 9 a.m. to 6 p.m. on Saturdays and prohibits construction on Sundays (Sammamish Municipal Code 16.05.050.110.1). Sammamish also defines as a public nuisance "any loud and raucous noise which unreasonably interferes with the use of any business or residential property, school or place of religious worship" and "sound from audio equipment, such as, but not limited to, tape players, radios and compact disc players, whether portable or placed in a fixed location, operated at a volume so as to be audible greater than 75 feet from the source" (Sammamish Municipal Code 8.15.020).

The **City of Redmond** defines disorderly conduct as "intentionally and without lawful authority making noise which unreasonably disturbs another" (Redmond Municipal Code 9.42.015). It also defines public disturbance noise as "yelling, shouting, whistling or singing on or near the public streets, particularly between the hours of 10 p.m. and 8 a.m. or at any time and place as to unreasonably disturb or interfere with the peace and comfort of owners or possessors of real property" and "sound from portable audio equipment, such as tape players, radios, and compact disc players, operated at a volume so as to be audible greater than fifty feet from the source, and if not operated upon the property of the operator."

Redmond's Community Development Guide (RCDG) also sets limits on sounds crossing property boundaries based on the "environmental designation for noise abatement" (EDNA) of the sound source and the receiving properties (RCDG 20D.100). The EDNA classes are based primarily on the property

zoning but also take into account the past, present, future, and adjacent land uses in the area. Portions of the area along the proposed Master Plan Trail would correspond to a "Class A" EDNA. Class A EDNAs are generally places where people sleep, and so include all manner of residential uses along with parks, camps, and hospitals and other health facilities. Construction noise is allowed to exceed the limits set for Class A EDNAs between the hours of 7 a.m. to 8 p.m. on weekdays and 9 a.m. to 6 p.m. on Saturdays; construction is prohibited on Sundays.

3.12.2.3 Existing Conditions

Sound level measurements were taken in an attempt to capture existing sound levels representing a variety of acoustic environments along the alternative trail alignments. Table 3.12-2 summarizes the sound level measurements taken during field visits on November 8 and December 19, 2003, and October 12, 2004. This table illustrates the sound levels and the types of noise sources present during the measurements. Refer to Figure 3.12-1 (pg 3.12-7) regarding the sound level measurement locations.

In general, there are four types of acoustic environments along the trail:

- near I-90 and SR-520,
- near East Lake Sammamish Parkway but mostly shielded from traffic noise from this road,
- near the Parkway and not shielded from traffic noise, and
- at a distance from the Parkway, with intervening terrain, homes, and/or vegetation.

Although none of the sound level measurements captured the noise environment for a mostly shielded location very near East Lake Sammamish Parkway, due to typical shielding effects, sound levels for this scenario would be expected to be at least 10 dBA quieter than a sound level taken near the Parkway in an unshielded location such as Sound Level Measurement (SLM) 2 or SLM 5 (Table 3.12-2).

Due to the timing and the relatively limited nature of these sound level measurements, they provide only a snapshot of the existing environment and do not represent conditions near Lake Sammamish during summer months when there would at times be much more noise from water-related recreational activities, lawn mowers, weedeaters, and other mechanical power tools. The measurements taken in November and December 2003 and October 2004 probably represent sound levels at the quietest time of year.

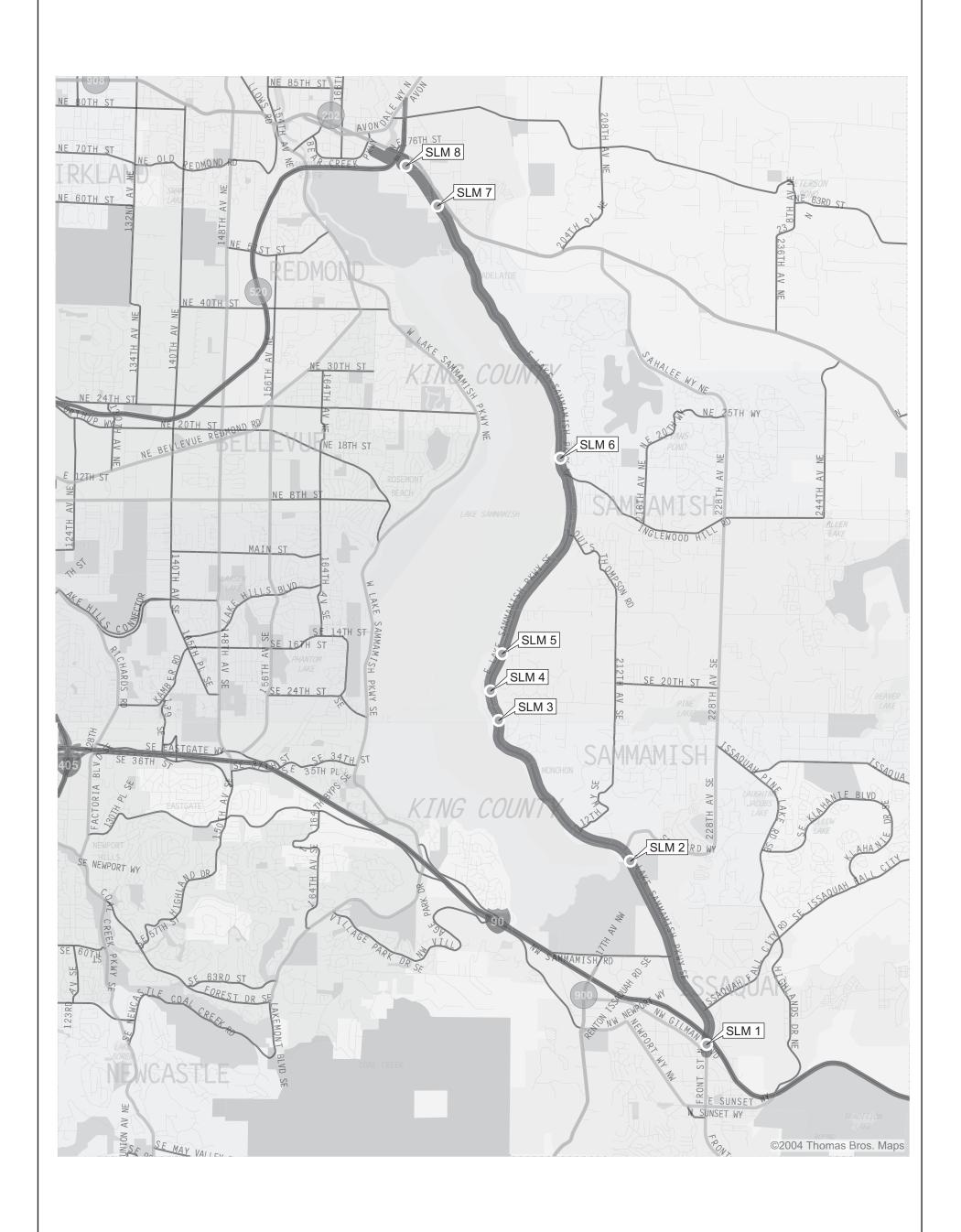
Table 3.12-2. Measured Existing Sound Levels along Project Corridor

SOUND LEVEL MEASUREMENT (SLM) No. AND LOCATION	DAY, DATE, AND TIME OF DAY	DURATION	Leq	L90	COMMENTS
SLM 1 - Issaquah, south of I-90	Saturday 11/8/03 1:14 p.m.	5 min	63.9	61.2	This measurement was taken on the railbed, about halfway between NW Gilman Boulevard and I-90. The measurement is representative of sections of the proposed trail near I-90, both north and south of the highway. The major source of noise during this measurement was traffic along I-90. Secondary sources included wind rustling through nearby trees. The measurement lasted only 5 minutes because the noise source was constant, and 5 minutes was sufficient time to represent the area. The Leq and the L90 differ by only 2 dBA.
SLM 2 – Issaquah – near 4-lane section of East Lake Sammamish Parkway	Saturday 11/8/03 1:55 p.m.	8 min	71.2	66.2	This measurement was taken on the railbed, about 200 feet south of the driveway of the eastern boat-ramp/parking area for Lake Sammamish State Park and about 60 feet from the center of the 5-lane road, which carried fairly high-speed traffic. This measurement location was on a portion of the railbed near East Lake Sammamish Parkway, unshielded from noise from this road. The major source of noise during the measurement was traffic along East Lake Sammamish Parkway, and three events of traffic traveling along the boat-ramp access road. Minor or secondary sources of noise included infrequent overhead aircraft.
SLM 3 – Sammamish – on trail, some distance from Parkway with some intervening shielding	Saturday 11/8/03 2:30 p.m.	15 min	51.9	45.4	This measurement was taken on the railbed, about 3,200 feet north of the northern end of East Lake Sammamish Shore Lane, within partial sight of but far downhill from East Lake Sammamish Parkway. Because this location was approximately 400 feet from the Parkway and there was shielding between the road and the railbed, this was a much quieter acoustic environment than SLM 2. Although the Parkway was audible, it was not a major source of noise at this location. Only minor sources of noise were noted, including traffic from the Parkway, water lapping the nearby shore, birds, distant power boats, and float planes.
SLM 4 – Sammamish – on trail, as far from Parkway as possible, with intervening shielding	Saturday 11/8/03 3:05 p.m.	10 min	47.6	42.8	This measurement was taken on the railbed, about 6,000 feet north of the northern end of East Lake Sammamish Shore Lane, at a location as far west as possible from East Lake Sammamish Parkway, and west of East Lake Sammamish Place. The measurement lasted 15 minutes, but the final 5 minutes were

Table 3.12-2. Measured Existing Sound Levels along Project Corridor (continued)

SOUND LEVEL MEASUREMENT (SLM) No. AND LOCATION	DAY, DATE, AND TIME OF DAY	DURATION	Leq	L90	COMMENTS
					disrupted by a dog barking nearby, so only the first 10 minutes of the measurement are considered. There were no major sources of noise noted during the measurement. Secondary sources included overhead aircraft, East Lake Sammamish Parkway traffic, birds, power boats, water lapping the shore, dogs, and nearby quiet conversation.
SLM 5 - Sammamish - near Parkway, across road from trail, near uphill grade	Friday 12/19/03 10:45 a.m.	15 min	66.6	47.3	This measurement was taken about 60 feet from the centerline of East Lake Sammamish Parkway, at the northeast corner of the intersection of the Parkway and 16th Avenue SE where there is a substantial uphill grade for southbound traffic. This measurement is representative of areas where the proposed trail could be adjacent to sections of this roadway with grades but moderate speeds. The major source of noise at this location was traffic along East Lake Sammamish Parkway. Minor sources of noise included distant hammering and traffic, and overhead aircraft. The measurement Leq is quite a bit higher than the measurement L90 because intermittent traffic noise from the Parkway was much higher than background sound levels.
SLM 6 - Sammamish - on trail, far from Parkway, with intervening shielding	Friday 12/19/03 11:40 a.m.	15 min	53.7	47.8	This measurement was taken on the railbed, north of Inglewood Hill Road. East Lake Sammamish Parkway was not visible from this location (behind several homes and lower in elevation than the road). The major source of noise at this location was traffic along East Lake Sammamish Parkway. Minor sources of noise included a nearby dog barking, overhead aircraft, and nearby voices.
SLM 7 – Redmond – near Parkway	Tuesday 10/12/04 1:19 p.m.	15 min	70.0	55.6	This measurement was taken at the Jefferson Marymoor at Lake Sammamish apartments at 6332 East Lake Sammamish Parkway. Meter was about 49 feet from the centerline of the road between two buildings. Traffic on the Parkway was the primary noise source; minor sources included distant traffic and neighborhood noises.
SLM 8 – Redmond – on trail south of the Redmond Inn	Tuesday 10/12/04 1:53 p.m.	15 min	54.5	51.4	This measurement was taken on the railbed south of and adjacent to the Redmond Inn. The meter was south of the Inn's parking area. Major noise sources included traffic on the Parkway and on SR-520; minor sources included traffic on NE 70 th and the SR-520 off ramp.

Source: Sound Level Measurements (SLMs) taken by MFG



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3.12.3 Direct Impacts

This section is organized slightly differently than other impact discussions in this chapter. Because the general types of construction impacts that could occur would be similar for all of the Build Alternatives, construction impacts are discussed first. Operation impacts specific to each alternative are then described.

3.12.3.1 Construction Impacts

With the implementation of effective means to control noise from construction, no substantial noise impacts related to construction of the Master Plan Trail are anticipated. Even with effective noise controls (see mitigation in Section 3.12.6, below), some construction activities could cause substantial but short-term changes in the existing acoustic environment near areas of active construction. Construction noise would be short-term, and would be regulated by the timing restrictions imposed by each of the cities through which the trail would pass. Construction of the trail is expected to occur only on weekdays, during daylight hours.

Construction of the Master Plan Trail would include use of equipment such as excavators, graders, compactors, trucks, and pavers. Portions of the trail construction would also require cutting pavement, and in some locations such as where retaining walls would be necessary, pile driving. Such equipment can generate relatively high sound levels that could impact nearby locations. Because portions of the trail pass within 50 feet of existing homes, construction noise, and especially use of pavement cutters and pile drivers, could disrupt activities at nearby homes. Any such impacts would be short-term and temporary at most locations because construction activities near most receivers would be limited in duration. Construction of the entire facility would occur in phases, and the total duration of construction is unknown. But with the exception of construction traffic along roads and potentially prolonged activity in and around staging areas, construction in individual parts of the project corridor is expected to last no more than a few weeks. Construction noise could nonetheless be considered intrusive by some listeners unless measures are used to control the levels of construction equipment noise experienced at nearby sensitive receivers.

Trail alternatives whose construction would require more excavation, grading, and pile driving would result in more noise being generated over a longer period than alternatives that require less of these sorts of activities. The Corridor Alternative would follow the existing Interim Use Trail for most of the route and probably would require somewhat less excavation, grading, and pile driving than either the East A Alternative or the East B Alternative because the latter two alternatives would develop a trail away from the existing Interim Use Trail and involve trail construction in areas with steeper terrain. With the East Alternatives, some of these activities would occur farther from homes west of the trail, but closer to homes east of the trail, including properties east of the Parkway. The steeper terrain would require more complex construction that would likely extend the duration and/or the intensity of construction activities and thereby increase the potential for noise impacts at some residences in the vicinity. For example, either East Alternative would require the hauling of additional materials to and from the project corridor and result in about a 49 percent increase in the number of truck trips compared with the Corridor Alternative. In addition, because the East Alternative route would move the trail eastward and raise the trail elevation compared with the Interim Use Trail, either East Alternative would increase the potential for short-term construction noise impacts at homes both east and west of the trail.

Construction noise associated with the Continuation of the Interim Use Trail Alternative would be limited to the northerly trail extension in the City of Redmond and the parking and restroom facilities in the City of Sammamish. There would be no construction activities, and therefore no construction-related noise, associated with the No Action Alternative.

3.12.3.2 Operation Impacts

This section evaluates noise impacts during trail operation for each alternative from two perspectives: that of residents along the project corridor and that of the trail users.

Corridor Alternative

Potential Noise Sources. Noise sources associated with the use of the Corridor Alternative would include bicycles traveling on pavement, occasional bicycle warning device sounds (e.g., bells), foot traffic on pavement and possibly gravel, unamplified human voices, and equestrian use along gravel. Near the access point parking areas, vehicles in and around the parking lots would also create some noise. Trail maintenance would involve occasional vehicular use of the trail (at slow speeds) and vegetation management (e.g., mowing in some areas and equipment use to remove hazard trees). These occasional maintenance activities would generate noise audible at nearby locations similar to existing neighborhood yard maintenance noise that occurs along portions of the trail.

Potential Effects of Trail Noise on Residents. Along areas of the Interim Use Trail near I-90, and along portions of the Corridor Alternative that run near East Lake Sammamish Parkway, it is highly likely that noise from sources associated with trail use would be completely obscured by existing noise from nearby traffic. Measured daytime sound levels from traffic in these areas range from the middle 60s Leq to the low 70s dBA (see Table 3.12-2, Sound Level Measurement (SLM) locations 1, 2, 5, and 7).

The Corridor Alternative would follow the course of the Interim Trail and route the trail near a number of existing homes. As with the Interim Trail, in some places this alternative would locate the trail between existing homes and portions of private property on Lake Sammamish. Some of these locations are relatively quiet compared with locations nearer to East Lake Sammamish Parkway. In portions of the project corridor that are far from traffic noise associated with East Lake Sammamish Parkway and are shielded from view of the roadway (e.g., SLMs 3, 4, and 6 in Table 3.12-2), ambient noise levels are much lower than those shown for SLMs 1 and 2. In these areas, noise generated by users of the Master Plan Trail could at times be noticeable to nearby residents. However, it is unlikely that noise generated by permitted trail uses would approach or exceed any of the cities' noise criteria because such uses do not generate much noise. As a result, overall trail use noise would be a minor source in the overall acoustic environment. Therefore, even though trail noise may at times be audible at nearby locations, no substantial noise impacts are expected to result from the Corridor Alternative.

Noise associated with vehicles at proposed trail access parking points would slightly increase sound levels in the vicinity of these facilities. However, two of the three parking areas are more than 500 feet from existing homes, and the third is more than 100 feet from the closest home. Consequently, noise from these facilities is expected to be well below each city's noise impact or nuisance criteria for residential receivers.

The trail and parking areas would be closed to the public during nighttime hours. Trail use noise is therefore not expected to occur at all during these generally more quiet hours, and no substantial noise impacts to residences along the trail are expected.

The noise associated with the Corridor Alternative would be similar to but somewhat different than noise associated with use of the Interim Use Trail insofar as the different trail surfaces would allow different uses that would generate different sounds. The gravel surface of the Interim Use Trail would be most suitable for walking and possibly wide-tire bike riding, while the paved and equestrian portions of the Corridor Alternative also would allow all sorts of wheeled (but non-motorized) recreation and horseback riding. While the sorts of sound sources associated with these uses would be different, the overall levels

of noise that would be anticipated from either sort of uses would not be very different. Thus, even with increased use of the Corridor Alternative trail, no substantial noise impacts would be expected.

Potential Effects of Existing Noise Sources on Trail Users. The Corridor Alternative would place the trail within the existing Interim Use Trail along the entire route. For approximately 1.5 miles near the southern terminus of the trail, the Interim Use Trail lies adjacent to East Lake Sammamish Parkway, and the trail would be fully exposed to roadway noise. In some areas, although relatively close to the road, the Interim Use Trail is substantially shielded from roadway noise by intervening terrain. For several long stretches, the Interim Use Trail is 100 feet or more from East Lake Sammamish Parkway and is also substantially shielded from roadway noise. Therefore a trail following the Interim Use Trail would in most sections of the corridor be substantially quieter than in the sections near the Parkway.

Sound level measurements on the railbed reveal that daytime sound levels at locations shielded and/or distant from East Lake Sammamish Parkway are from 12 dBA to more than 20 dBA lower than railbed locations near the road (see Table 3.12-2). A change of 10 dBA represents a perceived doubling (or halving) in apparent loudness. Therefore, sound level changes of 12 to 20 dBA represent substantial differences in the levels of traffic noise to which trail users would be exposed. Although not subject to any of the cities' noise criteria, the higher traffic noise levels at unshielded locations near the road fall into the range of levels (upper 60s to mid 70s dBA) typically considered inappropriate for residential and recreational uses. In contrast, sound levels in the more quiet areas of the corridor are well within the range of sounds suitable for even the most sensitive uses such as sleeping, and so would also be more suitable for recreational use.

East A Alternative

Potential Noise Sources. Sources of noise during use of East A Alternative would be the same as those described for the Corridor Alternative.

Potential Effects of Trail Noise on Residents. The route of the East A Alternative would be similar to the Corridor Alternative, except in areas where the East A Alternative would diverge from the existing Interim Use Trail to run along East Lake Sammamish Parkway often within 50 feet from the centerline of the roadway.

Locating portions of the East A Alternative adjacent to East Lake Sammamish Parkway would reduce the potential for trail use noise to be audible at homes near the trail compared to the Corridor Alternative because trail noises would be obscured by the traffic noise from the Parkway (represented by SLM 2 and SLM 5 in Table 3.12-2). However, no noise impacts are expected from permitted uses of the trail with any project alternative. Therefore the impacts on residents from trail noise resulting from the East A Alternative, with the trail closer to East Lake Sammamish Parkway, would not be different overall from those under the Corridor Alternative.

Potential Effects of Existing Noise Sources on Trail Users. With the East A Alternative, trail users would be more exposed to noise from the East Lake Sammamish Parkway than with the Corridor Alternative. Based on a review of this alternative route in relation to topographic maps of the area, the East A Alternative would place approximately 5 miles of trail within 80 feet of the roadway in unshielded locations compared to approximately 1.5 miles with the Corridor Alternative. Consequently, with either East Alternative, trail users would be subjected to traffic noise levels in the high 60s to mid 70s dBA (levels not generally considered appropriate for recreational uses), more than three times as much as with the Corridor Alternative.

Exposure to traffic noise levels in the high 60s to mid 70s dBA would be considered a noise impact under traffic noise rules and policies established by the Federal Highway Administration and the Washington State Department of Transportation. These noise criteria do not apply to this project but can be used as a reference to understand the levels of noise in question. These sorts of sound levels would interfere with normal conversation and contemplative recreation. Therefore, the sound levels at near-road locations would not be suitable for recreational uses.

East B Alternative

Potential Noise Sources. Sources of noise during use of the East B Alternative would be similar to those described for the Corridor Alternative and the East A Alternative.

Potential Effects of Trail Noise on Residents. Eliminating pedestrian and equestrian use on the Interim Use Trail would relocate the minor sound sources associated with trail use farther from homes near portions of the trail. This would reduce the potential that trail noise would be audible at these homes, but would not reduce the potential for operational noise impacts because no substantial noise impacts are anticipated.

Potential Effects of Existing Noise Sources on Trail Users. Locating the multi-use trail near East Lake Sammamish Parkway would expose trail users to levels of traffic noise higher than are recommended for recreational uses. Refer to discussion under the East A Alternative for additional information. Sudden noises from the Parkway may startle horses and endanger riders.

Continuation of Interim Use Trail Alternative

With this alternative, the existing gravel trail would continue to be used beyond 2015, but would be neither widened nor paved. The potential noise sources associated with this option would be similar to but more restricted than the other build alternatives because the gravel surface would be less suitable for some forms of wheeled recreation. For example, narrow-wheeled bicycles and skates would be less likely to be used, which would limit the use of the trail for some forms of recreation and commuting. This limitation would also probably reduce levels of overall use and associated trail use noise. No substantial noise impacts would be expected.

No Action Alternative

With the No Action Alternative, the Interim Use Trail would continue to be used until at least 2015. No Master Plan Trail would be built, and no signs or remediation work would be required. No noise impacts would be expected to result from continued operation of the Interim Use Trail. Existing noise sources along the Interim Use Trail include primarily pedestrian traffic, such as footsteps on gravel and unamplified voices. These noise sources would continue and would not increase beyond existing levels.

3.12.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Indirect noise impacts from the proposed trail may result from an increase in traffic along roads that intersect East Lake Sammamish Parkway and provide access to parking lots for trail users. Although not likely to be an important source of noise, increased traffic volumes on roads with little existing traffic could be noticeable to nearby residents.

3.12.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7) No cumulative noise impacts are anticipated.

3.12.6 Mitigation Measures

Construction noise is exempt in all three jurisdictions. However, potential construction noise impacts could be minimized or avoided by using a number of simple methods designed to reduce noise generation at the source, and/or techniques to control the transmission of construction noise to off-site receiving locations. For example, construction contractors could minimize construction noise with simple methods such as turning off idle equipment, limiting noise from back-up alarms by minimizing vehicles driving in reverse or using non-audible backup warning devices, using engine intake silencers and properly sized and functioning exhaust mufflers, and by locating stationary equipment and construction staging areas as far as possible from the nearest off-site receivers. In the event noisy equipment must be placed within about 200 feet of off-site receivers, the use of portable noise barriers could help control noise transmission and reduce the potential for construction noise impacts.

Because no substantial noise impacts are expected to occur at locations near the trail from operation of the Master Plan Trail, noise mitigation would not be warranted for trail use.

3.12.7 Significant Unavoidable Adverse Impacts

Because construction noise would be temporary and limited to daytime hours, no significant unavoidable noise impacts are anticipated. In addition, no significant unavoidable noise impacts are expected to occur from permitted trail uses of any trail alternatives.

3.13 Historic, Cultural, and Archaeological Resources

3.13.1 Studies and Coordination

Records at the Washington State Department of Archaeology and Historic Preservation were reviewed to identify potential cultural resources in the vicinity of the project in January 2000 and October 2003. In early 2000, records at the University of Washington Manuscripts, Special Collections, and University Archives and the King County Cultural Resources Department (now King County Historic Preservation Program) were also researched. Historic records including General Land Office maps were reviewed. Online historic resources such as HistoryLink.org were also searched. The King County Historic Preservation Program's Cultural Resources Database (CRDB) was reviewed in October 2003. Records, maps, and databases were searched for information about cultural resources located within 1 mile of the project area in order to understand the potential for additional unrecorded cultural resources in the project area.

Meetings with representatives of the Muckleshoot <u>Indian</u> Tribe and Snoqualmie Tribe were held in January 2000 to discuss areas of concern along the proposed Interim Use Trail trail. The Muckleshoot <u>Indian Tribe</u>, Snoqualmie <u>Tribe</u>, and Tulalip Tribes were contacted by letter on February 23, 2000, to provide an opportunity for comment on the project; no comments were received from the tribes by the archaeological firm. National Historic Preservation Act Section 106 consultation was completed on the Interim Use Trail project in 2001. Section 106 consultation <u>will also bewas</u> conducted for the Master Plan Trail between publication of the Draft and Final EIS, after the preferred alternative <u>is-was</u> selected. Copies of project correspondence can be found in Appendix H, Volume III.

3.13.1.1 Methodology

Expectations for Discovery of Resources

Expectations for discovery of cultural and historic resources in the study area were based on the location and types of sites previously recorded in the area, the proximity to water and food resources, and a review of literature, historic property records, and history of land use. The proximity of Lake Sammamish and the crossing of numerous creeks increased the probability of encountering both prehistoric and historic cultural resources. The presence of a historic railbed also increased expectations of historic resources being located adjacent to the proposed trail.

Prehistoric sites expected in the study area include villages, campsites, resource gathering locations, and temporary activity areas associated with hunting, fishing, or gathering. Additionally, Native American burials might be expected within the study area. Historic sites related to railroad construction and operation, settlement, mining, milling, logging, agriculture, and transportation can also be expected in the study area.

Archaeological Survey

An archaeological survey of the railbed was conducted along the length of the proposed East Lake Sammamish Interim Use Trail in February 2000. While the archaeologist did not leave the railbed, observations of the surrounding topography were made to assess the likelihood of intact native soils and to observe any potential historic structures adjacent to the railbed. No subsurface testing was conducted due to the compact nature of the railbed as well as the high probability of encountering fill rather than native soils (Johnson, 2000). East Lake Sammamish Parkway between East Lake Sammamish Place and SE 33rd Street was also surveyed at this time as an alternative bypass. For the Master Plan Trail a second

survey was conducted in November 2003 focused only on the East Alternatives route where it diverged from the railbed. The visibility of much of the ground surface along the East Alternatives route was extremely poor due to dense vegetation. Open areas were surveyed in meandering transects, and exposures such as molehills were examined more closely. The majority of the two surveys focused on the railbed; none of the areas selected for public access trail user facilities (such as parking or restrooms) was surveyed as these locations had not been designated. While no cultural resources were identified during either survey, archaeological monitoring is recommended for any construction into native soils.

Archaeological Monitoring

Fence installation along the East Lake Sammamish Interim Use Trail was monitored by an archaeologist in selected areas (Johnson, 2004). No significant cultural resources were identified during monitoring. A concentration of historic debris was located in the railbed near the site of the historic Campbell Mill Boarding House, although no distinct cultural strata could be identified and the volume of materials was not significant (Johnson, 2004).

3.13.2 Affected Environment

Because all of the proposed alternatives are located within 0.25 mile of each other, the affected environment is considered here to be the same for each alternative. However, as cultural resources must be viewed regionally, information about recorded archaeological and historic sites within 1 mile of the preferred alternative of the proposed Master Plan Trail is summarized below to gain perspective on the potential for unknown cultural resources in the project area.

3.13.2.1 Regulatory Environment

Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended requires federal agencies "to take into account the effects of their undertakings on historic properties" (36 CFR Part 800.1). The use of federal funding and the requirement for federal permits triggers the Section 106 process for this undertaking. This section identifies historic properties and determines the nature of the effects as outlined in the NHPA (36 CFR Part 800.4 and 800.5). See Section 3.13.6 of this EIS for additional information about completing the Section 106 process. Copies of project correspondence can be found in Appendix H, Volume III.

3.13.2.2 Native American History of the Area

The proposed Master Plan Trail is within the territory of the Sammamish, a Duwamish subgroup, and the Snoqualmie people (Ruby and Brown, 1992; Swanton, 1978). The project vicinity was probably utilized by both of these Southern Coast Salish groups, who spoke the Lushootseed language (Suttles and Lane, 1990). Both groups resided in winter villages along shorelines, bays, and rivers and relied heavily upon salmon for subsistence. During non-winter months, groups would leave the villages in search of shellfish, marine and freshwater fish, land game, waterfowl, sprouts, roots and bulbs, berries, and nuts (Suttles and Lane, 1990; Gunther, 1981). Food resources acquired during the spring, summer, and fall were used for winter supplies and trade, as well as immediate consumption. The project vicinity would have provided terrestrial game such as deer, elk, and small mammals whose meat was eaten fresh or dried for storage.

A wide variety of plant resources were sought for medicinal and other uses. Tules and cattails were collected near streams and marshes and used for making mats; western red cedar was used for rope, baskets, and numerous household items (Gunther, 1981). Haeberlin and Gunther (1930) note that canoe/tree burials were the predominant practice for the Snoqualmie people. The deceased would be

placed in a canoe, and the canoe placed in a tree or on a frame (Suttles and Lane, 1990). Often, as the canoe decayed and collapsed, the human remains would be redeposited to the ground below. Underground burial was reserved for the lower class (Haeberlin and Gunther, 1930).

Following the signing of the Point Elliott Treaty in 1855, the Snoqualmie were relocated to the Tulalip Reservation (formerly called the Snohomish Reservation) along with several other groups (Ruby and Brown, 1992; Swanton, 1978). All of these groups together comprise the Tulalip Tribes of the Tulalip Reservation, although many Snoqualmie refused to move to the Reservation. Indeed, the Snoqualmie Tribe was granted recognition by the federal government in 1999, an acknowledgment of their autonomy.

The Sammamish were also assigned to the Tulalip Reservation, unlike other Duwamish subgroups, who were assigned to the Port Madison Reservation. However, Ruby and Brown (1992) report that the Sammamish were autonomous and apparently did not go to the Tulalip Reservation, but were possibly absorbed by neighboring groups, such as the Snoqualmie. Little has been written about the Sammamish, except to note their orientation toward seasonal exploitation of interior lakes, streams, and prairies as opposed to marine resources (Geo-Recon International Ltd., 1980). Bagley (1929) notes that in 1854 the Sammamish "numbered 101 all told and were probably a band of the Duwamish". There is some disagreement on whether the Sammamish were an autonomous group, as discussed by Spier (1936). Spier (1936) notes that Gunther "includes Lake Sammamish, the presumable locale of the Sammamish, within Duwamish territory..." but that Curtis lists them separately as the *Sabábsh* with territory along "...the shores of Lake Sammamish and the eastern shore of Lake Washington".

Lake Sammamish was originally known as Squak Lake (Bagley, 1929; E.J. Fish, 1981), which likely originated from *Sqwa'xw*, an ethnographic village identified by Waterman (ca. 1920) at the mouth of Issaquah Creek. Hitchman (1985) identifies the origins of the word Sammamish as coming from the Indian name *samma* ("the sound of the blue crane") and *mish* ("river"). "Other tribal names were *Xa-tcx-atcu*, meaning 'small lake' (as compared to Lake Washington), and *Sts-apa-bc*, which has about the same meaning" (Hitchman, 1985).

3.13.2.3 Native American Cultural Resources Identified in the Vicinity of the Project

Recorded Sites

Recorded prehistoric sites are located in the vicinity of the proposed Master Plan Trail at both the northern and southern ends of the corridor. In the Redmond section, eight prehistoric sites, including the Marymoor Site (45-KI-9), are within 1 mile of the proposed Master Plan Trail (see Appendix H). The Marymoor Site was identified in 1964 and excavations there in the 1960s determined the site was an occupation area. Artifacts from the site included microblade cores and blades, Cascade points, large stemmed points, and basalt cobble tools (Greengo and Houston, 1970). Based on this assemblage and corrected radiocarbon dates, the site dates to between 4,200 and 2,700 years BP (before present) (Larson and Lewarch, 1995). The Marymoor Site was listed on the National Register of Historic Places in 1970.

Seven other small sites in the northern portion of the study area have been identified (Greengo and Houston, 1970; Nelson, 2000; Norman, 1999a, 1999b; Robinson, 1988), although three of these are presumed destroyed (refer to Appendix H for a complete listing). Two of the sites presumed destroyed were likely damaged when the Sammamish Slough was dredged and shortened in 1912 (E.J. Fish, 1981) and again in 1948 and 1963 (Robinson, 1988). Nevertheless, it is highly likely that other cultural deposits are present in the area.

In the Sammamish section, 45-KI-488, a historic site with a prehistoric component, has been identified within 1 mile of the proposed Master Plan Trail. The site consists of a low-density lithic (stone) scatter,

possibly from the Olcott period (5,000 - 8,000 BP). The prehistoric materials were mixed with more than 250 historic artifacts. The site is likely related to the historic town at Monohon (Nelson, 1998; Norman, 2000).

In the Issaquah section, one prehistoric site has been identified within 1 mile of the proposed Master Plan Trail: 45-KI-457, a lithic scatter, is along the general route of an Indian trail identified by the General Land Office in the 1860s (Hudson et. al, 2003; United States Surveyor General, 1860).

Additional Cultural Resources

Several documents indicate the likelihood of additional Native American-related cultural resources in the project vicinity. Waterman (ca. 1920) identifies several ethnographic places near the project including an Indian village called *Sqwa'xw* on Issaquah Creek at the present Lake Sammamish State Park, *Teqaiyuwa'lt*^u (Squawk Mountain, located west of Issaquah), and *Tsqe'lcul* (Tibbetts Creek). The longhouse at *Sqwa'xw* was perhaps 90 feet by 40 feet in size (Larson, 1984). Luttrell (2002) surveyed and tested for cultural resources at Lake Sammamish State Park, focusing on the shoreline, Issaquah Creek, and Tibbetts Creek. These investigations did not reveal any evidence of *Sqwa'xw*; the limited results of the testing were interpreted to indicate that changes in water levels or earthquake-related ground subsidence may have altered the landscape substantially, thereby shifting the location of the archaeological deposits (Luttrell, 2002).

Robinson (1986) notes the presence of a Sammamish burial ground "in or near the present town of Issaquah", although there is no more specific information available as to its location. Additionally, an important Native American trail that connected Puget Sound to the eastern part of the state passes the southern end of Lake Sammamish near Issaquah Creek (General Land Office, 1864).

E.J. Fish (1981) maps an Indian hop-picker village west of Issaquah Creek, which is likely the campsite run by early settler Lars Wold and referred to by Craine (1983). The hop-picker village probably dated to the last half of the 19th century. Larson (1984) suggests that the hop-picker village subsumed the village noted by Waterman. The potential cultural resources identified above would be in the Issaquah section.

Within the Sammamish section, King County CRDB identifies several culturally sensitive areas reported by local residents including numerous references to human burials (CRDB reference: KING01008; KING01091; KING01113; KING01135; KING01150). While these potential resources have not been formally recorded, they do provide insight into the types of resources that may be present within and adjacent to the proposed Master Plan Trail.

Project-specific consultation with Ray Mullen of the Snoqualmie Tribe confirms much of the above information regarding the cultural sensitivity of the shoreline at Lake Sammamish State Park and north to approximately 212th Way along the project corridor (Mullen, personal communication, 2000). Mr. Mullen considers the location of all culverts to be of potential cultural importance as well because they usually are situated at longstanding creeks which were the site of tribal residences. Additionally Mr. Mullen indicates that the area between Louis Thompson Road (STA $_{\rm COR}$ 433+00) south to approximately Sulphur Springs Point (STA $_{\rm COR}$ 333+00) along the project corridor should be considered culturally sensitive. Construction in these areas should be coordinated with tribal representatives to avoid unnecessary impacts to cultural resources.

3.13.2.4 Euro-American History of the Area

Redmond and Issaquah were two main historic settlements in the region of the project, one at either end of Lake Sammamish. Additionally, several smaller communities developed on either side of Lake Sammamish. Transportation by settlers in the region was limited to wagon roads and boat travel. Between 1860 and 1889, boats operated on what was known as Squak Lake, transporting people and freight (H. Fish, 1976).

The first railroad to operate in the Squak Valley was the Seattle, Lake Shore & Eastern (SLS&E), incorporated in 1885. The rails of the SLS&E were routed on the north sides of Lake Union and Lake Washington, along the east side of Lake Sammamish, and through the Squak Valley to Snoqualmie Pass and on to the eastern part of the state (Armbruster, 1999). Service between Seattle and Squak started around 1887, with additional tracks extending east to North Bend by 1889. The SLS&E was sold to Northern Pacific in 1892. Northern Pacific continued to operate on the line until 1970 when Northern Pacific was acquired by Burlington Northern (later Burlington Northern-Sante Fe [BNSF]) (E. J. Fish, 1981; Issaquah Historical Society, 2003). As noted in Chapter 1 of this EIS, BNSF ceased operating this line in 1996 and the Cascade Land Conservancy purchased the rail corridor from BNSF in 1997.

Redmond, to the north of Lake Sammamish, was settled in 1871 by Luke McRedmond and Warren Perrigo. Both made land claims and cleared their land on the east side of the Sammamish River. Originally, the town was called Salmonburg after the plentiful salmon running in the Sammamish River. The town came to be known as Melrose, after the Melrose House, an inn operated by the Perrigos. In 1883 McRedmond, the town's first postmaster, changed the town's name from Melrose to Redmond causing long-term bitterness between the Perrigos and McRedmonds (Stein, 1998). The main industries of the area were logging and milling, which provided prosperous living for both laborers and businessmen. By 1900 the population of Redmond had reached 271 (Bagley, 1929). Redmond was incorporated on January 1, 1912, after its population reached 300 (Stein, 1998).

Present-day Marymoor Park was originally the estate of Seattle businessman James W. Clise and his wife, Anna, who founded Children's Orthopedic Hospital. In 1904 Clise built a hunting lodge, known as Willowmoor, on 78 acres as part of a hunting preserve. Originally used only in summer, the lodge was enlarged by 1907 when the family moved there permanently. Clise later purchased an adjoining 350 acres. The property was developed as a model farm, used as a dairy farm, and purchased by King County in 1962. Between 1968 and 2002, the mansion housed the Marymoor Museum of Eastside History (Stein, 2002). Currently the Clise Mansion is used by the King County Parks and Recreation Department as a rental facility. James and Anna Clise had a reproduction of a Dutch windmill built at Willowmoor around 1905. The windmill was originally designed for grinding grain but was converted in the 1940s to a water pump (Gemperle, 1972).

Issaquah, at the south end of Lake Sammamish, was first settled by several families in 1863 (E.J. Fish, 1981). Ingebright Wold was issued a homestead at what would become the town of Issaquah. Originally known as Olney, the town was incorporated as Gilman in April 1892 in honor of Daniel Gilman who helped bring the railroad to the area. Issaquah became the town's permanent name in February 1899. Coal was discovered along the Squak River in 1862, although mining operations were not in place until 1887. Coal mining continued as a major industry of the area until 1923 when Pacific Coast Coal Company closed its mine (Issaquah Historical Society, 2003). Dairying, hop farming, and logging joined mining as the major industries of the Issaquah area.

The Casto (or Castro) family homesteaded the parcel now known as Pickering Farm. In November 1864, a group of Native Americans attacked the settlers at Issaquah Creek, seeking retribution for the deaths of several of their members. William and Abigail Casto and her cousin were slain and four of the Native

Americans were killed in the siege that was later known as the Squak Massacre. Many of the remaining settlers moved to Seattle following the conflict and the area was resettled the following year (Bagley, 1929; E.J. Fish, 1981). Territorial Governor William Pickering, Sr., bought the Casto property in 1867 and his descendants operated a dairy farm there until 1975. The Pickering barn and adjacent land were placed on the National Register of Historic Places in 1983.

Smaller communities developed between Redmond and Issaquah, including Campton, Monohon, and Inglewood. Logging operations existed all around Lake Sammamish between the 1880s and 1920s (Bagley, 1929). The combination of access to Lake Sammamish for transport of logs to the mill and access to the railroad for transport of lumber to the market influenced the development of the mills in these locations. Several mills were located in the immediate vicinity of the project. The Campbell Mill, Weber Shingle Mill, and Allen & Nelson Mill at Monohon were several of the more prominent mills on the east side of Lake Sammamish (E.J. Fish, 1981). Mill sites often became company towns as mill workers built houses and farmed.

An example of a company town was in Monohon, which was homesteaded by Martin Monohan in 1877. In 1888 the Donnelly Post Office moved across Lake Sammamish from the west side to the east side to be nearer to the SLS&E Railroad (History Link, 2000). The Allen & Nelson Mill, which also sought to be near the railway, was established there in 1889. "Fifty homes and a 20 room hotel were built for employees. In 1892, Monohon had the sawmill, a coal mine, and a population of 80. The main products were lumber, hops..., and dairy products" (History Link, 2000). E.J. Fish (1981) notes that Monohon Mill was the biggest lumber producer on Lake Sammamish and reached its peak in the early 1920s. The mill and much of the town burned down in 1926 and the post office closed soon after.

An Indian hop-picking village was located west of Issaquah Creek (E.J. Fish, 1981). The Wold hop farm in the Issaquah area expanded from half an acre in 1868 to 50 acres in 1893 before the industry died out in Issaquah by 1900 (E.J. Fish, 1981). Hop-picking was seasonal work that mainly drew local Native Americans. In September 1885, facing a depressed hop market, the Wold Brothers hired 37 Chinese immigrants to pick hops at below-market rates. The hiring of the Chinese workers coincided with anti-Chinese violence in the western states: just two days earlier a riot in a Wyoming coal mine left 28 Chinese coal workers dead and 19 injured (Long, 2000). Local residents, both Indian and white, protested violently over the course of several days, preventing the Chinese workers from reaching the hop fields. After the Wold Brothers unsuccessfully sought intervention by the justice of the peace, word spread that the Chinese workers were preparing to defend themselves from further attack. Fueled by this news, Indian and white rioters attacked the Chinese camp that night, killing three and injuring two as they slept (Long, 2000; E.J. Fish, 1981; Craine, 1983). The remaining Chinese workers left Squak the following day. Although numerous arrests were made, all were acquitted. Anti-Chinese sentiment continued in the Puget Sound area and in February 1886, Seattle rioters forced Chinese workers out of the city (Long, 2000).

At the south end of Lake Sammamish, the Lake Sammamish State Park was created in 1950 when the Washington State Parks and Recreation Commission purchased several parcels of land around "Sunset Beach," a public swimming area developed around 1930. The acquisition of additional acreage in 1957 and 2002 increased the park boundaries to the north and east (Luttrell, 2002).

3.13.2.5 Euro-American Cultural Resources Identified in the Vicinity of the Project

Historic sites have been identified both within 1 mile of, and adjacent to, the study area. In addition, the railbed itself is identified as an archaeological site (45-KI-451), although it is not considered eligible to the National Register of Historic Places due to its lack of integrity (Hamilton and Johnson, 2004; Hudson et al., 2003).

In the Redmond section, five historic structures have been identified within 1 mile of the project corridor (Appendix H, Volume III). Clise Mansion, listed on the National Register of Historic Places in 1973, and the Dutch windmill, listed to the State Register of Historic Places in 1973, are within the current Marymoor Park located west of the project corridor. The William White Mansion, owned by Justice White who married Redmond co-founder Luke McRedmond's daughter, is located northwest of the project corridor; the mansion is considered eligible to the National Register of Historic Places. The Yellowstone/Red Brick Road, a historic road to the east of the project corridor, was listed in the National Register of Historic Places in 1973.

Additionally, the King County Historic Preservation Program has identified the Campbell Mill Boarding House (HRI 523), immediately adjacent to the project corridor. A single-story cottage, the Campbell Mill Boarding House was built in 1910 and is the only remaining structure associated with the Campbell Mill. The mill began operations at the turn of the century, continuing through approximately 1930. Pilings at the northeast end of Lake Sammamish are the only remaining evidence of the mill itself. The pilings are visible from the existing railbed. A concentration of historic debris was uncovered below the railbed adjacent to the Campbell Mill Boarding House during construction monitoring of the fence installation on the Interim Use Trail (Johnson, 2004). No distinct cultural strata could be distinguished and the volume of materials was not considered substantial; however, the likelihood for potentially intact historic cultural resources outside the railbed prism is high.

In the Sammamish section, one historic archaeological site and eight historic structures have been identified within 1 mile of the proposed Master Plan Trail. Site 45-KI-488, a historic site with a prehistoric component, is in the vicinity of the Allen & Nelson Mill at Monohon and may be associated with the town of Monohon. Over 250 artifacts, predominantly historic-era objects, were collected at the site, suggesting a historic occupation of the area, although no structures were observed (Norman, 2000). In addition, the King County Historic Preservation Program has identified eight historic structures within 1 mile of the proposed project. Although only two structures are still extant, buried cultural deposits may be present in these areas. The potential for historic cultural resources is considered particularly high near Weber Point (between approximately STA_{COR} 534+00 and STA_{COR} 563+00), Inglewood (between approximately STA_{COR} 438+00 and STA_{COR} 472+00), and Monohon (between approximately STA_{COR} 292+00).

In the Issaquah section, three historic sites have been recorded within 1 mile of the project corridor. The Pickering Barn (45-KI-142H) was built in two phases in 1890 and 1906. The site includes the presumed remains of the Casto cabin, which have not been identified to date (Nelson, 1994). Pickering Barn was listed to the National Register of Historic Places in 1983. Site 45-KI-452 is represented by concrete reservoir features associated with the Issaquah Water Works. Site 45-KI-453, a concrete foundation, is southeast of the project corridor, on the north side of Interstate 90. The King County Historic Preservation Program identifies the location of the Frank Tibbetts house (KCHP 168) immediately adjacent to the railbed near STA_{COR} 125+00. Almost directly across the tracks is the location of the Anton Ek house (E.J. Fish, 1981). Neither structure is extant, but both could be considered locally important since Tibbetts and Ek were Issaquah pioneers.

3.13.3 Direct Impacts

All areas of the project corridor have some potential for containing unknown cultural resources. Within the Redmond section, areas with higher potential risk for cultural resources exist from STA_{COR} 620+00 to STA_{COR} 640+00 and between STA_{COR} 674+00 and STA_{COR} (northernmost station). Within the Sammamish section, locations with higher potential for unknown cultural resources include the area north of Weber Point (between approximately STA_{COR} 563+00 and STA_{COR} 534+00), from NE 18th Place south

to approximately NE 7th Court (between approximately STA_{COR} 481+00 and STA_{COR} 438+00), from Louis Thompson Road south to approximately Sulphur Springs Point (between approximately STA_{COR} 433+00 and STA_{COR} 333+00), the area known as Monohon (between approximately STA_{COR} 258+00 and STA_{COR} 292+00), and the vicinity of 212th Way SE (between approximately STA_{COR} 240+00 and STA_{COR} 225+00).

Additionally, based on review of the CRDB, the King County Roads Services Division Archaeologist considers the area around SE 8th Street to be extremely sensitive (between approximately STA_{COR} 379+00 and STA_{COR} 385+00) (Miller, personal communication, 2004); this area is included in the range of locations with higher potential for unknown cultural resources listed above.

Most of the Issaquah section has a potential for containing unknown cultural resources. Particular areas of higher potential include between STA_{COR} 135+00 and STA_{COR} 126+00.

It is important to note that additional unknown cultural resources may potentially exist outside of these areas.

3.13.3.1 Corridor Alternative

The primary potential direct impacts to cultural resources under the Corridor Alternative would be associated with construction or maintenance activities that disturb native soils in areas outside of the railbed prism, as discussed below.

Construction Impacts

Construction Access/Staging. Because construction access would occur on existing roadways, impacts to cultural and historic resources are expected to be low. However, if new or upgraded access roads are necessary for construction equipment, impacts to cultural and historic resources would range from moderate to potentially high. Additionally, clearing for staging areas has a moderate to high potential to impact cultural resources depending on the location and methods used.

Parking and Restroom Facilities. Impacts to cultural and historic resources associated with construction of parking and restroom facilities under all Build Alternatives would range from moderate to potentially high depending on the construction methods and location. All new construction outside of the Interim Use Trail may potentially impact areas with archaeological resources. The two proposed parking and restroom facilities in Sammamish are located in areas with a high probability for archaeological resources. The proposed parking spaces between NE 65th Street and NE 70th Street in Redmond are considered to have low probability since the area appears to be extensively disturbed and the spaces will be on the existing road. The use of heavy equipment may increase the potential impact from construction activities.

Traffic Control. Impacts to cultural and historic resources are expected to be low because traffic control measures would consist predominantly of installing signage. Ground-disturbing activities into native soils would increase the probability of impacting cultural resources.

Stormwater Management Facilities. Impacts to cultural and historic resources would range from moderate to high depending on stormwater management methods and locations. Ground-disturbing activities into native soils would increase the probability of impacting cultural resources.

Retaining Walls. Impacts to cultural and historic resources would range from moderate to high depending on the location and construction methods used for retaining walls. The use of heavy equipment

will increase the potential impact from these activities. The use of imported fill would have low to no impact on buried cultural resources, while earthmoving of intact soil, such as overexcavation to reach load-bearing soils, would increase the likelihood of disturbing unknown cultural resources.

Public Access/Additional Improvements. Impacts to cultural and historic resources related to public access are expected to be low in areas where access would be provided by existing intersections. In areas where access ramps or connector trails would be used, impacts would range from low to moderately high depending on the location and construction methods.

Impacts resulting from additional improvements at public access points would vary depending on the location and method. Generally, the preliminary improvements are considered to have low to no potential for disturbing cultural resources.

Fencing. Impacts associated with placement of fencing would range from low to high, depending on the location and type of installation. Direct drive installation of chain-link fence posts would have minimal potential to disrupt cultural resources, while excavation for split-rail or guardrail fence posts could disturb cultural resources <u>due to greater soil disturbance associated with installation-</u> <u>Monitoring for the presence of cultural resources will be conducted during construction.</u>

Bollards. There is low potential for disturbing cultural or historic resources when installing bollards in the area of the existing railbed <u>due to the disturbance that occurred as part of the railroad construction activities and shallow construction depth.</u>

Operation Impacts

Trail Use and General Maintenance. Impacts to cultural and historic resources from use and general maintenance of the trail are expected to be low as long as no ground-disturbing activities take place outside of the trail prism.

Vegetation Management. There is a low to moderate potential for disturbing cultural or historic resources during vegetation management depending on the management measures utilized. Spraying, mowing, or hand removal of weeds has low potential to disturb cultural resources, while grubbing or other mechanical means increase the likelihood of disturbing archaeological deposits.

Culvert Maintenance. Impacts resulting from culvert maintenance would range from low to moderate depending on the maintenance measures. General maintenance of culverts has low potential to disturb unknown cultural resources. However, if excavation into native soil below culvert gravels occurs, such as for installation of a catch basin, the probability increases to a moderate potential that archaeological resources may be disturbed.

3.13.3.2 East Alternatives

Although the East Alternatives and the Corridor Alternative are in relatively close proximity to each other, the potential impacts to cultural and historic resources associated with the East Alternatives are considered greater than for the Corridor Alternative and range from moderate to high. The East Alternatives would have substantially greater potential to disturb archaeological resources because they would require construction and ground disturbance outside of the former railbed in more places than the Corridor Alternative and in more areas considered to have high probability for cultural deposits, including human remains. Anticipated impacts due to staging, construction of public access improvements, retaining walls, fencing, and potentially stormwater management facilities are considered higher for the East Alternatives than those discussed for the Corridor Alternative. Anticipated impacts due to

construction of parking and restroom facilities, and traffic control, would be largely the same as those discussed for all Build Alternatives.

3.13.3.3 Continuation of the Interim Use Trail Alternative

Construction Impacts

Potential construction impacts for the Continuation of the Interim Use Trail would be limited to disturbance of native soils associated with the northern extension of the trail. Impacts resulting from construction of parking and restroom facilities would be the same as those discussed for all Build Alternatives.

Operation Impacts

Trail Usage. Impacts resulting from trail usage on the unpaved trail are expected to be low. Trail users would be required to stay on the trail. Measures such as fencing and signage would be used to ensure that they comply, minimizing potential impacts to cultural resources.

Trail Maintenance. Maintenance activities on the unpaved trail are anticipated to have minor impacts to cultural and historic resources as long as no ground-disturbing activities take place outside of the railbed.

Culvert Maintenance. Impacts resulting from culvert maintenance would be the same as those discussed for the Corridor Alternative.

3.13.3.4 No Action Alternative

Impacts would be the same as those discussed for the Continuation of the Interim Use Trail Alternative.

3.13.4 Indirect or Secondary Impacts

"Indirect effects" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Possible indirect impacts might include creation of private residential paths to the trail or development of recreation-related services at trailheads or parking locations. While such impacts are generally anticipated to be low, if these areas overlap with sensitive cultural areas, additional mitigation methods should be considered.

3.13.5 Cumulative Impacts

A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7) Excavation into native soils as a result of ongoing development in the area will increase the potential for impacts to cultural resources.

3.13.6 Mitigation Measures

To finalize the Section 106 process, a Programmatic Agreement (PA) will be was executed on December 12, 2008, and is appended to this EIS (36 CFR Part 800.14b). Signatories to the PA will be are the Office

<u>Department</u> of Archaeology and Historic Preservation, the Federal Highway Administration, King County Department of Natural Resources and Parks, and Washington State Department of Transportation. The Advisory Council on Historic Preservation, the Snoqualmie Tribe, the Muckleshoot Tribe, and the Tulalip Tribes should be was invited to be signatories as well, though the lack of participation by an invited signatory does not invalidate the PA. The PA will outlines the mitigation methods that are to be employed prior to and during construction and will include provisions to deal with subsequent inadvertent discovery of cultural resources during construction.

Because of the high probability for encountering cultural resources in the project area, particularly in areas outside of the existing railbed, cultural resources training would be conducted with all construction crews, field supervisors, and inspectors. Training will include information about the possibility of encountering cultural resources, recognition of cultural resources, and proper procedures following any discovery of cultural resources. Contracts for construction would include clauses addressing cultural resource discovery to encourage reports of discoveries without penalty.

If cultural resources are identified during construction activities for any of the alternatives, work will halt in the immediate area and the appropriate city or county department, King County Historic Preservation Program, the Washington State Department of Archaeology and Historic Preservation, Federal Highways Administration, and Washington State Department of Transportation will be contacted. In areas outside the existing railbed with high potential for cultural resources, additional archaeological work may be warranted and tribal representatives should be available to monitor construction areas. Additional mitigation measures specific to each of the alternatives are discussed below.

3.13.6.1 Corridor and East Alternatives

Parking and Restroom Facilities

To mitigate potential disturbance of buried archaeological deposits, archaeological testing would be conducted prior to any construction activity at the parking and restroom facilities proposed at East Lake Sammamish Parkway and Inglewood Hill Road and at East Lake Sammamish Parkway and SE 33rd. Testing would be necessary due to the potential to damage buried archaeological deposits, particularly including human remains, and the subsequent work stoppage necessary if archaeological deposits are encountered. Depending on the outcome of the archaeological testing, additional archaeological fieldwork may be necessary.

If additional locations are proposed for parking and restroom facilities, an <u>professional</u> archaeologist would will review locations to determine if additional mitigation measures are required.

Traffic Control

No mitigation measures are required.

Stormwater Management Facilities

An <u>professional</u> archaeologist <u>would will</u> review locations for proposed stormwater management facilities to determine if mitigation measures are warranted. Construction excavation into native soils would likely require additional archaeological fieldwork. Extending culverts or other culvert improvements that necessitate excavation into native soils will be monitored by an archaeologist and <u>invited</u> tribal representatives.

If additional property is acquired for detention and treatment of stormwater, an archaeological survey would will be conducted prior to any construction activity. Further archaeological work may be warranted based on the results of the survey.

Retaining Walls

An professional archaeologist would will review all plans for proposed retaining wall construction to determine what mitigation measures are warranted. Depending on the location and wall type, mitigation may include archaeological testing prior to construction or monitoring during construction. Monitoring will necessitate work stoppage in the immediate area if archaeological deposits are discovered. Additional subsequent archaeological fieldwork may be necessary as well, depending on the results of initial investigations.

Public Access/Additional Improvements

An <u>professional</u> archaeologist <u>would-will</u> review locations for proposed access ramp or connector trail construction to determine what mitigation measures are warranted. Depending on the location and construction methods, mitigation may include archaeological testing prior to construction or monitoring during construction. Monitoring will necessitate work stoppage in the immediate area if archaeological deposits are discovered. Other mitigation methods may be applicable such as using imported fill to construct access ramps.

Signage, Fencing, and Bollards

An <u>professional</u> archaeologist <u>would will</u> be consulted regarding the placement of signs, fences, and bollards outside of the existing railbed to determine the most appropriate installation method and avoid disturbing buried cultural deposits. Appropriate mitigation may include monitoring or testing depending on the location and installation methods proposed.

Vegetation Management

An <u>professional</u> archaeologist <u>would will</u> be consulted regarding vegetation management that involves disturbing native soils.

Culvert Maintenance

An <u>professional</u> archaeologist <u>would will</u> be consulted to monitor culvert maintenance when excavating into native soils, particularly at the north end of the project. It is important to note that the tribes generally consider culverts to have potential cultural resources associated with them, and have specifically requested that tribal representatives monitor any excavations in these areas.

Measures Specific to the East Alternatives

Dense vegetation prevented an adequate archaeological survey of the proposed East Alternative routes. To mitigate potential disturbance of cultural resources, an archaeological monitor would will be present during all vegetation clearing activities in order to further assess the potential for archaeological deposits. Additional archaeological investigations may be warranted prior to any construction activities due to the generally high probability for cultural resources in many of the areas where the East Alternatives would leave the existing railbed.

3.13.6.2 Continuation of Interim Use Trail Alternative and No Action Alternative

To mitigate potential disturbance of unknown cultural resources, an archaeological monitor would will be present at all ground-disturbing activities that involve excavation into native soils. Additionally the affected tribes would be contacted regarding their interest in having tribal monitors present. No other mitigation measures are required.

3.13.7 Significant Unavoidable Adverse Impacts

Significant unavoidable adverse impacts to cultural resources are not anticipated as a result of construction or operation of the Master Plan Trail. However, inadvertent loss, damage, or alteration to cultural resources is possible with any construction project. The anticipated impacts would be largely reduced by proposed mitigation measures.

Chapter 4 Other Environmental Considerations

4.1 Irreversible and Irretrievable Commitments of Resources

NEPA Council on Environmental Quality (CEQ) regulations require an environmental analysis to identify "any irreversible and irretrievable commitments of resources, which would be involved in the proposed action should it be implemented" (40 CPR 1502.16). Implementing any of the alternatives for the East Lake Sammamish Master Plan Trail would require a commitment of natural, human, and fiscal resources. These commitments would be the greatest for the East Alternatives, followed by the Corridor and Continuation of the Interim Use Trail Alternatives. The No Action Alternative would require a relatively minor commitment of resources.

Each of the Build Alternatives would require a long-term conversion of land resources to accommodate the trail, parking areas, restrooms, and stormwater facilities. In the case of the East Alternatives, some of the land converted to trail use would consist of residential properties that would be fully or partially acquired for the trail. Although the trail conceivably could be converted to other land uses at some time in the future, there is no reason to expect that such a conversion would be necessary or desirable. Thus such land conversion is considered to be an irreversible and irretrievable commitment.

Fossil fuels (diesel and gasoline), electricity (and the resources used to generate it), lubricants, and construction materials such as concrete, asphalt, aggregate, wood, and metal would be used in varying amounts for construction and operation of the alternatives. There is generally a sufficient supply of these materials, and the Master Plan Trail would not adversely affect their continued availability.

Some biological resources would be irreversibly and irretrievably committed as a result of the project. Some wetland and buffer areas would be filled, some areas of vegetation would be lost, and culverts would be extended on some streams. Unavoidable wetland impacts would be mitigated, potentially at another location outside the trail corridor. The Build Alternatives would result in an increase in impervious surface in the stream basins crossed by the trail, requiring the installation of permanent stormwater facilities to manage increased runoff.

As with any construction project, there is a possibility that unrecorded cultural deposits could be lost, damaged, or altered during construction of the Build Alternatives, although measures would be taken to prevent such impacts.

Substantial amounts of labor would be used in constructing and maintaining the Master Plan Trail. Labor is generally not considered to be in short supply, and the project would not adversely affect the continued availability of laborers. Construction of the Build Alternatives would require a substantial expenditure of public funds that would not be available for other uses.

The proposed commitment of natural, human, and financial resources for the Master Plan Trail is based on the purpose and need for the trail. The trail would provide an alternate transportation corridor access to recreation, employment, and retail centers in the Cities of Redmond, Sammamish, and Issaquah and complete a link in the King County trails system, thus benefiting businesses, employees, and residents.

These benefits are anticipated to outweigh the commitment of resources to construct and operate the Master Plan Trail.

4.2 Relationship between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

NEPA CEQ regulations (40 CFR 1502.16) require an environmental analysis to consider "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity." Implementation of the Master Plan Trail would result in local short-term impacts and uses of resources, while providing an alternative non-motorized transportation corridor and multi-use recreational trail for the long term.

Short-term effects of constructing the Master Plan Trail would include the creation of construction jobs, construction-related noise and dust, and traffic delays. These short-term effects would result in a trail that would have long-term benefits by providing an alternative to motorized modes of transportation and a non-motorized linkage between recreational facilities.

Short-term erosion and water quality impacts could occur during construction of the trail, although best management practices would be used to minimize impacts. The long-term increase in impervious surface and associated storm runoff resulting from paving the trail would be offset by construction of permanent stormwater management facilities.

Some vegetation near streams may be temporarily disturbed or removed during construction. These short-term impacts would be mitigated through a combination of on-site and off-site stream buffer planting, thus substantially improving riparian quality and fish habitat.

Wetland functions such as storing water and providing wildlife habitat would be reduced locally as a result of filling small areas of wetlands and wetland buffer for construction of the trail. Wetland mitigation would be designed to replace these lost functions over the long term, potentially through use of a wetland mitigation bank located outside of the trail corridor.

Construction of the East Alternatives would require the full or partial acquisition of some properties along the trail corridor, resulting in the relocation of some residents. There may be some reduction in property tax revenues for the jurisdictions where these properties are located, although many of the displaced residents would be expected to relocate within the same jurisdiction.

The Master Plan Trail Build Alternatives are consistent with local comprehensive plans goals and policies to provide access to local and regional recreation opportunities, connectivity between neighborhoods, and links between neighborhoods and services. The Build Alternatives also support the comprehensive plan policies to promote an increase in alternative modes of transportation. The Build Alternatives are compatible with the projected population growth in the project vicinity.

By providing an alternate transportation corridor and access to recreation, employment, and retail centers in the Cities of Redmond, Sammamish, and Issaquah and completing a link in the King County trails system, the Master Plan Trail would enhance long-term productivity within the project vicinity.

5.1 Introduction

As described in Chapter 1, since 1998 King County has been working to convert approximately 11 miles of abandoned railroad right of way along Lake Sammamish into an alternative non-motorized corridor and a multi-use recreational trail. While the project appealed to many advocates and potential users of the trail, some homeowners living on the shore of Lake Sammamish were concerned about the prospect of runners, cyclists, or horseback riders using a trail on the railroad corridor through their backyards. Public involvement activities undertaken as part of the East Lake Sammamish Master Plan Trail project included citizens advisory groups, coordination with agencies, community workshops, and mailings to project area residents. These activities are described below.

5.2 Agency Environmental Review Process

The environmental review process for the East Lake Sammamish Trail project has occurred in two phases. Phase 1, the Interim Use Trail and Resource Protection Plan, was followed by Phase 2, the Master Plan Trail. Table 5-1 summarizes the dates key environmental documents were released for public review and the associated public meetings held on both projects to date. King County has taken into account all comments received on the East Lake Sammamish Trail project since 1999. Tribal coordination related to historic, cultural, and archaeological resources is described in Section 3.13. Tribal coordination related to fisheries issues is described in Section 3.5.

Table 5-1. Environmental Review Process and Associated Public Meetings

DATE	EVENT
November 2, 1999	Determination of Significance and Request for Comments of Scope of Interim Use Trail and Resource Protection Plan EIS
November 17, 1999	Public Scoping Meeting (Open House)
May 19, 2000	Interim Use Trail and Resource Protection Plan Draft EIS Issued
June 20, 2000	Interim Use Trail and Resource Protection Plan Draft EIS Public Hearing
August 25, 2000	Interim Use Trail and Resource Protection Plan Final EIS Issued
October 31, 2000	Determination of Significance and Request for Comments of Scope of Master Plan Trail Draft EIS
November 15, 2000	Master Plan Trail SEPA Scoping Meeting
February 20, 2001	Master Plan Trail NEPA Scoping Meeting
May 10, 2002	Interim Use Trail and Resource Protection Plan NEPA EA Issued
June 12, 2002	Interim Use Trail and Resource Protection Plan NEPA EA Public Hearing
March 13, 2003	Finding of No Significant Impact (FONSI) on the <i>Interim Use Trail and Resource Protection Plan</i> NEPA EA

5.2.1 Interim Use Trail and Resource Protection Plan

The environmental process for the East Lake Sammamish Interim Use Trail project began in November 1999 under the State Environmental Policy Act (SEPA) with a Determination of Significance and public Environmental Impact Statement (EIS) scoping meeting. The Draft EIS for the Interim Use Trail and Resource Protection Plan was issued in May 2000 and open for public comments through June 2000. The Final EIS for the Interim Use Trail and Resource Protection Plan was issued in August 2000.

In early 2000, the project received federal funding (Transportation Equity Act for the 21st Century (TEA-21), triggering a requirement for federal environmental review under the National Environmental Policy Act (NEPA). A NEPA Environmental Assessment (EA) was released in May 2002, and a public hearing on the document was held in June 2002. A Finding of No Significant Impact (FONSI) was issued for the project in March 2003.

5.2.1.1 Public Scoping Meeting

The EIS scoping meeting and open house for Phase 1, the Interim Use Trail and Resource Protection Plan, was held in November 1999. Public comment was requested on the environmental issues and alternatives to be considered and evaluated in the EIS. Important issues recorded at the meeting included ensuring adjacent property owner safety, protecting the natural environment, limiting noise and maintaining area aesthetics, and facilitating recreational uses. Over 100 people attended this meeting.

5.2.1.2 Draft EIS Public Hearing

The *Interim Use Trail and Resource Protection Plan Draft EIS* was issued in May 2000, which was followed by a comment period lasting through early June 2000. To gather comments on the Draft EIS, a public hearing was held in June 2000. The project team recorded over 80 pages of comments during the public forum, along with over 40 pages of additional public comments taken in the lobby during the forum. The comments collected from this public hearing, in combination with those received during the comment period, were addressed and incorporated into the *Interim Use Trail and Resource Protection Plan Final EIS* issued in August 2000.

5.2.1.3 NEPA Environmental Assessment Public Hearing

A public hearing for the Interim Use Trail and Resource Protection Plan was held in June after the EA was issued in May 2002. The hearing provided the opportunity to provide feedback on the EA directly to a court reporter. Comments were collected from 12 hearing participants through the public forum, and in the lobby during the forum.

5.2.2 Master Plan Trail

The environmental process for Phase 1 resulted in the *Interim Use Trail and Resource Protection Plan Final EIS* in August 2000. A Determination of Significance and Request for Comments on the Scope of the Master Plan Trail EIS began at the end of October 2000. A SEPA scoping meeting was held in November 2000, and a NEPA scoping meeting was held in February 2001.

5.2.2.1 SEPA Scoping Meeting

In November 2000, the SEPA scoping meeting for Phase 2, the Master Plan Trail, was held. After developing alternatives through community workshops and comments, nearly 80 neighbors and citizens gathered at this meeting and provided over 150 comments. Maps and presentation boards were set up

around the meeting room displaying the alternatives and identifying important topics such as public safety, trail design, traffic, surface water impacts, and impacts on plants and animals.

5.2.2.2 NEPA Scoping Meeting

At the NEPA scoping meeting in February 2001, the project team presented potential trail alignment alternatives for a permanent use trail, along with the required No Action Alternative. The alternatives presented at this meeting were slightly altered based on the responses to comments received from the SEPA scoping meeting in November 2000. At the request of the project Citizen Advisory Group, the East Lake Sammamish Trail project team also provided corridor maps of each alternative, laid out side by side, to highlight the differences between the alternatives. Both oral and written comments were collected from over 100 neighbors and citizens attending this meeting.

5.3 Agency Coordination

Key efforts of the agency coordination for the East Lake Sammamish Master Plan Trail project are summarized in the following sections.

5.3.1 Agency Workshop

Following the scoping meeting for the Interim Use Trail and Resource Protection Plan in November 1999, an agency workshop was held in December 1999 to collect comments from and provide background information to local agency members. After identifying the proposed project alternatives, schedule, and current SEPA issues, a workshop discussion was facilitated that considered topics such as anticipated permits, alternatives, anticipated impacts, evaluation methodologies, preliminary mitigation measures, and anticipated permitting concerns.

5.3.2 Agency Scoping

In May 2001, as part of the Draft EIS development process for the Master Plan Trail, an agency scoping meeting was held. The meeting was conducted in two parts: (1) a guided trail walk, and (2) a scoping discussion. The trail walk allowed participants to observe the affected environment and understand the alternatives being considered. During the scoping discussion, input and concerns from the attending agency members focused on the natural environment, the built environment, the review process, and measures to mitigate any project effects. Participants included local cities (Issaquah, Sammamish, and Redmond), King County Land Use Services, King County Parks, King County Roads, Washington State Department of Transportation, Washington State Department of Fish and Wildlife, Washington State Department of Ecology, Washington State Parks and Recreation, U.S. Army Corps of Engineers, NOAA Fisheries, and Federal Highway Administration.

5.3.3 Interdisciplinary Team

At the recommendation of the Washington Department of Transportation (WSDOT), an Interdisciplinary Team (IDT) for the project was convened. Three IDT meetings were held in the summer of 2002 to: (1) refine the project's purpose and need statement, (2) establish criteria for selecting alternatives that could be evaluated in the Master Plan Trail EIS, and (3) develop design criteria for ensuring progress on the design of the alternatives. The IDT consisted of staff from project area cities, King County, the state, and resource agencies.

The IDT was provided with a project overview, including the results of the extensive public scoping process and public comments. The IDT provided suggestions for revising the draft purpose and need statement for the project and assisted the County in screening project alternatives. Based on the project purpose and need, the IDT then helped identify the criteria appropriate for screening the alternatives. This process ultimately resulted in three screening criteria: consistency with local and regional plans; consistency with design guidelines; and linkage to regional trails and bicycle lanes.

5.4 Public Coordination

The East Lake Sammamish Trail project required focused engagement of local citizens to address the many differences among trail users and those citizens within the project's impact area. Public involvement activities are summarized below.

5.4.1 Citizen Advisory Group

The Citizen Advisory Group (CAG) was an invaluable resource in coordinating the input of various stakeholder groups. The CAG assisted the planning and public participation process for both the Interim Use Trail and the Master Plan Trail. The 13-member group represented community and regional interests, as well as property owners along Lake Sammamish. The CAG met throughout the environmental, planning, and development phases of the project. Meetings were held during weekday evenings and were open to the public. Citizen Advisory Group meetings were advertised in local newspapers to encourage participation from the general public. Public comments and questions were taken at several of the CAG meetings when time allowed. Key input gained from the CAG included comments on the scope of the environmental review, concerns about trail safety, feedback on the *Interim Use Trail and Resource Protection Plan Draft EIS*, and recommendations for the development and operation of the Interim Use Trail.

5.4.1.1 Citizen Advisory Group Meetings

Seven CAG meetings were held between April and December 1999. In 2000, five meetings were held, and three meetings were held in both 2001 and 2002. At each meeting, project staff took notes and provided detailed summaries as a follow up, with these summaries being approved by the CAG.

5.4.2 Workshops

The project team wanted citizens to take an active role in planning a trail that fulfills the local as well as the regional vision; therefore, several public workshops were held in the project impact area to engage citizens in the planning process. Workshops were held both with the general public and with trail user groups.

5.4.2.1 Neighborhood Vision Workshops

Five neighborhood workshops were held during the winter and early spring of 2000. One workshop was held for each of five segments of the trail to get specific input from attendees regarding opportunities and constraints on the right of way and how these might be best addressed in the planning for the Master Plan Trail. The workshops were held at the request of community members who wanted to kick off the Master Plan Trail process. These workshops provided an opportunity for direct neighborhood input to shape the details of the Master Plan Trail alternatives. Response to these workshops was substantial, with over 150 citizens attending the workshops. Residents were grouped by shared characteristics such as access, natural resources or relationship to natural and built features. Large-scale plan sheets, design guidelines, and group facilitators were provided. Each of the five meetings was organized into 6 to 11 roundtable groups.

5.4.2.2 User Group Workshops

Beyond engaging the public on the segments of the trail project, the East Lake Sammamish Trail project team sent letter to over 45 user groups and held workshops with trail users to help identify their concerns and issues.

Executive Horse Council

A workshop held by the project team for the Executive Horse Council in September 2000 allowed the Council to learn more about the project and to provide feedback and comments on the trail. Specific issues addressed included access points and parking, crossings and amenities, and separating public from private space along the project corridor and trail alignment. This group identified concerns relating to local trail linkages, local and regional parking facilities, crossing signage, conflicts among users (including personal watercraft, non-motorized wheeled activities, and pedestrians), fencing places away from the trail, and placing the alignment away from East Lake Sammamish Parkway.

Cherry Hill Rider Group

In October 2000, the East Lake Sammamish Trail project team held a second user group workshop with the Cherry Hill Rider Group. This workshop addressed the same issues as the Executive Horse Council September 2000 workshop, including access points and parking, crossings and amenities, and separating public from private space along the project corridor and trail alignment. This group identified similar needs as the Executive Horse Council, including the need for both local and regional access points, activated traffic lights high enough for riders, soft surfaces, how to prevent conflicts with other trail users, trail signage, and linkages to other trails.

Cascade Bicycle Club

In the fall of 2000, members of the project team attended a club meeting of the Cascade Bicycle Club. This group was provided information about the proposed trail and given a questionnaire to provide feedback regarding trail features and routes.

5.4.3 Newsletters

Newsletters were an integral component of the public involvement effort for this project. Newsletters served as a way to connect with the community and provide project updates as well as extend meeting and event invitations to citizens. Six newsletters were distributed between November 1999 and the summer of 2003. Each newsletter was widely distributed to addresses in Redmond, Sammamish, and Issaquah and to all residents along the proposed trail. Newsletters were mailed to roughly 2,300 individuals and organizations.

5.4.4 City of Sammamish Outreach

In May 2004, the City of Sammamish prepared an independent survey for city residents regarding the East Lake Sammamish Trail. The purpose of the City's survey was to better understand their citizens' concerns related to the construction, operation, and management of the trail. Issues identified in the survey include: lack of privacy, aesthetics, concerns of trespassing, trash disposal, noise, pet refuse, both decreased and increased property values, recreational benefits, alternative commuting opportunities, and improved neighborhood connectivity. These issues are discussed throughout this EIS.

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Chapter 7

Distribution List

To foster good lines of communication, enhance interagency coordination, acknowledge that theis <u>Final Draft</u> EIS is a public document, and involve the public and Tribes in implementing NEPA/SEPA procedures, the <u>Draft EIS and the Final Draft</u> EIS <u>have been is being</u> sent to the entities below.

Tribes

Duwamish Tribe

Muckleshoot Tribe

Snoqualmie Tribe

Tulalip Tribe

Federal

Federal Emergency Management Agency

- U.S. Army Corps of Engineers
- U.S. Department of Commerce, National Marine Fisheries Service
- U.S. Department of the Interior, Fish and Wildlife Service
- U.S. Department of Transportation, Federal Highway Administration
- U. S. Environmental Protection Agency

State/Regional

Lake Sammamish State Park

Washington State Department of Ecology, Environmental Review Section

Washington State Department of Ecology, Northwest Regional Office

Washington State Department of Fish and Wildlife

Washington State Department of Natural Resources

Washington State Department of Transportation

Washington State Department of Transportation, Northwest Region Office

Washington State Office of Archaeology and Historic Preservation

Washington State Parks

Local

City of Issaquah, Parks Department

City of Issaquah, Planning Department

City of Redmond Fire Department

City of Redmond, Mayor's Office

City of Redmond Parks Department

City of Redmond, Planning and Community Development

City of Redmond Public Works Department

City of Sammamish City Manager

City of Sammamish Community Development Director

City of Sammamish Planning

City of Sammamish Police Department

City of Sammamish Public Works Director

King County Cultural Resources Office

King County Department of Development and Environmental Services

King County Department of Natural Resources and Parks

King County Department of Natural Resources and Parks, Tribal Liaison

King County Department of Transportation, Roads Services Division

King County Sheriff's Office

King County Water and Land Resources

Sammamish Plateau Water and Sewer District

Libraries

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Redmond Library

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Seattle Library

Companies and Organizations

Burlington Northern Santa Fe

East Lake Washington Audubon Society

Eastside Fire and Rescue

Friends of Marymoor Park

Puget Sound Energy

Puget Sound Regional Council

Citizen's Advisory Committee

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Chapter 9 Glossary

Term	Definition
303d list	A list of surface waters in Washington State that do not meet applicable surface water quality standards. The list is prepared by the Washington State Department of Ecology.
anadromous fish	Fish such as salmon that migrate from the sea upstream to breed in freshwater streams or rivers.
best management practice (BMP)	A method that can be used to minimize the amount of pollution entering surface waters. Best management practices may include schedules of compliance, operation and maintenance procedures, and treatment requirements.
bollard	A type of post used to block motorized vehicles from driving into specific areas but allowing pedestrians, bicycles, etc. to pass through.
Build Alternatives	A general term for the Corridor Alternative, East Alternatives, and the Continuation of the Interim Use Trail Alternative.
candidate species	Federal candidate species are those that the federal agencies have concluded should be proposed for addition to the federal endangered species list, but issuance of the proposed rule is precluded. State candidate species are those that WDFW will review for possible listing as state endangered, threatened, or sensitive.
channel morphology	The physical form of the stream, such as pools, riffles (turbulent areas), and glides (smooth, fast-flowing areas). Ideally, there is a 1:1 ratio for the numbers of pools to riffles. Channel morphology also concerns channel shape (e.g., U or V shaped) and whether the stream channel is incised (cut deeply into the ground surface), potentially preventing fish from accessing areas of the floodplain that might provide refuge during high flows.
coniferous	Trees that produce cones, such as pine and fir trees.
corridor	Term used to describe the former railroad right of way.
culvert	A conduit used to enclose a flowing body of water, used to allow water to pass underneath a road, railway, or embankment.

Term	Definition
debris flow	A flowing mixture of water-saturated debris that moves downslope under the force of gravity. The materials in a debris flow range in size from clay to boulders. Debris flows are created when loose masses of unconsolidated wet debris become unstable as a result of rainfall, melting snow, etc. The flows tend to move downslope along stream valleys or other channels.
deciduous	Plants that lose their leaves during part of the year (as opposed to evergreen plants, which keep their leaves or needles throughout the year).
depressional closed wetlands	Wetlands that form in topographic depressions with closed contours on at least three sides. Elevations within the wetland are lower than the surrounding landscape. They may have an outlet (depressional outflow) or not (depressional closed). Groundwater and precipitation are the major sources of hydrology. These wetlands can function to detain water.
dewatering	A method used to lower the groundwater table in localized areas to allow construction of footings and walls without having water on the site. In general, pumps are used to lower the groundwater table and the water is discharged to a surface water feature.
dissolved oxygen	A measure of the amount of oxygen in the water that is available to be used by aquatic organisms.
endangered species	A species that is in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
environmental justice	An analysis conducted by federal agencies to identify and address as appropriate any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.
ephemeral stream	A stream that flows for only part of the year.
fecal coliform	A type of bacteria found in the intestinal tracts of mammals. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces. These organisms may also indicate the presence of pathogens that are harmful to humans.

Term	Definition
full acquisition	The complete acquisition of a property. Full acquisition would likely occur for the East Lake Sammamish Trail project when the project substantially interferes with and thus damages the property to a degree that it removes all economic value.
geologically hazardous area	Areas that because of their susceptibility to erosion, sliding, earthquake, or other geologic events are not suited for development consistent with public health and safety. Geologically hazardous areas include seismic hazards, steep slopes, landslide hazard areas, erosion hazards, and coal mines.
glide	A smooth, fast-flowing area in a stream.
hydroperiod	How long and how often water is present in a wetland (i.e., the duration and frequency of ponding and saturation).
impervious surfaces	Constructed surfaces such as pavement, driveways, roads, and rooftops that do not allow rainfall to soak into the ground. Instead, water runs off of these surfaces and can enter water bodies such as streams and wetlands either directly or by being discharged from stormwater detention ponds or other facilities constructed to manage runoff.
Interim Use Trail	A gravel trail, located on the former railbed, which varies in width from 8 to 12 feet wide. All permits necessary to construct the Interim Use Trail within the Cities of Redmond and Issaquah were obtained, and construction of the Interim Use Trail in these areas was completed in early 2004. Construction of the remaining segment of Interim Use Trail in the City of Sammamish is expected to be completed in 2005 following issuance of necessary permits. Construction of the Interim Use Trail has involved various improvements to the existing railbed, such as removing the remaining rail ties; adding gravel to the surface of the railbed; installing fencing, signage, and litter receptacles; and repairing and maintaining existing ditches and culverts. Construction of the Interim use Trail was completed in April 2006.
intermittent stream	A stream that flows for only part of the year.
L ₉₀	The sound level that is exceeded 90 percent of the time during a given time interval.
large woody debris	Larger pieces of wood (logs, rootwads, etc.) within the stream that provide a diverse habitat for fish and contribute to the formation of habitat units (pools).

Term	Definition
$L_{ m eq}$	The equivalent sound level, or the level of a <i>constant</i> sound that contains the same <i>energy</i> as the actual sound, which fluctuates over time. The Leq can be thought of as a sound-energy average. But unlike a simple arithmetic average that can understate both the highest and lowest values of a range, the Leq considers <i>all</i> the sound energy that occurs during an interval (e.g., an hour). Thus, the Leq considers high sound levels more heavily because they contain more sound energy.
level of service (LOS)	An estimate of the quality and performance of transportation facility operations in a community. The degree of congestion and delay is rated using the letter "A" for the least amount of congestion, ranging to the letter "F" for the highest amount of congestion. LOS D or better is considered acceptable for most jurisdictions. At LOS E, intersections operate at capacity.
modified slope wetlands	Wetlands located where road and railroad construction has modified topography and runoff patterns of wetland on sloping land. These wetlands retain some characteristics of slope wetlands but also function like the depressional class wetlands. They depend on groundwater discharge and have a unidirectional flow, but due to ditching, excavation, berming, and culverts they also detain water and convey it through a restricted outlet. Thus they function as depressional outflow wetlands.
non-point pollution	Water pollution that comes from a number of small sources (such as stormwater runoff from roadways, excess fertilizers from lawns and agricultural fields, etc.). Point-source pollution, in contrast, comes from a single large source (such as a factory).
nutrient enrichment	The presence of excessive amounts of nutrients, such as nitrogen and ammonia, which can lead to degradation of water quality and algal blooms.
palustrine	Refers to wetlands that contain fresh water (rather than salt water) and that are either (1) dominated by trees, shrubs, and/or emergent vegetation (rooted plants that may be temporarily or permanently flooded at the base but have parts extending above the water surface), or (2) cover less than 20 acres and have a water depth of less than 6.6 feet.
palustrine emergent (PEM)	Palustrine emergent (PEM) wetlands are dominated by erect, herbaceous vegetation (plants whose stems do not produce woody, persistent tissue and generally die back at the end of each growing season).

Term	Definition
palustrine forested (PFO)	Palustrine forested (PFO) wetlands are dominated by woody vegetation greater than 20 feet in height.
palustrine scrub-shrub (PSS)	Palustrine scrub-shrub (PSS) wetlands are dominated by woody vegetation less than 20 feet in height.
partial acquisition	Acquisition of only a portion of a property. Partial acquisitions would occur for the East Lake Sammamish Trail project when only a portion of the property is required by the project and the remaining portion of the site retains its economic value.
perennial stream	A stream that flows year-round.
рН	A measure of the acidity or alkalinity of a solution. The pH scale ranges from zero to 14. A pH of 7 is neutral. More alkaline or basic solutions have a higher pH, while more acidic solutions have a lower pH.
peak hour	The hour of the day when the highest traffic volumes occur at an intersection or roadway segment. The specific peak hour varies from intersection to intersection but generally occurs for a single hour between 7 and 9 a.m. for the a.m. peak hour and 4 and 6 p.m. for the p.m. peak hour.
railbed	The term used in instances where physical studies or analyses were conducted prior to the construction of the Interim Use Trail.
raptors	A general term for a bird of prey (hawk, eagle, owl, etc.).
resident fish	Fish that remain within a body of water throughout the year.
riffle	A turbulent area in a stream.
riparian area	An area along a stream or other water body that is transitional between aquatic and terrestrial environments. The microclimate, soil, and vegetation are typically influenced by both surface water and groundwater.
riparian vegetation	Plants growing within the riparian area (immediately along the stream channel). A well vegetated riparian zone provides shade and organic material to the stream, keeping stream temperatures at levels acceptable for salmonids and supporting the stream food web. Trees in the riparian area can eventually fall into the stream and contribute to the large woody debris described above.

Term	Definition
riverine flow-through wetlands	Wetlands located in the floodplains of streams. These wetlands experience overland flooding and seasonally high groundwater. Many of the riverine flow-through wetlands in the study area have been altered by construction. Many of these modified areas are associated with fish-bearing streams, while others do not provide fish habitat.
salmonid	General term for salmon, trout, and steelhead.
scour	Removal of gravel and finer materials from the substrate of a stream by fast-moving water.
shoreline management master program	A shoreline plan created by a local government in compliance with the Washington State Shoreline Management Act. The plan designates what types of uses may be allowed along different portions of the shorelines within the community.
slope wetlands	Wetlands located on hillside slopes with unidirectional water flow down the slope. The principal water sources for slope wetlands are groundwater and/or precipitation. These wetlands do not have the ability to retain water; they drain without observable bed, bank, or constrained outlets.
soft-surface trail	A portion of the trail that is covered with a type of surface other than asphalt, such as gravel.
state sensitive species	Any wildlife species native to Washington that is vulnerable or declining and is likely to become endangered or threatened throughout a significant portion of its range within the state without cooperative management or removal of threats.
state species of concern	Includes species listed as state endangered, state threatened, state sensitive, or state candidate, as well as species listed or proposed for listing by the USFWS or NOAA Fisheries.
streambank stability	Whether the streambank is physically stable or showing signs of erosion, sloughing, or slumping.
substrate	Materials that compose the bed of the stream. Gravel and small cobbles are generally the most suitable for spawning, while large amounts of sediment and fine materials may smother fish eggs and fill pools.
threatened species	A species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Term	Definition
turbidity	A measure of the amount of particles suspended in water. Increasing the turbidity of the water reduces the amount of light that penetrates the water column. High levels of turbidity are typically harmful to aquatic organisms.
understory	The shrubs and herbs that make up the lower layers of vegetation beneath the forest canopy.
urban growth area	Areas designated by counties in Washington state under the Growth Management Act within which urban growth is encouraged and outside of which growth can occur only if it is not urban in nature. Areas must be designated that are sufficient to accommodate projected growth for 20 years. Public services and utilities must be provided to serve the projected growth.
wetlands	Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
wetland buffers	Upland areas surrounding wetlands that provide protection to the biological, chemical, and hydrologic functions of the wetlands.
wetland functions	The functions of wetlands are the "things that wetlands do" such as filtering sediment from storm runoff, ameliorating flooding, providing wildlife habitat, etc.
wetland mitigation bank	A wetland area that is created, restored, or enhanced to create a "bank" of wetland "credits" prior to impacts occurring. The credits can then be "withdrawn" to compensate for unavoidable impacts to wetlands resulting from projects at other sites in the future.

Chapter 10

Acronyms And Abbreviations

AASHTO American Association of State Highway and Transportation Officials

ADA Americans with Disabilities Act

AWDT average weekday daily traffic

BMPs best management practices

BNSF Burlington-Northern Santa Fe

BP Before Present

CAG Citizen Advisory Group

CEQ Council on Environmental Quality

CFR Code of Federal Regulations

cfs cubic feet per second

CIP Capital Improvement Plan

Corps U.S. Army Corps of Engineers

CRDB Cultural Resources Database

CWA Clean Water Act

cy cubic yard

dB decibel

dBA A-weighted decibel

DHHS U.S. Department of Health and Human Services

DNRP King County Department of Natural Resources and Parks

EA environmental assessment

Ecology Washington State Department of Ecology

EDNA Environmental Designation for Noise Abatement

EIS environmental impact statement

EPA U.S. Environmental Protection Agency

ESA Endangered Species Act

FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration

FONSI Finding of No Significant Impact

GIS geographic information system

GMA Washington State Growth Management Act

HGM hydrogeomorphic

IDT interdisciplinary team

ISD Issaquah School District

ISTEA Intermodal Surface Transportation Efficiency Act

KCC King County Code

LID Local Improved District

LOS level of service

LWSD Lake Washington School District

mph miles per hour

NARPO National Association of Reversionary Property Owners

NEPA National Environmental Policy Act

NESSWD Northeast Sammamish Sewer and Water District

NOAA National Oceanic and Atmospheric Administration

NPDES National Pollutant Discharge Elimination System

PEM palustrine emergent

PFO palustrine forested

PGIS Pollutant-generating impervious surface

PL Public Law

PSRC Puget Sound Regional Council

PSS palustrine scrub-shrub

RCDG Redmond Community Development Guide

RCW Revised Code of Washington

RM river mile

SCCP spill containment and countermeasures plan

SEPA State Environmental Policy Act

SLM sound level measurement

SLS&E Seattle, Lake Shore & Eastern

SMC Sammamish Municipal Code

SPWSD Sammamish Plateau Water and Sewer District

SR state route

STA station

SWPPP stormwater pollution prevention plan

TEA-21 Transportation Equity Act for the 21st Century

TESC temporary erosion and sedimentation control

TIP Transportation Improvement Program

TWLTL two-way left-turn lane

USC United States Code

USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

U&A usual and accustomed

vpd vehicles per day

WAC Washington Administrative Code

WDFW Washington Department of Fish and Wildlife

WDNR Washington Department of Natural Resources

WNHP Washington Natural Heritage Program

WRIA Water Resource Inventory Area

WSDOT Washington State Department of Transportation

Chapter 11 Draft EIS Comments and Responses

Business	
Item Code	Item Name
B-001	Waverly Hill Club, Inc.
B-002	Cascade Bicycle Club
B-003	Human Powered Transportation
Government Agency	
Item Code	Item Name
G-001	King County
G-002	<u>EPA</u>
G-003	City of Redmond
G-004	City of Sammamish
G-005	City of Redmond
Individual	
Item Code	Item Name
I-001	Manning, Paul
I-002	Beres, Warren
I-003	Goldman, Peter
I-004	Nizlek, Martin
I-005	Harsh, Thomas
I-006	Olsen, Frank

I-007	<u>Duangchan</u>
I-008	Hogshead, S.
I-009	Cairns, Billie
I-010	Pasko, Bente
I-011	Gauthier, Paul
I-012	Thomas, Jacklyn
I-013	Browning, Jim
I-014	Justice, Barb
I-015	Ball, Conrad
I-016	Kosenkranius, Leo
I-017	Burns, Dane
I-018	Karnes, Nancy
I-019	Rupple, James
I-020	Barker, Kipp
I-021	Crawford, Dan
I-022	Rittenhouse, Anne
I-023	Robertson, Kathy
I-024	Weil, Steven
I-025	Walters, Richard
I-026	Willman, Ray
I-027	Anderson, Jim
I-028	Jansky, Kate
I-029	Porter, Carry

I-030	MacInnes, Betsy
I-031	Bresko, Debbie
I-032	Ball, Conrad 2
I-033	Thomas, Gary
I-034	Story, Franklin
I-035	Akins, Mark
I-036	Leibfried, Lisa
I-037	Andrew, Kevin
I-038	West, Ral
I-039	Shimogawa, Earl
I-040	Nicholson, Allen
I-041	Wall, John
I-042	Hogenhout, Arnold
I-043	Matte, D.
I-044	Swift, Kate
I-045	Leavitt, Jim
I-046	Matte, Dawn
I-047	Platzner, Anne
I-048	Jeppesen, Eric
I-049	O'Brien, David
I-050	Anderson, Sharon
I-051	Dex, John
I-052	Carnay, Edwin

I-053	Johnson, Graham
I-054	Rodriguez, Joe
I-055	Palmer, Matt
I-056	Ulrich, Kimberly
I-057	Bachelor, Suzanne
I-058	Bongiani, Perry
I-059	Steinmetz, Andy
I-060	Sage, Dave
I-061	Miller, Bob
I-062	Miotke, Jim
I-063	Smith, Adrian
I-064	Hooper, Steve
I-065	Davis, James W.
I-066	Nomi, Margaret
I-067	Shuey, Jeff
I-068	Leclair, Mark
I-069	Koch, Jeff
I-070	Lamont, Dave
I-071	Leahy, Mike
I-072	Gross, Michelle
I-073	Sehorn, Lorraine
I-074	Mohr, Allison
I-075	Lewis, Cris

I-076	Jennison, Bob
I-077	Suhler, Mary
I-078	Mohn, Craig
I-079	Godo, Kristin
I-080	Mavros, Julie
I-081	Crosley, John
I-082	Liebert, Carlyn
I-083	Barnes, Bill
I-084	Backstrom, Becky
I-085	Hartman, Mark
I-086	Price, Mitch
I-087	Mintz, Elaine
I-088	Lewis, Dan
I-089	Cheg
I-090	Huckins, Brad
I-091	Kohlmeier, Dave
I-092	Reiss, Amy
I-093	Lehman, Brendon
I-094	<u>D'Alo, Stelio</u>
I-095	Butzberger, Rick
I-096	Weise, Daniel
I-097	Paul, Jeff
I-098	King, Janet

I-099	Stobie, Keith
I-100	Bachelor, John
I-101	Ward, Richard
I-102	Quinn, Paul
I-103	Lautman, Chris
I-104	Johnson, Eric
I-105	Dennis, John
I-106	Hildebrand, Phil
I-107	Firth, Ian
I-108	Loya, Richard
I-109	<u>Varner, Giles</u>
I-110	Riley, Jadine
I-111	Mollick, Don
I-112	<u>Sherry</u>
I-113	<u>Hills</u>
I-114	<u>Thiede</u>
I-115	<u>Beyer</u>
I-116	Krueger
I-117	<u>Andrews</u>
I-118	<u>Bird</u>
I-119	Anderson
I-120	Wolf
I-121	Sledd

I-122	<u>Comer</u>
I-123	<u>drjaydc</u>
I-124	<u>Kloba</u>
I-125	<u>Jarvi</u>
I-126	<u>Migden</u>
I-127	<u>Koetke</u>
I-128	<u>Grubbs</u>
I-129	<u>Earhart</u>
I-130	<u>Dye</u>
I-131	<u>Herb</u>
I-132	Bottomley
I-133	<u>Cannon</u>
I-134	Ayers
I-135	<u>McMurdo</u>
I-136	Morrow
I-137	<u>Baker</u>
I-138	Ayers
I-139	<u>Betts</u>
I-140	Armstrong
I-141	<u>Hanna</u>
I-142	Scott
I-143	<u>Chace</u>
I-144	<u>Egler</u>

I-145	<u>Platzner</u>
I-146	Weir
I-147	Radley
I-148	Robinson
I-149	Bredeweg
I-150	<u>Shaver</u>
I-151	Rosenthal
I-152	<u>Horvath</u>
I-153	<u>Alexis</u>
I-154	Brockway
I-155	Rundle
I-156	Garrity
I-157	<u>Miller</u>
I-158	<u>Crispin</u>
I-159	<u>Norlen</u>
I-160	<u>Morel</u>
I-161	Wissler
I-162	<u>Zucker</u>
Hearing Transcript	
Item Code	Item Name
H-001	Opening Statements
H-002	<u>Nizlek</u>
H-003	Ball

H-004	<u>Olson</u>
H-005	Gorremans
H-006	<u>Kosenkranios</u>
H-007	<u>Morris</u>
H-008	<u>Zucker</u>
H-009	<u>Hamilton</u>
H-010	<u>Hogshead</u>
H-011	<u>Thomas</u>
H-012	<u>Cairns</u>
H-013	<u>Intermission - Second Opening Statement</u>
H-014	<u>Hobbs</u>
H-015	<u>McGrath</u>
H-016	<u>Pasko</u>
H-017	Cross
H-018	<u>Justice</u>
H-019	<u>Grillo</u>
H-020	<u>Stobie</u>
H-021	Goldman
H-022	Closing Statements



East Lake Sammamish Trail Public Hearing November 9, 2006 Public Comment Form

	·
	Please leave Comment Form with sign-in sheet.
	Name (optional) Waverly Hills Club, Inc Address P.O. Box 427
	City
	Email deug hart@speakersy. net
	Comment We have a private beach that has been used by the
B-001-001	homeowners association since the 1960's. Trany final plans
	we would like to see over bleached parking area protected
,	from public use and/or access. The area in question is
2	located at 8E 33rd. a public paling lot and/or
ž	bathroom facilities should be located on the east side
,	the existing rail hed, leaving our heach alone.

B-001-001

The parking and restroom facilities proposed at SE 33rd Street would be on the east side of the Corridor Alternative, away from the beach area. No public access to or use of the beach is proposed at this location.

SEPAcomments, FMD

From: Patrick McGrath [patrick.mcgrath@cascadebicycleclub.org] Sent: Tue 12/19/2006 4:02 PM

To: SEPAcomments, FMD

Cc: 'Peter Hartmaier'; 'Bill Moritz'; 'David Hiller'; 'Dennis Neuzil'; JIM HUNT; 'Joel Siderius'; 'Mel Roberts'

Subject: East Lake Sammamish Trail DEIS comments

Attachments:

Thank you for the opportunity to comment on the draft Environmental Impact Statement for the East Lake Sammamish Trail. These are the official comments of the Cascade Bicycle Club.

Founded in 1979, Cascade Bicycle Club (CBC) is a 6,700-member, non-profit organization based in Seattle, Washington, serving more than half a million cyclists in the Puget Sound community. The club is operated by a nine-member volunteer Board of Directors, 14 professional staff, and thousands of volunteers. More Information about CBC's programs is available online at www.cascade.org or by calling 206-522-3222.

Comments:

B-002-001

CBC supports the "Corridor" alternative. Only the Corridor alternative yields a trail that
adequately balances the safety and convenience of those who use and cross the trail.

B-002-002

CBC encourages the County to minimize the number of cross-section variations of the trail. All cross-section variations should be justified on safety or engineering grounds.

B-002-003

3. Please limit the number of bollards on the trail. Bollards can be a safety hazard for cyclists and should only be used when there is a documented problem of motor vehicles driving onto the trail and less hazardous mitigation treatments have failed in their place. The Washington State Department of Transportation Design Manual also states that bollards should not to be used to slow or divert trail traffic.

B-002-004

4. Keep the trail open 24 hours a day. Many users of the East Lake Sammamish Trail will be commuters traveling to and from work. In the winter hours, one or both trip legs for such users will likely take place before or after daylight hours. A rule "closing" the trail is unreasonable, will not reflect the usage patterns of many trail users, and invites disregard of County policies.

Cascade Bicycle Club is pleased to be an active partner in the East Lake Sammamish Trail

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

B-002-001

Your comment is acknowledged.

B-002-002

Although five typical sections are proposed for the Corridor Alternative, the paved portion of the trail is always 12 feet wide and the horizontal geometry is designed to accommodate the posted speed for bicycle use. The variations in the typical sections pertain to the shoulder width and configuration, which are intended to provide better separation of slower speed uses from higher speed uses. In this manner, the portion of the trail used by most bicyclists (the paved portion) is intended to be relatively predictable. King County will revisit the number of transitions between cross sections in the design phase of the project.

B-002-003

Bollards will not be used to slow or divert trail traffic. Instead, they are proposed to prevent vehicular traffic from intentionally or inadvertently driving onto the trail. Consistent with its policy on other trails in the regional system, King County is proposing bollards at each intersection with a driveway or road. Bollards and the associated spacing will be based on King County standard details and layout, which are consistent with recommendations for "barrier posts" in the AASHTO Guide for the Development of Bicycle Facilities.

B-002-004

King County understands that people who use the trail for commuting would be constrained by the dawn to dusk hours of operation. These hours are consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system. However, King County has the authority to tailor specific hours of operation for each facility within its regional system, including trails. To do so, under King County Code section 7.12.030, the

D	2	- C	9
Page	4	OI	7

planning process. Please consider us a resource as you move forward with the EIS.

Patrick McGrath
Advocacy Organizer
Cascade Bicycle Club
p: 206.957.0689
f: 206.522.2407
www.cascade.org
"Creating a Better Community through Bicycling"

County would need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, but it could propose to do so in the future if demand warrants.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

SEPAcomments, FMD

Bill Moritz [moritz.we@gte.net] From:

Sent: Mon 12/18/2006 10:48 PM

To:

Auld, Gina; SEPAcomments, FMD moritz.we@gte.net

Cc: Subject:

Comments on E. Lk. Sam Trail DEIS

Attachments: Comments on Draft EIS ELST Oct 2006.doc(63KB)

Gina -- The power outage (which continues at my house) delayed my ability to get this out. Hopefully the County will find the comments helpful.

Let me know if you have any questions.

Bill Moritz

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

William E. Moritz, Ph.D. Human Powered Transportation 16901 – 105th Ave NE Bothell WA 98011-4033

December 17, 2006

Gina Auld, Project Manager King County Facilities Management Division King Street Center 201 South Jackson Street Seattle WA 98104

Dear Ms. Auld,

Ref: Draft EIS - East Lake Sammamish Trail

Thank you for making sure that I received the CD copies of the DEIS on the trail. I have completed my review of that material and offer the following summary comments. I have attached more detailed information in support of some of these points as well as additional comments that I hope the County will find helpful in completing the EIS and in developing the final trail design.

B-003-001

ALTERNATIVES: I fully support the Corridor Alternative. As detailed in the attachment, the East A and B alternatives are unacceptable because of their cost and environmental impact, failure to utilize the right of way, decreased safety, and failure to conform with state law and AASHTO. Placing the trail adjacent to the Parkway for 4 miles is completely uncalled for when we have a public right of way (91% of which is 100-200 feet in width) available for use. The Interim Use and No Action alternatives are unacceptable since they fail to provide a high quality trail that will be a vital part of the regional trail system.

B-003-002

CROSS SECTION CHANGES: The DEIS suggests that there would be 98 changes in the trail cross section along the 11 miles of trail! The DEIS states that at EVERY driveway the trail will be reduced to its minimum width. This is totally uncalled for and a waste of public money. From the Plan Sheets it appears that many of the transitions will be quite short (~100-200 ft). Further, fully 28 involve a change of just 12 inches! I urge the County to critically evaluate the necessity of having that many transitions.

B-003-003

BOLLARDS: As explained in great detail in the attached, placing known collision hazards in the middle of this trail is extremely dangerous and unnecessary. Documented experience on other King County trails reveals that crashes involving such things as bollards are the second most common type of accident. AASHTO does NOT require or recommend placing bollards at private driveway crossings. Recently there has been one death and another serious injury in the area after experienced cyclists hit bollards in the middle of similar trails.

B-003-001

Your support of the Corridor Alternative has been noted.

B-003-002

Although five typical sections are proposed for the Corridor Alternative, the paved portion of the trail is always 12 feet wide and the horizontal geometry is designed to accommodate the posted speed for bicycle use. The variations in the typical sections pertain to the shoulder width and configuration, which are intended to provide better separation of slower speed uses from higher speed uses. In this manner, the portion of the trail used by most bicyclists (the paved portion) is intended to be relatively predictable. King County will revisit the number of transitions between cross sections in the design phase of the project. Each decision will balance cost, safety, and other considerations.

B-003-003

Consistent with King County policy on other trails, bollards are proposed to prevent vehicular traffic from intentionally or inadvertently driving onto the trail. Thus, King County is proposing bollards at each intersection with a driveway or road. Bollards and the associated spacing will be based on King County standard details and layout, which are consistent with recommendations for "barrier posts" in the AASHTO Guide for the Development of Bicycle Facilities.

December 17, 2006

Page 2

B-003-003

A strict reading of the DEIS would indicate that bollards are only planned at <u>public street</u> intersections with the trail. (Their use even there is highly problematical.) However, bollards have been installed at just about EVERY trail crossing along the interim trail suggesting that the County actually intends to place them at private driveways as well.

Bollards should only be used where there is a documented problem with motor vehicle encroachment AND when other less dangerous methods have been tried and failed AND when it can be shown that installing such devices will indeed result in preventing unauthorized access.

B-003-004

TRAFFIC CONTROL: I fully support the proposed placement of STOP and YIELD signs for motorists crossing the trail at ALL of the private driveways. As stated in the DEIS, this is completely consistent with the MUTCD and I look forward to the County applying the same standards to all of their trails. I do note that such an approach has not been uniformly applied along the interim trail.

B-003-005

DAYLIGHT ONLY USE: Such a restriction will greatly diminish the utility of this trail for bicycle commuting several months each year. The County should be actively encouraging such alternatives in the interest of reducing energy use and improving the health of our residents. Indeed, given the multitude of access points it would impossible to actually "close" the trail in any effective manner. This restriction should be removed from the DEIS and plans for the operation of the trail once built.

Thank you for the opportunity to review this DEIS. I hope that my comments are helpful in resolving the issues I have raised. If any of my points are unclear, please feel free to contact me. Finally, please add my name/address to receive any further announcements or notices of actions regarding the development of this trail. I do look forward to using it in the near future.

Sincerely,

/s/ William E. Moritz

(The power outage has prevented me from printing and signing this letter.)

Attachment: Detailed comments on Draft EIS

B-003-004

Your comment is noted.

B-003-005

King County understands that people who use the trail for commuting would be constrained by the dawn to dusk hours of operation. These hours are consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system. However, King County has the authority to tailor specific hours of operation for each facility within its regional system, including trails. To do so, under King County Code section 7.12.030, the County would need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, but it could propose to do so in the future if demand warrants.

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Detailed comments on Draft EIS East Lake Sammamish Master Plan Trail – October 2006

B-003-006

Class 1 bikeway

Sec 1-1 (pg 1-1): Refers to a 'Class 1 bikeway.' This terminology is no longer in use. AASHTO dropped this designation by at least 1981 and WSDOT has not used it since at least May 2001. Indeed, the reference to the WSDOT Design Manual (pg 6-2) implies a 2006 date but then says 'updated 1995.' The May 2001 WSDOT manual adopts the AASHTO terminology of 'shared use path' to describe facilities such as are being proposed here. Additional references to 'Class 1 bikeway' appear on pages 2-46 and 3.11-26.

Trail Cross Section Transitions

B-003-007

Summary (pg S-17): Discussing the various cross sections—"The Corridor Alternative ... transitions to the narrowest configuration ... for each_driveway and road crossing for safety reasons..." (Emphasis added.) I was unable to find any analysis or justification for the conclusion that narrowing the trail at each_driveway would increase safety. To the contrary, I would argue that such transitions will DECREASE safety.

Trail crossings represent the places where the most dangerous conflicts might occur — between trail users and motor vehicles crossing the trail. Narrowing the trail to 12 feet + 2-2 ft shoulders forces all users onto the paved path at these critical junctions. Further, providing a wider trail at the driveways can increase sightlines — always a good thing from a safety standpoint.

B-003-008

Using the Plan Sheets in Volume II, I attempted to document each transition. The list that follows presents this information from south to north with the letters corresponding to cross sections shown in Figures 2-2 to 2-8.

The data reveal that there are 98 transitions over the 11 mile length of the trail – nearly 9 per mile or one every ~590 feet on average. But averages can be deceiving because many of these sections are very short. Time did not permit a detailed analysis but I have attempted to indicate short sections (~200 ft) with a single asterisk (e.g. A*) and VERY short sections (~100 feet) with a double asterisk (e.g. E**).

When the number of each transition is counted an interesting fact emerges. Two of them occur 14 times: D (18') to E (19'), and E (19') to D (18'). So 28 of the changes involve a mere 12 inches – the difference being the width of the lakeside gravel shoulder. Is it really

B-003-006

The language in the EIS has been changed to reflect the changes in terminology.

B-003-007

You are correct in observing that the trail transitions to the narrowest typical section at crossings with roads and driveways. These transitions are intended to improve safety given existing conditions along the corridor. The existing conditions of concern are proximity to adjacent roadways and intersections, and the horizontal and vertical geometry of many of the driveways the trail intersects.

Under the preferred alternative, which locates the trail in the railbanked corridor, the alignment runs parallel to East Lake Sammamish Parkway. AASHTO calls intersections in this scenario "midblock crossings." AASHTO recommends that such crossings be far enough away from existing intersections between roadways to be clearly separate from the activity that occurs as motorists approach these intersections. If, as you suggest, wider typical sections are applied at intersections with roads and driveways, the trail would often be in closer proximity to intersections with the Parkway, potentially interfering with vehicle queuing and turning motions at these intersections.

In many places, the trail is crossing driveways that have relatively steep grades. The wider these trail crossings, the more re-grading of driveways would be necessary to keep them functional. The driveways become even steeper; thus, vehicle stopping distances become more of a concern.

In many places, the trail is crossing driveways at odd angles, which when combined with the wider trail and steeper grades of the driveways, can actually decrease sight distances.

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B-003-008

worth it or necessary to create a different cross-section at these locations? Such an approach has to cost more and unnecessarily complicate the construction task.

I have several suggestions: 1) reduce the number of cross sections to the minimum necessary to do the job; 2) eliminate as many short and very short sections as possible, and 3) do NOT change the cross section at each driveway unless there are other reasons to do so

One other observation on C, D, and E: Having horses use the gravel path immediately adjacent to the paved trail will result in gravel being kicked onto the pavement. This will degrade the quality of the experience for cyclists and to some extent pedestrians. Further degradation will result from the deposition of horse feces on the "pedestrian/equestrian" shoulder. These problems will increase maintenance requirements.

B-003-009

Later in the document (Chapter 3) the desirability of narrowing the trail to protect sensitive environmental areas like wetlands is raised. This is certainly a worthwhile goal but hopefully it will be done prudently.

Alternatives

B-003-010

Sec 2.5 (pg 2-10): The *No Action* alternative is unacceptable. This corridor represents a very valuable public resource and should not be wasted. A trail has been planned here for decades and would serve as a vital part of the regional trail system. It will provide both recreation and transportation functions to the nearby residents as well as to the larger community.

B-003-011

Continuation of Interim Use would seriously limit the usefulness of the trail. The gravel surface is not compatible with narrow-tired bicycles – the type often used by commuters. The narrow trail width without shoulders is not a long-term solution. Such a facility would not adequately utilize the public investment in the right-of-way.

B-003-012

East A and B are totally unacceptable for the following reasons:

- Cost These are estimated to cost twice as much as the Corridor alternative. This
 would not be an appropriate use of public funds to placate the desires of a few
 lakeside homeowners.
- Environmental Impact It appears from the plans that there are 7 segments where
 the trail would be diverted from the rail bed and placed immediately adjacent to the
 Parkway. This would require 14 transitions some of which appear quite long which
 in turn would require substantial earth moving and the construction of retaining
 walls.
- Taking of private property and homes The EIS states that as many as 61 partialand 18 full-parcel acquisitions would be required along with relocating as many as 15 families. The \$22M cost estimate is probably low.

Finally, a narrower crossing of driveways and roads, consistent with crosswalks at intersections, provides greater predictability and control at intersections.

While there are five typical sections applied for the Corridor Alternative, all these sections have a continuous 12-foot pavement width that is designed to accommodate and provides predictability for the higher speed bicycle use. The difference between these sections is the width of the soft-surface shoulders and the presence or absence of a separated soft-surface trail. As discussed in the EIS, the wider shoulder and separated soft-surface trail provide better separation of different trail uses and thus improve trail safety. However, in many places, King County has narrowed the trail as needed to minimize project impacts to adjacent resources and uses. The number of transitions reflects the presence and proximity of these adjacent resources and uses. By definition, a "good fit" trail design that balances the interests and safety of all trail users and adjacent land uses will differ from a hypothetical "ideal fit" design that serves only one type of trail user or only serves adjacent land uses. The proposed sections for the Corridor Alternative demonstrate this truism.

B-003-008

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

For the Redmond segment, where horses are allowed, King County

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B-003-012

- Utilization of public right-of-way Alternative B would effectively forfeit more than 36% (~4 miles) of the public right-of-way to the private use of the adjacent landowners. That is simply unacceptable.
- Violates state law Placing such a trail immediately adjacent to the Parkway would require northbound cyclists to ride, effectively, on the left side of the road. This would violate RCW 46.61.770 which requires riding on the right side of the road.
- Is not in conformance with AASHTO The 1999 Guide for the Development of Bicycle Facilities lists 9 reasons (pg 34) why such facilities are not desirable. Further, on page 35 they state that when it is not possible to separate the trail from the adjacent roadway by at least 5 fect (for example DEIS Figure 2-10, Section I), then a physical barrier at least 42 inches high should be installed. No such barrier is proposed and would in fact be impractical due to the sightlines needed for motor vehicle egress from the private driveways west of the Parkway.
- Conflicts with driveway traffic Motor vehicles wishing to gain access to the Parkway, particularly northbound, will likely end up blocking the trail while they wait for a break in traffic. Trail users will either have to wait or maneuver in front or behind the stopped vehicle to continue on their way. This may place them in imminent danger if the motorist is too focused on Parkway traffic and unaware of their presence.
- Trail User Safety A two-way path immediately adjacent to the Parkway will
 seriously jeopardize trail user's safety. Northbound motor vehicles wishing to turn
 left into a driveway will be focused on the southbound Parkway traffic. Once a gap
 appears they will be inclined to quickly accelerate into the driveway entrance. They
 are unlikely to see a northbound cyclist who may be approaching from behind on
 that driver's left at 15 MPH (or more). They may also miss a southbound cyclist.
- Bike lanes Secs 2.5.2.1 and .2 (pg 2-24) indicate that bike lanes (which currently do NOT exist in the Parkway now—only a wide shoulder) will be present. These bike lanes should be provided regardless of which alternative is selected. (This is particularly critical if nighttime use of the trail is prohibited [see below].) The presence of southbound cyclists in the bike lane AND bi-directional bike traffic (along with perhaps a pedestrian and a horse or two in East B) in the immediately adjacent trail will further complicate the situation at each driveway entrance.

Given all of the listed reasons, the County must reject both the East A and B alternatives.

B-003-013

The Corridor alternative is by far the best. It will provide a full-service, shared use path that utilizes the public investment in the railroad right-of-way. It will cost ~50% of what the East A and B alternatives might. It would be far safer. It would have the potential to facilitate non-motorized commuting and utilitarian trips by bicycle (assuming the nighttime restriction is dropped). Several of the proposed cross sections would provide a separate path for 'wheels and heals.' Finally, the Corridor alternative would be consistent with the other urban regional trails in the area.

B-003-014

Traffic Control

Sec 2.5.6.3 (pg 2-31): For Type 1 crossings (Figure 2-12), the paths/sidewalks linking the trail to the crosswalk should be the same width as the trail -12 feet. A narrow

acknowledges that some incremental additional maintenance may be required, depending on the frequency and intensity of equestrian use that actually occurs there.

B-003-009

King County intends that the project design will comply with local, state, and federal regulations concerning wetlands and other sensitive areas.

B-003-010

King County concurs that the No Action Alternative would not meet the County's objectives. The Corridor Alternative continues to be King County's preferred alternative.

B-003-011

King County concurs that the Continuation of the Interim Use Trail Alternative would not meet the County's objectives. The Corridor Alternative continues to be the County's preferred alternative.

B-003-012

Evaluations in the Draft EIS support the assertion that the East Alternatives would cost more and have substantial impacts on private property. The Corridor Alternative continues to be the County's preferred alternative.

B-003-013

Your comment is acknowledged. King County has selected the Corridor Alternative as the preferred alternative.

B-003-014

The width of the connecting paths will vary depending on the situation. For example, in some cases, standard 5-foot-wide sidewalks may be

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B-003-014

sidewalk (as depicted) will not safely accommodate mixed-mode trail traffic as well as users of the sidewalk who are not using the trail.

B-003-015

The proposed placement of STOP and YIELD signs on the private driveway crossings is the proper design (Types 3 and 4). The trail is a public facility and thus has priority over private crossings. As noted, these treatments are in conformance with the MUTCD.

B-003-016

Under Type 5 (East A and B) crossings it is proposed that STOP signs be placed for trail traffic at each private driveway. This is ridiculous on its face and might well be confusing to southbound Parkway motorists since they too would see the STOP sign and might think it applies to them. The reality is that cyclists will not obey these STOP signs since the vast majority of times they encounter them there will not be any motor vehicles about to cross the trail. (If one has any doubt, look at the overwhelming lack of compliance in Lake Forest Park with numerous STOP signs at private driveways.)

B-003-017

Sec 3.11.3.1 (pg 3.11-16): The last paragraph states that the signing plan shown on figures 2-12 through 2-17 (Sec 2.5.6.3) are similar to existing conditions for the *No Action* and *Continuation of Interim Trail Use* Alternatives. This is not quite true. A detailed survey conducted in July revealed that there was one 4-Way STOP and SIX trail STOPs at private driveway crossings. One would hope that if the *No Action* or *Continuation* Alternatives is selected that these crossings would be changed to bring them into compliance with the signing plan.

B-003-018

Placement of traffic control signs: The document does not explicitly discuss the placement of signs adjacent to the paved portion of the trail. Figures 2-12 through 2-16 schematically show many such signs. It is critical that ALL such signs be placed in conformance with AASHTO's *Guide* figure 17 on page 35. (See also, 2003 MUTCD figure 9B-1 on page 9B-2.) Specifically, the lower left corner of all signs (not the posts, but the signs) shall be placed at least 3 feet horizontally (and no more than 6 feet) from the outside edge of the paved portion of the trail and no lower than 4 fect vertically (nor higher than 5 feet). MANY existing signs on the County's regional trails do NOT meet this standard and thereby create an unnecessary collision hazard for trail users.

B-003-019

Daylight use only

Sec 2.5.6.8 (pg 2-43): States that because the entire trail will not be illuminated, it "would be closed during hours of darkness for safety reasons." Such a restriction is totally uncalled for and, if imposed, will severely limit the usefulness of the trail for commuting purposes by cyclists. Given our northern latitude, during the winter, sunrise may not occur until nearly 8AM and sunset approaches 4PM. Not many of us have the luxury of a 9+ to 3- job!

It is interesting that the King County Code section dealing with trail use (7.12.295) does NOT state that the County trails are closed during darkness. Indeed, paragraph H.7 explicitly states that cyclists must display lights when using the trails after dark! Finally, it

sufficient because bicycle lanes are also provided on the roadway. These decisions will be refined during the design phase of the project, consistent with applicable design standards which, depending on the type of facility, may include AASHTO, the WSDOT Design Manual, or details and standards of the local jurisdiction.

B-003-015

Stop and yield signs (Types 3 and 4) have been recommended at low-volume driveways that are located far enough away from East Lake Sammamish Parkway to allow a vehicle to stop prior to reaching the trail. At these locations, trail user volumes will be much higher than vehicle volumes at the intersection, and trail users should be given priority. This signing approach is consistent with Section 9B.03 of the *Manual of Uniform Traffic Control Devices*, Federal Highway Administration, 2003 Edition.

B-003-016

Traffic control at Type 5 locations has been recommended to provide a safe crossing for both vehicles and trail users. Stop signs are recommended for trail users at intersections with insufficient distance for a vehicle to safely stop after making a left or right turn from East Lake Sammamish Parkway. A distance of 30 feet or more is generally necessary to allow a vehicle to come to a complete stop prior to reaching the trail based on stopping sight distance standards in A Policy on Geometric Design of Highways and Streets (AASHTO, 2001) and information in Trail Intersection Design Guidelines; (North Carolina Highway Safety Research Center, 1996). While we understand that some trail users may choose to disobey these stop signs, the County believes that adhering to established trail and intersection design standards is the best way to reduce risk at these intersections. Careful placement of these stop signs will minimize possible motorist confusion. The County believes that the benefits of potentially avoiding serious accidents between vehicles and trail users outweigh the minor

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B-003-019

would be totally impractical to try to enforce such a closure given the multiplicity of access points. The proper position is that all of the regional trails are open for use 24 hours and that all users, cyclists, skaters and pedestrians, should carry lights for safety. State law (RCW 46.61.780) already requires bicycles to have front lights and at least a rear reflector when operated at night. (Daylight use is also listed in Appendix A, Page 4.)

B-003-020

Bollards

Sec 2.5.6.10 (pg 2-44): It states that bollards (posts) 5 feet or further apart will be located at trail and roadway crossings. Bollards present very serious safety hazards to trail users, especially cyclists. Detailed user surveys done on the Burke-Gilman and Sammamish River Trails have repeatedly identified collisions with fixed objects (bollards and sign posts) as the SECOND most common crash type. (These surveys are the same ones cited in Section 3.7.2.2.)

A strict reading of the statement in the EIS would lead the reader to conclude that bollards will ONLY be installed on this trail at public street crossings and NOT at the ~66 private driveways and access roads that exist along this trail corridor. Roadway is defined in the 2003 MUTCD (Sec 1A.13) as "that portion of a highway improved, designed, or ordinarily used for vehicular travel" while 'highway' is "a general term for denoting a public way for purposes of travel by vehicular travel." (Emphasis added.) Further, the definition of 'intersection' (as opposed to 'crossing' [above] which is not defined in the MUTCD) specifically excludes driveways ["the junction of an alley or driveway with a roadway or highway shall not constitute an intersection" (Emphasis added.)]. Thus, driveways are NOT roadways!

It should be noted that AASHTO's *Guide* (page 57) specifically says: "Shared use paths **may** need some form of physical barrier at **highway intersections** to prevent unauthorized motor vehicles from using the facilities." (Emphasis added.) Thus bollards are not **required** and, as noted in the preceding paragraph, driveways are not **highways**.

Bollards can be deadly. Last year a cyclist in Pierce County died as a result of hitting a bollard. Another cyclist on Mercer Island was recently paralyzed after hitting a bollard on the I-90 trail. Both of these individuals were very experienced riders.

The supposed purpose for installing these dangerous devices is to restrict motor vehicle access to the trails. Yet in many locations where they are used a motor vehicle can easily go around the bollard(s) and gain access to the trail. Further, in places where they have not been installed or where the "knockdown" type have been destroyed, motor vehicle access doesn't seem to be a problem. Specific examples exist on the Burke-Gilman Trail in Lake Forest Park and elsewhere.

The EIS text at this section refers to using either removable or knockdown center bollards to provide emergency and maintenance access. Regarding removable bollards – unless they are physically locked in place they will not prevent anyone from simply pulling up the bollard and gaining access to the trail thus thwarting their supposed reason for being there.

inconvenience of requiring trail users to stop. Trail users who choose to ignore or disregard stop or other signs do so at their own risk.

B-003-017

During the construction phase of the Interim Use Trail Project, trail neighbors petitioned the County to reconsider the trail signage configuration at a handful of locations. In a few of these cases, the County concurred and changed the configuration. These locations will be reviewed again as part of the Master Plan Trail design, and site-specific decisions will be made based on the relative volumes of traffic at the intersection, sight distance considerations, and other criteria, including but not limited to those set forth in the *Manual of Uniform Traffic Control Devices*, Federal Highway Administration (3rd Edition, 2003), *Guide for the Development of Bicycle Facilities* (AASHTO, 1999), and *A Policy on Geometric Design of Highways and Streets* (AASHTO, 2001).

B-003-018

Comment acknowledged. King County intends to follow AASHTO and MUTCD standards in placing signs along the trail. Issues regarding sign placement along other trails are outside the scope of this EIS. However, if you have concerns about specific signs on other trails, please contact Robert Foxworthy, King County Regional Trails Coordinator, at (206) 263-6206 or robert.foxworthy@metrokc.gov.

B-003-019

King County understands that people who use the trail for commuting would be constrained by the dawn to dusk hours of operation. These hours are consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system. However, King County has the authority to tailor specific hours of operation for each facility within its regional system,

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B-003-020

While knockdown bollards appear to be a 'safer' alternative to the rigid metal or wooden posts commonly used, they have their own set of problems. First, by their very nature they do NOT keep unofficial motor vehicles from gaining access to the trail! Second, as the experience in Lake Forest Park on the BGT has graphically demonstrated, such devices are not very robust and are easily damaged. When they are broken they leave a rather large block of hard rubber that can easily cause a cyclist to crash if hit by their front wheel. Finally, there have been incidents in Lake Forest Park where children have used those flexible bollards to harass cyclists by pulling them off to the side and then releasing them as the cyclist passes.

While it is laudable to state that "the outer bollards will be ... located off the edge of the paved surface," this would mean that, with a 12 foot paved trail, the gaps between bollards would be almost 6 feet wide. This would permit many small and medium sized motor vehicles to simply drive through the gap!

Next, traffic engineers do NOT install rigid objects in the middle of or adjacent to the side of roadways because they represent a serious collision hazard to users of those roadways. Indeed, where unavoidable hazards exist (like at bridge abutments), they often install crash absorbing systems.

Finally, installing hazardous obstructions at trail intersections is precisely the WRONG place for them. Trail users, especially cyclists, must pay particular attention to the possibility that a motor vehicle might suddenly appear in their path. Having to also avoid a very real threat (the bollard) complicates their task unnecessarily.

Given all of the above, no bollards of any type should be used on this trail. Intersections should be posted with a NO MOTOR VEHICLES ALLOWED sign. If incursions become a problem, this can be backed up with a stiff fine as is done in Oregon - \$250.

(Bollards are also mentioned in Appendix A, page 5.)

B-003-021

Equestrian Access and Use

In general I support allowing equestrians to use the regional trails when it is practical for them to do so. However, the DEIS does not seem to address the access issue. No where can I find a discussion of how equestrians will access this trail. The proposed parking facilities do not appear to have a horse unloading platform nor do they seem designed to accommodate horse trailer parking. Are any horses currently stabled along the trail?

The Sammamish River Trail provides a fully separated tread for horses over much of its length from Woodinville to Redmond. In addition, the Tolt Pipeline and Redmond Powerline Trails provide access to nearby properties that stable horses. If horses are to be permitted on this trail, then every effort should be made to provide long sections of Section B trail for their use. The Plan Sheets show 10 separate and somewhat dispersed portions

including trails. To do so, under King County Code section 7.12.030, the County would need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, but it could propose to do so in the future if demand warrants.

B-003-020

Please see response to comment B-003-003.

B-003-021

Please see response to comment B-003-008. Some of the equestrian connections in the Redmond vicinity are described in Section 1.2.3 of the EIS.

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B-003-021

with the fully separated equestrian tread. (Interestingly, 9 of those 10 transition to Section E – the minimum width.)

B-003-022

Trail Access from North Parking Lot

Sheet 26, Volume II - Plan Sheets, shows the general layout for the trail parking lot in the vicinity of Inglewood Road. While I realize that these plans are preliminary, I was unable to see any direct trail access from this proposed lot. The contour lines indicate that the parking lot will be considerably higher than the trail. How will access be provided?

B-003-022

The preliminary plan includes constructing a ramp with switchbacks to meet ADA requirements. The ramp will be located near the northeast side of the parking lot and may be supplemented with stairs for more direct pedestrian use.



Wastewater Treatment Division Department of Natural Resources and Parks

King Street Center 201 South Jackson Street Seattle, WA 98104-3855

December 12, 2006

Kathy Brown, Responsible Official Facilities Management Division 500 Fourth Avenue, Room 320 Seattle, Washington 98104-2337

RE: East Lake Sammamish Master Plan Trail

Dear Ms. Brown:

The King County Wastewater Treatment Division has reviewed the Draft Environmental Impact Statement, dated October 20, 2006. King County's N. E. Lake Sammanish Interceptor is located within or near the East Lake Sammanish Trail site (please see as-built drawings attached). In order to protect this wastewater facility, King County Wastewater is requesting that the King County Facilities Management Division do the following:

FMD - Director's Office

Project # E-730 22E

G-001-001

 Submit construction drawings for the project to the Design, Construction and Asset Management Program, Civil/Architectural Section. Drawings should be submitted for review during design development so that King County staff can assess the project's impacts. Please send the drawings to:

> Eric Davison, DCAM, Civil/Architectural Section King County Wastewater Treatment Division 201 South Jackson Street, KSC-NR-0508 Seattle, WA 98104-3855 Tel.: (206) 684-1707 Eric.Davison@metrokc.gov

G-001-002

 King County has a permanent easement for a sewer line on the proposed development site, and we must be assured the right to maintain and repair the sewer line. In the event that the line must be relocated, a new permanent easement must be provided.

CLEAN WATER - A SOUND INVESTMENT

G-001-001

Thank you for the information. Drawings will be submitted, as requested.

G-001-002

Access for sewer line maintenance and repair will be addressed during the design phase of the project.

East Lake Sammamish Master Plan Trail EIS

Kathy Brown King County Facilities Management Division December 11, 2006 Page 2

G-001-003

 Please contact Pam Elardo, Supervisor, Right-of-Way Permit Unit, regarding the easement. She can be reached at (206) 263-3699, at Pam.Elardo@metrokc.gov, or by mail at:

> Pam Elardo, Supervisor, Right-of-Way Permit Unit Planning and System Development Section King County Wastewater Treatment Division 201 South Jackson Street, KSC-NR-0503 Seattle, WA 98104-3855

Thank you for the opportunity to review and comment on this proposal.

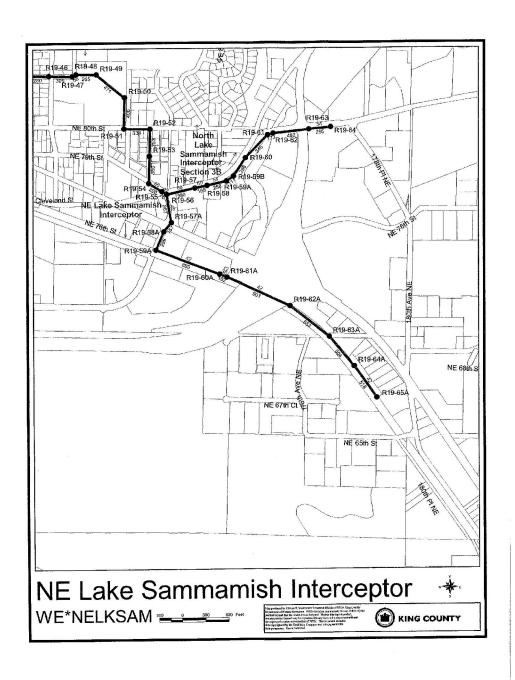
Sincerely,

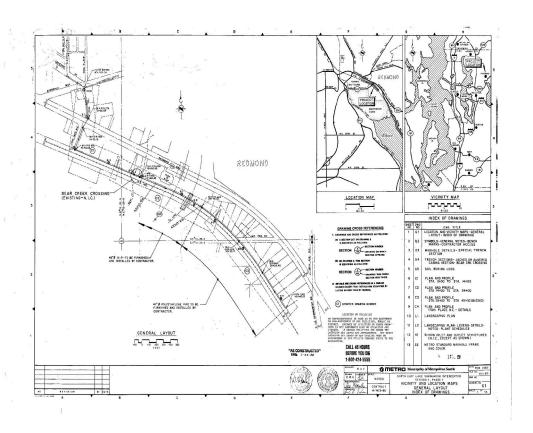
Sandy Redick, Administrative Staff Assistant Environmental Planning & Community Relations

Enclosures (4)

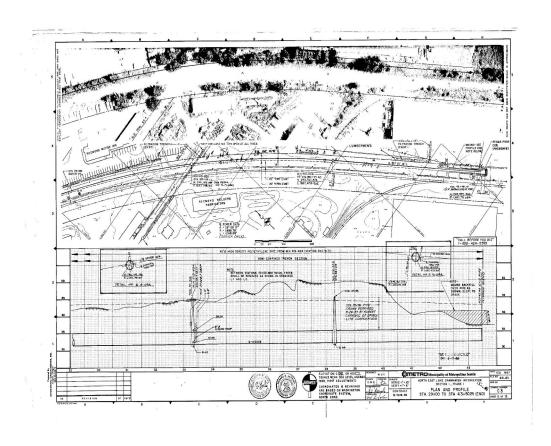
cc: Eric Davison, DCAM, Civil/Architectural Section Pam Elardo, Supervisor, Right-of-Way Permit Unit Gina Auld, Project Manager, Parks CIP G-001-003

Thank you for the contact information.





East Lake Sammamish Master Plan Trail EIS



Master Plan Trail Crossings

Table G-1. Corridor Alignment

Roadway/Driveway Station Sight Using Sight Using Using Sight Using Comments C		Existing Grades WB/EB Approaches	Crossing Type	Difficulty				
Access to 845-913 Sammamish Shore Lane NE	454+20.00	4	Yes (NE)	40	Driveway leads to a parking sreal east of the railbed. Residents appear to park and cross the railbed to access their houses. Driveway reconfiguration may be needed. Some vegetation management on the NE comer is recommended.	2%/20%	4	2
Access to 1123-1155 E. Lake Sammamish Parkway NE	456+50.00	73	Yes (NW, SW)	80	delineation required to separate trail from driveway. Vegetation management recommended on the west side of trail.		4/3	3
Pedestrian Access path	459+05.00	0	N/A	200	Pedestrian Access path to waterfront, Connects to trail	2%/20%	N/A	N/A
Recreational access	469+50.00	0	Yes (NE, SE)	160	Gated entry to recreational property. Trail delineation recommended. Vegetation management on the east side of trail recommended.	7%/20%	3	2
Access to 1629 E. Lake Sammamish Parkway NE	472+45.00	1	Yes (All)	320	Vegetation management on all corners (especially north) is recommended to maintain sight distance.	14%/10%	4/3	2
Access to 1707 E. Lake Sammamish Parkway NE	474+30.00	. 1	Yes (NE, SE)	300	Skewed crossing. If westbound approach is realigned, should consider regarding eastbound approach to maintain existing driveway grade. Some vegetation management is recommended to maintain sight distance.	20%/8%	3	2
Access to 1717-1723 E. Lake Sammamish Parkway NE	475+20.00	2	Yes (NE, SW, SE)	190	Some vegetation management is recommended to maintain sight distance, Existing rockery on the southeast corner blocking sight lines. Consider stopping or slowing bloycles due to poor sight lines.	20%/8%	4/3	2
Access to 1805 E. Lake Sammamish Parkway NE	477+45.00	1	Yes (SW, NW, SE)	280	Some vegetation management is recommended to maintain sight distance.	13%/20%	4/3	2
Access to 1815-1827 E. Lake Sammamish Parkway NE	479+00.00	2	Yes (NW, SW)	350	Some vegetation management is recommended to maintain sight distance. Trail delineation needed. Driveway consolidated with another.	10%/10%	4/3	2
Access to 1841 E. Lake Sammamish Parkway NE	480+45.00	1	Yes (SW)	50	Some vegetation management is recommended to maintain sight distance. Trail delineation needed. Driveway eliminated at this location and consolidated with another.	13%/2%	N/A	N/A
Access to 2007-2033 E. Lake Sammamish Parkway NE	486+20.00	3	Yes (SE)	160	Steap grade on eastbound approach. Some vegetation management is recommended to maintain sight distance.	6%/25%	3	3
Access to recreational property	490+00.00	2 boat launches	Yes (NE)	170	Steep grade on westbound approach, vegetation management required to improve sight distance.	25%/25%	3	3
New Access to Recreational Property for #50.	492+35.00	N/A	N/A	125	N/A	2%/20%	3	3
Old Access to Recreational Property, See #49	493+00.00	N/A	, N/A	85	Driveway eliminated.	2%/20%	N/A	N/A
Access to 2533 E. Lake Sammamish Parkway NE and Recreational property	499+35.00	1	Yes (NW, SW)	60	Gravel access is chained. Driveway adjusted to enter from the north instead of south. Driveway consolidated with others.	10%/8%	3	3
Access to 2629-2813 E. Lake Sammamish Parkway NE	512+55.00	3	None	60	Trail offset from rail bed. Access road will be adjacent to homes instead of the trail. Driveway removed and consolidated with another.	8%/12%	N/A	N/A
Access to 2825 E. Lake Sammamish Parkway NE	513+70.00	1	Yes (NE)	60	Limited sight distance and steep grade on Eastbound side. Some vegetation management is recommended to maintain sight distance.	20%/20%	3	3
Access to 2831 E. Lake Sammemish Parkway NE	515+50.00	1	Yes (NW, SW, NE)	60	Steep slope and rock wall on southeast corner may obstruct sight lines. Some vegetation management is recommended to maintain sight distance.	12%/12%	3	2
Access to 2841E. Lake Sammamish Parkway NE	518+20.00	1	None	140	Two interconnected driveways (see below). Trail delineation needed. Retaining wall at southeast corner may be a sight obstruction. Some vegetation management is recommended to maintain sight distance.	16%/10%	3	2
Access to 2???-2927 E. Lake Semmanish Parkway NE	519+10.00	2	None	250	Two interconnected driveways (see above). Trail delineation needed. Retaining wall at southeast comer may be a sight obstruction. Some vegetation management is recommended to maintain sight distance.	12%/12%	3	2

East Lake Sammamish Master Plan Tr

ctober 2006

East Lake Sammamish Master Plan Trail EIS

Sent: Wed 1/3/2007 9:51 AM

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SEPAcomments, FMD

From:

Whitaker.Melissa@epamail.epa.gov [Whitaker.Melissa@epamail.epa.gov]

To:

SEPAcomments, FMD

Cc:

East Lake Sammaish Trail Subject:

Attachments: 01-005-DOT DEIS E Lk Sammaish Trail.doc(39KB) SummaryofRatingDefinitions.pdf(17KB)

(See attached file: 01-005-DOT DEIS E Lk Sammaish Trail.doc)(See attached file: SummaryofRatingDefinitions.pdf)

Thank you,

Melissa Whitaker U.S. Environmental Protection Agency, Region 10 1200 Sixth Avenue, ETPA-088 Seattle, Washington 98101 (206) 553-2119 whitaker.melissa@epa.gov

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

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JAN 09 2007



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

PARKS - CIP - CPD Section Facilities Management DES 1200 Sixth Avenue Seattle, WA 98101

December 19, 2006

Reply To Attn Of: ETPA-088

Ref: 01-005-DOT

Kathy Brown Facilities Management Division 500 Fourth Avenue, Room 320 Seattle, WA 98104-2337

Dear Ms. Brown:

The U.S. Environmental Protection Agency (EPA) has completed its review of the draft Environmental Impact Statement (EIS) for the proposed East Lake Sammamish Trail (CEQ No. 20060418) in accordance with its authorities and responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The draft EIS evaluates four alternatives and one no-action alternative related to the development of an East Lake Sammanish Master Plan Trail. The draft EIS identifies the "Corridor Alternative" as the preferred alternative. This alternative involves development of a multi-use trail (pedestrian, wheeled, and equestrian) on paved and adjacent or separated soft surfaces along the former railroad right of way.

G-002-001

G-002-002

We support the development of a Master Plan Trail and support the mitigation measures discussed in the EIS and associated Appendix A as well as the Best Management Practices (BMPs) identified for the construction of the trail corridor. We also support the habitat enhancement activities that are discussed such as replacing culverts to improve fish passage. We have a few recommendations regarding identification of the agency responsible for implementing mitigation and BMPs, vegetation along trails, and water resources.

G-002-003

The draft EIS was prepared for the Federal Highway Administration, Washington State Department of Transportation, and King County Facilities Management Division. The document does not appear to identify who would be responsible for implementing mitigation measures, mitigation commitments outlined in Appendix A, and BMPs. We support these activities and recommend that the EIS identify the responsible agency for ensuring that they are implemented and that monitoring of resources (i.e. water, vegetation, fish and wildlife) occurs. Furthermore, the EIS should discuss how monitoring would affect decision making for the Master Trail Plan.

G-002-004 G-002-005

The draft EIS discusses vegetation along sides of the trail. EPA recommends use of native vegetation and the assurance that there is a sufficient vegetation buffer between the trail and the lake in order to avoid sloughing and run off from new impervious surfaces. These points should be addressed in an expanded discussion of the vegetation management in the final EIS.

G-002-001

Your comments are acknowledged.

G-002-002

Your comments are acknowledged.

G-002-003

As the project proponent, King County will be responsible for implementing mitigation measures and BMPs. A preface has been added to Appendix A - Environmental Commitments, identifying this responsibility.

G-002-004

King County will consider long-term monitoring commitments when selecting an alternative. Monitoring will be conducted as needed in accordance with federal, state, and local requirements. If monitoring data indicate that mitigation measures are not meeting identified performance standards, then King County will modify those mitigation measures to meet the identified standards.

G-002-005

The proposed trail is located in a corridor with dense residential development. There are very few opportunities to restore a buffer vegetated with native plant species between the trail and the lake. However, the trail is located far enough from the lake that the existing vegetation is adequate to prevent sloughing of the trail shoulders and to allow dispersal of runoff from new impervious surfaces. In locations where stormwater runoff cannot be dispersed along the shoulder of the trail, other methods will be used to manage stormwater. These methods may include conveying stormwater directly to Lake Sammamish, conveying stormwater to an area where it can be infiltrated or dispersed,

2

G-002-006

The draft EIS discusses temporary sedimentation, turbidity, and potential for spills during construction of the trail. As discussed previously, we support measures to minimize these impacts and appreciate the inclusion of Appendix A, which also identifies the use of a spill containment and countermeasures plan. One concern we have is that Appendix A lists water quality monitoring in accordance with Washington Department of Ecology's standards as a potential additional measure. We recommend that this be included as one of the mitigation commitments rather than a potential additional measure. Monitoring results would then be used to make any necessary adjustments during design and construction of the trail to ensure stormwater is managed properly and impacts to water resources are reduced or eliminated.

G-002-007

We have assigned a rating of LO (Lack of Objection) to the Preferred Alternative. This rating and a summary of our comments will be published in the Federal Register. A copy of the rating system used in conducting our review is enclosed for your reference.

We appreciated the opportunity to review and comment on the draft EIS. If you have any questions or comments concerning this review, please contact me at (206) 553-1601 or Lynne McWhorter of my staff at (206) 553-0205.

Sincerely.

Christine B. Reichgott, Manager NEPA Review Unit

TIEST TE TO TO

or conveying runoff to adjacent streams or wetlands. Section 3.2 of the Flnal EIS has been updated for clarification.

G-002-006

The text of the FEIS has been revised per your recommendation. Water quality monitoring has been made a mitigation commitment.

G-002-007

Your assignment of an "L.O." rating to the Corridor Alternative has been noted.

Enclosure

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

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SEPAcomments, FMD

From:

Joel Pfundt [JPFUNDT@redmond.gov]

Sent: Fri 12/22/2006 10:11 AM

To: Cc: SEPAcomments, FMD Don Cairns; Joel Pfundt

Subject: East Lake Sammamish Trail Master Plan DEIS - Redmond Public Works

Attachments: ELST DEIS Comment Letter 12-06 scanned.doc.pdf(197KB)

Gina,

Attached are Redmond Public Works' comments on the E Lake Sammamish Trail Master Plan DEIS. This is a really great new trail connection in the regional system and we are looking forward to the continued implementation of trail.

Best Regards,

Joel

Joel Pfundt, AICP Principal Planner City of Redmond 425-556-2750 jpfundt@redmond.gov

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007



Redmond

December 22, 2006

Gina Auld Project Manager King County Facilities Management Division King Street Center 201 South Jackson Street Seattle, WA 98104

Dear Ms. Auld:

Thank you for sending a copy of the Draft Environmental Impact Statement (DEIS) for the East Lake Sammamish Trail Master Plan, dated October 20, 2006. The East Lake Sammamish Trail is a very important element in the regional trail system and, once complete, will connect areas along the East Lake Sammamish Trail to three other Regional Trails in the Downtown Redmond area: the Sammamish River Trail, the Bear Creek Trail and the SR 520 Trail. The City of Redmond Public Works Department has completed its review of the document and is submitting comments.

G-003-001

The City of Redmond is concerned that the Transportation Section (3.11) of the DEIS does not adequately analyze the at-grade trail crossings for the eastbound SR 520 off-ramp and the westbound SR 520 on-ramp at Redmond Way (SR 202). This lack of analysis results in the DEIS not being able to articulate the potential impacts to trail users and traffic resulting from establishing at-grade crossings for these two intersections. The list below identifies areas where the City has identified inadequate data collection and analysis of these two trail crossings:

G-003-002

Table 3.11-1: AWDT on the eastbound SR 520 off-ramp and westbound SR 520 on-ramp at SR 202 should be measured because these are the volumes that actually impact the trail crossings. Future AWDT volumes should also be obtained for critical cross streets.

G-003-003

 Table 3.11-2: Existing weekday PM peak hour level of service should be evaluated for the eastbound SR 520 off-ramp and westbound SR 520 on-ramp because of the impact the estimated number of trail users could have on level of service at these intersections in the future.

G-003-004

Table 3.11-9: Year 2015 weekday PM peak hour level of service should be evaluated for the eastbound SR 520 off-ramp and westbound SR 520 on-ramp. In the DEIS, the purpose of this table is focused on the LOS impacts of additional vehicle traffic generated by trails users. The castbound SR 520 off-ramp presents a slightly different LOS situation. Existing and future signal operation and the resulting LOS depends on a significant number of right turns on red from the northbound dual right turn lanes. It is likely in the future that safety issues will necessitate a no right turn on red at this location per the Guide for the Development of Bicycle Facilities (page 48-49, AASHTO, 1999)

ELST DEIS Comment Letter 12-06

Page 1 of 2

G-003-001

As a result of these comments from the City of Redmond, King County authorized the preparation of an additional traffic analysis in April 2007 (Parametrix, April 25, 2007). Based on these comments and the subsquent analysis, the Transportation Section (3.11) has been revised to better articulate the potential impacts of at-grade crossings of the SR 520 ramps.

G-003-002

Average Weekday Daily Traffic (AWDT) volumes for the SR 520 ramps were obtained from the WSDOT 2006 Ramp and Roadway Report. These numbers were included in the April 2007 traffic analysis at these intersections (see response to comment G-003-001 above). The eastbound SR 520 off-ramp has an AWDT of 17,900 vehicles. During the PM peak hour, approximately 75 percent of vehicles on this ramp are destined for eastbound Redmond Way. The westbound SR 520 onramp has an AWDT of 19,670 vehicles. Existing AWDT volumes for other critical cross street locations are shown in Table 3.11-1 of the Draft EIS. Future AWDT volumes at these critical cross street locations were taken into consideration in determining the level of traffic control needed at each trail intersection listed in Table 3.11-10 of the Draft EIS.

G-003-003

The April 2007 traffic report included an analysis of existing weekday PM peak hour level of service at both ramps. Currently, vehicles traveling through these intersections during PM peak hours experience approximately 40 to 46 seconds of delay, corresponding to level of service 'D' conditions. This is considered to be an acceptable intersection level of service in the City of Redmond, based on the City's Transportation Master Plan.

G-003-004

because of the estimated high number of trail users and high right turning vehicle volumes. This change in signal operation would impact LOS at this intersection. The level of service at the westbound SR 520 on-ramp should also be evaluated because of potential impacts trail users could have on LOS.

G-003-005

Table 3.11-10: The potential safety impacts associated with the trail crossings at the SR 520 ramps are not identified and evaluated in this table. The City is particularly concerned about the northbound dual right turn from the eastbound SR 520 off-ramp.

G-003-006

Page 3.11-18: The conclusion that traffic operations would not be impacted by the atgrade crossings for the trail at the SR 520 ramps to and from Redmond Way has no
background data and is not reasonable, particularly given the trail usage estimates
included on page 3.11-12 of the DEIS and the City of Redmond's knowledge of traffic
operations at these intersections.

Based on these comments the City requests that the at-grade crossings for the castbound SR 520 off-ramp and westbound SR 520 on-ramp at Redmond Way (SR 202) be analyzed. The at-grade crossings are an acceptable interim measure while volumes on the trail remain low but mitigation in the form of grade separation of either the eastbound off-ramp or both the eastbound off-ramp and westbound on-ramp needs to be considered in the Final Environmental Impact Statement. Grade separation of these crossings may significantly improve safety for trail users and eliminate any negative impact trail user crossings would have on vehicle LOS.

The City of Redmond looks forward to receiving written comments responding to these issues and is willing to meet with the County to discuss these matters in greater detail. Please contact Joel Pfundt (425-556-2750, jpfundt@redmond.gov) if you have any questions or would like to arrange a meeting. Thank you again for submitting this material.

Sincerely,

Joel F. Pfundt, AICP Principal Planner

Don Cairns, Transportation Service Manager

Craig Larsen, Parks Director Rob Odle, Planning Director David Rhodes, Public Works Director

ELST DEIS Comment Letter 12-06

Page 2 of 2

G-003-004

King County agrees that a "no right turn on red" restriction would likely be needed at this ramp with an at-grade trail crossing. With this restriction, level of service (LOS) in the year 2015 for the right-turn movement would worsen from LOS D with an average delay of 51 seconds to LOS E with an average delay of 66 seconds.

When the westbound SR 202 to westbound SR 520 flyover ramp is completed by WSDOT, signal timing at this intersection could be optimized and more time would be allocated to the northbound right-turn movement. This would result in LOS D conditions and only a 0.6-second average vehicle delay increase with the right turn on red restriction and added pedestrian volumes from the trail.

G-003-005

King County concurs that the dual northbound right-turn lanes from the eastbound SR 520 off-ramp are a safety concern. Vehicles on the off-ramp are often traveling fast, and drivers are often looking left to make a right turn on the red light without stopping. The drivers might not see trail users approaching from the right with enough time to stop. Additional discussion about the safety concern has been added to Section 3.11 of the Final EIS.

G-003-006

Refer to response to comment G-003-004. The County acknowledges that there would be an impact from increased vehicle delay for the northbound right-turn movement. Vehicle delay would increase by 15 seconds for this movement. With signal timing optimized after completion of the westbound SR 202 to westbound SR 520 flyover ramp, the increase in average vehicle delay would only be 0.6 second.

G-003-007

King County concurs in part with the City of Redmond's conclusions. The at-grade crossing of the SR 520 off-ramp is an acceptable measure. Potential impacts to traffic operations and trail user safety at this crossing are reduced when combined with (1) improvements being implemented as part of the SR 520 nickel project, (2) a longer green light for traffic on the SR 520 off-ramp, and (3) prohibition of right turns on a red light for traffic on the off-ramp.

Depending on future trail use volumes, a long-term solution could be a grade-separated crossing, but the design and construction must be coordinated with Washington State Department of Transporation and City of Redmond projects in the area and it would require substantially more funding. In short, reconfiguration of the SR 520 off-ramp trail crossing intersection is beyond the scope of this project, due to lack of sufficient funding and other practical constraints, but King County may consider this solution over the long term.

Potential impacts of an at-grade crossing of the SR 520 on-ramp are less than those for the off-ramp due to the new westbound SR 202 to westbound SR 520 flyover on-ramp to be constructed as part of the SR 520 nickel project. This will significantly reduce traffic volumes on the existing on-ramp and conflicts with trail users crossing at-grade. Thus, King County is proposing that the at-grade trail crossing remain the long-term solution at this intersection.

East Lake Sammamish Master Plan Trail EIS

Page 27

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SEPAcomments, FMD

From:

Kamuron Gurol [kgurol@ci.sammamish.wa.us]

Sent: Tue 12/19/2006 4:41 PM

To:

5

SEPAcomments, FMD

Cc:

FW: Comments on Trail DEIS

Subject:

Attachments: Letter to King Co re Final ELST DEIS.doc(166KB)

Trying a new email address

Kamuron D. Gurol

Community Development Director

-----Original Message-----

From: Kamuron Gurol

Sent: Tuesday, December 19, 2006 4:39 PM

To: 'fmdsepacomments@metrokc.gov'

Cc: Ben Yazici; John Cunningham; Pete Butkus; Lyman Howard; Jessi Richardson; Jeff Brauns; Eric

LaFrance; Susan Cezar

Subject: Comments on Trail DEIS

Please find the attached DEIS comment letter from Sammamish, thanks!

Kamuron D. Gurol Community Development Director City of Sammamish 801 - 228th Ave SE Sammamish, WA 98075 (425) 295-05020 FAX (425) 295-0600 kgurol@ci.sammamish.wa.us

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Department of Community Development

486 228TH AVENUE NE ◆ SAMMAMISH, WASHINGTON 98074 ◆ TEL 425-898-0660 ◆ FAX 425-898-0669 ◆ WEB WWW.CI.SAMMAMISH.WA.US

December 19, 2006

Ms. Kathy Brown, Responsible Official King County Facilities Management Division 500 Fourth Avenue, Room 320 Seattle, WA 98104-2337

RE: Comments on Draft EIS for East Lake Sammamish Master Plan Trail

Dear Ms. Brown:

G-004-001

Thank you for the opportunity to provide comments on the above-referenced document. The DEIS analysis was thorough and detailed, and it should provide sufficient information to make good decisions. The City looks forward to continued progress on the trail plan.

The City is also currently in the preliminary design stage for the East Lake Sammamish Parkway street improvement project, and we are in the early planning stages for a new waterfront park along the trail. We would appreciate working together to coordinate the trail plan, the waterfront park and the road project in several areas, including but not limited to:

- Appropriate connections between the trail, park and East Lake Sammamish Parkway.
- Locating new stormwater treatment facilities within the trail Right of Way.
- Access for the trail's proposed parking facility should be aligned with the signalized intersection at NE Inglewood Hill Road (as a new west leg to the intersection).
- Coordination on potential impacts to residents along and nearby the trail associated with construction of the final trail.

G-004-002

The DEIS also states that among the action alternatives, the Corridor Alternative presents the lowest total impacts from construction, to wetlands, streams and fish resources, pedestrian safety, and impacts associated with private property acquisitions. While the City is concerned about impacts to individual properties, the Corridor Alternative appears to be the better overall choice for the final trail.

Thank you again for the opportunity to comment. If you have any questions, please do not hesitate to contact me.

Sincerely,

Kamuron D. Gurol Director of Community Development

G-004-001

King County will continue to coordinate with the City of Sammamish on these important projects.

G-004-002

Thank you for supporting the Corridor Alternative. King County will continue to work with its neighbors to minimize private property impacts.

Cc: Ben Yazici, City Manager John Cunningham, Director of Public Works Jessi Richardson, Director of Parks and Recreation Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

SEPAcomments, FMD

From: Linda Gorremans [LGORREMANS@redmond.gov]

Sent: Wed 12/13/2006 3:18 PM

To: Cc: SEPAcomments, FMD Craig Larsen; Timothy Cox

Craig Larsen; Timothy Cox

Subject: ELST Draft EIS Comments - Redmond Parks
Attachments: ELST Draft EIS Comments - Redmond Parks.doc(61KB)

Gina: Attached are comments on the draft ELS Trail EIS. So glad that King County is moving forward on this trail. Hats off to all who have been involved in this significant trail segment.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

EAST LAKE SAMMAMISH MASTER PLAN TRAIL NEPA/SEPA Draft EIS Report Comments

Reviewer: Linda Gorremans, City of Redmond, Park Planner	Date: 11-2-06
Address: P.O. Box 97010; Mail Stop: 4NPK; Redmond, WA 98073-9710	
Telephone: 425.556.2328; e-mail: lgorremans@redmond.gov	

	Page/Paragraph	Written Report	Reviewer Comments
	VOLUME I	:	Note: Comments primarily concern the trail within the City of Redmond
	p. 1-2 Figure 1-1		The "Regional Trails Recreational Facilities" map does not include Redmond's Bear & Evans Creek Trail & Greenway project or Redmond's 65 th Street Trail connection to Marymoor Park.
G-005-002	p. 1-4 / #3		The northern terminus of the King County owned and rail-banked corridor is west of Bear Creek after it crosses SR 520. Better language needs to be written to describe how the trail crossing will occur in the SR 520 intersection, what will be the impacts to Bear Creek, and how will any impacts be mitigated.
G-005-003		Equestrian connections include	(add) "and Bridle Crest Trail from Marymoor Park east to Bridle Crest State Park."
G-005-004		Bear Creek Trail, and the Evans Creek Trail	(change) "to Bear & Evans Creek Trail & Greenway segments."
G-005-005	Figure 2-1C	North Project Limit	This northern terminus limit does not match Figure 1-1. Also, why compromise the crossing of SR 520 by utilizing sidewalks along Redmond Way (aka SR 202); perhaps a grade separated, elevated trail should be proposed.
G-005-006	p. 2-10	No Trail Alternative	Redmond agrees with this analysis of the Section 4(f).
G-005-007		"City of Redmond's Bear Creek Trail"	The completed segment in downtown Redmond begins at the Sammamish River Trail at Leary Way, includes Town Center and Bear Creek Park, and currently ends at Union Hill Road.
G-005-008	p. 2-46 / section 2.6.4 Proposed Trail Connections # 2	"City of Redmond's Evans Creek Trail Perrigo Community Park	Comment: Perrigo Community Park is not in downtown Redmond. Delete "in downtown Redmond." Add: "A one-mile segment was constructed in 2004-5"
G-005-009	p. 2-46 / section 2.6.4 Proposed Trail Connections # 2		Another trail connection is Redmond's 65 th Street Trail which runs on the northern portion of NE 65 th Street from the ELST to Marymoor Park.

G-005-001

Figure 1-1, illustrates regional trails in the area, and has been revised to correctly illustrate the northern project terminus. Figure 3.7-2 illustrates recreational facilities in the northern portion of the project area, including the City of Redmond.

G-005-002

The manner in which the trail crosses the SR 520 corridor and Bear Creek Trail is depicted in Volume III, Figure 39, of the Draft EIS. Discussion has been added to Section 3.11 of the Final EIS, based on comments received from the City of Redmond in Comment Letter G-003.

Impacts to the buffers of Bear Creek are described in the Draft EIS in Table 3.5-4. There would be no direct impacts to the stream itself because the trail would cross the stream using the existing bridge structure. Furthermore, King County anticipates that state and local permit requirements will be imposed to protect Bear Creek from impacts that could occur when King County modifies the bridge deck to accommodate the trail.

G-005-003

The requested text has been added to the Final EIS in response to your comment.

G-005-004

The requested change has been made to the Final EIS in response to your comment.

G-005-005

The northern terminus of Figure 1-1 has been revised in response to your comment.

G-005-010 p. 3.7-5 Redmond Segment / # 2	"Planned construction in 2005 would extend the trail across Redmond Way to the existing underpass at Union Hill Road."	Change this to "Trail construction in 2006 extended the trail across Redmond Way to the existing underpass at Union Hill Road."
G-005-011 p. 3.7-5 Redmond Segment / # 3	"Farrell McWhirter Park"	Correct spelling is Farrel-MeWhirter Park.
G-005-011 p. 3.7-5 Redmond Segment / # 3 p. 3.7-5 Redmond Segment / # 3	"Between Union Hill Road and NE 95 th Street a 1-mile section of the trail is being constructed in 2004-5"	Change to "Between Union Hill Road and NE 95 th Street a 1-mile section of the trail was constructed in 2004-5" Add "Lakeside developers constructed a 1-mile section between the Redmond / Fall City Road and the northern boundary of the subdivision in 2000."
G-005-013 p. 3.7-6 Planned Equestrian Parks and Trails / # 1	"Redmond Watershed Park"	Change to "Redmond Watershed Preserve"
G-005-014 p. 3.7-6 Planned Equestrian Parks and Trails / # 1	"Once completed, the Master Plan trail would provide an access link between Marymoor Park and the Bear Creek Trail system, linking the existing and pianned equestrian trails described above."	Change to "Once completed, the Master Plan Trail would provide access to the Evans Creek Trail system, linking some of the existing and planned equestrian trails described above." Note: Due to safety and road crossing difficulties, Redmond no longer encourages equestrians in downtown Redmond on the Bear Creek Trail. Redmond would encourage equestrians to use the Evans Creek Trail, the future ELST to Marymoor Park, the Bridle Crest Trail, both sides of the Sammamish River Trail, the Redmond / Puget Power Trail, and trails in Farrel-McWhirter Park and the Redmond Watershed Preserve.
G-005-015 VOLUME III	Visual Quality and Aesthetics Technical Report	The document fails to mention the two 600-foot parcels in City of Redmond ownership. They are located south of 187 th Ave NE. Additionally the City of Sammanish owns two (former Nelson) parcels in close proximity to Redmond owned parcels. Please research and add these parcels to the document.
G-005-016 Appendix G Trail Intersections	SR 520 crossing	Please address how the Master Plan Trail will cross the intersection and cross Bear Creek to connect to Redmond's Bear Creek Trail and Town Center Trail and continue on the BNSF railroad right-of-way.

King County has concluded that the at-grade crossing of the SR 520 off-ramp is an acceptable interim measure. An even better long-term solution would be a grade-separated crossing, but the design and construction must be coordinated with the Washington State Department of Transportation and City of Redmond projects in the area and requires substantially more funding. Thus, King County is proposing the grade-separated crossing as a long-term mitigation strategy in the Final EIS. See also the responses to comments G-003-007 and G-003-004.

G-005-006

Your concurrence regarding Section 4(f) is noted.

G-005-007

The text of the Final EIS has been revised in response to your comment.

G-005-008

The requested text deletion and addition have been made to the Final EIS in response to your comment.

G-005-009

The text of the Final EIS has been revised in response to your comment. The trail connection was mentioned.

G-005-010

The text of the Final EIS has been revised in response to your comment.

G-005-011

The text of the Final EIS has been revised in response to your comment. The spelling was corrected.

G-005-012

The text of the Final EIS has been revised in response to your comment.

G-005-013

The text of the Final EIS has been revised in response to your comment.

G-005-014

The text of the Final EIS has been revised in response to your comment.

G-005-015

Some reference to these facilities has been added to the discussion in Appendix F in Volume III. However, the addition of these facilities does not change any of the findings.

G-005-016

The manner in which the trail would cross SR 520 is described in the Draft EIS Volume I Section 3.11; depicted in Volume II plan sheets; and included in Volume III Appendix G. Additional discussion has been added to Sections 2.5.6.3 and 3.11 in the Final EIS.

East Lake Sammamish Master Plan Trail EIS
Page 34

RECEIVED

ELST

24 2006

November 24, 2006

PARKS - CIP - CPD Section Facilities Management DES

Project Manager
King County Facilities Management Division
King Street Center
201 S. Jackson St., #700
Seattle, WA 98104

Dear Ms. Auld:

I-001-001

I-001-002

I-001-003

I-001-004

I-001-005

Gina Auld

This letter is written as public comment on the Draft Environmental Impact Statement (DEIS) on the East Lake Sammamish Trail design alternatives.

While the "no action" alternative is preferred by us as residents along the trail, we acknowledge that this option is likely politically unrealistic. Among the remaining alternatives, we would most support the Corridor Alternative for cost, safety, and simplicity reasons.

However, we have some concerns even under this option:

- at the 11/09/06 public hearing, one attendee suggested that the trail should be open around-the-clock. This notion should be rejected for safety and security reasons:
- 2. The risk for all trail users inherent in the proposed equestrian usage greatly outweighs the perceived benefits for a limited number of riders. We have raised, shown, and ridden horses for 40 years, and our experience tells us that the proposed proximity of these animals and their riders to bikers, skaters, runners, pets and other trail users would be an accident waiting to happen. Dealing with the horse manure would be an additional and unnecessary challenge. Equestrian usage is a bad idea;

Thus, our preferred alternative is the Corridor option, clarified to specify daylight access only and to exclude equestrian usage.

In another matter, in the DEIS Appendix G, Table G.1.Corridor Alignment (copy attached), the driveway access to 1123-1155 E. Lake Sammamish Parkway is incorrectly identified to serve just two houses. Instead, this driveway accesses three homes. The Plan should be corrected to the extent that this recognition would alter the work proposed for this designated trail crossing.

Sincerely,

Paul Manning/Joy Manning 1155 E. Lake Sammamish Parkway NE

Sammamish, WA 98074

I-001-001

Your support of the Corridor Alternative has been noted.

I-001-002

King County Code section 7.12.480 establishes the general hours of operation for all facilities in the County's regional park system as dawn to dusk. Although it has the authority to tailor specific hours of operation for each facility within its regional system, including trails, King County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail. However, it could propose to do so in the future if demand warrants.

I-001-003

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

I-001-004

Your support of the Corridor Alternative has been noted. Please see the responses above regarding hours of operation and equestrian usage.

I-001-005

Thank you for the correction. The number of residences served by the driveway at this location will not influence the overall decision; however, the correction will be noted during the design phase of the project.

Warren & Vicki Beres 2305 E. Lake Samm. Pl. S.E. Sammamish, WA 98075

To: Gina Auld, Project Manager King Co. Facilities Man. Div. King Street Center 201 South Jackson St. Seattle, WA 98104

Dec. 17, 06
RE: Comments on Draft E.I.S. - East Lk. Samm. Trail
Master Plan

I-002-001

We wish to express our concern about expanding the size and scope of the E. Lake Samm. trail as it will further wreck our property at 2305 E. LK. Samm. Pl. S. E., Samm., WA. The existing interim trail has ruined our property by confiscating our private property in the former BNSF railroad corridor as per our win in the Federal Court of Claims in Washington D.C. Public use now biseds our residential property, negatively impacting our View, our privacy, and our personal use and enjoyment of that property. Any expansion of size and use will further negatively impact our landscaping and other private property we own that will be damaged or stolen trom us by King County. We request be removed from our property and As per King Co. Code Water Quality 9.12.025,

I-002-001

King County acknowledges receipt of your comment and has reviewed the concerns expressed therein. Issues stemming from federal railbanking of the BNSF corridor are outside the scope of this EIS. From :

Warren & Vicki Beres 2305 E. Lake Samm. Pl. S.E. Sammaraish, WA 98075 Dec. 17,06 page 2

I-002-002

Item 5. - domestic animal Lake Sammamish. Why county government proposing horses as an allowed use on 'Concerned about have also, in addition, had issues with transients trespassing our neighborhood properties trouble makers /a. k.a. thieves properties from only a matter bad happens Very such as We have inappropriate in through our property Resed and Warren Beres

I-002-003

I-002-002

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

I-002-003

Section 3.8.2.5 of the Draft EIS discusses safety and security associated with the East Lake Sammamish Trail. As noted on Page 3.8-14, published studies on rail-trails indicate that trail neighbors typically are concerned that new trails may result in negative impacts (e.g., concerns regarding increased crime and vandalism), but the studies show that these concerns are not borne out in any substantial way, although isolated incidents have occurred across the country.

As noted on Page 3.8-23, occasional incidents of trespass or private property vandalism could occur on properties adjacent to the trail, but these are not expected to exceed existing conditions. King County has worked closely with the cities of Redmond, Sammamish, and Issaquah to address trail-related law enforcement and public safety issues, and will continue to do so over time. King County's experience with other trails suggests that the risk of increased trespass is likely to be counterbalanced by the increased public presence on the trail.

Finally, the King County Code also addresses these issues. In KCC section 7.12.295(H)(9), the model trail user code of conduct specifies that "[t]rail users should respect private lands adjacent to county trails and should stay on trails to avoid trespassing on or interfering with

adjacent private property." Under KCC sections 7.12.650 and -.670, anyone caught violating the code of conduct may be subject to a fine of up to \$500, and loss of park or recreation facility use privileges.

East Lake Sammamish Master Plan Trail EIS

Page 38



FRIENDS OF THE EAST LAKE SAMMAMISH TRAIL RECOMMENDATIONS FOR FINAL TRAIL November 9, 2006

Preface: The Friends of the East Lake Sammamish Trail (FEST) was created in 1999 to support King County's development of the East Lake Sammamish trail. Over the years, FEST has been active in supporting the trail in numerous ways. At a Board meeting on November 6, 2006, the FEST Board adopted the following positions relative to the final trail.

I-003-001

1. FEST Agrees With the County's Preferred "Corridor" Alternative.

FEST believes that, from the standpoint of cost, public safety, aesthetics, and minimization of ground disturbance and environmental degradation, the County should adopt the County's preferred alternative, the Corridor Alternative.

2. Fences

Fences can play a useful role in separating the trail user area from adjacent environmentally-sensitive areas and private property. At the same time, the County's right-of-way is significantly wider than the actual trail itself. The public deserves to use and enjoy viewing the public's land.

I-003-002

To balance these factors, FEST believes that the County should require all fences to be reasonably set-back from the boundary of the actual user trail. What is "reasonable" depends on the circumstances. The County should take into account the following types of factors: (a) whether the narrowness of the corridor in a specific location justifies a narrow fenced user area; (b) whether the fence is genuinely necessary to protect an environmentally sensitive area; and (c) whether the fence unreasonably interferes with or clutters trail users' views of the lake.

I-003-003

In general, FEST believes the County should rely more on wooden split-rail fencing than black plastic-coated chain link fence. Moreover, the County should always, unless justified by extraordinary circumstances, avoid erecting fence in such a manner that the fence creates a "dog-run" effect.

3. Land-owner Use of County Right of Way And View-blocking Landscaping

1

I-003-001

Your support of the Corridor Alternative has been noted.

I-003-002

King County concurs with the range of criteria identified in this comment, in addition to the need to reasonably accommodate adjacent uses and the privacy of adjoining property owners. These criteria will be considered through the design and permitting phase of the project.

I-003-003

The specific type of fence applied in any situation will depend on the purpose of the fence. To the extent practical, the County intends to minimize use of chain-link fence. These decisions will be made during the design and permitting phase of the project.

I-003-004

I-003-005

The County's right-of-way varies from 50 to 200 feet and the proposed user portion of the trail is projected to extend to a maximum of 27 feet. To be a "good neighbor," FEST believes the County should permit adjacent property owners to reasonably use (for their gardens and improvements) areas outside the user area or the fenced trail user area.

However, FEST believes that the County should adopt written policies and a permit system governing such use. These policies should <u>never</u> permit landowners to use or develop areas within the County right-of-way that unreasonably interfere with the actual trail-user area or the buffer outside that area that is necessary to avoid a fenced "dog-run" effect.

5. Public Access Points

I-003-006

I-003-007

FEST encourages the County to obtain and maintain as many public access points as possible. FEST urges the County to identify all possible road crossings where the public should be permitted to access the trail from the Parkway. The County should also identify all places where the public can park and gain safe access to the trail, including parking lots or on-street parking.

6. Safety Features

I-003-008

FEST encourages the County to deploy state-of-the art systems, electronic or signed, which avoid trail-user and automobile conflicts at trail crossings.

7. Horses.

I-003-009

Due to trail width, neighbors, and water pollution issues, FEST believes horses are appropriate only on very limited segments of the trail, such as in the Redmond portion.

8. Trail Width

I-003-010

In general, FEST encourages the County to design the trail so that it is a minimum of 12' in width paved and has two 2' shoulders. However, where topography and adjacent properties reasonably permit, FEST agrees with the County's design proposal (Figure 2-3 in the EIS) which specifies an 18 foot trail prism and a separated 4 foot trail.

I-003-004

This recommendation is consistent with existing King County policy and practice.

I-003-005

As described in Section 1.3.3 of the Draft EIS, King County currently has written policies and a permit system in place. Changes to these policies and the permit system are not being considered as part of the Master Plan Trail development. Any future changes to these policies and the permit system would be subject to separate rule-making processes, including appropriate public input. However, during the design phase of the project, King County will be reviewing existing permits to ensure they are compatible with the Master Plan Trail.

I-003-006

In Table 2.5-2 of the EIS, King County has identified a number of locations where the public may access the trail, including places where the public can access the trail from the Parkway. During the design phase of the project and prior to opening of the Master Plan Trail, King County will work with each local jurisdiction to make sure appropriate access points and parking areas are identified and marked with signs.

1-003-007

King County proposes three new parking areas in the EIS and identifies other parking options in the vicinity of the corridor. Other parking will be as marked and permitted by the local jurisdictions. Where on-street or other access is provided, King County has proposed safety improvements for the access areas.

2

I-003-008

Preliminary sign conventions are identified in the EIS. King County will be refining these plans during the design phase of the project.

I-003-009

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

I-003-010

Thank you for supporting the County's vision.

East Lake Sammamish Master Plan Trail EIS

Page 41

November 9, 2005

Gina Auld, Project Manager King County Facilities Management Division King County Center 201 South Jackson St - #700 Seattle WA 98104

RE: East Lake Sammamish Trail (ELST) DEIS

Dear Ms. Auld,

I-004-001

Herewith please find my comments regarding the alternatives being considered for the ELST. Please include them in project documents for consideration in adoption of a preferred alternative.

My comments are stimulated by recent observation of the current, interim trail, experience gained during my career as a traffic engineer and transportation planner (having prepared plans for and instituted numerous bicycle-pedestrian facilities), as well as observation of operation of the Burke-Gilman trail.

Succinctly, I caution the County, in selecting the preferred alternative to consider a readily apparent safety issue. Safety is a clearly stated objective within the design process as attested in your DEIS Notice of Availability (paragraph 5 - "The trail is intended to <u>safely</u> accommodate a variety of user groups..." emphasis added.) The present, interim design, if merely paved, will place users at great risk and create unnecessary liability for local residents and the County.

Federal Guidelines - The Federal Highway Administration's training material for design of Off-Road Trails ("FHWA Course On Bicycle And Pedestrian Transportation", Lesson 10 - Off-Road Trails, pg. 10-1) notes -

"While they have many positive features, design of off-road trails must be done with the same care and attention to recognized guidelines as design of bike lanes on roadways. In addition, trails are often extremely popular facilities that are in high demand among rollerbladders, bicyclists, joggers, people walking dogs, and a variety of other users. The resulting mix and volume of non-motorized traffic can create dangerous conditions that should be anticipated during the design phase."

No matter which of the five alternatives under consideration is selected, the true cost of accommodating the proposed mix of users should be considered now. To do otherwise would be to delude and endanger the public.

There are inherent incompatibilities between the prospective users. Chief among these will be their difference in speed. Difference in speed is a primary factor in traffic accidents; the higher the difference in relative speed, the more severe the accident (and the higher the propensity for their occurrence).

Once paved, given the grade of the rail bed (though a seemingly gentle slope of 2%), speed of some cyclists would exceed 20 and even 25 miles per hour. Mixed with slower moving users such as walkers, joggers, and even tots on tricycles, a dangerous mix will be produced.

The most cost-effective approach would be to direct higher speed cyclists (those over 10-mph) to use the shoulder of East Lake Sammanish Parkway. In all likelihood, pressure from these users to merely extend the Burke-Gilman design to this trail will prevail. If that be the chosen course of action, what considerations need be taken?

I-004-001

Under the preferred alternative, the Interim Use Trail would not just be paved, it would also be widened. Based on the County's experience with other urban trails in the regional system and consistent with AASHTO guidelines for the design of shared-use paths, a paved width of 12 feet can reasonably accommodate the mix of uses. Further, where practical the County is proposing to develop wider or even separated soft shoulders to allow more separation between faster and slower users. The existing shoulders of East Lake Sammamish Parkway will remain available to bicyclists and may be preferred by advanced bicycle commuters.

Section 2.5.6.8 of the EIS explains that the County design for the preferred alternative is intended to accomodate a maximum posted speed of 15 miles per hour. King County Code section 7.12.295(A) specifies that "no person shall travel on a trail at a speed greater than is reasonable and prudent under the circumstances and having regard to the actual and potential hazards then existing." It requires that speed be controlled as necessary to avoid colliding with others who are complying with the law and exercising reasonable care. It further states that travel at speeds in excess of 15 miles per hour constitutes a prima facie presumption that the person violated the code. King County Code section 7.12.295(H)(2), the Model Trail User Code of Conduct, specifies that "[e]very user shall exercise due care and caution to avoid colliding with any other trail user."

Trail users who choose to exceed the posted speed limit on the trail do so at their own risk, as do those who ride in a careless or reckless manner. Under King County Code sections 7.12.650 and -.670, those who are caught exceeding the trail's speed limit or violating the model code could be fined up to \$500, or lose their park or recreational facility use privileges, or both.

I-004-001

Pg. 2 - M.Nizlek DEIS Testimony

Burke-Gilman Safety Study - In 2005 a study was completed for the County along the Burke-Gilman Trail. Findings from that study are directly applicable to design of the ELST and, in the exercise of prudence, should be taken into consideration prior to selection of a preferred alternative. The study ("Burke-Gilman Trail Crossing Plan", The Transpo Group, 2005) made the following determinations:

- 1 Very few cyclists (less than 3%) comply with stop controls, and
- 2 Stopping sight distance in excess of 125 feet is needed to accommodate 20-mph

cyclists.

Field observation verifies that the interim design of the ELST has not been established with the above in mind. There is inconsistency in whether cross-traffic or trail traffic is to yield. Many locations lack the requisite 125+ ft of sight distance necessary for higher speed cyclists. And, no speed limits exist.

To make a sound decision between alternatives, if higher speed cyclists are not accommodated elsewhere as suggested above, it behooves the County to evaluate the implications to each of the five alternatives (e.g., costs to create sight distances or establish trail speed limits). Failing to do so will result in unnecessary long-term consequences and unnecessary costs.

Respectfully,

Martin Nizlek, P.E., Ph.D.

312 W. Lake Sammamish Parkway NE

Bellevue WA 98008

Sight distances were evaluated for intersections along the alignment. The results are described in Section 3.11.3 and Appendix G of the Draft and Final EISs. Where sight distance deficiencies have been identified, the two primary measures for addressing the issue are traffic controls (as described in Section 2.5.6.3) and vegetation management (as described in Section 2.5.6.11).

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154 10	The state of the s	ram	
_			

Please leave Comment Form with sign-in sheet.

Name (optional) Thomas E. Hars
Address 1841 E. C. Samm Phus WE
City Sammam & WA Zip Code 9807/
Email tharsh @ tup-inc. com

I-005-001

"Corridor" Alternative. The turing radius of the new driveway (now the interim trail bef) need to be a dequate to allow access to my property for trucks and emergency vehicle traffic.

a simple solution would be to put specific bumps on the either side of my driveway.

I-005-001

During the design phase of the project, King County will be closely examining site-specific driveway configurations to ensure appropriate access is maintained.



Please leave Comment Form with sign-in sheet.

	Name (optional) FRAME OBSEN
	Address 3417 E-Lk Symmunish Sh. Ln Stz.
	City Sammanns Zip Code 95075
	Email
1-006-001	Comment Every meeting I have arrowded we
	have reguested that no parking 1076
	and pestinone be built officesty up one
	Insternal Enforcing these loss is soing
	to be difficult at the least.

I-006-001

Comment acknowledged. Based on King County's experience with other regional trails, parking and restrooms are necessary amenities given the 11-mile length of the corridor. King County is proposing to locate these facilities close to East Lake Sammamish Parkway and thus relatively visible and accessible to law enforcement officers, as well as the general public.

The King County Sheriff enforces park rules. The Sheriff will respond to calls from residents regarding trail rule enforcement. The trail corridor, including restroom and parking facilities, is part of the Sheriff's patrol responsibilities, as is the rest of the park system. There are currently no plans to increase or enhance the Sheriff's presence on the corridor.



Please leave Comment Form with sign-in sheet.

	Name (optional) Nome Duang (han
	Address 6581 137 TH PL NE #477
	City Resument Zip Code 98052
	Email Luangchann @ wwdb.org
:-007-001	Comment
	Most interim use of trail, away from road. and award high include.
1	

I-007-001

The last segment of the East Lake Sammamish Interim Use Trail was completed and open to the public in March 2006. King County's preferred alternative (the Corridor Alternative) sites the Master Plan Trail along the former rail bed. This is the site of the existing Interim Use Trail, and it avoids inclines to the greatest extent possible.



Please leave Comment Form with sign-in sheet.

	Name (optional) 5. Hogshead
	Address 3251 W. Lake Sammanish Pkuys.
	City Bellevue Zip Code 98008
	Email Skimntraaol, com
08-001	Comment I Strongly Dupport the
	Corridor alternative on former
8-002	trailroad right of way. Please
1	let's make public land
	benefit the public.

I-008-001

Your support of the Corridor Alternative has been noted.

I-008-002

Your support of the Corridor Alternative has been noted.

COST INE SOUTH amien HOS

East Lake Sammamish Trail Public Hearing November 9, 2006 Public Comment Form

Please leave Comment Form with sign-in sheet.

	Name (optional) Billie Cairns
	Address 107 E. Lake Samm. Sh. Ln. NE.
	City Sammamish Zip Code 98074
	Email cairns jb@ aol com/jbcairns@com cast, net
I-009-001	Comment Se support the Corridor Alternative
•	located of the former railroad right of way. I enjoy
	the trail. Paving the trail would allow wheel chairs to use the trail which is good,
	and tricydes. It only wish we could have
	had this trail 40 years ago! I have lived at the above address over 40 years.
	are the second s

I-009-001

Your support of the Corridor Alternative has been noted.



Please leave Comment Form with sign-in sheet.

	Name (optional) Bente Pasko
	Address 22109 NE 215+ Nang
	City Sammaring L Zip Code 98074
	Email pasto @ nalink, com
1-010-001	1. Build the preferred afternative Corridor, 12 ft gaved, left soft surface going down
I-010-002	2. Export areas for all ational perh amerities such as waterfront access, Plangfound & 56 3300, benches etc
I-010-003	3. Push back the fenci and tall hedges away from the traine's edge execut where necessary for safety or where homes are closer than 20 ft from
I-010-004	4. Keep ownership of the corridor and parmit uses outside the active trail corridor that accommodate the nistorical use of the corridor while not detrailing from the trailer genience.
I-010-005	5. The black chain links to foot bences are until 5 sold rail is much properted as should be the first choice where beneing is großesed.

I-010-001

Your support of the Corridor Alternative has been noted.

I-010-002

Some limited amenities such as interpretive signs and benches will be considered during the design phase of the project. Larger amenities such as playgrounds are not currently proposed, but may be considered in the future, subject to separate environmental and public processes.

I-010-003

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way.

I-010-004

King County has no plans to sell any portion of the right of way.

I-010-005

The use of chain link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives provide an equivalent level of protection based on site-specific conditions.

East Lake Sammamish Master Plan Trail EIS
Page 50



Please leave Comment Form with sign-in sheet.

	Name (optional) Paul Gauthier
	Address 3251 W. Lake Samm SE
	City Rollevue Zip Code 95008
	Email SKIMUTR @ DOC. COM
I-011-001	Comment T strongly support The Corner
ε	DItemative. It is a much more enjoyable
	way to branche along The lake, Than being
	forced close to The noise and pollution of
	,
	The highway. Anything less is too much
	of a compromise. Let's do it right.

I-011-001

Your support of the Corridor Alternative has been noted.



Please leave Comment Form with sign-in sheet.

Name (optional)
Address 3105 Douglas C+6W
City <u>Leszque</u> zip Code <u>98027</u>
Email Jacklyn: Thomas@comcast.net
comment Wake the ELST RR bed route permanent!
Please pave & follow (as much as possible) the railbed route. Cutizens have commented over the years how much a permanant,
pawed trail means to all of us (including fotore generations). A trail with inclines would hinder handicapped trail users. The
trail with inclines would hinder handicapped trail users. The trail should offer a maximum pleasant trail experiences vistas, quiet, level travel. If we are spending to on a permanent, paved
trail, make it worthwhile, it we all share a common thail (bikers, walkers, horses) make it as wide as possible \$
traul (bikers, walkers, horses) make it as wide as possible of a sanitary as possible. Can't wait to bike on a paved traul
from kszavah to Redmond!!!

Note: Difficult to find this bilda (N). no signage on road guiding us to this meeting, and bilda is in an out-of-the-way location. Other previous insettings held in easier-to-find compus

locations were signed and easily found at BCC.

I-012-001

Your support of the Corridor Alternative has been noted.

I-012-002

As suggested, the trail would be a minimum of 12 feet wide with two 2-foot shoulders, but would be widened where possible to accommodate a wider soft-surface shoulder or a separated soft-surface trail. King County has decided to prohibit equestrian use south of the City of Redmond, because there are no designated equestrian trails in the cities of Sammamish or Issaquah and the equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

I-012-001

I-012-002



Please leave Comment Form with sign-in sheet.

Name (optional) Jim BROWNING
Address 19633 SE 09455
City <u>S1774111</u> Zip Code <u>98675</u>
Email drbrowning. Chotmail.com
I completely AGREE WIDT A TRAK I do
HAVE CONCERNS ABOUT HOUSE USE MIND
WHAT MAPPENS TO THEIR WASTE & the CARE
I disagree with the PARKING AND
RESTROOMS MED TRAIL IN MESIdemal ARCO
due to TRAFFIC, & the Potential gartering
SPOST questional AcTIVITY & gang ACTIVITY.
MAINTHEONS FOR THAT USE ONLY POT YOUR
MININTERING IN ESTABLISHED TO THE

I-013-001

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

I-013-002

Comment acknowledged. Based on King County's experience with other regional trails, parking and restrooms are necessary amenities given the 11-mile length of the corridor. King County is proposing to locate these facilities close to East Lake Sammamish Parkway and thus relatively visible and accessible to law enforcement officers, as well as the general public.

The King County Sheriff enforces park rules. The Sheriff will respond to calls from residents regarding trail rule enforcement. The corridor, including restroom and parking facilities, is part of the Sheriff's patrol responsibilities, as is the rest of the park system. There are currently no plans to increase or enhance the Sheriff's presence on the corridor.

The preliminary plans for the two parking and restrooms facilities are designed to minimize effects on local traffic.

I-013-001

I-013-002



Please leave Comment Form with sign-in sheet.

	Name (optional) BARB JUSTICE
	Address 4004 - 243 nd PL, SE
	City <u>/55A0UAH WA</u> Zip Code <u>980Z9</u>
	Email Sjust 6 t a aol, Com
	Comment
I-014-001	1 & Dam 100% against KC selling any
	Portion of the existing right- of way.
I-014-002	For the sake of future generations the entire
	corridor must be preserved for a multi-lise
	Corridor for future transportation needs.
	Rail, trail, road or a combination of
anj	a all three modes must be remain or
	viable use of the entire width of the raid banks
I-014-003	Decond! On Page 2-45 2.6.1 milenium Trollay." The charged from Track"
7	In line to an number of needs To be Charge from the

I-014-001

King County has no plans to sell any portion of the right of way.

I-014-002

King County concurs.

I-014-003

King County will discuss the specifics of how and where the trolley track would be located with respect to the trail as trolley plans are further developed.

I-014-003

To troil (TRAIL) must be moved a rail vehicle be it a trolley or a self propelled single rail vehicle.

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Please leave Comment Form with sign-in sheet.

Name (optional) _	CONRAD	SALL	
	76 729 th		
City SSA	SUAH	Zip Code	98029
	RIKEOM		
			ou man and seaf his must distance assume more rail an encountering on more registratified and property.
Comment Thanks	f the egan	haily to	comment.
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			sel that this
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use of p	-blic finds,	>VI) (1)	contibuting
to the	quality of	life in	our community
	healthy prove		
transpert	Hiera.	Harales -	

I-015-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

I-015-001

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Please leave Comment Form with sign-in sheet.

	Name (optional) Leo Kosenkranius		
	Address 3233 E Lake Semmamish Show Lane 5E		
	City SammaMi3h Zip Code 98075		
	Email Leo. Kosenkranius@earthlink.net		
I-016-001	Concern about Parking lot @ SE 33rd		
	\$ Not a safe location because) It will		
	increase drug use & trafficing in the area.		
	Currently There is guse, trafficing, and waste		
	disgarded in the middle of the night.		
I-016-002	2) Locacation is hidden from the main road:		
17	This will increase illegal activities.		
I-016-003	, ·		
	3) Turn in access is poor. a) SE 33rd access block or backs up traffic		
	b) Parkway does not have a turn lane,		

I-016-001

Comment acknowledged. Based on King County's experience with other regional trails, parking and restrooms are necessary amenities given the 11-mile length of the corridor. King County is proposing to locate these facilities close to East Lake Sammamish Parkway and thus relatively visible and accessible to law enforcement officers, as well as the general public.

The King County Sheriff enforces park rules. The Sheriff will respond to calls from residents regarding trail rule enforcement. The corridor, including restroom and parking facilities, is part of the Sheriff's patrol responsibilities, as is the rest of the park system. There are currently no plans to increase or enhance the Sheriff's presence on the corridor.

I-016-002

As described above, this site was selected, in part, because it is relatively visible from East Lake Sammamish Parkway, which should aid law enforcement efforts.

I-016-003

A northbound left-turn lane onto SE 33rd Street currently exists. Traffic volumes in this turn lane would increase by a small amount due to the East Lake Sammamish Trail parking lot; however, access to SE 33rd Street likely would not be blocked or significantly increase traffic backups at this location. The County anticipates that on an average day, the parking lot would add a total of 5-6 vehicles to this northbound left-turn movement, which would not significantly impact vehicle delay at the intersection. There is also sufficient storage in the left-turn lane to accommodate the increased traffic because it transitions into a two-way left-turn lane farther south.

Southbound traffic on the Parkway should experience little or no delay

I-016-004

10ne

because any vehicles heading for the trail parking lot could make a free right-hand turn into SE 33rd Street.

I-016-004

The proposed exit from the parking lot would be adjacent to SE 32nd Street. At this exit, sight distance to and from East Lake Sammamish Parkway would be improved by removing some vegetation and brush north of the driveway. With the brush removal, visibility at this location would be equal to or better than visibility at an alternative driveway location south of SE 33rd Street. Relocating the parking area south of SE 33rd Street is not desirable because the property width is narrower, which would make it difficult for the County to fit all of the necessary facilities on the property; and because additional earthwork would be required to provide a level parking surface, which would increase the cost to construct the lot.

SEPAcomments, FMD

Dane Burns [rdburns@cnw.com]

Sent: Tue 10/31/2006 7:13 PM

To:

Cc: Subject: SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-017-001

Hard to believe after yeras of hard work and millions of dollars the County is even considering anything else! Pave the trail as it is now and finish the project.

Dane Burns Issaquah

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-017-001

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

From:

Nancy Karnes [nmkarnes@comcast.net]

Sent: Tue 10/31/2006 7:01 PM

To:

Cc: Subject: SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To Whom It May Concern:

I-018-001

As an advid cyclist and having biked on East Lake Sammasish Road, I am strongly in favor of the corridor alteranative. Being on the road is not a safe alternative. thank you for your consideration.

Nancy Karnes, RN MSN CCRN Faculty, Associate Degree Nursing Bellevue Community College Bellevue, WA nkarnes@bcc.ctc.edu (425) 564-2552

I-018-001

Your support of the Corridor Alternative has been noted.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Tue 10/31/2006 7:00 PM

SEPAcomments, FMD

To:

James Rupple [jwrupple@yahoo.com]

SEPAcomments, FMD; SEPAcomments, FMD

Cc:

Subject:

Don't take a wrong turn on the trail

Attachments:

I-019-001

I do NOT support the East A & East B solutions to the trail. Keep it straight and safe. Do not force people to go up to the Parkway just for a few homeowners. Don't waste the money.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-019-001

Your support of the Corridor Alternative has been noted.

To:

Barker, Kipp [BarkerK@dnb.com]

SEPAcomments, FMD

Sent: Tue 10/31/2006 6:47 PM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-020-001

We need to work on the Sammamish Trail and complete the project that was started. Thank you! Kipp Redoc

Kipp A. Barker

Dun & Bradstreet

2001 6th Ave., Suite 2215

Seattle, WA 98121

barkerk@dnb.com

206-956-1492 (office)

206-963-0324 (cell)

866-392-4025 (fax)

Your support of the Corridor Alternative has been noted.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Dan Crawford [dbmech@comcast.net]

SEPAcomments, FMD

Sent: Tue 10/31/2006 6:43 PM

To: Cc:

Corridor alternative for East Lake Sammamish Trail is the best!

Subject: Attachments:

I-021-001

As an avid bicycle rider (I have no car) who lives on the Eastside, I strongly prefer the Corridor alternative for the East Lake Sammamish Trail. It really makes no sense to pay millions of dollars more for alternatives East A and East B, which push trail users onto a busy roadway. Please keep the trail corridor the same as the interim trail.

Thanks, Dan Crawford 12543 NE 23rd Pl. #D-6 Bellevue, WA 98005

I-021-001

Your support of the Corridor Alternative has been noted.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From:

Anne Rittenhouse [ritts@comcast.net]

Sent: Tue 10/31/2006 6:33 PM

To:

Subject:

SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-022-001

Please do what you can to support the Corridor alternative for the ELST. With the cost of gas, the CO2 emissions, pollutions and obesity in our country, we need this alternative!!!

It's good for the citizens.

Sincerely, Anne Rittenhouse



Anne Rittenhouse, Broker Rittenhouse Realty LLC

"Family and Friends ARE our Business." TM

6229 121st Ave. SE, Bellevue, WA 98006-4422 206-714-0826 425-641-4091 Fax Ritts@comcast.net



https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From: Kathy Robertson [pickets@worldnet.att.net]

Sent: Tue 10/31/2006 6:13 PM

To: Cc:

SEPAcomments, FMD

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Hi,

After all the hard work and hard fought legal battles, it would be ludicrous to lose what all have worked to hard to gain, and that is a continuous corridor off the E. Lake Sammamish road where pedestrians, joggers, families, and cyclists can travel safely without impacting drivers on a major arterial. I biked this section only once before the trail opened because of the traffic hazards, and now have traveled the new corridor several times, because I no longer fear for my safety or have to compete with traffic.

I-023-001

King County owns this corridor. I believe it would be fiscally irresponsible to not use the trail for its intended purpose and expect us King County taxpayers to pay for additional land when these additional funds could be better used for other programs. The fact that the trial crosses private driveways is no different than parts of the Burke Gilman, Sammamish River, and other trails. These trails do not have sections closed or rerouted to satisfy a few landowners. These land owners will adjust with time, and need to accept that this corridor, which they never owned, is a viable part of our public trail system. And it is wrong to expect us, the public, to fund a trail corridor, or even sections of one, for their private use.

I-023-002

I adamantly support the Cascade Bicycle Club's positions, as stated below:

- 1. The preferred alternative (Corridor) is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East 8 plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- **4.** The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Thank you for this opportunity to comment.

Kathy

Kathleen Robertson

https://owa.metrokc.gov/cxchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-023-001

Your comments are acknowledged. The preferred alternative is a multiuse trail on the rail corridor.

I-023-002

Your comments are acknowledged. King County considered all of these factors when selecting the preferred alternative.

13136-66th Avenue NE

Kirkland, WA 98034

Phone: (425) 814-8459

Cell Phone: (425) 417-2048

e-mail: pickets@att.net

Steve Weil [Steve.Weil@microsoft.com] SEPAcomments, FMD

Sent: Tue 10/31/2006 6:02 PM

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-024-001

There is a shortage of "through routes" for cycle transportation. The ESLT should be completed in the simplest and most cost-effective manner.

Thanks, Steve

Steve Weil

425-703-5104

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-024-001

From: Richard Walters [rcwalters@mac.com] Sent: Tue 10/31/2006 5:56 PM

To: SEPAcomments, FMD
Cc: Richard Walters

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear King County Metro Staff:

I-025-001

I am writing to urge your office to support the "Corridor" or "preferred" alternative and oppose the "East 'A'" and "East 'B" alternatives.

My reasons are as follows:

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- **4.** The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Thank you for your consideration,

Richard C. Walters

3405 177th Ave. NE

Redmond, WA 98052

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-025-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

rrom:

Ray and Judy [rayjudywillman@verizon.net]

SEPAcomments, FMD

Sent: Thu 10/26/2006 5:16 PM

To: Cc:

Subject:

ELST

Attachments:

1-026-001

I have looked over your 5 proposed alternatives for the Master Trail Plan Phase II and would like to offer my support for the East A alternative. As an equestrian, I find this to be the most attractive in terms of safety and ambiance. The Corridor Alternative would also be acceptable. The East B Alternative is much less attractive for equestrians. There is always some element of risk when horses are required to use road shoulders in high traffic situations, and it may also prohibit riders whose horses cannot tolerate that kind of traffic impact. Both alternative 4 and 5 would be even less desirable alternatives because they result in limited equestrian access at best, and perhaps no access at all.

Thank you for your consideration

Judy Willman Legislative Analyst King County Executive Horse Council 425 885 5498

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-026-001

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

From:

Sharon Anderson [SKayAnderson1@comcast.net]

SEPAcomments, FMD

Sent: Tue 10/31/2006 7:49 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To Whom it May Concern:

I-027-001

Please complete the East Lake Sammamish Trail by paving it through, I am an avid cyclist and just yesterday took that route, the road is busy and not safe, please continue to make the Eastside cycle, walking, jogging friendly. We need to support such healthy activity even if it may "inconvenience" a few.

Thanks for listening!

Sincerely,

Sharon Anderson

5623 178th Ave. SE

Bellevue, WA 98006

425-603-9503

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

To:

Kate Jansky CRNA [kjansky@comcast.net]

SEPAcomments, FMD

Sent: Wed 11/1/2006 6:45 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Hello,

I-028-001

I commute by bicycle 2- 3 days a week from the central Plateau behind Skyline HS to Group Health on NE 156th in Redmond. I have been eagerly awaiting a paved, safe route along East Lake Sammamish. Routing traffic from the trail up onto the main roadway is unsafe. It creates a surprise nuisance for drivers and an additional challenge for beginning or young riders who might not be safe if the trail meanders into

I support the initial plan that paves already purchased land. It is the best value for the public and has the smallest impact on the surrounding environment.

The East A and East B alternatives would require major and expensive new development outside the right of way.

Kate Jansky Sammamish, WA

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-028-001

To:

Carry Porter [carry_porter@yahoo.com]

SEPAcomments, FMD

Sent: Wed 11/1/2006 6:27 AM

Cc:

Cc: Subject:

please support the "preferred corridor" for the East Lake Sammamish Trail

Attachments:

To Whom It May Concern:

I-029-001

I am a cyclist who lives in Kirkland and frequently rides through Redmond, Issaquah and Sammamish. I am writing to offer my support for the preferred corridor for the East Lake Sammamish Trail. I strongly believe that it is the best alternative for the public for three reasons:

First, the preferred alternative uses land that King County already owns. The East A and East B plans would require spending an additional \$22 million buying land plus additional engineering costs. Second, the preferred alternative gives trail users an even and direct route. The East A and East B plans would route users back onto East Lake Sammamish Parkway, defeating the purpose of the trail entirely. And lastly, the preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Thank you very much for you time. I look forward to using a paved, complete East Lake Sammanish Trail soon.

Sincerely, Carry Porter

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I-029-001

The sender of this message has requested a read receipt. Click here to send a receipt.

SEPAcomments, FMD

Betsy MacInnes [Macib@foster.com] From: SEPAcomments, FMD

Sent: Wed 11/1/2006 7:25 AM

To:

Cc:

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-030-001

I am a resident of Issaquah and an avid, regular cyclist. I now ride the shoulder of East Lake Sammanish, which I don't consider very safe. I strongly urge you to keep the trail off the shoulder of the road, and to get it paved.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-030-001

Sent: Wed 11/1/2006 7:18 AM

SEPAcomments, FMD

From: breskodeb@aol.com [breskodeb@aol.com]

To: SEPAcomments, FMD

Cc: Subject:

I support the Master Corridor alternative for the E. Lake Sammamish Trail

Attachments:

I-031-001

I support the Master Corrdiro alternative for the East Lake Sammamish trail for the following reasons:

- 1. The preferred alternative is the best value for the public.
- 1. The preferred alternative uses land that king County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Debbie Bresko Sammamish, WA

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I-031-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Wed 11/1/2006 6:03 AM

SEPAcomments, FMD

To:

Ball, Conrad A [conrad.a.ball@boeing.com]

SEPAcomments, FMD

Cc: Subject:

Support for the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Greetings,

I-032-001

Please accept this message with my strong endorsement of the "Corridor" option for the Eastlake Samammish Trail final configuration. My family and I are active trail users. We believe that the Corridor option provides the best value for the county (it best utilizes the existing railbed and minimizes the additional investment of public funds), and perhaps most importantly it is the safest alternative for all users. We are already so proud of the trail and the commitment to health and sustainable transportation the trail represents - the trail sends a great message about who we are as a community. To abandon the railbed for the road would be a tremendous loss - increasing the hazard to the trail users and the drivers - and would squander the investment we've already made in the right of way.

Thanks for your consideration and for your leadership in demonstrating King County's commitment to health and safety.

Conrad A. Ball 5356 229th Ave SE Issaguah WA 98029

253 657 1727 (voice) 206 276 9348 (cell)

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-032-001

SEPAcomments, FMD

From: To:

EXT-Thomas, Gary W [gary.w.thomas@boeing.com]

Sent: Wed 11/1/2006 5:53 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-033-001

I am an avid cyclist who uses the bicycle to commute to work. I choose to do this because the expense of driving my car is getting out of hand. Plus I see it as a way to help alleviate the congestion on the roads. Doing so, I feel, helps in lowering the overall costs in maintenance few cars, less wear & tear, lower maintenance costs.

Therefore I would appreciate all efforts to pave the Sammamish trail.

Thank you,

Gary W Thomas

Spirit AeroSystems, Inc. Multi Mission Maritime Airplane Wichita M.E. On Site in Renton

M/S: 6M5-03 Phone: 425-965-6974 Pager: 1-800-347-3952

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-033-001

Sent: Wed 11/1/2006 1:16 AM

I-034-001

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

To:

Franklin Story [fstory@lighthouse9.com]

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-034-001

I have enjoyed the East Lake Sammamish since its inception last Spring—and it is may strong wish that the trail is completed, as planned, with the accompanying soft-surface.

It has been a real asset for me personally, and many of my fellow King Co. residents—improving our health and quality of life by facilitating a more active lifestyle.

And frankly, easy access to such a wonderful trail is a major reason I chose to stay in the Redmond area even though my work has transferred me farther North, out of King county. Because of it, I continue to contribute to the Redmond and King Co. tax base and share a real "sense of community" several times a week with the many runners and walkers I come across on the trail.

Please, finish what we have started—it's a wonderful and useful gift to King Co/Eastside residents. We will realize benefits, on so many levels, from this trail for generations!

Franklin Story

Franklin Story

Email: fstory@lighthouse9.com Phone: 206.931.7484

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From:

Mark Akins [makins@seattletimes.com]

Sent: Wed 11/1/2006 12:39 AM

To:

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-035-001

Please do not consider breaking up the East Lake Sammamish Trail and send users onto East Lake Sammamish Parkway under the "East A" and "East B" alternative plans.

I commute by bicycle along the parkway occasionally, and I've had some close calls with motorists who veered onto the shoulder of the road, dangerously close to me. I do not wish to be a statistic!

I was thrilled when the trail was completed, and I'm even more excited about the prospects of seeing it paved to provide a safe, fast commute. Keep us bicyclists off the parkway and out of harm's way, please!

Thank you. Mark Akins

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-035-001

To:

Lisa Leibfried [lisa_leibfried@hotmail.com] SEPAcomments, FMD

Sent: Wed 11/1/2006 12:11 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-036-001

Please support the preferred "Master Corridor" alternative.

Here are a few reasons to support the "Corridor" or "preferred" alternative and oppose the "East 'A" and "East 'B" alternatives.

- I. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Thank you,

Lisa Leibfried

Seattle resident and long-time bicyclist

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-036-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

To:

Kevin Andrew [kevin.h.andrew@gmail.com] SEPAcomments, FMD

Sent: Tue 10/31/2006 10:29 PM

Cc:

Subject:

Keep the East Lake Sammamish Corridor

Attachments:

I-037-001

It's so wonderful that such a great trail could come together, don't let a few people derail a wonderful community achievement.

Kevin Andrew

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Tue 10/31/2006 11:20 PM

SEPAcomments, FMD

From:

Ral West [ral@ak.net]

To: SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-038-001

I think the bike corridor alternative for the East Lake Sammamish Trail is a needed amenity for our community. Bicycling is not only healthy for our community members, but is a clean alternative to the use of automobiles.

Further, the preferred alternative is the best value for the public and uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs. The preferred alternative also gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail. This preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Please consider these arguments in your decision-making.

Thank you,

Ral T. West

ral@ak.net

No virus found in this outgoing message. Checked by AVG Free Edition.

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I-038-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From: Earl Shimogawa [earlshim@comcast.net] Sent: Tue 10/31/2006 10:14 PM

To: SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-039-001

It is my understanding that the Corridor alternative for the East Lake Sammamish Trail uses public land for the enjoyment and health of all the citizens of this wonderful state. We cannot allow a few individuals who own properties along the lake to take that away from the vast number of our residents in order to fulfill their own selfish desires, i.e., to use public land to extend their property boundries and acquire greater personal privacy. I have no problem with someone who wants a large property, but they should do it at their own expense, not at the expense of the people of WA.

Earl Shimogawa, M.Ed, CRC, ABVE Dura Vocational Services, P.S. PO Box 6516 Bellevue, WA 98008-0516 Phone: 425-401-0245 Cell: 425-652-0036 Fax: 425-401-0497

Email: earlshim@comcast.net

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-039-001

Your support of the Corridor Alternative has been noted.

Pursuant to King County Code 14.30 and consistent with its management of the regional trails system, King County maintains a special use permit system to authorize private use of County-owned property. These permits are typically of a 5- to 10-year duration, are subject to federal railbanking requirements, and King County reserves the right to revoke a special use permit. King County will not knowingly tolerate unpermitted private use of public property.

Sent: Tue 10/31/2006 9:47 PM

SEPAcomments, FMD

From: Allen Nicholson [allennic@comcast.net]

SEPAcomments, FMD

To: Cc:

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-040-001

When the homeowners purchased their property, there was an easement in place ... many of the property owners built on the easement with the expectation that if enough of them did this, then the easement might be somehow invalidated. For those property owners who were misled, or not made aware of the easements, they should be seeking compensation from their title company and/or the sellers and/or developers of the at issue properties. For any of these people to continue to waist public funds fighting this issue is frivolous and I would expect our public officials to file suit against these property owners, on behalf of the public, in order to quash their land-grabbing efforts and recoup the costs, including public court and attorney fees.

Allen Nicholson 3331-99th Ave NE Bellevue, WA, 98004

I-040-001

Your comment is noted. Legal matters arising out of or relating to federal railbanking of the former BNSF corridor are beyond the scope of this EIS.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Tue 10/31/2006 9:33 PM

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

From: John Wall [carguynw1@comcast.net]

To: SEPAcomments, FMD
Cc: Lambert, Kathy

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-041-001

Please note that I urge you to select the Master Corridor alternative for the East Lake Sammamish Trail. The other alternatives defeat the purpose of the trail, i.e., to provide the public with a walk and/or bike trail around the east side of Lake Sammamish. Purchasing additional land makes no sense—why buy land when the citizens of King County already own a right of way—and adds to development costs.

It is possible to protect private interests along the lake while granting King County residents their legitimate interest in the trail. Implement the least costly and environmentally intrusive alternative - the Corridor alternative.

John Wall 22260 NE 7th Street Sammamish, WA 98074 425-868-7654 home 206-719-7977 cell

https://owa.mctrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From:

ARNOLD HOGENHOUT [ARNOLDUS04@MSN.COM] SEPAcomments, FMD

Sent: Tue 10/31/2006 9:22 PM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-042-001

Arnold Hogenhout

I am all for the preferred alternative on the bike trail. It is the most cost effective way for taxpayers also.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From:

D Matte [dmatte@comcast.net]

SEPAcomments, FMD

Sent: Tue 10/31/2006 8:38 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

SEPAcomments, FMD

I-043-001

I'm a cyclist that frequently rides around Lake Sammamish and live at the south end of the lake. I am anxious to see the trail paved so that cyclists no longer have to ride with the traffic on east Lake Sammamish. Once the trail is paved, that portion of the ride around the lake will be much safer.

The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.

Sincerely,

Dan Matte

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Tue 10/31/2006 8:43 PM

SEPAcomments, FMD

From: Kate Swift [khswift@verizon.net]

SEPAcomments, FMD

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-044-001

The whole purpose of buying the old railroad was to replace with it a trail. A trail that follows the exact path of the railroad, with no deviations up to east lake samm parkway, or onto other land that would have to be purchased at additional cost.

Stick to that intent! The result will be a wonderful trail and doubtless thousands will enjoy the direct link-up and scenic views. Tell the Nimby's to put up or sell up.

Say NO! to East A and East B.

Kate Swift

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Version: 7.1.409 / Virus Database: 268.13.21/509 - Release Date: 10/31/2006

Page 1 of 1

SEPAcomments, FMD

Sent: Tue 10/31/2006 8:45 PM Jim Leavitt [jim.leavitt@romac.com]

To: SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-045-001

As a bicycle commuter, I'm one less car on the road. We must encourage alternate forms of transportation, and the trail accommodates that goal. Today, the UK released a report that suggests the world's economy will suffer a greater than 10% downturn due to global warming. Encourage cyclists, give them safe trails to bike upon, our grandchildren will thank us.

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Jim Leavitt

3240 164th Place SE

Bellevue, WA 98008

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-045-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

From:

D Matte [dmatte@comcast.net]

SEPAcomments, FMD

Sent: Tue 10/31/2006 8:47 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

My family and I love the East Lake Sammamish trail. We take our kids on the trail all the time. We feel very safe having the kids on the trail because they are off the road. I personally bike the trail twice a week without the kids too and absolutely love it.

I-046-001

I understand that there is opposition to the trail proposing to close down certain parts of it. This would be very unfortunate. Safety is very important to us and we would not use the trail if we were forced to ride on the road. I understand this is land that King County already owns, so why is this an issue?

Please feel free to contact me for further comments. I very strongly support the East Lake Sammamish Trail.

Thanks,

Dawn Matte

425-641-4489

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-046-001

The purpose of the EIS is to investigate the impacts and effects of all trail alternatives. King County's preferred alternative (Corridor Alternative) does not remove the trail from the corridor. However, the Draft EIS is required to analyze the impacts and effects of all alternatives, including alternatives that would place the trail next to East Lake Samammish Parkway. Relative levels of user safety were evaluated for all alternatives considered.

From:

Joe and Anne [theplatzners@comcast.net]

SEPAcomments, FMD

Sent: Tue 10/31/2006 8:35 PM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-047-001

Please keep the Trail along the tracks. Do not divert parts of the trail to East Lake Sammamish Parkway.

Thank you!!!

Anne Platzner

4220 160th Place SE

Bellevue

I-047-002

Here are a few reasons why I support the "Corridor" or "preferred" alternative.

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns.
- 3. The preferred alternative gives trail users an even and direct route.
- 4. The preferred alternative has the smallest impact on the surrounding environment.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-047-001

The preferred alternative is to develop the trail in the corridor.

I-047-002

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 10/31/2006 8:33 PM

I-048-001

SEPAcomments, FMD

From: To: Eric [ericjep@comcast.net]

SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-048-001

Keep, maintain and pave the trail for the greater good of all citizens. This is a positive community enhancement for all people to enjoy.

Eric V. Jeppesen

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Your support of the Corridor Alternative has been noted.

From:

David O'Brien [o.celtic@verizon.net]

Sent: Tue 10/31/2006 8:23 PM

To: SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To King County;

I-049-001

I support the Corridor alternative for the East Lake Sammamish Trail. As someone who works in Issaquah at Costco corporate and lives in Redmond, I have been anxiously waiting over 6 years for this trail to be paved as an avenue for cycling commuter route that is "free" of car traffic. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail and putting bicyclist and pedestrians in harms way of car traffic. As someone who was hit head on by a car making an illegal left hand turn into me on June, 2004, I know that keeping cyclist off the street it improves our safety and promotes commuting®

Thank you for listening,

David O'Brien

9067 161st CT NE

Redmond, WA 98052

Email: o.celtic@verizon,net

Trail

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From:

Sharon Anderson [SKayAnderson1@comcast.net]

SEPAcomments, FMD

Sent: Tue 10/31/2006 7:49 PM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To Whom it May Concern:

I-050-001

Please complete the East Lake Sammamish Trail by paving it through, I am an avid cyclist and just yesterday took that route, the road is busy and not safe, please continue to make the Eastside cycle, walking, jogging friendly. We need to support such healthy activity even if it may "inconvenience" a few.

Thanks for listening!

Sincerely,

Sharon Anderson

5623 178th Ave. SE

Bellevue, WA 98006

425-603-9503

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Tue 10/31/2006 7:21 PM

SEPAcomments, FMD

To:

John Dex [wjdex@yahoo.com]

SEPAcomments, FMD

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-051-001

I regularly cycle on both the East Lake Sammamish Parkway and the new East Lake Sammamish trail. The trail has been an exceptional addition to the recreational landscape. I have been looking forward to the trail being paved. As you move forward to this end, please stay on track! The Corridor alternative aka preferred alternative makes the most sense.

The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail. As a cyclist familiar with the route I can tell you that rerouting trail traffic (often kids and less experienced cyclists) would create a very dangerous environment. Likely, this would reduce utility and enjoyment of the trail for families and I believe its value to the community as a whole.

Please stick with the Corridor alternative.

Thank you,

John Dex Bellevue

J Dex : wjdex@yahoo.com

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I-051-001

From: To:

Edwin [siklista@peoplepc.com]

Sent: Wed 11/1/2006 9:07 PM

Cc:

SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-052-001

I support the "Corridor Alternative" for the paving of East Lake Sammamish Trail for the following

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

On my commute/recreational bicycle ride to Redmond, I always have to use East Lake Sammamish Pkwy due to the unpaved surface of East Lake Sammmish Trail. As always, I have to dodge car traffic and jeopardizing my safety due to unsafe drivers. The paving of the trail will eliminate this hazard, not only to myself but also to countless others who are forced to use the roadway.

Thank you.

Edwin Carnay

PeoplePC Online A better way to Internet http://www.peoplepc.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-052-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Page 1 of 1

SEPAcomments, FMD

Graham Johnson [grahammandy@verizon.net]

SEPAcomments, FMD

Sent: Wed 11/1/2006 8:24 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear Sir/Madam,

I-053-001

I support the Corridor alternative for the East Lake Sammamish Trail

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.
- 5. The trail should be used for all public use as was the intent.

Best Regards

Graham Johnson 21524 NE 9th Place Sammamish, WA, 98074

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-053-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

From:

Joe Rodriguez [spogdog@comcast.net]

SEPAcomments, FMD

Sent: Wed 11/1/2006 8:04 PM

To: Cc:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-054-001

I support the Corridor alternative as the most cost effective alternative for a complete trail.

The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.

Joseph Rodriguez

Your support of the Corridor Alternative has been noted.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Wed 11/1/2006 7:15 PM

I-055-001

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

From:

Matt Palmer [palmerm@verizon.net]

To: SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-055-001

The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land — not counting the additional engineering costs. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.

-Matt Palmer

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

Sent: Wed 11/1/2006 5:41 PM

SEPAcomments, FMD

Kimberly Ulrich [kimberlyulrich@cbbain.com] From:

To: SEPAcomments, FMD

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail Subject:

Attachments:

I-056-001

For the East Lake Sammamish Trail I support the Corridor alternative for these reasons:

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.

 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route
- users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Kimberly Ulrich

Coldwell Banker Bain cell: 206.650.6549 fax: 425.455.9659 e-mail: kimberlyulrich@cbba.com

....always give people more than they expect to get - Nolson Boswell

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-056-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

From:

Suzanne Bachelor [suzanne@streamtree.com]

SEPAcomments, FMD

Sent: Wed 11/1/2006 4:35 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-057-001

Please complete our wonderful & useful trail as soon as practical with the original corridor in tact! Thanks,

Suzanne Bachelor

Life Coach

phone: 425.821.3944

coachsuz@streamtree.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-058-001

Your support of the Corridor Alternative has been noted.

Hello.

I-058-001

I would like to voice my support for the preferred "corridor" alternative for the East Lake Sammamish Trail. This looks like it would be the most cost-effective and safest route for the final trail.

Thank you.

Perry Bongiani 1643 – 266th Way SE Sammamish, WA 98075 425-391-9476

###

This message is for the designated recipient only and may contain privileged or

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https://oww.metroke.gov/evchange/ELSTEMD_SEPAcomments/Inhov/ELST%20Gen 1/24/2007

Andy Steinmetz [Andy.Steinmetz@loudtechinc.com]

Sent: Wed 11/1/2006 1:37 PM

To:

SEPAcomments, FMD andy.steinmetz@verizon.net

Cc: Subject:

In support of the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear King County representative,

I-059-001

I would like to express my strong support for the "Master Corridor" plan for the East Lake Sammamish

Compared to the other alternatives proposed, the "Master Corridor" plan uses land that is already owned by King County. The East A and East B alternatives instead would require King County to purchase and develop additional land and increase the total cost of the trail substantially. I therefore strongly oppose these other alternatives (East A and East B).

Also, from a safety perspective, the East A and East B alternatives would route the users, walkers, joggers, bikers, and in particular children to the very busy East Lake Sammamish Parkway. This totally defeats the purpose of having a safe trail away from busy roads and car traffic. The Master Corridor would keep the users away from the road and therefore safe!

In addition, the Master Corridor plan has the least impact on the surrounding environment. East A and east B alternatives would require major new development with negative impact on the environment.

In summary, the "Master Corridor" plan is superior over the other alternatives by three major factors: Cost, environmental impact, and safetyl

I don't think there is any question on what the decision needs to be.

Best regards,

Andy Steinmetz, Ph.D.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-059-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From: Dave Sage [Dave.Sage@PREMERA.com] Sent: Wed 11/1/2006 1:23 PM

To: SEPAcomments, FMD

Cc:

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I support the preferred "Master Corridor" alternative for the East Lake Sammamish Trail!

As a long time Redmond resident (moved here in about 1968, attended Redmond Elementary, Redmond Junior High & Redmond High Schools, class of 1976) I have been waiting for this trail since I first beard it proposed in about 1972. The anti-trail activists have held up this trail long enough. I wish the county had never allowed them to build houses between the lake & the railroad & East Lake Sammamish Parkward!

My kids have attended Horace Mann Elementary School, and currently attend Redmond Junior High & Redmond Jifgh Schools. We currently cannot use the interim trail as our bicycles cannot handle the gravel surface. Please pave the trail as soon as possible, completing a safe corridor around Lake Sammamish! We cannot put wider tires on our tandem bicycle.

I-060-001

Here are a few reasons I support the "Corridor" or "preferred" alternative and oppose the "East 'A" and "East 'B" alternatives.

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

I-060-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

From:

Bob Miller [bmiller260@comcast.net]

Sent: Wed 11/1/2006 12:45 PM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake SammamishTrail

Attachments:

I-061-001

Hello, my parents used to live on lake sammamish when the train ran from issaquah to redmond. It ran right through the backyard. They knew when they bought the property that the railroad right of way was never going to be their property. They are long dead but the controversy continues. Today I live in issaquah and I am a cascade bike club member and an avid cyclist. I use the trail several times a week for recreation and commuting. It appears that some lakeshore residents refuse to realize that that right of way never belonged to them. They bought after the train stopped running. I don't believe that changed anything. Please complete the trail is it now stands. It is public land, had been public land when the rail route ceased. Do not let a few stingy, misinformed land owners impede and imperil the public's well being.

Bob miller 425 391 1888 Your support of the Corridor Alternative has been noted.

From:

jim.miotke@gmail.com on behalf of Jim Miotke

Sent: Wed 11/1/2006 11:22 AM

To: Cc:

Subject:

East Lake Sammamish Trail.

SEPAcomments, FMD

Attachments:

To Whom It May Concern:

I-062-001

As an avid cyclist and member of the Sammamish community, I wanted to let you know that I support the corridor alternative for the East Lake Sammamish Trail.

I am doing all I can to ride to work each day, cutting down on emissions and gas usage, and I will also enjoy using the trail for recreational purposes.

Thanks,

Jim Miotke, Jim<u>®betterphoto.com</u>
President, BetterPhoto.com, Inc. ®
Celebrating 10 years of community, learning, and fun!

Get feedback on your photos from pro photographers: http://www.betterphoto.com/photography-feedback.asp

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From:

Adrian Smith [adrian@ignitionpartners.com]

SEPAcomments, FMD

Sent: Wed 11/1/2006 11:14 AM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-063-001

Please take into consideration my support for the corridor alternative for the East Lake Sammamish trail.

Best Regards, Adrian Smith.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

From:

Steve Hooper [shooper@ignitionpartners.com]

SEPAcomments, FMD

Sent: Wed 11/1/2006 10:55 AM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To King County Executive,

I-064-001

I am a long term (30 year) resident and biker in King County. I often commute into work and spend many enjoyable hours biking on the weekends. As our population and traffic congestion continues to grow it is becoming more dangerous for the growing population of bikers. Your proposed East Lake Sammamish Trail is exactly the kind of investment the county should be making to support recreation and commuting in the county. I urge you to continue with your plans to complete the East Lake Sammamish Trail.

Steve Hooper

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-064-001

The sender of this message has requested a read receipt. Click here to send a receipt.

SEPAcomments, FMD

From: Davis, James W [james.w.davis@boeing.com]
To: SEPAcomments, FMD

Sent: Wed 11/1/2006 10:43 AM

To: Cc:

CC

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-065-001

I am once again appalled that the people living along the East side of Lake Sammamish are trying yet another underhanded legal tactic to prevent the public from using land that does not belong to the home owners. The railroad right of way that has become the East Lake Sammamish trail is PUBLIC PROPERTY. These are not "private driveways" that cross public property, these are driveways which encroach upon property owned by the public, these are driveways that were constructed across public property by builders or homeowners "betting on the come" that the trail would not be constructed along the former railroad right of way. Now that the law has been followed and the trail is in place, this group is trying everything it can to block the trail. That right of way was there long before any of those people moved there. This situation is akin to someone who knowingly buys a home next to an airport and immediately begins complaining about the noise from airplanes

I'm a cyclist and a taxpayer, I want that trail intact. Riding on East Lake Sammamish Boulevard is frightening. Vehicle speeds are high and there is no shoulder on parts of the road. Diverting bikes to that road is irresponsible and dangerous. The homeowners should be ASHAMED of themselves and their callous attitude toward rider safety.

The Cascade Bicycle Club preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.

Please, stand up to this small cadre of homeowners who think they are special and do what is right for the greater good. Thank you for listening.

Jim Davis Everett Site Cost Accounting Manager A/P Programs Finance E-9100 M/C 03-TE Office: (42S) 266-6012

Alpha Pager: http://webpager.boeing.com/htbin/pagem/?pagee=james.davis

Cellular: (206) 679-8378

E-Mail: James.W.Davis@Boeing.Com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-065-001

From: To: Nomi, Margaret L [margaret.l.nomi@boeing.com]

Sent: Wed 11/1/2006 10:17 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Respectfully,

Thanks for listening!

Let's get on with paving the trail. You'll recognize these reasons, which my husband and I (Issaquah residents) wholeheartedly believe.

I-066-001

1. The preferred alternative is the best value for the public.

SEPAcomments, FMD

- Use the land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way. King County is eager for a improved trail system and increased opportunity for safe and direct bicycle transportation. Thanks again and have a great day.

Margaret Nomi
Deputy Fleet Support Chief
707/727/ 737-100 - 500
Boeing Commercial Aviation Services
Office:(206) 766-4470 Fax: (206) 662-3722
cell: (206) 853-9870 MC 2L-81
margaret.l.nomi@boeing.com

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I-066-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From: To:

Jeff Shuey [jeff@k2workflow.com]

Sent: Wed 11/1/2006 9:56 AM

Cc:

SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-067-001

 $1. \quad \text{Option 1 is the best use of public funds and natural resources. I support option 1 - The Corridor Alternative: The}\\$ proposed Master Plan Trail would be located within the former railroad right of way. The majority of the trail would encompass the existing Interim Use Trail.

Please consider the points below to support my recommendation for Option 1.

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land - not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Thank you for your time,

Jeff Shuey

Sammamish Resident & Tax Payer

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I-067-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From:

Mark Leclair [mdleclair2@mac.com]

Sent: Wed 11/1/2006 5:26 AM

To:

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-068-001

I support the paving of the East Lake Sammamish Trial.

Mark LeClair mdleclair2@mac.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-068-001

Sent: Wed 11/1/2006 9:30 AM

SEPAcomments, FMD

From: To: Jeff Koch [jeff@ekoch.org]

SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-069-001

The preferred alternative uses land that King County /already /owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.

Thanks, Jeff Koch

King County resident and avid trail user

Your support of the Corridor Alternative has been noted.

Page 1 of 1

SEPAcomments, FMD

From: To:

Dave Lamont [dlamont@ccdenterprises.com]

SEPAcomments, FMD

Sent: Wed 11/1/2006 9:26 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear Sir or Madame:

I-070-001

I am a user of the Sammamish trail. In March I ride around the lake at least three times per week and continue doing so until September. I very much look forward to the paving of the trail as my rides are now on the road where there a many cars commuting and not paying attention to cyclist.

I fully support the "Preferred Alternative" and am opposed to the East A and East B plans. The East A and East B plans are less attractive because they both cost more money for land acquisitions and engineering expenses. Additionally East A and B fail to use existing government property for the best interests of all of the citizens and benefit a select minority. Lastly, the environmental impacts of the preferred alternative are less than those of East A and East B.

Thank you for your consideration in this matter.

Dave Lamont

1555 132 Ave NE, Suite B

Bellevue, WA 98005

425-732-4400 xt 100

Fax 425-732-4401

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I-070-001

From:

Mike Leahy [mike.leahy@comcast.net]

SEPAcomments, FMD

Sent: Wed 11/1/2006 9:13 AM

To: Cc:

CC: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear Sirs and Madams--

I-071-001

The East Lake Sammanish trail is a jewel in the crown of King County's bountiful recreational opportunities. We the citizens of this county must not allow a handful of wealthy and selfish landowners decide how the County uses its land. The trail corridor predated the rich guys by several decades. The preferred alternative is the only just and rational choice.

Regards,

Mike

Mike Leahy mike.leahy@comcast.net (425) 865-9979 Your support of the Corridor Alternative has been noted.

Sent: Wed 11/1/2006 8:55 AM

SEPAcomments, FMD

From: To: Gross, Michelle [michelle.gross@wamu.net]

SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-072-001

As a road cyclist living near Issaquah, I frequently ride in the area to the east of Lake Sammamish. Riding along East Lake Sammamish Parkway, however, is some of the most dangerous riding I do. I have been anxiously awaiting the paving of the East Sammamish trail so that cyclists will have a safe, direct route around the Lake that connects to other trails. The most simple and cost effective way to accomplish this route is to pave the trail. Let's get it done!

,

Your support of the Corridor Alternative has been noted.

Sent: Wed 11/1/2006 8:13 AM

L

SEPAcomments, FMD

From: To: Lorraine Sehorn [LorraineS@listentalk.org]

SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-073-001

Let's keep our trails open to all!

Lorraine Sehorn

Office Manager

Listen and Talk

Education for Children with Hearing Loss

10207 NE 183rd ST Bothell, WA 98034

425-483-9700

425-487-3471 fax

lorraines@listentalk.org

http://www.listentalk.org

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-073-001

Thank you for your support of the regional trail system.

Sent: Wed 11/1/2006 7:52 AM

SEPAcomments, FMD

Allison Mohr [allisonmohr@yahoo.com]

To: SEPAcomments, FMD

Cc: Subject:

EastLake Sammamish Trail

Attachments:

I-074-001

I am appalled that the people living along Lake Sammamish are once again trying to divert the public from using land that does not belong to the home owners. The rail right of way is PUBLIC PROPERTY. There are not "private driveways" that cross public property, those are driveways which encroach upon property owned by the public, perhaps THEY should be shut down or rerouted?

I'm a cyclist, I'm a taxpayer, I want that trail intact. Riding on East Lake Sammamish Boulevard is frightening. Vehicle speeds are high and there is no shoulder on parts of the road. Diverting bikes and walkers to that road is irresponsible. The homeowners should be ASHAMED of themselves and their callous attitude toward public safety.

The Cascade Bicycle Club preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.

Please, stand up to this small cadre of homeowners who think they are special and do what is right for the greater good.

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I-074-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From:

Lewis, Cris [Cris.Lewis@wyndhamvo.com]

SEPAcomments, FMD

Sent: Wed 11/1/2006 7:49 AM

To: Cc:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Hello,

I-075-001

I am a strong supporter for the corridor alternative for the East lake Sammamish Trail. As a community that is trying to encourage ride share, biking, transit as a means for transportation in the area I feel it is critical that King County work hard to provide the ability and support to do this. A few reasons why:

- 1) The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 2) The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.
- 3) The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.

Regards,

Cris Lewis

Kirkland Resident

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I-075-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Wed 11/1/2006 7:49 AM

SEPAcomments, FMD

To:

Bob.Jennison [bob.jennison@comcast.net]

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-076-001

The East Lake Trail is too important not to pave. It allows families to use the trail that will promote health and safe riding area for Children. Finish the trial as it should me and it open

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-076-001

Sent: Mon 11/6/2006 7:20 PM

SEPAcomments, FMD

From: SuhlerCPA@aol.com [SuhlerCPA@aol.com]

To: SEPAcomments, FMD

Cc:

I-077-001

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

It is imperative that bicycles and pedestrians have a separate trail. As traffic in our area continues to increase the only safe alternative is to provide off road trails. This will provide a safe corridor for commuter and recreational riders.

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I-077-001

King County concurs with your safety concerns. The off-road Corridor Alternative is the County's preferred alternative.

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

From:

Craig Mohn [craigmohn@earthlink.net]

SEPAcomments, FMD

Sent: Mon 11/6/2006 3:31 PM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear King County -

I-078-001

Completion of the East Lake Sammamish Trail must be a high priority. The public is best served by a trail which utilizes the rail corridor right-of-way, rather than on overly-expensive alternative which zig-zags up onto a major traffic artery.

Completion of this trail makes it possible for families to bicycle, rollerbladers to skate, and pedestrians to safely walk from Issaquah to Fremont on a trail which is relatively straight and insulated from major traffic arteries. The health benefits to the community are obvious. These uses would be severely compromised if the more-expensive alternative is considered.

I understand the concerns of the lakeshore property owners. However, there was a rail easement when they bought their property, and the possibility of uses ranging from a trail to light-rail to renewed heavyt rail traffic was priced into their property. Tthey simply have no right to complain about the less-intrusive option of a paved trail with quiet users. Their protestations are a cynical attempt of get the public to subsidize the perfection of every detail of their desired lifestyle.

Thanks for listening, Craig Mohn

Sent: Mon 11/6/2006 8:21 AM

SEPAcomments, FMD

To:

Godo, Kristin G [kristin.g.godo@boeing.com]

SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-079-001

The preferred alternative gives trail users an even and direct route.

The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.

Kris Godo BEST Data Warehouse Developer 425 865 1683 M/S 7A-CA I-079-001

Your support of the Corridor Alternative has been noted.

From:

Julie Mavros [JulieMavros@myarbonne.com]

Sent: Sun 11/5/2006 8:50 PM

To: Cc:

SEPAcomments, FMD East Lake Sammamish Trail

Subject: Attachments:

I-080-001

We need to complete the East Lake Sammamish Trail. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Julie and Bill Mavros

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-080-001

From: To:

Crosley, John M [john.crosley@ots.treas.gov] SEPAcomments, FMD

Sent: Sun 11/5/2006 1:59 PM

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Here are a few reasons to support the "Corridor" or "preferred" alternative and oppose the "East 'A" and "East 'B" alternatives.

I-081-001

- 1. The preferred alternative is the best value for the public.
- The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

LET'S GET SERIOUS ABOUT DOING THE RIGHT THING FOR BICYCLING AND WALKING. CHOOSE THE "CORRIDOR" ALTERNATIVE. Thank you, John Crosley

I-081-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Sun 11/5/2006 8:01 AM

SEPAcomments, FMD

From: To:

Carlyn Liebert [carlynlie@comcast.net]

SEPAcomments, FMD

Cc:

janet m bird

I support the Corridor alternative for the East Lake Sammamish Trail Subject:

Attachments:

I-082-001

Hello, I live right off the trail and I think the trail is great! There are so many happy people and families walking down the trail what a tremendous success for King County! One reason I've supported the trail from the start is that the East Lake Sammamish Parkway is an unsafe path for bikers and walkers and others using recreational equipment such skateboards, roller blades. I've been a nurse practitioner in this area for many years and have taken care of people who have been hit by car while bicycling on the Parkway. I would not consider taking my children, when they were young, on walks or bike rides down the Parkway. It's just too unsafe to take the trial up to the road! Doing that would eliminate a safe path for so many of the people who are currently truly enjoying using the trail. I hope you will decide on the 'Preferred Alternative' which keeps the trail exactly where it is today! Sincerely, Carlyn Liebert

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I-082-001

From: To:

Bill Barnes [bbarnes@speakeasy.net]

SEPAcomments, FMD

Sent: Sun 11/5/2006 8:10 AM

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

I-083-001

```
Subject:
Attachments:
 To Whom it may concern:
 /* I would like to comment on my support of the Corridor
 alternative for the East Lake Samimish Trail:
 1. *The preferred alternative is the best value for the public./
 /*2. *The preferred alternative uses land that King County already
 owns. The East A and East B plans would require us to spend an
 additional $22 million buying land -- not counting the additional
 engineering costs./
 /*3. *The preferred alternative gives trail users an even and direct
 route. The East A and East B plans route users up on to the East
 Lake Sammamish Parkway, defeating the purpose of the Trail./
 /*4. *The preferred alternative has the smallest impact on the
 surrounding environment. The East A and East B alternatives would
 require major new development outside the right of way.
 /Thank you for reading my note ...
 /Bill Barnes
 1830 153rd Ave SE
 Bellevue, WA 8007
```

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I-083-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Sat 11/4/2006 9:56 PM

SEPAcomments, FMD

To:

Becky Backstrom [gbbackstrom@yahoo.com]

SEPAcomments, FMD

Cc:

Subject:

support eastlake trail

Attachments:

I-084-001

I would like to put my input, with support for the "Master Corridor" plan, Which is to pave the existing trail. I use that trail 3-4 times a week, and any alternative would be more costly and less enjoyable for the trail users. I run and bike. I have lived in Sammamish for 9 years, I use to live on East Lake Sammamish Parkway waiting for the trail to open. I moved up on the hill and then it finally opened. Even though I am further away, I truly enjoy the trail to run on and I use it frequently. So, please pave the existing trail. Thank You Becky Backstrom

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I-084-001

From:

Mark Hartman [hartmandesign@cablespeed.com]

Sent: Sat 11/4/2006 7:32 PM

To:

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear Sirs,

I-085-001

I for one am not in favor of spending added millions on the East Lake $\,$ Sammamish Trail at the whim of wealthy property owners along the lake who prefer the trail not intersect their precious driveways -- to the detriment of the project.

The plain truth is that the overwhelming majority of area residents desires the trail to be completed as originally designed. Please do not let a very vocal, wealthy few bully local government into doing the wrong thing.

Sincerely,

Mark Hartman Sammamish WA 425-836-9627

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I-085-001

Sent: Sat 11/4/2006 4:38 PM

SEPAcomments, FMD

Mitch Price [mitch.price@comcast.net] To:

SEPAcomments, FMD

Cc: Subject:

I-086-001

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-086-001

Sent: Sat 11/4/2006 12:10 PM

SEPAcomments, FMD

From: To: Elaine M. [elainelm@comcast.net]

SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-087-001

The trail is a great asset to our community. We walk or bike it often and there are always people on it. We have gone miles on the trail and very few houses are impacted from what we have seen. The alternative to finish paving the trail is the only smart action to take. Those who lost in their bid to have the trail stopped are now just trying to find other ways to impact it and double the costs. PLEASE, for the sake of the residents, our kids and future generations of residents, please finish the trail as the preferred alternative(Master Corridor) and let us continue to enjoy it.

Thank you,

Elaine and Dan Mintz 4119-205th Ave. SE Sammamish,WA

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-087-001

From: dan.lewis1@co
To: SEPAcomments

dan.lewis1@comcast.net [dan.lewis1@comcast.net]

Sent: Sat 11/4/2006 11:01 AM

Cc:

SEPAcomments, FMD; SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-088-001

It is time to stop allowing the private landowners that have properly along the East Lake Sammanish Trail to further delay the rest of the public from our full and rightful use of this trail. The fact that alternative considerations would result in additional expense to the project and to the public is but one other reason to support the Corridor option.

Please promote the "Corridor" proposal and do not let these few people with their biased and self-serving motivations deprive the majority of the taxpaying public our proper access to a trail that would take us one step further towards a truly first class collection of trails in the Puget Sound area.

Thank you.

Daniel B. Lewis Snoqualmie, WA ph 425.396.3096

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I-088-001

Sent: Fri 11/3/2006 11:58 PM

SEPAcomments, FMD

From: cheg01@comcast.net [cheg01@comcast.net]

To: SEPAcomments, FMD

Cc:

I-089-001

Subject: East Lake Samammish Trail Draft EIS comments

Attachments:

Comments on Draft EIS for East Lake Samammish trail:

Please do not depart from the original intent to establish a permenent trail along Corridor Alternative, the path of the interim trail. All of the other alternatives increase danger to users and drastically reduce the probability that the trail will be used by anyone other than the residents who have done so much to obstruct the creation of the trail.

It would be an irresponsible use of public funds to spend \$34 million to build an alternate route for a questionable benefit to a few property owners. That is public land and should be used for the public benefit rather than abandoning it to private individuals to prevent highly speculative harm to their welfare.

I-089-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

The sender of this message has requested a read receipt. Click here to send a receipt.

SEPAcomments, FMD

From:

Brad and Diane Huckins [huckins.family@verizon.net]

Sent: Fri 11/3/2006 10:40 PM

To: Cc:

sepAcomments, FMD

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-090-001

As an avid bike advocate I support linking up our current bike trails into one network. I support the corridor alternative for the East Lake Sammamish Trail.

Brad Huckins

The King James Bible "God's Preserved Words" Psalm 12:6,7

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-090-001

From:

Dave Kohlmeier [dkohlmeier@comcast.net]

Sent: Fri 11/3/2006 9:56 PM

To:

SEPAcomments, FMD

Cc:

Subject: I sup

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To whom it may concern,

I-091-001

I am a resident of Redmond and this trail is a significant portion of King Countles trail project and to burden it with millions of dollars to appease people who bought their homes knowing this was going in or when there was a railroad...

That money can be used in other places for acquisition of more land, accelerating development of trails already in the planning stage, etc.

Please don't cater to people who already have plenty of privileges - just look where they live.

Best Regards

Dave Kohlmeier

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I-091-001

Sent: Fri 11/3/2006 3:15 PM

Page 1 of 1

SEPAcomments, FMD

To:

Amy Reiss [type2amy@yahoo.com]

SEPAcomments, FMD

Çc: Subject:

East Lk Sam Trail

Attachments:

I-092-001

The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-092-001

From:

Brendon Lehman [brendon@lehman.cc] SEPAcomments, FMD

Sent: Fri 11/3/2006 10:55 AM

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-093-001

The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.

I am new the area and don't fully understand the impact of what is happening, however I DO support the Cascade Cyclists and as I become more involved and use more of the trails I appreciate the fact that they are maintained and kept up.

I-093-002

I have ridden on the Sammanish Parkway and it is a nice trail. It would be a shame if parts of the trail were closed due to a few minor drive way issues and private residences. What ever happened to the sense of "community" and human kindness? Why do we have to be concerned about bike riders going across a few driveways? Do people really not pay that much attention to check their rearview mirror?

I am not upset or trying to cause a problem, I am simply voicing my support the Cascade Club!

Please contact me if you would like.

Brendon Lehman

425-281-4968

brendon@lehman.cc

Issaguah, WA

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-093-001

Your support of the Corridor Alternative has been noted.

I-093-002

Alternatives that would close some or all of the trail do not meet King County's objectives. The County's preferred alternative is the Corridor Alternative.

Sent: Fri 11/3/2006 8:57 AM

SEPAcomments, FMD

Stelio D'Alo [sdalo@hotmail.com]

SEPAcomments, FMD To:

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-094-001

The preferred alternative is the best value for the public and takes into account the greater benefit to the majority of the population.

Stelio D'Alo

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-094-001

From:

Rick Butzberger [mybutz@verizon.net]

Sent: Thu 11/2/2006 8:12 PM

To:

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Hi,

I-095-001

I support the Corridor alternative for the E Lk Sammamish Trail, for the following reasons:

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.
- 5. The property owners in the area had full knowledge of the Right Of Way when they purchased their property.

Regards,

James Butzberger 8612 113th Way NE Kirkland, WA 98033

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I-095-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Thu 11/2/2006 2:32 PM

SEPAcomments, FMD

From: Daniel Weise [daniel@weises.org]

To:

SEPAcomments, FMD 'Daniel Weise'

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-096-001

I live in Kirkland and bicycle throughout King County. I have been waiting years for the East Lake Sammanish Trail to be available to road cyclists like me. (Road bikes can only be used on paved roads.) I find it very discouraging that the few private landowners along the route are once again putting roadblocks in the publics way. The public already owns the trail. It is of no value to the public, us taxpayers, to spend any additional money subsidizing the rich. For this reason the "East A" and "East B" proposals are non-starters, and should not be pursued. Only the "Corridor" proposal is in the best interests of the public.

Sincerely,

Daniel Weise

12810 NE 64th St

Kirkland, WA 98033

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-096-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

I-097-001

SEPAcomments, FMD

To:

Jeff/Joyce Paul [jeffrey.paul@comcast.net]

Sent: Thu 11/2/2006 1:15 PM

Cc:

Subject:

Support for the Corridor Alternative

SEPAcomments, FMD

Attachments:

To whom it may concern,

I-097-001

I am in full support of the Corridor Alternative for the East Lake Sammamish Trail. The paved trail will be a significant asset to the community. I think it would be irresponsible to spend a large amount of additional money for either of the other alternatives.

Thank you for the opportunity to comment,

Jeffrey Paul

Sammamish

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

SEPA		

From: To: Janet King [janet.king@comcast.net] SEPAcomments, FMD Sent: Thu 11/2/2006 7:58 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Dear King County,

I-098-001

I fully support the Corridor alternative for the East Lake Sammanish Trail. I have taken my kids down East Lake Sammanish before and it is a scary alternative to having a trail completely separate from that very busy road.

Thank you for taking my opinion into account.

Sincerely,

Janet King

23714 NE 61st Street

Redmond, WA 98053

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gcn... 1/24/2007

I-098-001

To:

Keith Stobie [keith_stobie@msn.com]

Sent: Thu 11/2/2006 12:43 AM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

As a road bike rider, I can't currently use the gravel trail, but understand why it would be great to get cyclists like myself off the E. Lake Sammamish Parkway. I also nearly witnessed the tragic death of a cyclist on E. Lake Sammamish Parkway during the 2005 Flying Wheels bike ride.

I-099-001

1. The preferred alternative is the best value for the public.

SEPAcomments, FMD

- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammanish Parkway, defeating the purpose of the Trail.
- **4.** The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Sincerely,

Keith Stobie

13603 SE Third Place, Bellevue, WA 98005

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-099-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

You forwarded this message on 1/24/2007 8:47 AM.

SEPAcomments, FMD

SEPAcomments, FMD

From:

John Bachelor [jb@streamtree.com]

Sent: Wed 11/1/2006 11:31 PM

To:

Cc:

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-100-001

I support the corridor – the preferred alternative - for the East Lake Sammamish Trail. For years I and my family have been hoping for and looking forward to the completion of this link. The other alternatives do not make sense; costing an exorbitant amount for the "benefit" of imposing major inconveniences on the public who use the trail. The corridor alternative is the greatest value for the general public, the most straightforward, the safest and the most usable. I urge you to give final approval to the corridor alternative and move forward as soon as possible with plans to pave this link. Thank you very much for your consideration.

John Bachelor

StreamTree Associates

425-821-3944

www.streamtree.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-100-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From: Rich

Richard Ward [richardw@yellow-dogs.com]

Sent: Wed 11/1/2006 10:21 PM

To: Cc: SEPAcomments, FMD

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments

I-101-001

The existing plan clearly holds the best value for the taxpayers and limits the impact on the environment to the existing interim trail. Please maintain the current plan and continue development of the East Lake Sammanish Trail.

-Richard Ward

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/24/2007

I-101-001

Sent: Tue 11/7/2006 11:44 AM

SEPAcomments, FMD

From: To: Paul Quinn [paulq@vidiator.com]

SEPAcomments, FMD

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

Dear Sir/Madam:

I-102-001

I support the "Corridor" or "preferred" alternative and oppose the "East 'A" and "East 'B" alternatives primarily because the preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional several million buying land -- not counting the additional engineering costs.

Paul

J. Paul Quinn

CFO

Vidiator® - Media in Motion™

10900 NE 8th Street, Suite 1486 Bellevue, WA 98004 USA

d: +1 425-278-1301

f: +1 425-688-8338

m:+1 206-510-7676 e: paulq@vidiator.com

w: www.vidiator.com

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I-102-001

Frame Chris & Dor

Chris & Dorothy Lautman [Lautman@verizon.net] SEPAcomments, FMD Sent: Tue 11/7/2006 11:31 AM

To: Cc:

SEPACOITINE

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-103-001

Please use common sense and enact the corridor alternative for the East Lake Sammanish Trail. I understand the homeowners who are looking out for themselves - it is your job to look at the bigger picture!

Dorothy Lautman

Kirkland resident

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-103-001

Sent: Tue 11/7/2006 11:11 AM

SEPAcomments, FMD

From: Eric Johnson [ejohnson@afts.com]

SEPAcomments, FMD

Cc: SZAIC@hotmail.com; chuck.ayers@cascadebicycleclub.org

Subject: ELST Project Comments

Attachments:

To:

I-104-001

Our preference is for the paved trail using the existing RR right-of-way, Corridor Alternative 1.

- -Paying is important in order to include most bicycle commuters and others (like us) who only have road bikes.
- -Keeping the maximum separation from road traffic is also a priority for us (and most cyclists).
- -Maintaining the most MULTI-USE features of the trail are also important for a community resource like this.
- -The least cost approach will facilitate the most rapid implementation of any option as well.

The Corridor Alternative 1 addresses all of the above issues best,

Thanks, Eric

Eric Johnson 2201 Fairview Ave e #8 Seattle WA 98102

Eric Johnson - President

Automatic Funds Transfer Services, Inc. (AFTS)

151 S Lander St Suite C / Seattle WA 98134-1889

FAX: 206-254-0968 or 888-313-0021 PHONE: 206-254-0975 x130

Toll free: 800-275-2033 x130
E-Mail: mailto:ejohnson@afls.com
WEB: http://www.afts.com/
http://www.moveupdate.com/

FTP: ftp://ftp.afts.com/

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-104-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From: Dennis, John (MED US) [john.dennis@siemens.com]

Sent: Tue 11/7/2006 11:07 AM

To:

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-105-001

I live in King County and would use the East Lake Sammamish Trail, and I hope that the County will select the Corridor alternative.

The East alternatives place such long stretches along the busy road that they really don't represent a trail at all. For a trail user routed onto the road in this manner, these options would be even less desirable than just putting the whole route along the road. The East alternatives essentially represent abandoning the railroad right-of-way and putting trail users along the road instead. These options are not an asset to the county as a whole, not something that county residents would go out of their way to use (unless perhaps they lived adjacent to the site), and not worth the county investment.

Thanks, John Dennis

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Thank you

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I-105-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 11/7/2006 10:57 AM

SEPAcomments, FMD

From:

Phil.Hildebrand@lexisnexis.com

[Phil.Hildebrand@lexisnexis.com]

SEPAcomments, FMD

To:

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-106-001

As a King county bicycle commuter and weekend cyclist, I would like to express my preference for the 'corridor' route as opposed to the East A/B alternatives.

If King County already owns the right of way for the corridor route then the county will save money using this route rather than incurrent the expenses of buying property to use the other East A/B alternative routes. As well, the corridor should be the least impact on the environment in general. These trails are important for the community, and I hope that we build them in such a way as to minimize costs and impacts to the County.

Thanks for the consideration,

Phil Hildebrand

2640 49th Ave SW

Seattle, Wa 98116

Working in Belleview, WA

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I-106-001

Firth, Ian [ian.firth@weyerhaeuser.com] From: SEPAcomments, FMD

Sent: Tue 11/7/2006 10:17 AM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Good Morning,

I-107-001

I am a 63 year old cyclist who enjoys the outdoors and particularly the bike trails in the Seattle metropolitan area. This area is not particularly biker friendly when it comes to riding on the streets. This is why I support any effort to build trails. They are safe, and in addition provide non polluting recreation.

Please consider these views when discussing alternatives.

Thanks,

Ian

lan C. Firth

Director, Marketing and Sales

Weyerhaeuser Forest Products International

Tel. 253 924 7693

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I-107-001

Sent: Tue 11/7/2006 9:50 AM

SEPAcomments, FMD

From: Loya, Richard [RLoya@api.com]

SEPAcomments, FMD

To: Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-108-001

I bicycle commute from Redmond to Issaquah 2 to 4 days per week. A paved trail would be a significant safety improvement.

Richard "Rick" Loya | Sales Manager | Applied Precision LLC

Direct: 425.657.1364 | Cell: 425.829.9420 | www.appliedprecision.com

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I-108-001

Your support for a paved trail is noted.

From: Giles Varner [gilesva@msn.com]

Sent: Tue 11/7/2006 9:42 AM

To:

SEPAcomments, FMD

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-109-001

Putting bicycles and pedestrians off the train and onto East Lake Sammamish Parkway defeats the purpose of the train and make the use of the trail much less pleasant (who wants to walk along a busy road instead of a quiet woods?).

Using the existing trail bed would be less expensive than buying land to shunt the trail to East Lake Sammanish Parkway.

Using the exisitng corridor would have the least impact on the environment since there would be no need for further development outside the current trail pathway.

I-109-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

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Jadine Riley [Jadine.Riley@microsoft.com] From: SEPAcomments, FMD

Sent: Tue 11/7/2006 9:42 AM

To:

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-110-001

As a cyclist and regular user of both the East Lake Sammamish Road and East Lake Sammamish Trail, I would like to let you know that I support the Corridor Alternative for the East Lake Sammamish Trail. Why? Most importantly, the route is the most meaningful route for a trail user - it is close to the lake, pretty, direct and safe. Connecting up to the East Lake Sammamish Parkway adds unnecessary additional trail, increases costs and breaks the flow of the trail.

As the most direct route, the Corridor is the best value for the public. It uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs - money that could be spent enhancing other trails in an overcrowded urban environment. And the Corridor Alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Thank you for considering my views on this issue.

Jadine Riley

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-110-001

Your comments are noted. King County considered all these factors when selecting their preferred alternative.

Sent: Sun 11/19/2006 5:35 PM

SEPAcomments, FMD

From:

Don Mollick [dmollick@comcast.net]

SEPAcomments, FMD

To: Cc:

Subject:

Eastlake Sammamish trail use

Attachments:

Dear Gina,

I-111-001

I am a regular trail user of the eastlake trail. I park at the boat launch, and run for approximately 5 miles along the lake going north. I love this trail as it is now. There are many runners and walkers I encounter, and I feel that the surface is ideal for such use. My choice to drive to this trail is the relative safety and soft surface to run along. We aging runners/walkers appreciate the unpaved trails for the ease on our joints. I would like to propose that the trail is well used and ideal to many of us in its present state. Why pave over a well drained and incredible surface for many to use. If there is some need to make it "better for the thin tire bikes", I would like to make a proposal to at least keep part of it useful for the runners who prefer the present surface....there are a lot of us! Thank you,

Lynda Mollick

Issaguah resident 25 years.....

I-111-001

The County's preferred alternative continues to be the Corridor Alternative, which includes 12 feet of pavement and two soft-surface shoulders, each a minimum of 2 feet wide, to accommodate pedestrians. The shoulder on the west side will be widened where possible, and in some segments a separated soft-surface trail is proposed.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

Sent: Sun 11/19/2006 10:19 AM

Your comment is noted.

You forwarded this message on 11/27/2006 9:19 AM.

SEPAcomments, FMD

From: Slorrainey@aol.com [Slorrainey@aol.com]

To: SEPAcomments, FMD

Cc:

Subject: farm house

Attachments:

I-112-001

It's just a shame what is going on in this whole area. All the "improvement", I've lived here my whole life, and as far as I'm concerned the valley is destroyed. I'm just waiting to retire to move else where, and believe me I can't wait to go. Sherry

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

From:

LithoDir@aol.com [LithoDir@aol.com]

SEPAcomments, FMD

Sent: Fri 11/24/2006 8:10 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-113-001

I would ask that you move forward with the "preferred alternative" for the East Lake Sammanish trail. It's the only plan that makes sense for pedestrians and cyclists. As a bike rider who rides along the east side of the lake at least once a week it will be the safest route.

Thanks!!

David Hills 425 827-2100

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I-113-001

From: Hanne THIEDE [rediss53@msn.com] Sent: Sun 11/12/2006 6:10 PM

To: SEPAcomments, FMD

Cc: Subject:

Comments on East Lake Sammamish Trail

Attachments:

My family and I have lived on the Sammanish Plateau since 1982. We were always proponents of the East Sammanish trail so we were delighted when the interim trail finally opened earlier this year. We enjoy using the trail for walking and blke riding. We believe that for the permanent trail King County should adopt the County's preferred alternative, the "Corridor" Alternative.

I-114-001 I-114-002

During our use of the trail we have been disappointed by some of the ugly fences, especially the tall chain link and wooden fences, which in many places create an unpleasant "tunnel" effect. Such fences should not be used in areas where the county's right-of-way is significantly wider than the trail bed. The lower wooden split-rail fences are much more esthetically pleasing, allows for views, and fits much better with the environment while effectively separating the trail from sensitive areas. I understand that in some limited locations, it might be necessary to erect taller fences to protect private property.

I-114-003

The public should have access to the county's complete right-of-way which in many areas extends to the shoreline. Private citizens should not be allowed to use public right-of-way for private purposes such as docks, gardens and parking lots. Under no circumstances should private citizens be allowed to fence off shoreline property that is part of the public right-of-way. There may be sensitive areas that are inappropriate for public use, but they should be conserved as sensitive areas and residents should not be allowed to use these areas for private purposes.

I-114-004

It is very important to assure safety of both trail users and residents along the trail, and the county should install state-of-the art features and the trail should be patrolled by bicycle police. Benches, picnic tables, and permanent restrooms should be included in the final plan.

I-114-005

Sadly, there is currently no public access to Lake Sammamish anywhere along the entire eastern shore. In addition to opening county right-of-way shoreline areas to the public, the county and the 3 cities and the eastern shore should develop long-term plans to acquire waterfront properties that come for sale to provide future park and beach facilities.

I appreciate the opportunity to provide comments.

Sincerely,

Hanne Thiede 1633 209th Place NE Sammamish, WA 98074 425-868-4482

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-114-001

Your support of the Corridor Alternative has been noted.

I-114-002

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way. The use of chain link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives provide an equivalent level of protection based on site-specific conditions.

I-114-003

Pursuant to King County Code 14.30 and consistent with its management of the regional trails system, King County maintains a special use permit system to authorize private use of County-owned property. These permits are typically of a 5- to 10-year duration, and King County reserves the right to revoke a special use permit. During

the design phase of the project, the County will be reviewing existing permits to ensure they are compatible with the Master Plan Trail. For additional information, please refer to Section 1.3.3 of the EIS.

I-114-004

Permanent restrooms are proposed in two places along the trail.

Additional amenities such as benches may be added, where appropriate, during the design phase of the project. Law enforcement of the trail will be performed by the King County Sheriff.

I-114-005

Comment noted. King County is not proposing access to Lake Sammamish as part of the East Lake Sammamish Master Plan Trail project. Any future proposals to do so would undergo separate environmental and public processes.

East Lake Sammamish Master Plan Trail EIS
Page 158

From:

Glen Beyer [glenb@microsoft.com]

SEPAcomments, FMD

Sent: Sat 11/11/2006 4:36 PM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Hello,

I-115-001

As a frequent user of the trail, I support the Master Corridor Alternative. I have ridden the trail from end to end on my mountain bike many afternoons. It is a great workout and except for the occasional unobservant motorist crossing, completely safe. If I were forced off the trail and up onto East Lake Sammamish Parkway, I would not feel safe and would stop using the trail.

Sincerely,

Glen Beyer

Sammamish Resident

Your support of the Corridor Alternative has been noted.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

Sent: Fri 11/10/2006 3:25 PM

SEPAcomments, FMD

From:

Krueger, Lee R [lee.r.krueger@boeing.com]

To: SEPAcomments, FMD

Cc: Subject:

Sammamish Lake Trail

Attachments:

I-116-001

I-116-002

As a resident off of the lake along Inglewood hill trail for 14 years now I would like to see this trail kept and maintained as an integral part of the Marymoor trail system and beyond. Unfortunately, I just discovered that a public hearing was planned for last night in Bellevue to discuss alternatives ranging from paving to no action (keeping the trail as is and closing it in 2015). I would've have liked to appear and present my comments. My family and I have been looking fwd to using the trail since it was first discussed several years ago. Since it has been open to the public, we use it almost on a daily basis for walks, exercise (even in the rain) and even as an alternative to going shopping. We find that many times now that we either ride or walk to Redmond/Issaquah for many items that would traditionally require us to drive. The parkway is not safe to bike or walk on with children. The trail is an economical alternative means for us to use our natural resources wisely. Closing it would be unacceptable and a mis-use of public lands & right-a-ways. We would not be opposed to not paving the trail it and leaving it as is. It is a nice alternative to a paved walkway we have every place else. We would also like to see a few access points to the lake as well. We like to kayak and it is discouraging to drive to the boat ramp to put in and get out. It is not only inconvenient, but can be dangerous during peak boating hours. We especially like to paddle along the slough end of the lake (quieter and less boat traffic) and traversing the entire lake to do so is not

The bottom line is. We NEED this trail to remain open and accessible to the general public for the public good. I hope this message gets out to proper authorities.

Thanks,

Lee Krueger Associate Technical Fellow The Boeing Company V5 CAE Analysis Tools Kinematic/Multi-Body Dynamics - Lead (425)294-8185 Lee.R.Krueger@Boeing.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-116-001

Your comments are noted.

I-116-002

Comment noted. King County is not proposing to provide public access to Lake Sammamish as part of the trail project. Any future proposals to provide public boat or other access would undergo separate environmental and public review processes.

To:

Kevin Andrew [kevin.h.andrew@gmail.com]

SEPAcomments, FMD

Sent: Tue 10/31/2006 10:29 PM

Cc:

Subject:

Keep the East Lake Sammamish Corridor

Attachments:

I-117-001

Kevin Andrew

It's so wonderful that such a great trail could come together, don't let a few people derail a wonderful community

 $https://owa.metrokc.gov/exchange/ELSTFMD.SEPA comments/Inbox/ELST\%20Gen... \ \ 1/24/2007$

Thank you for your support of the regional trail system.

Sent: Thu 11/9/2006 9:35 PM

Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

SEPAcomments, FMD

From: janet m bird [janbird2@juno.com]

SEPAcomments, FMD

To: Cc:

Subject: ELST Final DEIS Public Hearing Nov. 9, 2006

Attachments: _____ ELST Final DEIS Public Hearing Nov. 9, 2006.doc(23KB)

ELST Final DEIS Public Hearing Nov. 9, 2006

I-118-001

I regularly use the East Lake Sammanish Trail and believe the corridor alternative is the best choice for the final trail. It is the safest route as the rail corridor is in a residential area where people are slowly getting out of their driveways or coming back in their garages. If the trail was up on the Parkway, resident's main concern would be getting on and off the Parkway and would be less likely to notice trail users coming up to the intersection. Another issue is there is greater noise with a trail up at the Parkway rather than the rail bed. Another concern would be the elevation gain that would probably need to be done to get up to the Parkway. There are a few hilly places on the Sammanish River Trail and where it joins the Burke Gliman and these are the areas where trail users can be most dangerous to each other. Someone of higher speed may end up on the rear of someone who has more difficulty going up hill. With it following the rail, this wont be an issue. Another big issue is the difference in cost. \$34,934,000 for the corridor and \$68, 714,000 for the East Alternatives. No need to acquire property with the corridor but for the East Alternative, it will require 58 to 61 partial acquisitions and 15 to 18 full acquisitions of private property. The County would also need to relocate 12 to 15 family units. With these figures, the trail would never get fully built. And the final trail does need to get paved in order to be a trail of the same caliber as the existing regional trails since it will be connecting to them and can be an alternative transportation corridor.

I-118-002

I also would like to see less use of chain link fencing and more use of the split rail as it is much more attractive and gives less of a dog run look. Also, as the County's right-of-way is significantly wider than the actual trail itself, the County should require all fences to be reasonably set-back from the boundary of the actual user trail. This will allow the public to use and enjoy viewing the public's land. I am concerned right now that in a number of places, there are arborvitae that are smack up against the fence. Obviously these will need to be removed once the final trail is built.

I-118-003

I also have concerns about design. The intersection of 56^{th} near Albertson's and Pickering Barn gets so much traffic that it appears this is an intersection where there should be a bridge crossing of the trail over the road or underneath it (like on the Sammamish River Trail.) Another scary intersection is 62^{nd} across from Fred Meyer. With the poor sight distance due to the curve near the trail, at the very least there ought to be cross walk lights on the road like they do at Redmond Town Center near Larry's Market...with a pressure sensitive switch that goes off when someone is on the trail crossing the road. At Siemans they put a curb in where the railroad tracks were so that needs to be changed as well. There are so many polls there I don't see how one could easily stay on their bike and cross there. There also seems to be a shortage of portajohns. Right now when I start walking at the southern end from 212^{th} and walk and hour, there are no portojohns. Eventually with the final plan, there will be a restroom across from the 7-11 but it will still be over an hour's walk before reaching the one at Inglewood Hill. The one you had around Mint Grove when the trail was being constructed was a good location. This is actually needed now…..3 and 4 years down the road is too long to wait. Also, when you start building the trail, I would give priority to putting in parking, even if it is just gravel temporarily and also portajohns…the prananent bathroom can be put in later. The trail needs better access as soon as possible. Another issue is the start date. I see 2 dates for the start of the trail in the DEIS, one is 2009 and the other is 2010. This seems quite far off. I moved to this area to be near the trail when I was 48 years old and now I am 56. Let's get it done before I retire!

I-118-004

I-118-005

Thanks.

Janet Bird 3310 221st Ave SE Sammamish, WA 98075 425 427-5218 (H) 425 391-2872 (W)

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-118-001

Your support of the Corridor Alternative has been noted.

I-118-002

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way. The use of chain-link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives

provide an equivalent level of protection based on site-specific conditions.

I-118-003

The intersection at SE 56th Street is identified in the Draft EIS, Section 2.5.6.3, as a Type 1 (high volume) crossing. Trail users will be directed to the signalized intersection and existing cross walk.

In the same section of the Draft EIS, SE 62nd Street is categorized as a Type 2 (low volume) crossing, where the traffic volume and/or sight distance limitations would warrant stop signs on the trail for the safety of trail users. As acknowledged in Table 3.4-2 (Section 3.4.3.1 of the Draft EIS) and recommended in Appendix G (Volume III of the Draft EIS), some vegetation would be removed to maintain the appropriate sight distances. As stated in Table 2.5-2 of the Draft EIS, specific improvements to the intersection of the trail with SE 62nd Street would be determined during detailed design and permitting.

I-118-004

King County is only proposing permanent restroom facilities at SE 33rd Street and at Inglewood Hill Road.

I-118-005

The schedule for constructing the trail depends, in part, on funding availability and obtaining the necessary permits. Depending on when the permits are issued, King County expects to begin construction in 2009 or 2010.

East Lake Sammamish Master Plan Trail EIS

Page 163

From: Christian Anderson [Christian.Anderson@microsoft.com]

Sent: Thu 11/9/2006 2:08 PM

To: Cc:

o: SEPAcomments, FMD

Subject: Supporting the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Christian Anderson | Senior Operations Manager | Global Partner Support

I am a frequent user of the East Lake Samm Trail as a commuter from my home near Cottage Lake (North Avondale) to my office in Issaquah. I've kept abreast of the project via the KC website, most importantly the page http://www.metrokc.gov/geastlakesammamisthrail/phase2.aspx.

I-119-001

I want to urge the team to select option 1 so the trail serves the whole community to its fullest in both terms of cost effectiveness and access to cyclists, pedestrians and equestrian users. I understand the concerns of area homeowners. My use of Burk Gilman has shown that use of the trail has on the whole a positive influence on the area, and builder a community that supports transportation alternates that benefit homeowners through reduced traffic and noise on E. Lake Sammamish parkway.

Thanks for the attention!
Christian Anderson

So, to be clear, I've marked the option I believe meets the community's goals to a greater extent than the other options.

- >>> Corridor Alternative: The proposed Master Plan Trail would be located within the former railroad right of way. The majority of the trail would encompass the existing Interim Use Trail. I fully support this option.
- 2. East A Alternative: A Master Plan Trail would use the existing Interim Use Trail alignment in certain segments and transition to the roadway shoulder for driveway/public roadway intersections, along 1.7 miles of divided properties, to avoid sensitive areas, and in other locations. Where the alignment for the paved portion of the multi-use trail leaves the Interim Use Trail alignment, pedestrian and equestrian use would continue on the existing Interim Use Trail. Forcing cyclists to the street makes little sense the trail would carry walkers and riders, but no bikes?
- 3. East B Alternative: The East B Alternative would be identical to the East A Alternative except where the paved portion of trail transitions to the roadway shoulder, pedestrians and equestrians would also be routed to the shoulder. In these areas, the existing Interim Use Trail on the railbed would be closed and no trail access would be permitted on the railbed.
 Excluding all trail users from a short section increases the danger for those riding up on the road it's very busy and would force many potential trail users to simple not use the trail at all. (Something advocates of this options must understand.)

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- 4. Continuation of the Interim Use Trail Alternative: The existing Interim Use Trail would be continued beyond the currently approved 2015 expiration date. Equestrian use is not permitted on the existing Interim Use Trail, but would be considered as part of this alternative. The existing Interim Use Trail would also be extended at the northern terminus, across Bear Creek and connecting to the Bear Creek Trail.
 - This is not great, but would be a reasonable #2 choice should #1 be unworkable.
- No Action Alternative: King County would continue to operate the existing Interim Use Trail through 2015, at which time the permitted operation of the trail would expire in the absence of additional environmental review and King County Council action.

 This essentially says "We give up." Too much has been invested to simply stop.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

From:

Wolf, Michael [wolf.mc@ghc.org]

SEPAcomments, FMD

Sent: Thu 11/9/2006 9:50 AM

To:

Cc: Subject:

T

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To Whom It May Regard,

I-120-001

I am an active trail user with two small children. Upon reviewing the East Lake Sammamish Trail option I strongly endorse the "corridor" or "preferred" plan.

Please, maintain the integrity of this public treasure.

Sincerely,

Michael Wolf

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-120-001

Sent: Wed 11/8/2006 10:23 PM

SEPAcomments, FMD

From: csledd [csledd@jps.net]

To: SEPAcomments, FMD

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-121-001

I strongly favor the Corridor alternative for the East Lake Sammamish Trail. Buying additional land and engineering detours off the main trail are unnecessary expenses. Both the East A and the East B alternatives would defeat the purpose of creating a continuous, relatively level trail, away from the heavy traffic of East Lake Sammamish Parkway. The interim trail is great and has caused little detriment to the owners of the properly it crosses. Please proceed with the Corridor or "preferred" alternative. Pave the interim trail, and make this dream a reality.

Thank you, Charles Sledd, member of Cascade Bicycle Club

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-121-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

From: gordy comer [ggordygordy@comcast.net] Sent: Wed 11/8/2006 1:50 PM

To: SEPAcomments, FMD

Cc:

Subject: East Lake Sammamish Trail Master Plan

Attachments:

I-122-001 I-122-002 I am a property owner on the lake. The trail splits my property. My house is on the beach. My family has supported the trail for more than 50 years. I have the following concerns: There needs to be lots of access to the beaches. There isn't any now, there should be. Lots and lots of public beaches. There should be lots of views of the lake. I have noticed that the county has quietly allowed adjoining property owners to build fences, walls, and plant tight rows of non-native trees, all on county property, for the purpose of blocking the view. For many sections of the trail, currently, you can't see the lake. I can understand everyone's need for privacy. I don't think this is good policy. A problem with widening the trail and paving is speed. I would request a stop sign where my driveway crosses. It is really hard to drive across the trail at my property now, and I worry about much faster bike riders. How about some bathrooms and drinking fountains? And benches with a nice view. A few places to go for a swim? Thanks, Gordy Comer

5116 s. pearl Seattle, wa. 98118

I-122-001

King County is not proposing to provide public access to Lake Sammamish as part of the trail project. Any future proposals would undergo separate environmental and public review processes.

I-122-002

King County will be reviewing permitted uses within and immediately adjacent to the Master Plan Trail footprint as part of the design and construction phases of the project.

https://owa.metrokc.gov/exchange/FMD.SEPAcomments/Inbox/ELST%20General%... 1/23/2007

drjaydc@earthlink.net [drjaydc@earthlink.net]

SEPAcomments, FMD

Sent: Wed 11/8/2006 9:16 AM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-123-001

I support completion of the East Lake Sammamish Trail on the original corridor. This is the best use of public funds and a better route for multiple users. Alternatives A & B would be far more costly, take longer to complete and offer less user safety. I am a current user of the pathway along the parkway. I am exposed to high traffic, careless drivers and debrie on the trail. A paved ELST seperated from these risks would be a far safer and more enjoyable path. I encourage you to establish the original corridor as the route of choice for safety and cost effectivness.

drjaydc@earthlink.net EarthLink Revolves Around You.

I-123-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

https://owa.metrokc.gov/exchange/FMD.SEPAcomments/Inbox/ELST%20General%... 1/23/2007

Your support of the Corridor Alternative has been noted.

Shelley Kloba [shelley@kloba.com]

SEPAcomments, FMD

Sent: Wed 11/8/2006 6:29 AM

To: Cc:

Subject:

ELST

Attachments:

Dear Sirs:

Thank you so much for opening up the ELST to users, after a long wait. My family has enjoyed it a number of times and view it as a valuable community resource. These types of projects really add to the quality of life and enjoyment of citizens. I look forward to the further development of the trail from this interim phase, but I am concerned that some of the alternatives are not nearly as user-friendly or costeffective as others.

I-124-001

not spending another estimated \$22 million buying land. I am also in favor of a direct route. Re-routing but in this day and age, parents cannot let their kids roam as freely. It is really nice to have a safe alternative for kids to get out and do some exploring and visit other kids in their neighborhoods without having a parent take them in a car. Lastly, I am in favor of treading lightly on the land. The preferred outside the right of way.

Please continue to develop this valuable community resource in the most sensible way, weighing the greater good over the individual desires. Please select the preferred alternative.

Thank you, Shelley Kloba 425-823-9732 Kirkland, WA

Please consider the preferred alternative. I am in favor of using land that King County already owns and the trail up onto East Lake Samm. Pkwy will make it less user friendly. My family really enjoys being able to bike where there is no traffic, and I know that for children, their parents could allow them to use the trail with more confidence if it were not on that busy road. I grew up able to ride my bike anywhere I wanted, alternative will have the least amount of environmental impact and won't require any further development

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

East Lake Sammamish Master Plan Trail EIS

Sent: Wed 11/8/2006 1:23 AM

SEPAcomments, FMD

From:

Eric Jarvi [eric@jarvi.com]

SEPAcomments, FMD

To: Cc:

Subject: Safety First = ELST Corridor Alternative

Attachments:

I-125-001

If we believe in "safety first," the Corridor alternative sounds like our safest option. I use both the East Lake Sammamish Trail and the shoulder of East Lake Sammamish Parkway, for different reasons.

First, ELST. I have small children who love the trail. I already fear for their safety when I am holding their hands and walking them from the designated parking locations on East Lake Sammamish Parkway to the designated trail access points, with high speed vehicular traffic zooming past us. Once we are on the trail I feel much safer. I'm looking forward to better parking. Unfortunately the East A and East B plans as described in http://www.metrokc.gov/eastlakesammamishtrail/phase2.aspx seem to indicate that trail users would be led back up to the shoulder of the road, and right next to traffic following rules that children and pets don't totally understand.

Second, the ELSP shoulder. I cycle commute on the East Lake Sammamish Parkway shoulders year round. I'm concerned that combining portions of the existing ELSP shoulder with a bidirectional mixed-use trail would be extremely dangerous. Users including beginner cyclists, walkers, runners, pets, and small children would be forced to travel against the flow of vehicular traffic that could kill or seriously injure them. It can be funny to do the shuffle in the office hallway not knowing who is going to go to the right or the left. It's not so funny suddenly having to do the shuffle at 20+MPH on a road bike when your life is on the line.

Recently there was a woman in her 70's who tried to merge onto I-90 going 20-25 miles per hour. She was smashed to pieces by a semi truck. Witnesses said the trucker couldn't have done anything. ELSP is a major truck route – what if a child or pet strayed from an East A or B shoulder?

Or what if a vehicle strayed into an East A or B shoulder? Drunk driving haunts this road, and it's a real problem for Sammamish. Cell phones and other distractions are common on this road, especially during heavy commute times. Let's be defensive and keep ourselves, our pets, and our loved ones as far away from problem drivers as possible.

For these reasons I believe the Corridor alternative is the safest option

Sincerely,

Eric Jarvi

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-125-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

20906 NE 19TH PL

Sammamish, WA 98074

From:

Drmigden@aol.com [Drmigden@aol.com] SEPAcomments, FMD

Sent: Wed 11/8/2006 12:43 AM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-126-001

Doug Migden

I strongly support the Corridor alternative for the East Sammamish Trail. As a local emergency physician I know we need safe places to cycle. This a no brainer.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

From:

Dale and Laura Koetke [koetke@isomedia.com]

SEPAcomments, FMD

Sent: Tue 11/7/2006 10:44 PM

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-127-001

Please stay with the preferred alternative which gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Traill!

Thank you Dale Koetke

Dale and Laura Koetke koetke@isomedia.com

with the preferred alternative which gives trail users an even and direct mute. The East A and East B plans route

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

Ed Grubbs [edgrubbs@hotmail.com]

SEPAcomments, FMD

Sent: Tue 11/7/2006 9:01 AM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-128-001

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of

Ed Grubbs

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-128-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 11/7/2006 7:31 AM

SEPAcomments, FMD

From: John Earhart [jjearhart@juno.com]

SEPAcomments, FMD

brakingnews@cascadebicycleclub.org

Subject:

To:

Cc:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-129-001

I recently read that the East Lake Sammamish trail is in jeopardy of becoming something besides the world class trail it was intended to be because of a very few special interest property owners. Please consider the following in your determination of the best use of this corridor. There is a corridor in place already. Why spend additional tax payer funds to reroute the trail off the existing trail to build the East A and East B plans.

The preferred alternative is the most direct route through the area and has the smallest impact on the surrounding environment.

I see no reason to spend more money to build something that is already in place to appease a few. It is time that the public be represented in these issues in Washington State.

Thank You for your consideration in this matter

John Earhart

Your support of the Corridor Alternative has been noted.

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

SHESKIS99@aol.com [SHESKIS99@aol.com]

Sent: Tue 11/7/2006 9:11 AM

To: Cc:

Subject:

SEPAcomments, FMD E Sammamish Trail

Attachments:

Krazy Spokers

I-130-001

Do not close this trail. It is so perfect to commute from Issaquah to Redmond and to connect

eventually to the Marymoor-Burke Gilman trail or even to the Centenial trail in Snohomish to Arlington. Also the trail from Duvall to Monroe should be a consideration. Keep us bikers off the highways and Also the trail from Duvali to Mornoe should be a consideration. Reep us british on the Inghways and able to commute on these trails. Get a better surface than the one used for bikers and handicappers. We a a group of seniors that bike every Thursday and enjoy biking the trails available. Thanks for giving us a chance to comment on this subject. Shella Dye

Charlie Herb [Charlie.Herb@microsoft.com]

Sent: Tue 11/7/2006 9:09 AM

To: Cc:

Subject:

East Lake Sammamish Trail

SEPAcomments, FMD

Attachments:

I-131-001

I'm writing in support of the "Corridor Alternative" for the East Lake Sammamish Trail. I began commuting to work by bicycle two to three days a week from Issaguah to Redmond (~18 miles one way) shortly after the ELST opened this spring. My route is to take the ELST to Marymoor, ride through Marymoor, then take the SVT to the 520 paved trail which takes me right to my office. Thanks to the ELST this means I have less than two total miles on roadways.

Currently, due to the gravel trail, I'm forced to take my mountain bike with wider tires which makes for a longer commute and ultimately doesn't allow me to commute by bicycle as much as I would like. I have been eagerly awaiting the paving of this trail so that I may begin riding a road bike to work on the trail.

The ELST has made commuting by bicycle a reality for me. I'm not comfortable riding to work on the road, especially during the fall/winter/spring months when it's dark in the morning, evening or both. In the handful of times that I have tried using the road, I've already been hit by a car once (someone pulling out in front of me). The ELST does cross several driveways, but I feel very safe riding on it and the driveways do not pose a concern for me.

To me, the "Corridor Alternative" makes the most sense and the East Alternative A & B should not even be considered. I would really like to see this trail paved so that I may increase the frequency of my commuting and encourage others to give it a try. Thank you for your consideration and for the all the work done on the ELST.

Thanks,

Charlie Herb

Sr. Systems Engineer

Microsoft

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

From:

DiAnn Bottomley [dbottomley@applept.com]

SEPAcomments, FMD

Sent: Tue 11/7/2006 9:05 AM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-132-001

Please support the Master Corridor (Preferred "corridor" alternative) for the E. Lake Sammamish Trail.

Thank you DiAnn Bottomley

This transmission may contain confidential information that is privileged. The information is intended only for the use of the individual(s) or entity to which it is addressed. Any unauthorized disclosure, distribution or the taking of any action in the reliance upon this communication is prohibited under State and Federal law. If you have received this communication in error, please notify the sender immediately and return the original information. Thank you.

Your support of the Corridor Alternative has been noted.

JC Cannon [jccannon@microsoft.com] SEPAcomments, FMD

Sent: Tue 11/7/2006 8:51 AM

To:

Cc:

I-133-001

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I live across from the trail and enjoy it the way it is.

Regards,

Darrell J. Cannon

Your support of the Corridor Alternative has been noted.

Sent: Tue 11/7/2006 8:46 AM

SEPAcomments, FMD

Lee Ayers [leemargaret@msn.com] To:

SEPAcomments, FMD; Lee Ayers

Cc:

Re: I support the Corridor alternative for the East Lake Sammamish Trail Subject:

Attachments:

The last letter was still the original; here is the modified letter.

Lee

---- Original Message -----

From: Lee Ayers

To: fmd.sepacomments@metrokc.gov

Cc: Lee Margaret Ayers

Sent: Tuesday, November 07, 2006 7:41 AM

Subject: I support the Corridor alternative for the East Lake Sammamish Trail

To Whom this May Concern,

I-134-001

I've lived on the Sammamish Plateau since 1992, and through the lack of controlled planning in this area, I have watched land be scooped up by subdivisions (and those with private interests) and fast-food businesses installed in lieu of quality vendors. While we've paid substantial property taxes, parks on the northern end of the plateau are small to non-existent. Over the years, the majority of our money has gone toward other improvements in King County. Now those with private interests would propose that we spend more of our hard-earned dollars to provide an alternative route that would almost double the cost to the newly developed Sammamish Trail? This can't happen. County government should be cost-

Traffic in this region is horrible, and with the projected growth of the Seattle corridor to double in the next 15 (?) years, traffic will only get worse. We need quality bike trails that allow people to safely commute, and enjoy exercise and family without the added cost of those with special interests. Not to sound corny, but the 'Rails to Trails' program should be guarded with as much stamina as our personal rights. To those on the periphery, it may seem like a small section of land over which to argue, but the idea that we can connect city with city, county with county and state with state, is an exciting prospect for a country that will grow to 400 million in the next several decades. Ideologically, this battle is for the whole 'Rails to Trials' program - not just the Sammamish Trail. If one specialist group gets its way, it sets precedence for the next group.

In Hawaii and Australia, no one owns the coastline. A person can walk from city to city, and it's wonderful. Several years ago, my husband and I biked German. We biked from town to town and staved in B&B's along the way - never hitting a road. I've seen how Rails to Trails are being added across the US. These corridors will change the landscape of our country and enhance local communities and business in a way many cannot see. The I 90 corridor is almost connected across the state. Via Rails to Trails, I can bike from Carnation to Snoqualmie and Snohomish to Arlington. In my mind, the Rails to Trails Program is the only coastline left to Americans. Maybe we can't see the big picture now, but if the Rails to Trails program is a success, the whole landscape of America will change. I will be able to travel across America like we did in Germany, exploring coffee shops and bakeries, heritage and local color.

King County, for all the ears of watching my taxes go into a black hole, I have appreciated your stalwart position on making this corridor happen. Please don't let special interests increase costs or divert the intent of the Rails to Trails program. Our children and their children will appreciate it as much as we do the Burke-Gilman Trail today.

Thank you for listening, Lee Margaret Ayers

---- Original Message ----

From: Lee Ayers

To: fmd.sepacomments@metrokc.gov; Lee Ayers

Sent: Tuesday, November 07, 2006 8:27 AM

Subject: Re: I support the Corridor alternative for the East Lake Sammamish Trail

I-134-001

I've modified the letter I sent earlier:

To Whom this May Concern,

I've lived on the Sammamish Plateau since 1992, and through the lack of controlled planning in this area, I have watched land be scooped up by subdivisions (and those with private interests) and fast-food businesses installed in lieu of quality vendors. While we've paid substantial property taxes, parks on the northern end of the plateau are small to non-existent. Over the years, the majority of our money has gone toward other improvements in King County. Now those with private interests would propose that we spend more of our hard-earned dollars to provide an alternative route that would almost double the cost to the newly developed Sammamish Trail? This can't happen. County government should be cost-effective.

Traffic in this region is horrible, and with the projected growth of the Seattle corridor to double in the next 15 (?) years, traffic will only get worse. We need quality bike trails that allow people to safely commute, and enjoy exercise and family without the added cost of those with special interests. Not to sound corny, but the 'Rails to Trails' program should be guarded with as much stamina as our personal rights. To those on the periphery, it may seem like a small section of land over which to argue, but the idea that we can connect city with city, county with county and state with state, is an exciting prospect for a country that will see unprecedented growth in the next 40 years. Ideologically, this battle is for the whole 'Rails to Trials' program – not just the Sammamish trail. If one specialist group gets its way, it sets precedence for the next group.

In Hawaii and Australia, no one owns the coastline. A person can walk from city to city, and it's wonderful. The Raiis to Trails Program is the only coastline left to us. King County, for all the ears of watching my taxes go into a black hole, I have appreciated your stalwart position on making this corridor happen. Please keep to your guns.

Thank you for listening, Lee Margaret Ayers

Sent: Tue 11/7/2006 8:39 AM

SEPAcomments, FMD

From:

Gavin [gmcmurdo@gmail.com]

SEPAcomments, FMD

To: Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To whom it may concern

I-135-001

At this time of year the weather continues to deteriorate and it is almost pitch dark at 5:30PM, I feel that it is a simple safety issue of using the trail as part of my commute home by bicycle. Giving commuter cyclists the option of using the trail has the benefit to the motorists that they do not have to content with a cyclist on the roadway.

Regards,

Gavin McMurdo

1806 228th Ave NE

Sammamish

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-135-001

King County understands that people who use the trail for commuting would be constrained by the dawn to dusk hours of operation. These hours are consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system. However, King County has the authority to tailor specific hours of operation for each facility within its regional system, including trails. To do so, under King County Code section 7.12.030, the County would need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, but it could propose to do so in the future if demand warrants.

From:

Dan Morrow [dmorrow@swensonsayfaget.com]

SEPAcomments, FMD

Sent: Tue 11/7/2006 8:20 AM

To:

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-136-001

As a long-time cyclist living in Redmond, I urge King County to adopt the Corridor Alternative for the East Lake Sammamish Trail. This alternative by far makes the most sense from a trail user safety standpoint and from an economic standpoint. The East alternatives ignore the basic premise of the trail: to provide a safe corridor for cyclists, runners & walkers, and other non-vehicular users. Funneling cyclists back onto the already dangerous East Lake Sammamish Parkway defeats the basic premise of the trail.

Second, the East alternatives cost twice as much. The draft EIS states that twice as much fill will be required. That's twice as much truck traffic during construction too.

Please vote to follow the recommendation of the Draft EIS and adopt the Corridor Alternative. Regards,

Dan Morrow, PE 5809 156th Ave NE Redmond, WA 98052

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-136-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 11/7/2006 8:11 AM

SEPAcomments, FMD

From: To:

Tom Baker [tommbaker@hotmail.com]

SEPAcomments, FMD

Cc: Subject:

I support the corridor alternative

Attachments:

To whom it may concern

I-137-001

I strongly support keeping the trail on the right of way. It is important $% \left(1\right) =\left(1\right) \left(1\right)$ from both an ease of use and a cost point of view. I want to see the trail to be the most accessible it can be.

Tom Baker 1202 N 35th St Renton, WA 98056

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I-137-001

Your support of the Corridor Alternative has been noted.

Sent: Tue 11/7/2006 7:41 AM

SEPAcomments, FMD

From: To:

Lee Ayers [leemargaret@msn.com]

SEPAcomments, FMD

Cc:

Lee Margaret Ayers

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To Whom this May Concern,

I-138-001

I've lived on the Sammamish Plateau since 1992, and through the lack of controlled planning in this area, I have watched land be scooped up by subdivisions (and those with private interests) and fast-food businesses installed in lieu of quality vendors. While we've paid substantial property taxes, parks on the northern end of the plateau are small to non-existent. Over the years, the majority of our money has gone toward other improvements in King County. Now those with private interests would propose that we spend more of our hard-earned dollars to provide an alternative route that would almost double the cost to the newly developed Sammamish Trail? This can't happen. County government should be cost-

Traffic in this region is horrible, and with the projected growth of the Seattle corridor to double in the next 15 (?) years, traffic will only get worse. We need quality bike trails that allow people to safely commute, and enjoy exercise and family without the added cost of those with special interests. Not to sound comy, but the 'Rails to Trails' program should be guarded with as much stamina as our personal rights. To those on the periphery, it may seem like a small section of land over which to argue, but the idea that we can connect city with city, county with county and state with state, is an exciting prospect for a country that will see unprecedented growth in the next 40 years. Ideologically, this battle is for the whole 'Rails to Trials' program - not just the Sammamish trail. If one specialist group gets its way, it sets precedence for the

In Hawaii and Australia, no one owns the coastline. A person can walk from city to city, and it's wonderful. The Rails to Trails Program is the only coastline left to us. King County, for all the ears of watching my taxes go into a black hole, I have appreciated your stalwart position on making this corridor happen. Please keep to your guns.

Thank you for listening, Lee Margaret Ayers

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I-138-001

Sent: Tue 11/7/2006 6:28 AM

SEPAcomments, FMD

From: Scott Betts [scottebetts@gmail.com]

To: SEPAcomments, FMD

Cc:

I-139-001

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

Hello,

I support the Corridor alternative since it is the simplest, most effective and least costly plan for the East Lake Sammanish Trail. The East A & B proposals would require far more resources to implement and would create a far less usable trail. The Corridor alternative has the advantage of using the old rail right of way which the county already owns. As a taxpayer who greatly appreciates the services provided by King County and avid user of the existing trail, I support the Corridor alternative which worlt force the county to divert revenue from other worthy projects in order to see the East Lake Sammanish Trail completed.

with regards, Scott Betts 4415 249th Ter SE Issaquah, WA 98029 425-391-6751

I-139-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Armstrong, Donald R [donald.r.armstrong@boeing.com]

Sent: Tue 11/7/2006 5:32 AM

To: Cc:

Subject:

SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-140-001

As an engineer, a bicyclist and a citizen concerned about efficient use of tax dollars, I can't imagine wasting any time or money on alternatives that route users out of the corridor and on to East Lake Sammamish. Pave it and be done!

Sincerely,

Don Armstrong 2633 309th AVE SE Fall City WA 98024 cell(206)999-1852

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I-140-001

- FIUII

William Hanna [jogger.bill@verizon.net]

Sent: Mon 11/6/2006 9:43 PM

To: Cc: SEPAcomments, FMD

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

I-141-001

I support development of the East Lake Sammamish Trail using the preferred alternative for the following reasons:

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- **4.** The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

Please consider this in making your decision. Thank you!

William D. Hanna

14215 N.E. 84th Court

Redmond, WA 98052

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-141-001

Your comments are acknowledged. King County considered all of these factors when selecting their preferred alternative.

Sent: Mon 11/6/2006 9:02 PM

SEPAcomments, FMD

Jerry Scott [jerry@obatik.com]

To:

SEPAcomments, FMD

Cc:

Subject:

ELST (comments on DEIS)

Attachments:

I-142-001

Put it on the right-of-way.

Get it paved.

This is a critical link - finish it up now.

I-142-001

Your support of the Corridor Alternative has been noted.

Alden (Buff) Chace [chacebike@comcast.net]

SEPAcomments, FMD

Sent: Tue 11/7/2006 10:23 PM

To: Cc:

I-143-001

I support the Corridor alternative for the East Lake Sammamish Trail

Subject: Attachments:

We need a paved trail that provides a safe and efficient alternative to the traffic conditions of the East lake Sammamish Parkway. It is poor logic to consider alternatives that do not make use of the existing right of

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-143-001

To:

Harold Egler [egler3@mac.com] SEPAcomments, FMD

Sent: Tue 11/7/2006 8:02 PM

Cc:

I-144-001

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I live on the eastside in Bellevue and want the preferred alternative. Please pave this most direct route.

Harry Egler 706 177th lane NE. 98008

I-144-001

Your support of the Corridor Alternative has been noted.

France Jos and Ann

Joe and Anne [theplatzners@comcast.net]

Sent: Tue 11/7/2006 5:00 PM

To: SEPAcomments, FMD

Cc: Subject:

I-145-001

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

As an active cyclist and voter in Bellevue, my family and I would like your support ensuring the preferred alternative is built for the trail. We need a continuous paved trail for the length of the lake for safety, value, and reduction in emissions.

Thank you for your support

Joe Platzner 425 401 5040

https://owa.metrokc.gov/cxchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

Sent: Tue 11/7/2006 3:44 PM

SEPAcomments, FMD

From: Kristi Weir via Comcast [khweir@comcast.net]

SEPAcomments, FMD

PATRICK MCGRATH Cc:

Subject:

We support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To:

I-146-001

Dear King County Council:

Support the Corridor alternative for East Lake Sammamish Trail (ELST) which would pave the existing trail. This is important for many reasons.

- 1. It would improve the Health and Safety of the public. The paved trail would allow more public recreationists to exercise and enjoy and our natural surroundings. We have road bikes and recently were introduced to the 17 mile Centennial Trail from Snohomish to Arlington. Many people were enjoying the trail--road cyclists, mountain bike cyclists, skaters, hikers and walkers with strollers. All could enjoy the day and not worry about auto and truck traffic.
- 2. The alternative proposals (East A and East B) would require some use of the street/roadway with motor vehicle traffic--not so safe. There is a constant risk with mixing autos, buses, trucks and motorhomes with walkers, runners and cyclists.
- 3. Staying with paving the existing designated rails-to-trails plan would save the county millions of dollars, which would otherwise be needed to buy up more land and do further planning and construction. Paving the existing trail makes the most sense--economically and for the good of public health and safety.

Thomas W. Weir, M.D. Kristina H. Weir 4639 133rd Ave SE Bellevue, WA 98006 425-747-8480

I-146-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 11/7/2006 2:28 PM

I-147-001

From:

tom radley [tomradley@msn.com]

SEPAcomments, FMD To:

Cc:

Subject:

ELST Master Plan

Attachments:

I-147-001

I live on Lake Sammamish in the Weber Point area. I love the trail and I am so happy that you finally built it. My family and I use the trail every day and some days use it more than once.

I want to see it finished and paved. I want it completed on the route that it is already on.

Putting any portion of it on the road would be declaring a death sentence to the users.

Several of my neighbors who were against the trail have know purchsed bicycles and enjoy riding on the trail. I enjoy seeing the smiles on the

faces of all the people using the trail. Thomas S. Radley

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

From: To: Chris Robinson [chris@coolspringer.com]

SEPAcomments, FMD

Sent: Tue 11/7/2006 12:50 PM

Cc:

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

I-148-001

I choose this Master Corridor alternative! I live on Lake Sammamish and have been a cyclist for 20 years! I like that this alternative has the least impact on the environment and is the best value for the public. Please choose this solution!

Thank you,

Christine Robinson
Phone: 425-922-7496
Fax: 425-484-6521
chris@coolspringer.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-148-001

From: Steve

Steve Bredeweg [sbredeweg@yahoo.com] SEPAcomments, FMD

Sent: Tue 11/7/2006 12:47 PM

To: SE

Cc: Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

To whom it may concern,

I-149-001

I was very happy to see the interim finally open in March this year, after years of legal messes and unnecessary legal fees wasted. I was shocked to read that it may all start over as the County is now considering 3 different plans. It seems like deja vu all over again. I support the Corridor alternative for the East Lake Sammamish Trail. Let's move foward!

- 1. The preferred alternative is the best value for the public.
- 2. The preferred alternative uses land that King County already owns. The East A and East B plans would require us to spend an additional \$22 million buying land -- not counting the additional engineering costs.
- 3. The preferred alternative gives trail users an even and direct route. The East A and East B plans route users up on to the East Lake Sammamish Parkway, defeating the purpose of the Trail.
- 4. The preferred alternative has the smallest impact on the surrounding environment. The East A and East B alternatives would require major new development outside the right of way.

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-149-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 11/7/2006 12:43 PM

SEPAcomments, FMD

From: To: Jeff Shaver [jshaver@broadcom.com]

SEPAcomments, FMD

Cc:

I-150-001

Subject:

I support the Corridor alternative for the East Lake Sammamish Trail

Attachments:

Greetings,

The corridor alternative is, in my mind, the superior choice for the following reasons:

- 1. Most cost-efficient.
- 2. Produces a usable trail for bicyclists. The alternatives which route wheeled traffic onto a very busy road make the trail unusable for bicycles. The concept of northbound bicyles on the southbound shoulder is ludicrous. It is a serious safety hazard for both bicyclists and motorists.
- 3. Remains true to the trails concept. Rerouting wheeled traffic off of major portions of the trail destroy the unity of the trail system which is at the heart of the region-wide drive to connect and expand trails.
- 4. Honors committments already made. The "East" alternatives are simply another attempt by certain individuals to scuttle the entire trail project. The decision to develop the trail has been made. The alternatives essentially reverse that decision. The alternatives which virtually close sections of the trail to all traffic constitute a violation of the public's trust.
- 5. Smoothest flow of traffic. Alternatives will increase congestion and confusion, while slowing the flow of trail traffic, as well as vehicle traffic.
- 6. Safest. As mentioned above, the re-routing alternatives will result in dangerous conditions for drivers and riders. This is unacceptable when such a fine, safe plan exists the master corridor following the interim trail.

Please choose the corridor!

Jeffery Shaver Federal Way, WA

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I-150-001

Your comments are noted. King County considered all of these factors when selecting their preferred alternative.

Sent: Tue 11/7/2006 12:06 PM

SEPAcomments, FMD

Carol Rosenthal [CSR@LAHTNESOR.COM]

To:

SEPAcomments, FMD

Cc: Subject:

I support the corridor alternative

Attachments:

I-151-001

Please don't let special interests increase costs or divert the intent of the Rails to Trails program. Our children and their children will appreciate it as much as we do the Burke-Gilman Trail today.

Sincerely,

Carol Rosenthal

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-151-001

Sent: Mon 1/8/2007 12:10 PM

SEPAcomments, FMD

From: Auld, Gina

To:

SEPAcomments, FMD

Cc:

Subject: FW: Sammamish Lake Trail

Attachments:

Gina Auld

Project Manager, Parks CIP

KSC - NR - 0700

201 South Jackson Street, Rm. 700

Seattle, WA 98104 Office: (206) 263-7281 Cell: (206) 724-1296

----Original Message----

From: Lozano, Mike Sent: Monday, January 08, 2007 11:44 AM

To: Auld, Gina

Cc: Nunnenkamp, Robert

Subject: FW: Sammamish Lake Trail

Happy New Year Gina and Robert,

Just returned from a great three week vacation in sunny Arizona and found this in my many emails. Mike

----Original Message----

From: Fred Horvath [mailto:fredhorvath@hotmail.com]

Sent: Friday, December 29, 2006 2:43 PM

To: Lozano, Mike

Subject: Sammamish Lake Trail

I-152-001

If it isn't too late, we would like to comment on the present unpaved Sammanish Trail and then plans to pave the Trail. We had reservations about how the Trail would be used in it's present state, but we have discovered that the Trail is be used by large numbers of joggers, mountain bikers, older couples walking, families with strollers and/or young chilren. What is missing from the Trail are the high speed bikers who continue to fly by our house on the Parkway in groups of 20-30.

We have serious safety concerns about the plans to pave the Trail for the benefit of the bikers. The Trail is unique, in that it cuts through the backyard of many homes and that it is crossed by many driveways. Because of the poor sight lines, bikers would either have to radically reduce their speeds and /or stop for each driveway. Where the Trail cuts through back yards, young children would be at great risk trying to cross the Trail going to and from their beach, retreiving a ball or toy, or visiting a neighbor child.

In summary, there are many advantages to leaving the Trail unpaved, while paving the Trail would create many serious safety and liability issues.

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I-152-001

Under the preferred alternative, the Interim Use Trail would not just be paved, but it would be widened. Based on the County's experience with other urban trails in the regional system and consistent with AASHTO guidelines, a paved width of 12 feet can reasonably accommodate the mix of uses. Further, where practical the County is proposing to develop wider or even separated soft shoulders to allow more separation between higher speed and lower speed users. The existing shoulders of East Lake Sammamish Parkway will remain available to bicyclists and may be preferred by advanced bicycle commuters.

Sections 2.5.6.3, 3.11.2.8, and 3.11.3.1 of the EIS describes seven types of traffic control measures that would be employed depending upon the type of intersection and sight distance at each intersection. The application of the traffic control measures at any given intersection depends, in part, on the sight distance conditions at the intersection. Sight distance is a principal consideration for roadway and path intersection design. Existing sight distance conditions for each intersection are inventoried in Volume III, Appendix G. Sight distance conditions would be updated and considered during design.

Thank you for your attention to our con	our concerns.
---	---------------

Karen and Fred Horvath

Get the Live.com Holiday Page for recipes, gift-giving ideas, and more. www.live.com/?addtemplate=holiday

From:

Alexis [cheerfulalexis@msn.com]

To:

Cc:

SEPAcomments, FMD
Sammamish trail

Subject: Attachments:

I-153-001

Hello my name is Alexis and I was reading the master plans for the Sammamish trail and me and many other homeowners would like you to strongly consider to change the trail to let equestrians on. Would can have the same rules or laws as pedestrians and the dogs. Even a small path to Marymoor park would be great and then connect it to the equestrian trail they have their many people are wanting to make it an equestrian access. Please take this into consideration.

-Alexis

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Sent: Sun 12/31/2006 9:47 PM

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-153-001

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

Sent: Fri 12/29/2006 11:23 PM

SEPAcomments, FMD

From:

Reid Brockway [reid.brockway@L-3Com.com]

SEPA

SEPAcomments, FMD

To: Cc:

Subject: ELST DEIS comments

Attachments:

The following are comments on the Draft Environmental Impact Statement for the East Lake Sammanish Master Plan Trail, dated October 2006.

There are two related issues where the DEIS does not prescribe adequate mitigation. One is parking in non-designated areas and the other is trail access. I am a resident living adjacent to the trail, and have observed problems of both kinds since the interim trail has been open.

I-154-001

Users of the interim trail have been parking on the shoulder of East Lake Sammamish Parkway on either side of the entrance to my community (Shorelands), where the trail is quite visible from the Parkway, and accessing the trail using the community's private lane. This is not a designated access point. Since there is a trail-related dog litter station and waste can at our entrance, perhaps people assume it is an access point. No signage tells them to the contrary.

I understand other communities are seeing the same thing occurring.

But of greater concern to me is the fact that when cars are parked straddling the entrance to our community, it creates a safety hazard; view of the Parkway is obstructed. It can be extremely difficult to see around these cars to know if traffic is coming. To turn right onto the Parkway to go south (i.e., into the near lane), this forces a driver to poke the nose of his car almost into the lane before he can see traffic coming from the left. Turning left to go north, which requires knowledge of traffic coming both directions, is even more risky. It becomes necessary at times to turn right and drive a ways on the Parkway then make a U-turn to go north.

I-154-002

A second safety hazard this causes is for cyclists using the shoulder of the Parkway, which is an established bicycle route, especially for commuters. Cyclists must move very close to or into the lane of traffic to go around these parked cars, which is dangerous. It has been suggested in the past that these shoulders be designated as bicycle lanes with cyclist logos. The argument against this has been that this would make them no-parking lanes, and the shoulders are needed for emergency parking. If this is still a valid argument, some other solution is needed.

I-154-003

Neither of these issues is given sufficient attention in the DEIS. At least two mitigation measures should be prescribed - signage and active enforcement. No Parking and No Access signs should be placed at these tempting locations to provide notice to an unaware public. Perhaps striping to designate no-parking areas will be necessary as well. But inevitably there will be people who ignore such messages, so the master plan EIS should prescribe enforcement measures as well. Perhaps an

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I-154-001

During the design phase of the project, King County will work with the local jurisdictions to develop appropriate signage, identifying where access is allowed. Following construction, King County will update information on their trail website that will identify appropriate access points and discourage entry at unauthorized points.

Section 2.5.6.2 of the EIS provides the locations of off-Parkway trail parking. Parking and signage along East Lake Sammamish Parkway are governed by the rules and regulations of the local jurisdictions.

I-154-002

The local jurisdictions, in this case the City of Sammamish, regulate parking along East Lake Sammamish Parkway. This concern should be raised to the city. Please note that, as stated in Table 3.11-12, the City of Sammamish Six-Year Transportation Improvement Program (July 2005) identifies plans to improve bicycle lanes along portions of the Parkway.

I-154-003

Section 3.11.6 of the EIS describes mitigation for parking impacts. Because parking is under local jurisdiction (the cities of Redmond, Sammamish, and Issaquah), mitigation measures would be implemented in cooperation with the local jurisdictions. Enforcement would also be the responsibility of the local jurisdictions.

I-154-003

arrangement for pro-active monitoring and enforcement by the Sammamish Police Department is the solution. In any case, it should not be up to the local residents to confront trail users and become de facto policemen. The trail has created this problem, and the Master Plan should provide an effective solution.

In summary, I believe the Master Plan EIS should address, in adequate detail, mitigation of the trail access and hazardous parking issues. Such measures should include effective signage and active enforcement.

Reid Brockway 167 E Lk Sammamish Sh Ln NE Sammamish, WA 98074

Sent: Tue 12/19/2006 11:57 PM

SEPAcomments, FMD

From:

Mike Rundle [mikerun@msn.com]

To: SEPAcomments, FMD

Cc: Subject:

Comments on ELST DEIS

Attachments:

Comments on issues in the ELST DEIS:

I-155-001

The opening of the interim trail has led to an increase in trespass. I have experienced this first hand. Since the trail is not adjacent to the road people look to use my private driveway to access and exit the trail. They also have sought to water and relieve their dogs off the trail.

I-155-002

The absence of fencing and/or gates on the east side of the interim trail promotes the feeling that access is granted to property on the east side of the trail.

I-155-003

This problem is perpetuated in the proposal for the Master Plan trail. The DEIS does not adequately address public access deficiencies with the corridor only alternative vs. East Alternatives. East Alternative provides greater public access including access to SE 24th and neighboring population. The corridor only alternative is accessible to the adjacent property owners while the cast alternatives are accessible to the greater community.

I-155-004

The DEIS does not discuss what facility trail users will use to travel to access points on the trail. In the Case of the East Alternative B area, non motorized facilities along E Lake Samm Place SE and E Lake Samm Pkwy SE will have to be constructed just so trail users can safely travel to one of the limited trail access points like SE 33rd. If the corridor alternative is chosen, how will users travel to the access points safely? Why put people at risk? Why not build a complete solution now?

I-155-005

The LID potition submitted to the Sammamish City Council - and signed by 60%+ of the local property owners along the East Alternative B area was submitted to help support construction of a trail alternative similar to East Alternative B -- not to build a sidewalk. The signatures were gathered over one weekend which speaks directly the level of support in the area for an alternative trail alignment.

I-155-006

Was the LID considered as a means of defraying or climinating acquisition costs? Some homeowners have stated that they would be willing to donate or grant an easement along the

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I-155-001

Section 3.8.2.5 of the Draft EIS discusses Safety and Security associated with the East Lake Sammamish Trail. As noted on Page 3.8-14 of the Draft EIS, published studies on rail-trails indicate that trail neighbors typically are concerned that new trails may result in negative impacts (e.g., concerns regarding increased crime and vandalism), but the studies show that these concerns are not borne out in any substantial way, although isolated incidents have occurred across the country.

As noted on Page 3.8-23 of the Draft EIS, occasional incidents of trespass or private property vandalism could occur on properties adjacent to the trail, but these are not expected to exceed existing conditions. King County has worked closely with the cities of Redmond, Sammamish, and Issaquah to address trail-related law enforcement and public safety issues, and will continue to do so over time. King County's experience with other trails suggests that the risk of increased trespass is likely to be counterbalanced by the increased public presence on the trail.

Finally, the King County Code also addresses these issues. In KCC section 7.12.295(H)(9), the model trail user code of conduct specifies that "[t]rail users should respect private lands adjacent to county trails and should stay on trails to avoid trespassing on or interfering with adjacent private property." Under KCC sections 7.12.650 and -.670, anyone caught violating the code of conduct may be subject to a fine of up to \$500, and loss of park or recreation facility use privileges.

I-155-002

Section 2.5.6.9 of the Draft EIS identifies the circumstances under which the County would install fences. Adjoining property owners are of course free to fence or landscape their own property outside the rail corridor boundary if they so desire, subject to any local regulations

I-155-006

existing road ROW to help facilitate trail construction of something similar to East Alternative B in exchange for the trail being moved out of their private back yard to the border of their front yard adjacent to a public road where the public is commonly expected to be.

I-155-007

The DEIS cost estimate for construction of East Alternative B is a worst case scenario. Non motorized facilities will be a required component of future road improvements for East Lake Samm Place SE and E Lake Samm Parkway. Cooperation with the local city and incorporation of the Multi-Use Trail with these projects could help meet both project objectives at a much lower cost and increase public access to the trail and future pedestrian improvements on interconnecting roadways.

I-155-008

DEIS Table S-1 identifies a worst case scenario of 22,000,000 in property acquisition costs based on a complete build out of the road right-of ways, a dubious assumption on E Lake Samm Place SE, and the addition of a maximum cross section trail. Obviously there is a more reasonable design, which the DEIS alludes to but does not focus on for purposes of a cost estimate. This is the largest single difference in cost between the railbed alternative and East Alternatives; it's as if someone was trying their best to make the East Alternatives financially unpalatable...

I-155-009

What is the justification for doubling or tripling the use of the railroad corridor to 19 or 27 feet? 8-10 feet of ballast base was historically used by the railroad for over the last 100 years (8 foot rail ties \pm 1 foot gravel spalling off each side).

I-155-010

Railbanking allows for the continuation of the easement to preserve it for future rail use. How is widening the use beyond the actual historical rail use in concert with railbanking?

I-155-011

How has this document considered the varying legal ownership, agreements between railroad and homeowner and historical use surrounding the railbed and railroad ROW?

I-155-012

An alternative that is missing from analysis is that of simply maintaining existing fencing, paving the existing interim trail and incorporating additional intersection improvements. The same cross section could/should also be considered in an East Alternative B alignment. The cost would be dramatically less for both alternatives.

Sincerely,

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or permit requirements. Adjoining property owners may also apply to the County for a special use permit to install a fence or landscaping within the rail corridor boundaries. Section 1.3.3 of the Draft EIS describes the County's special use permit program.

I-155-003

The East Alternatives would allow access to the trail in a greater number of locations than the Corridor Alternative. However, the safety of these access points is more important than the number of access points. At each of the designated access points (see Table 2-2), King County considered whether or not additional improvements for getting people across or along East Lake Sammamish Parkway would need to be included as part of the project.

Further, King County must balance accessibility against other criteria when evaluating alternatives to select a preferred alternative. Based on the criteria and evaluations in the Draft EIS, and after taking into account the public comments received, King County's preferred alternative continues to be the Corridor Alternative.

I-155-004

As described above, the County's preferred alternative continues to be the Corridor Alternative. Access is provided as described in Table 2-2 of the Draft EIS.

I-155-005

As described in the Draft EIS, Section 2.4.1, the LID alternative was considered and rejected, in part because a sidewalk fails to meet the County's objectives for a shared use path. The County determined that if the LID alignment were designed to meet guidelines for a shared use path, as opposed to a sidewalk, it would ultimately have the same or similar impacts to those of the East B Alternative. For the reasons set

forth in in the EIS, the County's preferred alternative is the Corridor Alternative, not the East B Alternative.

I-155-006

Consistent with the response to I-155-005 above, anything less than 12 feet of pavement with shoulders does not meet King County's objectives for a multi-use regional trail. While some property owners may be willing to contribute an easement along the roadway, the topographical and space constraints there, combined with the need to preserve space for future roadway improvements, would still result in substantial private property impacts (loss of access and even loss of structures). These factors are among those that contribute to the high costs estimated for the East Alternatives.

I-155-007

King County has been working with the local cities during development of the EIS alternatives. Staff from each city participated in an interdisciplinary team early on, focused on the project purpose and range of alternatives. The preliminary alignments and resulting cost estimates for the East Alternatives are based in part on direction from the City of Sammamish. Since that time, the City has expressed its conditional support of the Corridor Alternative. See comment letter G-004.

I-155-008

While no immediate plans have been identified to improve East Lake Sammamish Place, the City of Sammamish provided specific direction regarding the location of the trail with respect to the roadway. The typical section applied through this area incorporates the same basic features as applied throughout the corridor. The cost estimate in Table S-1 of the EIS is based on the location, section, and features of the East Alternative B as described in Section 2.5.2 of the EIS.

East Lake Sammamish Master Plan Trail EIS

I-155-009

The justification for the trail width is provided in Section 3.7.3.1 of the EIS, which states in part: "To help minimize some of the potential conflicts (between users), the Corridor Alternative would be developed to provide the greatest amount of separation between trail users..." Insofar as the comment asserts facts about the railroad's use of and right or interest in the corridor, those assertions relate to federal railbanking of the BNSF corridor, which is beyond the scope of this EIS.

I-155-010

Railbanking under the National Trails System Act, 16 U.S.C. §1247(d), preserves railroad easements by authorizing their interim use for public trails and other purposes until such time as interstate freight rail service is restored. Railbanking preserves the full width of the railroad easement, not just such portion of the easement as may have been previously improved for railroad use. Where the corridor consists of fee property, the County owns that property outright and may make any use of the property permitted under applicable laws and regulations and consistent with "railbanking" requirements. Where the corridor consists of "railbanked" railroad easements, the County may make interim trail and other uses of any portion of such easements, up to and including the full width of such easements, consisting with "railbanking" requirements.

The Corridor Alternative is located within County-owned fee property or "railbanked" easements in all locations except where it crosses SR 520 in Redmond. Deviations were made in this location to preserve public safety, and have been made in conjunction with WSDOT, the City of Redmond, and King County. Although the Corridor Alternative departs from the railbanked corridor near SR 520, that segment of the Corridor Alternative is located entirely within other public rights-of-way.

East Lake Sammamish Master Plan Trail EIS

Page 208

I-155-011

The EIS considers varying legal ownership, agreements between the railroad and homeowners, and historical use in numerous places, some examples of which are provided here. First, as described in Section 2.5.1, the trail configuration is narrowed in places (in part) to avoid existing structures and preserve access to adjacent properties. The preliminary design depicted in Volume II of the EIS is also premised on remaining within either the railbanked right of way or the negotiated easement, depending on the manner in which land is held. For example, if the cut and fill lines for the trail would extend outside that area, retaining walls would be used, as described in Section 2.5.6.5. The potential for changes in access, loss of parking, and reduced privacy are acknowledged in Section 3.8.3.

Pursuant to King County Code 14.30 and consistent with its management of the regional trails system, King County maintains a special use permit system to authorize private use of County-owned property. Among other purposes, these permits can provide a mechanism to recognize established and historically used trail corridor crossings. For additional information, please refer to Section 1.3.3 of the EIS. Legal issues arising from federal railbanking of the BNSF corridor are beyond the scope of the EIS.

I-155-012

A paved trail would accommodate road bicycles and other wheeled uses. The existing Interim Use Trail varies from 8 to 12 feet wide and has no shoulders in many places. This configuration would have a much higher potential for conflicts between uses, given the types and volumes of use expected. Although it could cost less to simply pave the Interim Use Trail, the trail would not meet recognized design guidelines, such as those in AASHTO, and the trail would not well serve the needs of its intended users. As a result, the alternative of paving the Interim Use Trail would not meet the County's goals and objectives.

East Lake Sammamish Master Plan Trail EIS

SEPAcomments, FMD

From:

Pat Garrity [piscespat@comcast.net]

Sent: Tue 12/19/2006 10:01 PM

To: Cc:

Subject:

Gina Auld

SEPAcomments, FMD

Attachments:

Let me say that I consider the trail a wonderful asset to the area and my husband and I use it several times a week. It passes in front of our home. We like the trail the way it is.

I-156-001

I fear that a smooth surface will increase the "wheeled" traffic and add a lot of speed to the mix. There are some bikers who already go too fast and very few bikers give a signal when passing now. Adding inline skaters, narrow tired bikes and skate boarders will further add to the confusion of this "two way" trail

I-156-002

I also cannot believe that horses are being considered for this residential trail. Horses are easily spooked and with dogs, baby strollers, bikes, and skaters, it does not seem wise or safe. Who will clean up after them? I have never seen a rider get off a horse and scoop up the droppings. I can't imagine residents along the trail will want horse droppings on their driveways.

Please keep it the way it is!!

Pat Garrity

2021 E. Lake Sammamish PI SE

I-156-001

King County's regional trail system is intended to accommodate the broadest array of nonmotorized uses possible. The County's preferred alternative (Corridor Alternative) includes increasing the width of the Interim Use Trail to 12 feet of pavement with two shoulders that are each a minimum of 2 feet wide.

I-156-002

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if conditions for equestrian use in the area improve.

Sent: Tue 12/19/2006 6:57 PM

SEPAcomments, FMD

From: JORDAN MILLER [millerjmz@msn.com]

To: SEPAcomments, FMD

Cc:

Subject: East B Alternative- YES!

Attachments:

Attn: Gina Auld

My family and I strongly endorse the 'East B Alternative' plan for the East Lake Sammamish Trall (ELS Trail). This plan would seem to allevate most of the numerous concerns and conflicts created by the existing Corridor's adjacency to and through private properties.

Before I continue, let me apologize for getting this letter turned into your department at the last minute. Thankfully our home's electricity was restored today. What a storm!

I-157-001

I-157-002

I-157-003

I-157-004

We live at 2831 East Lake Sammamish Parkway Southeast. Our current beachside residence is separated from our upper property and vehicle garage by the intersecting Corridor. As I'm sure your department is aware, we are one of the unfortunate few properties (I think approximately 30 homes) where the Corridor is literally cutting through our front or back doors. All access to our home must be done on foot! If King County's "Preferred Alternative" (i.e.: the existing Corridor) is constructed, we will be forced to traverse across 18+ feet of trail.

Aside from the obvious inconvenience caused by the proposed and existing Interim trail, my biggest concern is for the safety of my growing family, as well as my extended family, friends and maintenance people. To cross an 18 ft. trail with runners, dog-walkers (often unleashed in spite of regulations), mountain bilkers, high-speed road cyclists, rollerbladers, skateboarders and even horseback riders is a daunting task to say the least. I ask that your department consider what it would be like for us to cross this pedestrian highway on a daily basis. Try crossing with small children, their grandparents, or disabled friends. How about crossing with proceries, packages, fuel for watercraft or barbeque, landscape maintenance equipment, or house maintenance in general. How about crossing with luggage; "Hellot trail-users, we're going out of town!" This list could go on for many more pages. I'm sure I could find another list that would go on for many pages; the Crime Records for the Burke Gilman Trail, a trail that the ELS Trail is emulating as well as connecting to! Criminal activity is a major factor to consider, not only for your trail users but especially for the homes and families that neighbor the trail. Trespassing, vandalism, theft, voyeurism, rape, and child molestation are all crimes invited by opening this Corridor to the public.

Living with the Interim Trall this past year has already caused us a lot of stress. A neighbor's car (2 lots south) was repeatedly vandalized; broken into, kicked, jumped on, glass shattered. I know that this type of criminal activity is only the beginning of what's in store for a public trall of this magnitude. I have encountered numerous bicyclists speeding down the Interim Trall at night as well. After attending the Master Plan public hearing in November, it became obvious to me that the majority of cyclist trall proponents had a sort of 'Robin Hood Compley'; "steaf from the rich, give to the cyclists!" I had intended to make a statement at the public hearing, but after listening to the Cascade Bicycle Club rep promote keeping the trail upen at night, and another Friends of Mary Moore Park rep voicing his obvious disdain for lakefront owners property rights, I was shocked into silence. At least with this letter I can still have avoice in this major decision.

Is there any park that is open at night? The increase in criminal activity during non-daylight hours statistically keeps most parks closed at night. I should hope that this would hold true for the ELS Trail as well.

When we purchased our property in 2002, we had hoped the Trail would be rerouted for properties such as ours. We had also been informed of a nearby neighbor whom received a permit to construct a pedestrian overpass from his driveway to his home on the lake. This seemed like a viable solution for us to pursue, should the Trail be built through our property. Unfortunately, early negotiations for our Trail overpass were turned down.

After walking the ELS Interim Trail from Redmond to Issaquah I can certainly see where a wide, high speed, multi-use trail can easily work... especially the first mile or so from either end. I can also understand how homes that reside with the trail safely east of them, with intersecting driveways to get them across the trail, a trail following the existing Corridor can work. But obviously the East B Alternative was designed with the foresight to protect the directly affected property owners as well as the people wishing to use the Trail safely and enjoyably.

Your consideration and argument for the East B Alternative is greatly appreciated by myself, my family, and all those truly affected by the Trail's route. Thank you!

Sincerely,

Jordan Miller 2831 E. Lk. Samm. Pkwy SE Sammamish, WA 98075 425.894.9841

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I-157-001

Section 3.8.2.5 of the Draft EIS discusses safety and security associated with the East Lake Sammamish Trail. As noted on Page 3.8-14 of the Draft EIS, published studies on rail-trails indicate that trail neighbors typically are concerned that new trails may result in negative impacts (e.g., concerns regarding increased crime and vandalism), but the studies show that these concerns are not borne out in any substantial way, although isolated incidents have occurred across the country.

As noted on Page 3.8-23 of the Draft EIS, occasional incidents of trespass or private property vandalism could occur on properties adjacent to the trail, but these are not expected to exceed existing conditions. King County has worked closely with the cities of Redmond, Sammamish, and Issaquah to address trail-related law enforcement and public safety issues, and will continue to do so over time. King County's experience with other trails suggests that the risk of increased trespass is likely to be counterbalanced by the increased public presence on the trail.

Finally, the King County Code also addresses these issues. In KCC section 7.12.295(H)(9), the model trail user code of conduct specifies that "[t]rail users should respect private lands adjacent to county trails and should stay on trails to avoid trespassing on or interfering with adjacent private property." Under KCC sections 7.12.650 and -.670, anyone caught violating the code of conduct may be subject to a fine of up to \$500, and loss of park or recreation facility use privileges.

I-157-002

Consistent with King County Code section 7.12.480, the trail hours of operation would be dawn to dusk. However, the Code also authorizes the County to set different hours of operation for individual facilities, incuding trails. Any proposal to change the hours of operation for the

proposed trail would be the subject of a separate administrative rulemaking process, and would include public notice and an opportunity for public input or feedback.

I-157-003

Based on the evaluations in the Draft EIS and public comments received, the County's preferred alternative continues to be the Corridor Alternative. The County is not proposing any pedestrian overpasses across the East Lake Sammamish Trail.

I-157-004

Thank you for your comment. Your preference for the East B Alternative has been noted.

Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

SEPAcomments, FMD

From:

R.Crispin [rcrispin1@yahoo.com]

SEPAcomments, FMD

Sent: Tue 12/19/2006 6:18 PM

To:

Cc:

Subject: DEIS Comments

Attachments: DEIS Comments - R.Crispin 12-19-06.doc(35KB)

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Comments Master Plan ELST Draft EIS 12-19-2006

fmd.sepacomments@metrokc.gov.

My property lies in section-township-range, 07-24-06, between STA 299 and STA300 depicted in Figure 14, pg 26 of the Draft Alignment Draft EIS.

I-158-001

It is important for the public to realize that the Seattle, Lake Shore and Eastern Railroad Company was never granted an easement to lay tracks through 07-24-06, which ran roughly from STA289 in figure 14 to STA 311 in figure 15 of the Draft EIS. In subsequent years from the initial railroad encroachment, property owners granted some easements, but the majority of section 7 remained a "prescriptive" easement area. The underlying land in this area, which the rail traversed over, is still owned in fee by the private property owner. The federal court is litigating the size of the prescriptive use since it was under federal statute that allowed a new use to follow when the railroad use was terminated. In a Vermont railbanking case, a federal judge determined the new trail use width to be 8 ft, the width occupied by the railroad ties. Final width determination is important so that all parties are aware of their legal ownership and/or usage rights. The Draft EIS for area 07-24-06 shows the trail width to be 18+ & 19+ ft. These widths may be too wide.

I-158-002

Public comment takes on an adversarial tone when it comes to adjacent property owners. In my bisected section, as stated above, the railroad corridor is only an easement. King County chooses to use the word "own" in describing exclusivity to the corridor, failing to educate the public in the true matters regarding "ownership," disseminating information which spawns public hostility against adjacent or bisected property owners. The proper and orderly process, which is underway in federal court, must continue until a final determination is reached, and before permits to expand beyond

I-158-001

The comment is acknowledged. As discussed in the text of the EIS, the trail corridor was "railbanked" under the National Trails System Act, 16 U.S.C. §1247(d) ("Trails Act"). The Trails Act authorizes interim trail use of rail corridors preserved for future rail use. Under the Trails Act, the federal Court of Claims is the proper forum for disputes regarding the scope of property interests in "railbanked" corridors. Presault v. ICC, 494 U.S. 1, 110 S.Ct. 914, 108 L.Ed.2d 1 (1990); Good v. Skagit County, 104 Wn. App. 670, 17 P.3d 1216 (2001).

A number of property-rights claims have been settled in sectiontownship-range 07-24-06 and elsewhere along the corridor. Certain portions of the corridor are the subject of ongoing litigation in the federal Court of Claims. The Court will decide whether the federal government must compensate the claimants for interim trail use of those portions of the corridor. To make that decision, the Court must first determine the scope of property rights which the railroad originally acquired in those portions of the corridor. The Court's determination is pending. The Court of Claims case numbers are 04-1456 through 04-1459, 04-1463 through 04-1469, 04-1471 through 04-1473, and 04-1476. King County is not a party to any of the Court of Claims litigation. There is no dispute whether "railbanked" corridors may be used for trails; the Trails Act dictates that they may. 16 U.S.C. 1247(d); see also Presault v. ICC, 494 U.S. 1 at pp.17-18; Friends of the East Lake Sammamish Trail v. City of Sammamish, 361 F.Supp.2d 1260 at pp.1273-74 (W.D. WA 2005); Good v. Skagit County, 104 Wn. App. 670 at pp.675-76.

The Washington State Court of Appeals, the federal District Court for the Western District of Washington, and the Ninth Circuit Court of Appeals have already ruled that the railroad acquired fee title to other portions of the corridor. See King County v. Rasmussen, 299 F.3d 1077 (2002); King County v. Rasmussen, 143 F.Supp.2d 1225 (W.D. WA. 2001); Ray v. King County, 120 Wn. App. 564, 86 P.3d 183 (2004). King County owns those portions outright.

the ballast railbed could be issued. It is in the best interest of all to have these legal determination completed so there will not be any outstanding issues or animosity.

I-158-003

The proposed parking area and restroom facilities at SE 33rd Street depicted in Figure 13, pg 25 of the Draft Alignment encompasses land that is also in federal litigation to determine the scope of the railroad easement. It is premature to designate this area for public use unless the County is prepared to spend additional money to compensate the true owners.

I-158-004

In other matters concerning the Draft EIS, public testimony overwhelmingly admits the disproportionate speed of the common trail user – walker or jogger - to that of the bicyclist, and the dangers that this disproportionate speeds bring. In the Los Angeles area, the beach esplanade is a 20 mile multi-use trail running along the public beaches for several miles at a time. The speed limit for that paved trail is 8 mph, nearly half of King County's limit. The only reason that the beach trail in California works is that it is heavily patrolled. Tickets are regularly issued to speeding bicyclists. King County trails have a dismal record of enforcement. Cyclists regularly speed, ignore traffic signs, and generally have a disdain for the slower moving trail user; one need only visit the Burke Gilman Trail to see for oneself. Unfortunately, pedestrian accidents are rarely reported because the bicyclist flees and the police are helpless to do anything. The cyclists using the ELS interim trail are beginning to travel at increased speeds as the compacted gravel smoothes out. Patrols are minimal and ineffective. Public hearing testimony was given by self proclaimed "cyclist" advocating a paved trail alternative to facilitate training or commuting. These activities sustain speeds in excess of 20 MPH. These speeds are incredibly dangerous for the typical trail user, and the danger is exacerbated when there is no daylight.

I-158-005

I-158-006

Further, it is surprising that King County government is advocating paving over land, creating more impervious surfaces, when it is actively advocating the opposite for private property owners throughout King County. The water quality report haphazardly dismisses the fecal contamination runoff by horses and

I-158-002

Your comment is acknowledged. Refer to the response to comment I-158-001.

I-158-003

Your comment is acknowledged. Refer to the response to comment I-158-001.

I-158-004

King County's preferred alternative (Corridor Alternative) would increase the width of the Interim Use Trail to 12 feet of pavement with 2 shoulders that are each a minimum of 2 feet wide. In some areas, one shoulder would be wider or an entirely separate soft-surface trail would be provided to further separate slower speed uses from higher speed uses. Each of these improvements would provide opportunities to physically separate various types of users, and would thereby lessen the risk of trail user conflicts or collisions. These improvements are consistent with AASHTO guidelines for the design of shared-use paths and are discussed in EIS Sections 2.5.1, 3.7.2.6, and 3.7.3.1. The existing shoulders of East Lake Sammamish Parkway will remain available to bicyclists and may be preferred by advanced bicyclists.

As described in the EIS, the majority of the County's preferred alternative (Corridor Alternative) runs through residential areas with distinct crossings. Commercial development is primarily limited to the areas north of NE 65th Street and south of SE 56th Street. There is no public access to Lake Sammamish from the trail, and none is planned at this time. These attributes serve to differentiate the preferred alternative from beachfront trails in the Los Angeles area. Many, if not most Los Angeles-area beachfront trails are characterized by substantial crosstrail access to nationally recognized and heavily used public beaches. Many Los Angeles-area beachfront trails front high density commercial and residential buildings, including restaurants and retail stores that

I-158-006

pets, claiming damage to the environment has already occurred by development surrounding the lake. The trail draws more people, their pets, and soon horses into an area where they had not been previously. Fecal matter in the lakes was the reasons behind the geese exterminations in 2000 & 2001, and fecal run-off into the lakes will be a problem when the animal density increases. Preventing additional water quality damage from the newly introduced animal waste is important and must be dealt with, not dismissed. Adding 24 acres of impervious surface where fecal waste will be run off, is not being a good steward of the land and compounding the problem.

I-158-007

On a more personal note, since the public announcement several years ago of the corridor's railbanking and conversion to a trail, my bisected property has been trespassed upon and I've had several break-ins. When the fencing for the interim trail was erected and the corridor officially opened to the public, problems continued. Some of the public would trespass upon my property and my neighbor's property if there were no lock on the gate. Within the first week of corridor opening to the public, my gate lock was cut. Since then I have experienced at least 2 instances of people jumping over the fence, people walking their dogs are not cleaning up after them, and I recently had a car tire slashed while parked on my own property.

I-158-008

Though testimony from non-adjacent property owners advocates privacy to the adjacent property owners, that sentiment is clearly not being practiced. The users of the trail bisecting my property have shown themselves to be loud, nosey, and generally disrespectful to the property owner's privacy. I've seen grown people stop, hang on the gate looking at my small house and property, only to scurry away when they see that someone is there. Fences and landscaping provide the only privacy buffer from the increasingly rude public. My neighbors have experienced similar problems. Fences and hedges are a necessity in this section - the corridor users are intrusive. The plan for fences on both sides as depicted in cross section E would be appropriate, though overall trail width is still at issue.

serve the urban beachgoing public. While an 8-mph speed limit may be appropriate for that environment, AASHTO trail design guidelines indicate that a 15-mph speed limit is appropriate for the conditions that exist along the County's preferred alternative.

Section 2.5.6.8 of the EIS explains that the County design for the perferred alternative is intended to accomodate a maximum posted speed of 15 miles per hour. Furthermore, King County Code section 7.12.295(A) specifies that "no person shall travel on a trail at a speed greater than is reasonable and prudent under the circumstances and having regard to the actual and potential hazards then existing." It requires that speed be controlled as necessary to avoid colliding with others who are complying with the law and exercising reasonable care. It further states that travel at speeds in excess of 15 miles per hour constitutes a prima facie presumption that the person violated the code. In King County Code 7.12.295(H)(2), the Model Trail User Code of Conduct specifies that "[e]very user shall exercise due care and caution to avoid colliding with any other trail user." Trail users who choose to exceed the posted speed limit on the trail do so at their own risk, as do those who ride in a careless or reckless manner. Under King County Code 7.12.650 and -.670, anyone caught exceeding the trail's speed limit or violating the model code could be fined up to \$500, or lose their park and recreational facility use privileges, or both. Law enforcement of the trail will be performed by the King County Sheriff.

Since the opening of the Interim Use Trail, no collisions between bicyclists and any other trail users have been reported to King County. Consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system, the trail would only be open for public use from dawn to dusk. However, King County has the authority to tailor specific hours of operation for each facility within its regional system, including trails. To do so, under King County Code section 7.12.030, the County would

I-158-009

With all the issues and problems stated above the only alternatives that work in my area is the East "B" Alternative Plan or the No Trail Alternative. Though Ms. Jenny Bailey stated at the November 9th public hearing stated that no decision has been made, it is clear from the tone of King County officials and employees that, in fact, a final choice has been decided the Corridor Alignment Plan. One can only hope that this process or that one's comments will guide the County to do right by the bisected property owners.

I-158-010

Finally, a survey in the late 1990's was conducted to determine the as-built centerline of the railroad corridor. In the fall of 2005, during site construction of the interim trail through Sammamish, another survey was conducted to re-establish the corridor centerline. What survey companies did this work? Which county office has the documents and field notes from these specific surveys? If I wish to obtain copies what should I do? Was the survey recorded per state law? My understanding is that all DEIS drawings and related Master Plan construction is to be based on that as-built survey; it is important for the as-built corridor centerline to be properly documented and recorded. Mr. Bud Parker stated during the Nov 9 hearing that all comments would be answered or dealt with in the final EIS.

Rory Crispin P.O. Box 40443 Bellevue, WA 98015 need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, though it could propose to do so in the future if demand warrants.

I-158-005

King County's 2005 Critical Areas Ordinance update applies to certain types of land in rural King County, outside the urban growth boundary. It does not apply to land located in cities within the urban growth boundary. Such jurisdictions have their own land use plans and development regulations. A comprehensive review of the land use plans and regulations that may apply to the alternatives is beyond the scope of this EIS.

As discussed at length in Section 1.2 of the Draft EIS, the preferred alternative for the trail was designed to promote the goals of the County's comprehensive land use plan by enhancing and expanding the Interim Use Trail, which is a regional non-motorized transportation corridor and regional recreation asset. While the preferred alternative and the other alternatives were also developed to comply with applicable local land use regulations, any site-specific land use compliance issues will be resolved at the design and permitting stage once an alternative is selected.

I-158-006

King County has decided to prohibit equestrian use of the East Lake Sammamish Trail south of the City of Redmond. Pursuant to King County Code section 7.12.430, the County will post signs to that effect near the Redmond/Sammamish city boundary. There are no designated equestrian trails in the cities of Sammamish or Issaquah. The equestrian trails that do exist south of Redmond cannot reasonably be linked to the East Lake Sammamish Trail. However, in the future, the County could allow equestrian use of the trail south of Redmond if

conditions for equestrian use in the area improve.

King County Code section 7.12.410(C) requires that any person whose dog or other pet is in any King County park area shall be responsible for removing feces deposited by such animal from the park area. King County will continue to provide bags for trail users to clean up after their pets.

I-158-007

Section 3.8.2.5 of the Draft EIS discusses safety and security associated with the East Lake Sammamish Trail. As noted on Page 3.8-14, published studies on rail-trails indicate that trail neighbors typically are concerned that new trails may result in negative impacts (e.g., concerns regarding increased crime and vandalism), but the studies show that these concerns are not borne out in any substantial way, although isolated incidents have occurred across the country.

As noted on Page 3.8-23, occasional incidents of trespass or private property vandalism could occur on properties adjacent to the trail, but these are not expected to exceed existing conditions. King County has worked closely with the cities of Redmond, Sammamish, and Issaquah to address trail-related law enforcement and public safety issues, and will continue to do so over time. King County's experience with other trails suggests that the risk of increased trespass is likely to be counterbalanced by the increased public presence on the trail.

Finally, the King County Code also addresses these issues. In KCC section 7.12.295(H)(9), the model trail user code of conduct specifies that "[t]rail users should respect private lands adjacent to county trails and should stay on trails to avoid trespassing on or interfering with adjacent private property." Under KCC sections 7.12.650 and -.670, anyone caught violating the code of conduct may be subject to a fine of up to \$500, and loss of park or recreation facility use privileges.

Issues regarding cleanup of pet waste were addressed in the response to your comment I-158-006 above.

I-158-008

Please see responses to comments I-114-002, I-002-003, and I-155-002, which address fencing and privacy issues like those in your comment.

I-158-009

Your preference for the East B or No Action alternatives is noted. After reviewing the Draft EIS evaluations and public comments received, the County's preferred alternative continues to be the Corridor Alternative.

I-158-010

King County surveyed property boundaries along the corridor, as well as the railroad centerline. County surveyors are not required by Washington State RCW to record such documents. You may contact Gina Auld, East Lake Sammamish Trail project manager, at 206.263.7281 to view or obtain copies. Please note that, as described in Section 2.5.1, the majority of the Master Plan Trail would encompass the existing Interim Use Trail. However, the centerline of the Master Plan Trail is not always the same as that of the Interim Use Trail (or former railbed). The centerline of the Master Plan Trail would be shifted to avoid or minimize effects on adjacent access roads, critical areas, steeper slopes, etc.

East Lake Sammamish Master Plan Trail EIS

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SEPAcomments, FMD

To:

Cyndi Norlen & Jim Anderson [cynandjim@yahoo.com]

Sent: Mon 12/18/2006 9:04 PM

Cc:

Subject:

East Lake Sammamish trail DEIS

SEPAcomments, FMD

Attachments:

I-159-001

I-159-002

We are writing to comment on the ELST DEIS and future construction. The idea of constructing a fully paved trail will cause more runoff flooding and require too much expense for stormwater mitigation. It appears more real estate will be required to accomodate the preferred alternative and we feel this will adversly affect the neighbors property and detract from the already charming and perfectly utilitarian trail as it exists in it's present state.

I-159-003

I-159-004

It will also enable more bicycle traffic at higher speeds than the current gravel trail. This will create a dangerous unsafe conflict of users because higher speed and greater bike traffic will intimidate and potentially cause harm to walkers, joggers and pets. We anticipate accidents will occur and citizens will be harmed. The County should include funds in future budgets to compensate accident victims for damages. Most importantly we feel the estimated cost of \$35 million for the preferred alternative is absolutly way too much taxpayer money to use on modification of the 11 mile trail. At \$3.18 million per mile it's too much. That kind of money should be saved for community emergency response as we can see is lacking from ther latest wind storm. As taxpayers and voters we cannot understand this completely unjustified use of our hard earned money. The county apparently has no sense of what it takes to earn the money we pay in taxes and should greatly scale back the ELST plan as described in the DEIS to save taxpayer funds and reduce the environmental impact that will result in the stated ambitious plan. It seems that any change to the existing interim trail will have a greater negative environmental impact and provide marginal value. In summary the "no Build" option is the best. Leave it as is and change the name from interim to final.

Jim Anderson and Cyndi Norlen 20048 SE 27 PL Sammamish, WA 98075 (425) 391-0676

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https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-159-001

King County anticipates that paving the existing gravel trail will not significantly change the volume of stormwater runoff generated from the trail surface because: (1) in many locations along the trail corridor, runoff from the paved surface will be dispersed/infiltrated into adjacent gravel and vegetated surfaces; and (2) the existing gravel surface currently does not allow interception or evapotranspiration, two natural methods of reducing runoff volume.

In addition, many existing drainage problems in the vicinity of the trail corridor are related to off-site runoff; poorly maintained, failing and/or inadequate local drainage systems; and seeps. Changing the trail surface will not significantly influence these problems. However, during construction of the Master Plan Trail, many of these local drainage problems will be fixed by improving failing and/or inadequate existing drainage systems.

I-159-002

The preferred alternative (Corridor Alternative) would be constructed within the railbanked right of way.

I-159-003

Under the preferred alternative, the Interim Use Trail would not just be paved, but it would be widened. Based on the County's experience with other urban trails in the regional system and consistent with AASHTO guidelines, a paved width of 12 feet can reasonably accommodate the mix of uses. Further, where practical the County is proposing to develop wider or even separated soft shoulders to allow more separation between higher speed and lower speed users. The existing shoulders of East Lake Sammamish Parkway will remain available to bicyclists and may be preferred by advanced bicycle commuters.

I-159-004

Your concerns regarding the project cost are noted. While the Continuation of the Interim Use Trail Alternative would cost less than the preferred alternative, it fails to meet the County's objectives for a regional trail and nonmotorized transportation alternative. The EIS describes the additional functions and values that would be achieved by implementing the Corridor Alternative.

East Lake Sammamish Master Plan Trail EIS
Page 221

Sent: Mon 12/11/2006 11:56 AM

SEPAcomments, FMD

From: Gene Morel [genem@voicebox.com]

SEPAcomments, FMD; SEPAcomments, FMD

To: Cc: Subject:

RE: East Lake Sammamish Trail Comments

Attachments:

I-160-001

One additional comment pertains to the assumption that emergency vehicles could use private driveways to access the trail in limited access areas such as my area. I think the county steps outside the bounds of rights here. I would like to know what my legal options are to prevent liability from granting any access. Right now, I see no reason to allow any county or emergency vehicle access through my property.

Gene Morel

From: Gene Morel

Sent: Tuesday, December 05, 2006 8:26 AM To: 'fmdsepacomments@metrokc.gov' Subject: East Lake Sammamish Trail Comments

Below are my comments on the Draft EIS for the Lake Sammamish Trail. I favor the East B alternative. I am one of the 75 bisected property owners in section 7. My comments are centered on some of the assumptions made relative to the positioning of the East alternatives versus the on-corridor alternative.

- On page S-9, the EIS states that "The railbanked corridor encompasses the public right of way and is 100 to 200 feet wide over 91percent of the proposed trail length." My comments relate to the other 9% of the right of way. As was agreed in the past by Parks employees, most of this 9% is not owned in fee title by King County nor do they have written easement agreements defining the width of this 9% of remaining right of way. I cannot find anywhere inside the EIS where the remaining 9% of the ROW is discussed as to width or trail design. Why is this so? Did I miss it? Figure S-3 details trail width for the typical 100 200 ft wide ROW areas. No diagram is presented for areas where the ROW is not owned by the county and no ROW width is defined.
- In the cost estimates for East A and B versus the Corridor Alternative, \$22M of the \$34M in additional cost for East A or B is from ROW acquisition costs. A couple years ago, many of the property owners in the bisected area agreed to form a LID that would grant the county the ROW necessary ROW to locate the trail along E. Lake Sammamish Pkwy. I would still agree to this. Mike Rundle started this LID and can answer any questions about the LID. The EIS should address the willingness of bisected lot owners to help the county offset acquisition cost.

Gene Morel

2933 E. Lake Sammamish Pkwy SE

Sammamish, WA 98075

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

I-160-001

Law enforcement and other emergency services along the trail would be provided by local agencies, subject to their existing policies and practices. However, it is a well established principle of constitutional law that police, fire departments, and other first responders may enter or cross private property in furtherance of their duties to the public, such as rendering aid to individuals in danger of harm, protecting property at risk of damage or destruction, responding to reports of a crime being committed, and so forth. The Draft EIS and the Final EIS are intended to be consistent with this basic principle and are not intended to expand upon it. An in-depth discussion of constitutional law is beyond the scope of this EIS.

Sent: Mon 12/11/2006 11:11 AM

I-161-001

Your support of the Corridor Alternative has been noted.

SEPAcomments, FMD

From: To: Tom Wissler [tom@naurtech.com]

SEPAcomments, FMD

Cc: Subject:

The Master Corridor alternative is best for the East Lake Sammamish Trail

Attachments:

I-161-001

I want to express my support for the "Master Corridor" alternative for the East Lake Sammamish Trail.

As a cyclist, I feel that paving the Master Corridor alternative is the safest alternative. I and my family currently ride often on East Lake Sammamish Parkway. Although there are wide shoulders, this road is very congested with many vehicles exceeding the speed limit and presenting dangerous conditions for cyclists.

As a taxpayer, I feel that the Master Corridor is the most cost effective and prudent. I don't believe that King County should spend many additional millions on this project when it can be completed efficiently with the current preferred Master Corridor.

Please finish the job that many people have worked tirelessly on to provide fair use for this public resource.

Tom Wissler 1922 202 PL SE Sammamish WA 98075

tmw@kwailan.com

https://owa.metrokc.gov/exchange/ELSTFMD.SEPAcomments/Inbox/ELST%20Gen... 1/23/2007

From: Jeremy M. Zucker [mailto:zucker@oz.net] Sent: Monday, November 20, 2006 8:27 PM

To: Exec.Sims@metrokc.gov

Subject: East Lake Sammamish Trail Encroachments

Dear Executive Sims,

I-162-001

First of all, I want to thank you for your unwavering support of the East Lake Sammamish Trail. Your vision and fortitude have enabled the interim trail to become a reality, and – with a bit more work – we shall all reap the benefits of a completed trail on the former railroad right of way.

As someone who has supported the trail for many years, I have had the opportunity to walk the trail before the rails were removed, during the transition process, and most recently a few weeks ago with my wife and son. Although I am pleased with the (albeit slow) progress that has been made, I am appalled by the encroachments on the ROW that have been made by the adjacent property owners, and the willingness of the County to aid and abet in this "land grab" by placing the fencing (chain link and split rail) right up against the proposed paved trail envelope and allowing adjacent property owners to build, pave, and landscape on the County property.

The County owns the former railroad right of way. In some places it is fifty feet wide, and in other places up to two hundred feet wide. While it may be true that there are adverse possession claims from the Burlington Northern days that take precedence, for whatever reason the County has continued to allow adjacent property owners to rape and pillage (I'm sorry, that might be a little bit strong language – let's just say "steal") the ROW for their own private gain. As Dwight Pelz said some years ago, "This is how wealthy people do civil disobedience, with stucco and asphalt." Attached are some photos that I took last month while walking the trail that show some – but obviously not all – the offending encroachments.

I-162-001

Thank you for your support of the regional trails system.

Pursuant to King County Code 14.30 and consistent with its management of the regional trails system, King County maintains a special use permit system to authorize private use of County-owned property. These permits are typically of a 5- to 10-year duration, and King County reserves the right to revoke a special use permit. For additional information, please refer to Section 1.3.3 of the EIS.

I-162-001

Having read the ELST NEPA/SEPA Draft Environmental Impact Statement, it would appear that the "reverse takings" (as I like to call it) being committed by the adjacent property owners will be continued and condoned by the County: The hideous chain link fences will be placed in close proximity to the trail (rather than maximizing the linear park space actually owned by the County); adjacent homeowners who had enough chutzpah to pave and landscape their way to within inches of the interim trail will be rewarded for their misdeeds; and the people of King County will be denied the use of the majority of the East Lake Sammamish Trail property that it purchased.

I-162-002

The East Lake Sammamish Trail right of way is a public asset and needs to be protected. Here are a few concrete actions that I would like to see made to maintain that public asset:

 Chain Link Fencing: Except where the fencing is needed to protect life (along the edge of a bridge or other high drop-off), the chain link fences should be at the <u>property</u> boundary. This includes those areas where there are docks and other nuisances. We do not want the ELST to end up looking like a dog run. We want to maximize the aesthetics of the trail experience.

I-162-003

Encroachments: Structures, paving, excavating, and landscaping that have occurred since the County purchased the ELST ROW should be dismantled and/or otherwise returned to the former state;

I-162-004

- 3. Permitting: Where, through historical adverse possession or true need, the County deems it in its best interest to allow the adjacent property owner to use a portion of the ROW, that should be done through an established and monitored public hearing process. The County could also permit private use (landscaping, gardening, etc.) of unused portions of the ROW through a permitting and design review process. This would:
 - a. Provide revenue to the County;
 - b. Control the types of landscaping on the ROW.

I-162-005

4. Own, design, and maintain in perpetuity: Burlington Northern obtained the ROW over one hundred years ago in anticipation of future commerce and transportation needs. We (the citizens of King County) need to own, design, and maintain the corridor in perpetuity. Who knows what the County's transportation and green space needs will be in another hundred years?

I-162-006

Lastly, I am in favor of the following:

- Adopting the County's preferred Corridor Alternative on the former RR ROW;
- Developing wherever possible a 27-foot wide trail, (minimum 12' wide paved surface;
 4' pedestrian/equestrian soft surface trail; plus shoulders, separating vegetation, and clear zones);

I-162-007

Provide additional public access points to the trail and the waterfront;
Develop additional park facilities (bathrooms, park benches, children's play structures)

I-162-008 |

along the trail;

Have the trail open for public use 24 hours a day. Otherwise bicycle commuters will be forced up on E. Lake Sammamish Parkway in the early morning hours and late in the afternoon and evening during the late Autumn, Winter, and early Spring. For years I bicycle commuted to Woodinville – first from Eastgate and later from Queen Anne – and would never have been willing or able to do it had I been forced to compete with cars on the city streets after dark. The trail is not just a recreation facility, but is – like the Burke-Gilman and Sammamish River Trail – a commuter corridor. Also, if the trail is closed after dark, adjacent property owners would not be able to access "their" property across the other side of the trail or visit neighbors using the trail as a sidewalk after dark.

I-162-002

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities.

In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way.

The use of chain-link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain-link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain-link fence, but only if King County

The East Lake Sammamish Trail Corridor is a beautiful asset. We need to do everything in our power to see that it continues as such and that it is maintained and developed for the good of the citizens of King County.

I would be more than happy to talk with you or any member of your staff about the future of the East Lake Sammamish Trail.

Thank you very much for your time.

Sincerely,

Jeremy

Jeremy M. Zucker

709 W. Garfield St.

Seattle, WA 98119

(206) 284-5422

determines that such alternatives provide an equivalent level of protection based on site-specific conditions.

I-162-003

Please see response to comment I-162-001 above.

I-162-004

Please see the response to comment I-162-001 above.

I-162-005

King County has no plans to sell any portion of the right of way.

I-162-006

Your support of the Corridor Alternative has been noted. The Corridor Alternative would be 27 feet wide in some areas.

I-162-007

Table 2-2 of the Draft EIS identifies proposed access points and access improvements for getting to the trail. Some amenities such as interpretive signs and benches will be considered during the design phase of the project. King County is not proposing access to Lake Sammamish, or larger amenities such as playgrounds, as part of this project. Any future access or large amenity projects would undergo separate environmental and public review processes.

I-162-008

King County understands that people who use the trail for commuting would be constrained by the dawn to dusk hours of operation. These hours are consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system. However, King County has the authority to tailor

specific hours of operation for each facility within its regional system, including trails. To do so, under King County Code section 7.12.030, the County would need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, but it could propose to do so in the future if demand warrants.

East Lake Sammamish Master Plan Trail EIS
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KING COUNTY

DIVISION OF PARKS AND RECREATION

EAST LAKE SAMMAMISH TRAIL MASTER PLAN DEIS HEARING

NOVEMBER 9, 2006

5:00 through 8:00 p.m.

BELLEVUE COMMUNITY COLLEGE 3000 LANDERHOLM CIRCLE SE AUDITORIUM N-201

Carl T. Beck, Court Reporter CCR 2952

Van Pelt, Corbett & Bellows 100 South King Street * Suite 360 Seattle, WA * 206 682-9339

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8	MARTIN NIZLEK	16	
9	3710 E. McGilvra Street Seattle, Washington 98112		
10	CONRAD BALL	18	
11	5356 229th Avenue SE Issaquah, Washington 98029		
12	FRANK OLSON	18	
13	3417 E. Lk. Sammamish Lane SE Sammamish, Washington 98075		
14	LINDA GORREMANS	19	
15	PO Box 97010 Redmond, WA 98073	10	
16	LEO KOSENKRANIOS	20	
17	3233 E. Lk. Sammamish Lane SE	20	
18	Sammamish, Washington 98075	0.1	
19	BILL MORRIS 16901 105th Avenue NE	21	
20	Bothell, WA 98011		
21	JEREMY ZUCKER 709 W. Garfield	22	
22	Seattle, Washington 98119		
23	ROBERT HAMILTON 3931 E. Lk. Sammamish Pkwy NE	24	
24	Sammamish, Washington 98074		

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1	APPEARENCES
2	FOR KING COUNTY:
3	FOR KING COUNT.
4	GINA AULD
5	KEVIN BROWN
6	MONICA CLARKE
7	ROBERT FOXWORTHY
8	ROBERT NUNNENKAMP
9	BUD PARKER
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EAST LAKE SAMMAMISH MASTER PLAN DEIS HEARING, 11/09/06

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OPENING STATEMENT BY BUD PARKER

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Okay. Let's everybody take your places if you would, please. Just to make sure you're in the right room. This is a meeting, and we're going to talk or take testimony tonight for the East Lake Sammamish Trail Master Plan DEIS. And this is a formal hearing, and we're set to take testimony.

Now, I notice there's only one person signed up. So if you do want to say something and speak tonight, please get on the sign-up list. The people out front should be there.

So I want to thank you for coming tonight. And first I want to say for the record that this is November 9th, 2006. It's a public hearing for the Draft Environmental Impact Statement for the East Lake Sammamish Trail Master Plan. The time is 5:10 p.m., and this hearing will open until 8:00 p.m. tonight.

My name is Bud Parker. I'm the Manager of Capital Planning Development Section with King County, and I'm standing in tonight for Kathy Brown. Kathy Brown is the manager of my division. She's the responsible SEPA official for this project, but she's had a family medical situation. She couldn't be here tonight.

Before we start I want to say a couple of comments and kind of ground rules for the evening. First I want to

Van Pelt, Corbett & Bellows 100 South King Street, Suite 360 Seattle, WA * 206 682-9339

H-001-001

Opening statements at the public hearing were made by Bud Parker and Jenny Bailey.

introduce some folks. I want to introduce Gina Auld. She's the Project Manager for King County for this project, and Kevin Brown, who is the Director of Parks for King County, and Jenny Bailey from Parametrix. And she'll speak in a few minutes and we'll introduce her, have her give a little presentation in a minute.

The Draft Environmental Impact Statement, we call it the DEIS, has been prepared in accordance with the State Environmental Protection Act, SEPA, and the National Environmental Protection Act, NEPA. These laws require that any project that may have an impact go through an extensive environmental analysis. This analysis is designed to help the decision makers to decide and define the projects to best met the public interest.

For public projects the law requires that the project proposal clearly state the purpose and need. And in the handout that you got as you came, that is in that handout. So you have it there in front of you. The Purpose and Need Statement is presented in that handout, and we won't go through it tonight or read it; but again, you do have it in front of you there. And if you don't, the handouts are on the desk as you came in the lobby.

The law requires that we have at least three alternatives to evaluate. In this case, we have in the DEIS for the trail studied five.

> Van Pelt, Corbett & Bellows 100 South King Street, Suite 360 Seattle, WA * 206 682-9339

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The law requires a forty-five day comment period, and for this project we're extending that comment period to 60 days. And the purpose of this hearing tonight is to take testimonv.

At this hearing there are three ways to provide input. Each person who signs up on the sign-up sheet may speak. We originally intended to have two minutes for each speaker so that we make sure and get everyone that may want to speak a chance to speak. And you also can provide comments. We have a court reporter. We have two, by the way. We have one taking testimony of everything that is said in this room. Out front in the lobby down the hallway to the west is another court reporter. If you'd like to comments there, you may do that, and they're going to be there this evening also. And then also we have sheets to give written comments. You can do that and turn those in if you want to after the meeting tonight.

And in addition to tonight's meeting and any comments you want to make, written or verbally here, you can go and address them to Gina. And again, on your fact sheet, there are the e-mail addresses for and the Web sites for this trail project. We have both Gina's e-mail address, and we have the e-mail address for the formal SEPA comments on the -- it's called fmd.sepacomments@metrokc.gov, and that's our official e-mail site.

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We will be taking public comments through December 19th of this year, 2006.

Okay. So if you'd like to provide or give testimony this evening, we have a mike here, and we will have the two different sites. So if you don't feel comfortable giving a verbal comment you can go to the court reporter

All this information that you'll hear tonight, the presentation that you'll see in a minute are all on our Web site, and the Web site address is in your handout. The DEIS is there, the document itself and all the appendices are there also. So everything is there for you to look at.

All right, Jenny Bailey from Parametrix, we're going to have her go briefly through the five alternatives. So we have kind of ground rules on what we're talking about tonight, and then this meeting -- again, I'll repeat -- is to take comments. So any of you who want to make comments about the DEIS, this is your evening to do that; plus, you can certainly submit up to the 19th on their Web Site.

All right. Jenny.

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STATEMENT BY JENNY BAILEY

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Good evening. I'm going to take care of a few logistics first. I just want to make sure everybody's aware that the bathrooms were on the opposite side of the

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lobby and down the hall and to make sure that all of you did have an opportunity to sign in on the sign-up sheet as you came in and to collect one of the fact sheets that were available by the door.

I'm going to talk tonight about the five alternatives that are included in the Draft EIS. If you can't hear me, please let me know.

The five alternatives are the Corridor Alternative, the East A Alternative, the East B Alternative, the No Action Alternative, and the Continuation of Interim Use Trail Alternative.

So, again, I'm going to speak about each one of these. There's information about them within the fact sheet, and there's information about them on the Web site.

So the first alternative is the Corridor Alternative. This would place the Master Plan Trail within the rail banked corridor. It would be different than the existing gravel interim use trail in that it would be paved, and it would also be wider. The width would vary from 18 to 27 feet depending on the constraints around it. And what I mean by that is there's often adjacent driveways, access to properties, parking, significant trees, streams, wetlands. All those things were considered in trying to determine what width should be applied to any given area within the corridor.

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So this is a depiction of the Corridor Alternative at its widest, and what you have is a 12-foot pavement with two, two-foot shoulders. And then for the widest, you have a separated, soft-surface trail that would accommodate pedestrian and potentially equestrian use. So this is the 27-foot section.

All of these sections are oriented so you're looking north. So the right side of the figure would be towards the parkway. The left side of the figure would be towards the lake. So that soft-surface trail is on the west side of the trail configuration.

The 27 feet doesn't fit in many areas along the corridor. So in many places we've narrowed from 27 feet to either 21, 19, or 18 feet, depending again on those constraints round it.

This figure is showing the 21-foot section, and what's changed is we no longer have a separated, soft-surface trail. We still retain the 12 feet of pavement with the two-foot shoulder on the east side. And we have a wider, five-foot shoulder on the west side; again, to accommodate pedestrian and potential equestrian use.

And this is the Corridor Alternative at its narrowest, which is the 18-feet configuration. And for all of our paved alternatives, you will see always see the 12-foot of pavement with two shoulders that are at least two-feet

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wide. And this is the narrowest configuration for the Corridor Alternative.

So the next two alternatives are East A and East B Alternatives. Both of these were developed based on an alignment that was proposed by several citizens way back in the beginning of the planning process.

And under this alignment, the Master Plan Trail would be in the rail bank corridor in some places, but it would leave the rail bank corridor in others to go up to the adjacent roadways; in other words, East Lake Sammamish Parkway or East Lake Sammamish Place.

Where it's down in the corridor -- where it's located in the corridor, it uses the same section, the same width, as the Corridor Alternative.

Where it goes up to the Parkway or to East Lake
Sammamish Place, we always maintain that 12 foot of
pavement with two shoulders that are at least two-feet
wide.

What we did is when it was located up, adjacent to the roadway, we located it with respect to the roadway based on direction from the City of Sammamish. And what I mean by that is the City told us how many feet from the existing roadway centerline we should locate our trail, and that distance is intended to accommodate potential future roadway improvements.

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And then beyond that accommodation for future improvements, we didn't propose any other relocations of roadways or any kind of major change in operations to the roadways. We made it work with what's there.

So the difference between the East A and the East B $\hbox{Alternative $--$ this figure $--$ up here is the lake and these } \\ \hbox{are some of the docks.}$

Can you hear me when I turn towards the figure? Can you hear me okay?

This is the rail bank corridor, and then here is the trail. And it's up, adjacent to the roadway right here. So when the trail is up, adjacent to roadway, under the East A Alternative, the rail bank corridor would remain open to public use and the existing Interim Use Trail would accommodate pedestrian and equestrian use.

And for the East B Alternative in that same situation where you've got your trail up adjacent to the road, the rail bank corridor would be closed to public use.

So the difference between the East A Alternative and the East B Alternative is what happens with the rail bank corridor when the multipurpose trail leaves the rail bank corridor.

When the trail is up, adjacent to East Lake Sammamish

Parkway, this is the typical section that's applied. It's
a 12 foot of pavement with the two, two-foot shoulders; and

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in this case there's a planted divider between the Parkway and the trail.

When the alignment is up, adjacent to East Lake
Sammamish Place, this is the typical section. It's very
similar, same 12 feet with two, two-foot shoulders. The
difference is we have a landing. It wouldn't always be
vegetative like that. There's a landing at the top of
driveways. If you can envision East Lake Sammamish Place,
there's many driveways were cars are coming up the driveway
to enter the Place. What the landing does is provide an
opportunity for drivers of vehicles and trail users to
better see each other before the vehicle would enter the
trail.

So I talked about the Corridor Alternative, the East A Alternative, and the East B Alternative. The fourth alternative is the No Action Alternative, which is required under both SEPA and NEPA, so the environmental regulations.

As you may recollect when the County made the decision years ago to proceed with an Interim Gravel Trail, the idea was always that that trail would be temporary until a master-planning process could occur. And so the Interim Trail that's out there today has a life expectancy.

So under the No Action Alternative, what would happen is the trail would continue to operate until 2015, at which time, it would simply be closed unless the County undertook

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additional environmental review and action between now and then. So that's the No Action Alternative.

The Continuation of the Interim Use Trail Alternative would allow the County to continue operating the gravel trail beyond 2015. There simply wouldn't be a paved trail.

The difference would be that it would be extended to the north beyond its current terminus through the State Route 520 interchange to the vicinity of Bear Creek and the Redmond Town Center area. And it would also -- in the EIS, we contemplate allowing equestrian use on the Interim Use Trail.

And finally some of the other amenities that are consider for all of the alternatives are considered for this gravel trail alternative. And by that I mean that restroom and parking facilities are proposed for all the build alternatives. New restroom and parking is proposed at Southeast 33rd Street and at Inglewood Hill Road. And new parallel parking facilities are proposed between Northeast 65th Street and Northeast 70th Street in Redmond.

Some of the other common features are bollards and fencing and vegetation management and signs for trail etiquette and for traffic control. And, of course, the existing maintenance of the drainage out there would continue as well.

So the County has named a preliminary preferred

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alternative, and that is the Corridor Alternative because it appears that that alternative best meets the County's objectives; in that, it's providing a paved trail that accommodates a variety of uses within the rail banked corridor.

However, no decision has been made. That's why we're here tonight, in part. We want to hear what you have to say via your testimony tonight or the written comments that you make. That will help inform the King County decision.

So the intent here tonight is to hear what you have to say. If you do have questions about alternatives, I would encourage you to contact Gina. Her information is on the fact sheet. It's in the EIS. It's on the Web site. And she can try and provide any clarification that you might need to make meaningful comment. You do have the opportunity to continue to submit written comments through December 19th. Thanks.

BUD PARKER: Thank you, Jenny. All right. Now we begin the public hearing. I planned to call the first three speakers up, actually we see right at this point we only have one speaker. So, again, if you've heard anything up to this point that you do want to make comment on, please, let us know so we can get you on the list. We have a Martin Nizlek.

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1 MR. ZELEG: Nizlek. 2 BUD PARKER: Please, step up to the microphone. 3 4 TESTIMONEY OF MARTIN NIZLEK 5 6 Good evening. My name is Martin Nizlek. I'm a 7 resident of West Lake Sammamish Parkway in Bellevue, 312 8 West Lake Sammamish to be exact. 9 For the sake of time and to make sure I cover the 10 points that I'd like to, I'm just going to read this and go 11 from there. This is addressed to Gina. 12 Herewith please find my comments regarding the 13 alternatives being considered for the East Lake Sammamish 14 Trail. Please include them in project documentation. My 15 comments are stimulated by a recent observation of the 16 current Interim Trail, experience gained during my career 17 as a traffic engineer and transportation planner having prepared plans for and instituted numerous 18 bicycle/pedestrian facilities, as well as observation of 19 2.0 the Burke-Gilman Trail. н-002-00121 Succinctly, I caution the County in selecting the preferred alternative to consider a readily apparent safety issue. Safety is a clearly stated objective within the design process as attested in your DEIS notice, specifically paragraph five states, The trail is intended Van Pelt, Corbett & Bellows

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H-002-001

Federal, state, and local guidelines were followed when developing alternatives for consideration. Refer to Section 3.7.3 for a discussion of trail user conflicts and safety issues, and Section 3.7.6.2 for mitigation measures related to user speed.

Under the preferred alternative, the Interim Use Trail would not just be paved, it would also be widened. Based on the County's experience with other urban trails in the regional system and consistent with AASHTO guidelines for the design of shared-use paths, a paved width of 12 feet can reasonably accommodate the mix of uses. Further, where practical the County is proposing to develop wider or even separated soft shoulders to allow more separation between faster and slower users. The existing shoulders of East Lake Sammamish Parkway will remain available to bicyclists and may be preferred by advanced bicycle commuters.

H-002-001 1 to safely accommodate a variety of user groups. The present interim design if merely paved will place users at 3 great risk and create unnecessary liability for local residents as well as the County. Let's take a look at federal guidelines. There are numerous documents. I chose to select a very basic one, Federal Highway Administration's training material for the design of off-road trails, specifically from their training 9 course. 0 In lesson ten for off-road trails, they have the following statement that: You should pay specific attention to the difference in speed between potential users. I encourage you in selecting any alternative to make sure that you do look at that difference in speed. Thank 16 you. 17 Should I submit this to Gina or --18 BUD PARKER: You can leave it over there, thank you. And thank you, Mark, for reminding me that if you do 19 20 want to speak we do what your name and your address before 21 speaking. 22 Do we have no other speakers? 23 CONRAD BALL: I'll speak. 24 BUD PARKER: Yeah. Why don't you come up here and 25 give your name and address, please.

1 to safely accommodate a variety of user groups. The 2 present interim design if merely paved will place users at 3 great risk and create unnecessary liability for local 4 residents as well as the County. Let's take a look at federal guidelines. There are 5 numerous documents. I chose to select a very basic one, 6 7 Federal Highway Administration's training material for the 8 design of off-road trails, specifically from their training 9 course. 10 In lesson ten for off-road trails, they have the 11 following statement that: You should pay specific attention to the difference in speed between potential 12 13 users. 14 I encourage you in selecting any alternative to make 15 sure that you do look at that difference in speed. Thank 16 you. 17 Should I submit this to Gina or --BUD PARKER: You can leave it over there, thank you. 18 And thank you, Mark, for reminding me that if you do 19 20 want to speak we do what your name and your address before 21 speaking. 22 Do we have no other speakers? 23 CONRAD BALL: I'll speak. 24 BUD PARKER: Yeah. Why don't you come up here and 25 give your name and address, please.

H-003-001

Your support of the Corridor Alternative has been noted.

TESTIMONEY OF CONRAD BALL

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H-003-001

My name is Conrad Ball, 5356 229th Avenue, Southeast in Issaquah. Thanks for the opportunity to comment. I and my family strongly endorse the preferred Corridor Alternative. We feel that this option solely addresses simultaneously three critical issues: the safety of the public, both trail users and drivers on East Lake Sammamish. It represents the best use of public funds, and it contributes maximally to the quality of life in our community, to healthy recreation, and sustainable transportation. Thank you.

BUD PARKER: Please come up.

FRANK OLSON: I filled this out. So it's got my

15 address.

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17 TESTIMONY OF FRANK OLSON

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Frank Olson, 3417 East Lake Sammamish, Shore Lane Southeast. One of the problems every meeting I've gone to we've had comments. And everyone has commented on why do we have to have parking lots and restrooms. At 33rd they're going to put a parking lot and restrooms right across the street from a 7-Eleven, which is a gathering place for people. And how you're going to control it, I

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H-004-001

Based on King County's experience with other regional trails, parking and restrooms are necessary amenities given the 11-mile length of the corridor. King County is proposing to locate these facilities close to East Lake Sammamish Parkway and thus relatively visible and accessible to law enforcement officers, as well as the general public.

The King County Sheriff enforces park rules. The Sheriff will respond to calls from residents regarding trail rule enforcement. The corridor, including restroom and parking facilities, is part of the Sheriff's patrol responsibilities, as is the rest of the park system. There are currently no plans to increase or enhance the Sheriff's presence on the corridor.

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H-004-001

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don't know. But each time we've said, let's not have this, each time it comes back. And I think that you're really not considering the people that live on the trail. The other gentlemen doesn't live on the trail, and I'm sure I'd be happy, too. But I think that you need to take a look at what are we doing to the people that live on the trail and their property rights. Thank you.

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BUD PARKER: Anyone else? Yeah. Please, come down. State your name and address, please.

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TESTIMONEY OF LINDA GORREMANS

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Linda Gorremans, and I'm a park planner for the City of Redmond.

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I'm here on behalf of the City of Redmond. The City of Redmond supports your master plan proposal to use the preferred route on the existing rail bed. We also request your support, suggestions, and recommendations to come up with a safe crossing for State Route 520 within the City of Redmond.

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And also in your EIS, I did not find any mention of public land that is owned by the City of Redmond and the City of Sammamish south of 187th. So you might want to add

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that.

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BUD PARKER: Anyone else? Yeah. Please, come down. State your name and address, please.

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TESTIMONEY OF LINDA GORREMANS

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H-005-001

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H-005-002 8

And also in your EIS, I did not find any mention of public land that is owned by the City of Redmond and the City of Sammamish south of 187th. So you might want to add that.

н-005-003

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H-005-001

Your support of the Corridor Alternative has been noted.

H-005-002

As a result of these comments from the City of Redmond, King County authorized the preparation of an additional traffic analysis in April 2007 (Parametrix, April 25, 2007). Based on these comments and the subsequent analysis, the Transportation Section (3.11) has been revised to better articulate the potential impacts of at-grade crossings of the SR 520 ramps and to add two potential strategies for mitigating these impacts, depending on construction funding and sequencing.

H-005-003

The City of Sammamish intends to acquire the property owned by the City of Redmond and is initiating a master planning process for what they are calling the Sammamish Landing Park. This project has been added to the Related Projects Section of the Final EIS (Section 2.6). The City of Sammamish and King County are coordinating the two projects to ensure they are compatible.

1	I will also be making written comments on your EIS.
2	Thank you.
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4	TESTIMONEY OF LEO KOSENKRANIOS
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6	Leo Kosenkranios, 3233 East lake Sammamish, Shore Lane
7	Southeast.
8	I'm concerned about the considerations for the parking
9	lot at Southeast 33rd. I don't think it's properly
10	considered: the access and visibility and concerns about
11	drug activity and other things.
12	Living there in the middle of the night, we
13	occasionally have people racing up and down our street
14	because it's secluded, and the proposed parking lot would
15	be right there. It is proposed to be out of sight or away
16	from the road. It's also proposed to be in a location
17	where there isn't a good turn lane or access to it. And
18	those are my main concerns.
19	
20	BUD PARKER: Anyone else? This is your opportunity to
21	speak. Please, help us here. This is important for us.
22	Are you Jeremy?
23	BILL MORRIS: No.
24	BUD PARKER: Go ahead and state your name and address,
25	please.

1 I will also be making written comments on your EIS. 2 Thank you. 3 4 TESTIMONEY OF LEO KOSENKRANIOS 5 Leo Kosenkranios, 3233 East lake Sammamish, Shore Lane 6 7 Southeast. H-006-001 I'm concerned about the considerations for the parking 9 lot at Southeast 33rd. I don't think it's properly considered: the access and visibility and concerns about drug activity and other things. Living there in the middle of the night, we occasionally have people racing up and down our street because it's secluded, and the proposed parking lot would be right there. It is proposed to be out of sight or away from the road. It's also proposed to be in a location where there isn't a good turn lane or access to it. And those are my main concerns. 19 20 BUD PARKER: Anyone else? This is your opportunity to speak. Please, help us here. This is important for us. 21 22 Are you Jeremy? 2.3 BILL MORRIS: No. 24 BUD PARKER: Go ahead and state your name and address, 25 please.

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H-006-001

Section 3.8.2.5 of the Draft EIS discusses safety and security associated with the East Lake Sammamish Trail. As noted on Page 3.8-14 of the Draft EIS, published studies on rail-trails indicate that trail neighbors typically are concerned that new trails may result in negative impacts (e.g., concerns regarding increased crime and vandalism), but the studies show that these concerns are not borne out in any substantial way, although isolated incidents have occurred across the country.

As noted on Page 3.8-23 of the Draft EIS, occasional incidents of trespass or private property vandalism could occur on properties adjacent to the trail, but these are not expected to exceed existing conditions. King County has worked closely with the Cities of Redmond, Sammamish, and Issaquah to address trail-related law enforcement and public safety issues, and will continue to do so over time. King County's experience with other trails suggests that the risk of increased trespass is likely to be counterbalanced by the increased public presence on the trail.

Finally, the King County Code also addresses these issues. In KCC section 7.12.295(H)(9), the model trail user code of conduct specifies that "[t]rail users should respect private lands adjacent to county trails and should stay on trails to avoid trespassing on or interfering with adjacent private property." Under KCC sections 7.12.650 and -.670, anyone caught violating the code of conduct may be subject to a fine of up to \$500, and loss of park or recreation facility use privileges.

Sight distances at all potential trail crossings were addressed in Section 3.11.2.8 and Appendix G of the East Lake Sammamish Master Plan Draft EIS.

Refer also to the responses to Letter I-016.

TESTIMONEY OF BILL MORRIS

My name is Bill Morris, 16901 105th Avenue Northeast, in Bothell.

I strongly support your preferred alternative, the Corridor Alternative. I think that the East A and East B Alternatives are extremely dangerous because they place slow-moving traffic in both directions on one side of the road. And when you have a vehicle, for example, coming, let's say, north on East Lake Sammamish Parkway wanting to turn left into a driveway, their attention is going to be on automobiles not on trail users, especially someone coming also northbound. So I can just see a real serious safety issue with those cars making left turns, particularly into their driveways trying to avoid oncoming traffic and nailing some trail user heading northbound.

I also think that those two alternatives definitely violate the standard design recommendations that are out in the industry.

And they also force bicyclists to travel against the law. The RCW specifically says you're to ride on the right-hand side of the roadway. And this is going to be so close to the roadway, you're going to create a situation where bicyclists are going to have to ride against traffic, and that's simply not safe or legal. Thank you.

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H-007-001

Your support of the Corridor Alternative has been noted.

H-007-002

Federal, state, and local guidelines were followed when drafting each alternative under consideration. To address safety concerns at trail crossings, bollards would be installed and vegetation growth would be monitored and managed near all trail crossings to maximize sight distances for trail users and vehicles.

For the East A and East B Alternatives that would be immediately adjacent to the roadway, a physical buffer or barrier would be constructed. Section 3.11.3.2 describes the potential impacts associated with implementation of the East A Alternative.

H-007-003

Federal, state, and local guidelines were followed when developing each alternative under consideration. Refer to Section 2.5.2 for an overview of the planning process and alternative development for the East Alternatives.

H-007-004

Safety concerns regarding contra-flowing bicyclists are addressed in Section 3.11.3.2.

1 BUD PARKER: Jeremy -- you have to state your last 2 name. I can't quite read it. 3 4 TESTIMONY OF JEREMY ZUCKER 5 6 Hi, my name is Jeremy Zucker. I live at 709 West 7 Garfield Street in Seattle. 8 I'm a 20-year resident of King County. For most of 9 those years, I've lived on Queen Anne in Seattle. I'm also 10 an avid bicyclist, and used to bicycle commute from Queen 11 Anne to Woodinville along the Burke-Gilman Trail to -- and the Sammamish River Trail or via I-90 through Bellevue to 12 13 Marymoor Park and down the Sammamish River Trail. 14 I have a child who enjoys bicycling on bike trails 15 away from the noise and potential conflict of the roads. 16 Although I'm pleased that the trail is moving forward 17 towards completion, there are a number of issues that 18 concern me greatly. H-008-001 The first is encroachments. Adjacent property owners have seen fit to pave, landscape, and in other ways deleteriously lay claim to public land on the former railroad's right-of-way. Perhaps some have been done innocently, but there are many, many instances in which the property owners have attempted ill-begotten gains. I would call this the get-it-while-you-can-before-they-give-a-damn

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H-008-001

It is the goal of the East Lake Sammamish Trail to keep public land open for public use. Private landowners who have encroached on the County owned right of way will receive no special accommodation.

H-008-001 1 H-008-002 2 4 H-008-003 8 H-008-00420 technique.

The second issue is what I would call "reverse takings." The current placement of the fences in their proximity to the trail regardless of the width of the County-owned right of way is a blatant give away to the adjacent property owners. I'm sure there are situations in which the adjacent property owners might want to get a permit to use a portion of the right-of-way that is not anticipated being utilized for the trial, but the County shouldn't give away, figuratively not literally, or put artificial limits on who has the right to use the property that the County legally owns.

Thirdly, the chain link fences should be used where necessary at the right-of-way property boundary not at the trail edge.

The chain link fence is an unsightly and dangerous thing. Where there is a need as described in Section 2.5.6.9 of the Master Plan EIS use it but use it discriminatingly at the property boundary.

Fourth, the trail must be built on existing the rail bed the Corridor Alternative. The trail should not be a dog run with chain link fences between a narrow-paved strip. They should maximize the aesthetics and should plan possibly a 27-foot portion along the main trail corridor. Thank you.

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H-008-002

Pursuant to King County Code 14.30 and consistent with its management of the regional trails system, King County maintains a special use permit system to authorize private use of County-owned property. These permits are typically of a 5- to 10-year duration, and King County reserves the right to revoke a special use permit. For additional information, please refer to Section 1.3.3 of the EIS.

H-008-003

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way. The use of chain link fence has been expressed as an aesthetic concern of trail users, particularly

2.5

when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives provide an equivalent level of protection based on site-specific conditions.

H-008-004

Refer to Table 2-1 for a summary of trail widths by alternative. Refer to Section 3.9.3.1 for more information on visual quality impacts resulting from proposed fencing. See response to Comment H-008-003 for further discussion.

East Lake Sammamish Master Plan Trail EIS
Page 256

1 BUD PARKER: Anyone else? Would you like to speak? 2 Please, state your name and address as you come to the 3 microphone, please. 4 TESTIMONEY OF ROBERT HAMILTON 5 7 Robert Hamilton, 3931 East Lake Sammamish Parkway 8 Northeast. I live north above the point adjacent to the Interim Trail. 9 10 First, I'd like to know if there is anyone on the 11 staff that can help me interpret the engineering drawings. 12 I went to the library to see what exactly will happen in my 13 neighborhood, and I was unable to determine from the small 14 drawings. Is there anybody on the staff that can help me 15 today? 16 BUD PARKER: We're not set up to do that tonight, but 17 Gina definitely can do that. That's her job to help people 18 understand those. H-009-001 9 ROBERT HAMILTON: Very good. Then the other comment that I have is my access road, which is shared by me and three neighbors, is one thousand feet long immediately adjacent and parallel to the Interim Trail separated by about knee-high wooden guard rail. I'd like to know if and when I can -- me and my neighbors -- can pave our roadway so that

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H-009-001

King County maintains a permit system to respond to individual requests for improvements within the right of way. Such a request would be processed through the permit system.

н-009-001

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SHERI HOGSHEAD: I will.

it's not continuously full of potholes. That's all $\ensuremath{\,\mathrm{I}}$ have to say.

BUD PARKER: Again, give those comments to Gina, and we can help you with that certainly. Thank you.

Other comments? This is a formal hearing. So it is important that if you want to comment, we get them recorded tonight. This was intended solely to take comments on the DEIS. So it's not a meeting where we can have a -- we have to have a formal hearing. This is required by law. So it's important that if you do have anything to say, please, say it. We need to get these comments down.

All these comments, by the way, both written, verbal, and e-mails that we receive will be answered and dealt with in the final EIS. So all comments will be answered -- have to be answered and will be answered in the final document. So you will -- if you comment tonight -- you will get an answer to that comment in the final document. And all comments or all types of communication we get are all treated equally: tonight's e-mail, if you want to talk to the court reporter privately, all those comments are treated equally and will be answered in the final document. So this is your opportunity to make -- you know, to make the comments. Anymore? Sure, come on down. State your name and address, please.

Thank you. My name is Sheri Hogshead. I live at 3251

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H-010-001

Your support of the Corridor Alternative has been noted.

TESTIMONEY OF SHERI HOGSHEAD

West Lake Sammamish Parkway Southeast, and I strongly

support the original alternative or the original corridor.

I think that's what we planned on for -- what -- 20 years

and worked toward. And I think it's the safest alternative

BUD PARKER: I saw some one or two people just come

comment, please, come up and do so at this point. Well, we

Again, I have to keep this formal hearing open because

for the most people. So I hope that that's the one that

in. This is a formal hearing. If you want to make

have a long way to go. Does anyone know how to sing?

this is our opportunity, and it is required by the State

and we're trying to hold to that. So in case we do have

Please, state your name and address, please.

SEPA regulations. So -- yeah, come on up, please. Please.

And we stated that we would be here from 5:00 to 8:00,

goes through. Thank you.

people come in late.

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1 TESTIMONEY OF JACKIE THOMAS 2 3 My name is Jackie Thomas. I live at 3105 Douglas 4 Court Southwest in Issaguah, Washington. I'm assuming the comments have to be environmentally related; is that correct? 7 BUD PARKER: You can make any comment on the DEIS that you want. H-011-001 JACKIE THOMAS: All right. I'm looking forward to 0 having a permanent paved trail. So I guess that means these alternatives and the expiration in 2015, I'm against that. .3 If we are going to spend the money to have a trail experience, it should be as pleasurable as possible for all people, which means it should be level for our handicapped visitors. It should be a quiet experience, which means away from the roadbed, and it should be as level as possible and enjoying as many of the beautiful vistas of 18 19 the area as possible. Thank you. 20 21 BUD PARKER: Anyone else? I'll tell you what I'll 22 do. This is against all -- I shouldn't do this, but I will 2.3 do it. Oh, one more -- good, I didn't have to do it. 24 UNIDENTIFIED SPEAKER: Were you going to sing? 25

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H-011-001

The Corridor Alternative and both the East A and East B Alternatives would be at a gradient that is acceptable under the Americans with Disabilities Act (ADA). These alternatives also call for a paved trail. Refer to Chapter 2 for a description of the features associated with each alternative.

The Corridor Alternative would be located within the former railroad right of way on the existing Interim Use Trail. This alignment is located away from East Lake Sammamish Parkway. Refer to Section 3.12 for further discussion of noise associated with the alternatives.

1 TESTIMONEY OF JIM CAIRNS 2 3 My name is Jim Cairns. I live at 107 East Lake Sammamish, Shore Lane Northeast. 4 H-012-001 5 I've been using the Interim Trail quite frequently, and I enjoy it. But I've also notice that there's many parts of the Interim Trail just north of us that accommodating in the 21, the narrowest modification that 9 you put on that -- would be very difficult because of the 0 slope of the west side and then immediate wetlands and a bank on the east side. And I would be very concerned that -- it would be nice if we could have that wide trail all the way. But it appears that there's going to have to be some modifications in those narrow areas. H-012-002 5 And then another thing that I would like to see, has there been any cost estimations of the various alternatives so we can compare one with the other. Thank you. 18 19 BUD PARKER: Anyone want to comment? Someone new came 20 in. Would you like to make a comment? 21 UNIDENTIFIED SPEAKER: Right off the bat, no. 22 BUD PARKER: Okay. Okay. I'll say what I was going 2.3 to say now. This is a formal hearing. We can't have 24 discussions or have -- answer questions. But I'll tell you

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what I will do. And they're going to kill me when I tell

H-012-001

Trail design has taken into account a number of factors, including wetlands and topography. As described in Section 3.3.7.1, retaining walls and minor shifts in the trail alignment would reduce effects on wetlands. These same measures would be used, as needed, depending on topography, adjacent uses, and other factors.

H-012-002

Refer to Table 2-4 for a cost comparison summary.

TESTIMONEY OF JIM CAIRNS

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My name is Jim Cairns. I live at 107 East Lake Sammamish, Shore Lane Northeast.

I've been using the Interim Trail quite frequently, and I enjoy it. But I've also notice that there's many parts of the Interim Trail just north of us that accommodating in the 21, the narrowest modification that you put on that -- would be very difficult because of the slope of the west side and then immediate wetlands and a bank on the east side. And I would be very concerned that -- it would be nice if we could have that wide trail all the way. But it appears that there's going to have to be some modifications in those narrow areas.

And then another thing that I would like to see, has there been any cost estimations of the various alternatives so we can compare one with the other. Thank you.

in. Would you like to make a comment?

BUD PARKER: Anyone want to comment? Someone new came

BUD PARKER: Okay. Okay. I'll say what I was going

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what I will do. And they're going to kill me when I tell

discussions or have -- answer questions. But I'll tell you

UNIDENTIFIED SPEAKER: Right off the bat, no.

to say now. This is a formal hearing. We can't have

H-013-001

An intermission was taken and opening statements were repeated.

them this. We can have Jenny and Gina and several other people out in the hallway. If you have a specific question and you don't want to give testimony, we can have them do that so you can at least maybe have a question or so answered. We can't do it here. I have to keep this hearing open, but if you would like to do that and feel that you have a question that you might want informally or if you'd like to write a comment sheet, I suppose we could do that, too. So if any of you would like to do that, I think I could convince staff that we should go out and do that; and they can maybe answer a question or two. But we just simply have to keep this hearing open here. So if you do that maybe Jenny or Gina could go out there. And if you would like to ask them questions, please feel free to do that. Anyone else want to say anything, please, do if you want to? UNIDENTIFIED SPEAKER: Would there be any possibility of going over those trail alternatives again? BUD PARKER: Again? Jenny can do that. Yes, Jenny can do that and the handout, you can take that out there and feel free to do that and ask her if she could give you more detail on those, yes. And if any of you want to go and just kind of stand around while she's doing that. I

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think with this small of a group, you can do that if you go

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want to go and get more detail. And then we'll just simply have to be here and keep the formal hearing open or close it for awhile and reopen it if we get someone that wants to speak.

So if you do want to have a little more detail or make some comments, please do that. If you want to make a written comment and don't want to speak, please fill out one of our forms or go to the Web site, and you can formally make comments.

And all of the comments, I will repeat, are treated equally: the written comments, the verbal comments, and the comments through the Web site. Every one of them has to be dealt with by law in the final EIS, and we will do that.

So -- well, possibly what I will do now is why don't we adjourn the formal hearing or call it and see if we -- and maybe for 20 minutes or a half hour, and then we'll start again if it feels like -- you know -- if we have anyone new that comes in.

So as of 5:45, we're going to adjourn the hearing for a half hour and see if we have more people. So feel free to comment or talk to the people outside, and we'll start again in about a half hour. Thank you.

[Hearing recessed for thirty minutes]

BUD PARKER: All right. Please come in, we'll get start again here. At 5:45 tonight we suspended the public

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hearing, and we're going to resume it again. This is the public hearing for the East Lake Sammamish Trail Master Plan DEIS. We are at 6:15, November 9th, 2006. We are going to resume hearing.

We have the opportunity for those of you who want to give public testimony here at the mike, you can do that.

We have a court reporter out in the lobby in the west part of the building. People can give instructions. And we're taking all the information here tonight. You also have the opportunity to give written comments. You have forms. You can give written comments tonight. In addition to that, we have on your fact sheet, you have several numbers. We have a Web site that the document is all -- the DEIS is posted on the Web site. You can look at that there, and all its appendices are there. And we have in your fact sheet the addresses for formal comments both to the DEIS and to Gina Auld, our Project Manager, who is outside, but she'll be here in a minute. I'll introduce her again.

We're going to go through the presentation of the alternatives briefly. Again, on your fact sheet you have a statement about each one. Jenny Bailey from Parametrix will go through them again quickly here. And then we will take public testimony. We have several people who have signed up; and again, any of you who want to sign up in addition or speak in addition to that, you certainly may.

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So, Jenny, if you would, would you go through the alternatives again. Thank you.

STATEMENT BY JENNY BAILEY

So I'm going to the alternatives again very quickly.

There are five that are considered in the Draft EIS. They are the Corridor Alternative, the East A and East B

Alternatives, the No Action Alternative, and the

Continuation of the Interim Use Trail Alternative. I'm

going to talk just briefly about each.

So the first is the Corridor Alternative. Under this alternative the Master Plan Trail would be located within the rail banked corridor. And it would be different from the existing Interim Use Trail in that it would not be gravel. It would be paved, and it be wider, varying from 18 to 27 feet depending on the constraints around it. Some of those constraints are driveways, property access, wetlands, streams, significant trees. All of those things were looked at in trying to decide how wide to make the trail in any given location.

So this is depicting the widest that the Corridor Alternative would be. It includes 12 feet of pavement with two, two-foot shoulders and a separated, soft-surface trail to accommodate pedestrian and potential equestrian use.

All of these figures are oriented so that you're looking north. So the Parkway is on this side, and the lake is on this side.

There are a number of places where we can't get a 27-foot wide trail in. So we narrow to either 21, 19, or 18 feet, respectively, depending on the constraints around it.

This cross-section is showing 21 feet. Again, we still have the 12 feet of pavement with the two-foot shoulder on the east side. And then we have a wider, five-foot shoulder on the west side for pedestrian and potential equestrian use.

And this is the narrowest configuration for the Corridor Alternative. It's 18 feet with the 12-foot of pavement and two, two-foot shoulders.

The next two alternatives are East A and East B Alternatives. They were both derived from an alignment that was proposed by several citizens fairly early on in the planning process.

Under that alignment in some places, the trail would be within the rail bank corridor; but in others, it would leave the rail bank corridor and move up to either East Lake Sammamish Parkway or East Lake Sammamish Place.

When it's located in the corridor, we applied the exact same typical section that we did for the Corridor Alternative, varying from 18 to 27 feet.

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When it moves away from that rail bank corridor, we always maintain that 12 feet of pavement with the two, two-foot shoulders at a minimum.

When the alignment is located next to either the Parkway or the Place, we located it with respect to the roadway based on direction provide by the City of Sammamish. And what I mean by that is that the City gave us a certain number of feet from the existing centerline of the roadway to which we located the trail, and that distance, that offset, was intended to accommodate potential future roadway improvements to both East Lake Sammamish Parkway and East Lake Sammamish Place.

Other than that accommodation for potential future improvements, we didn't propose any other relocation of roadways or any major changes to the operation of the roadways in order to make these alternatives work.

So what's the difference between East A Alternative and the East B Alternative? This figure is showing -- up here we have the lake and the docks. This is the rail bank corridor along here. Up here we have the alignment moved away from the rail bank corridor and the adjacent roadway.

Under the East A Alternative, when you have your multi-purpose trail up here, this existing rail bank corridor would continue to be open to public use, and the Interim Trail would be used for pedestrian and potential

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equestrian use.

Under the East B Alternative when that multi-purpose trail has moved up to the roadway, the rail bank corridor would be closed to public use.

So that's the difference between the East A and the East B Alternative.

When either the East A or East B Alternative is located adjacent to the Parkway, this is the typical section that was applied with that 12 feet of pavement and two, two-foot shoulders; in this case we have a planted divider between the Parkway and the trail.

And this is the typical section that was applied when the alignment was next to East Lake Sammamish Place.

Again, it's got the 12 feet of pavement and the two, two-foot shoulders. The difference is that since the trail is on the west side of the Place and there's a number of those driveways where property owners are basically driving up a hill, there's a landing. And it wouldn't always be vegetative like this is depicted. But there would be a landing that would allow a vehicle to better pull up on the same grade as the trail so that drivers and trail users can better see each other before the vehicle pulls into the trail.

Alternative, which is required under both NEPA and SEPA regulations, our environmental regulations.

As you may recollect when King County made the decision to go with an Interim Gravel Trail, the idea was always that it would be temporary, and so that gravel trail that's out there today has a life expectancy.

And under the No Action Alternative, what would happen is that the trail would continue to be operated until 2015, at which time, the trail would be closed unless King County between now and then undertook some additional environmental review or action to keep it open.

And the final alternative is the Continuation of the Interim Use Trail Alternative. Under this one, King County could continue to operate the gravel trail in its current configuration beyond the year 2015. The difference is that it would be extended beyond its current northern terminus through the State Route 520 interchange up to the Bear Creek Redmond Town Center vicinity. And equestrian use is considered in the Draft EIS for this gravel trail.

And then it also would include some of the other amenities that the paved trails would propose. I'll talk about some of those right now.

So some of those common features that either the gravel or the paved trails would have would be new restroom and parking facilities.

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New restroom and parking are proposed at Southeast 33rd Street and at Inglewood Hill Road. And then additional parallel parking is proposed between Northeast 65th Street and Northeast 70th Street in Redmond.

In addition to parking and restrooms, some of the other common features are fencing and bollards, vegetation management, signs for trail etiquette and for traffic control. Storm water would continue to be maintained within that corridor. So those are some of the common features.

The County has named a preliminary preferred alternative. It is the Corridor Alternative because it best meets King County's purpose and need; in that, it's providing a paved trail that will accommodate a wide range of uses within the rail bank corridor.

However, no decision has been made. And the testimony that's given tonight and the written comments that are submitted by the public and agencies all go into the decision-making process and will help better inform a King County decision. Thanks.

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BUD PARKER: Okay. We're going to resume the public testimony. And again I'll remind you, this is a formal hearing required by the SEPA, State Environmental Protection Act. And we are taking testimony in three forms

1 tonight: verbally, here at this mike; we have a court 2 reporter around through the lobby and to the west part of 3 the building if you're interested in doing that, and you can have a statement taken there; or we have written forms 4 5 for you to fill out and turn in tonight. We also have, 6 again, according to your fact sheet, Web site and e-mail 7 addresses both for Gina Auld, our Project Manager. 8 So you can write formally to the address for formal 9 comments on the DEIS, or you can talk to Gina if you want 10 more detail about any of the alternatives. 11 All right. Let's resume. We have two people. Michael Hobbs. 12 13 Michael? Yes, state your name and address, please. 14 15 TESTIMONEY OF MICHAEL HOBBS 16 17 I am Michael Hobbs, 13506 Northeast 66th Street, Kirkland 98033. 18 I am not a neighbor of the trail at all, but I would 19 20 be somebody who would use it. And also I'm very active 21 with the Marymoor Park. I'm on the board of Friends of 22 Marymoor Park, and so this trail is of interest to me from 23 that perspective. 24 I came here firmly expecting to say, I completely

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endorse the Alternative A on the existing roadbed. The

1 tonight: verbally, here at this mike; we have a court 2 reporter around through the lobby and to the west part of 3 the building if you're interested in doing that, and you can have a statement taken there; or we have written forms 4 5 for you to fill out and turn in tonight. We also have, 6 again, according to your fact sheet, Web site and e-mail 7 addresses both for Gina Auld, our Project Manager. 8 So you can write formally to the address for formal 9 comments on the DEIS, or you can talk to Gina if you want 10 more detail about any of the alternatives. 11 All right. Let's resume. We have two people. Michael Hobbs. 12 13 Michael? Yes, state your name and address, please. 14 15 TESTIMONEY OF MICHAEL HOBBS 16 17 I am Michael Hobbs, 13506 Northeast 66th Street, Kirkland 98033. 18 I am not a neighbor of the trail at all, but I would 19 20 be somebody who would use it. And also I'm very active 21 with the Marymoor Park. I'm on the board of Friends of 22 Marymoor Park, and so this trail is of interest to me from 23 that perspective. 24 I came here firmly expecting to say, I completely

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endorse the Alternative A on the existing roadbed. The

East A Alternative where the bicycles would revert to -farther east of the lake could be of interest if there's a
significant risk of accidents between cars in driveways and
the trail on the existing corridor. Moving the bicycles up
to the road might be justified on safety reasons.

But in general, I think that a lot of the objection to the original corridor is just NIMBYism by people who should have known because the corridor was well stated long before they purchased their fancy homes.

So I'd say that I really am very strongly in favor of going through with the paved trail. And if bicycles are moved away from the existing trail, keeping the existing trail open for pedestrians would be very valuable.

There's very few places where you can see the lake as a private citizen that does not own property on the lake, and there's far more viewing opportunities from the existing trail than from the trail up against East Lake "Sam" Parkway. That's all I have to say, Thank you.

BUD PARKER: Thank you. Patrick McGrath. State your name and give your address, please.

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H-014-001

Your support of the Corridor Alternative has been noted.

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TESTIMONEY OF PATRICK McGRATH

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Hello, my name is Patrick McGrath. I'm with the Cascade Bicycle Club, and we're based in 7400 Sandpoint Way in Seattle. We have about 6700 members in the Puget Sound region. And I wanted to come today to lend our support to the Corridor Alternative for three main reasons.

The first reason, the corridor completes the vision of a north-south, non-motorized corridor that links Remond,

Sammamish, and Issaquah. It's been sorely needed. Anyone who was trying to drive here tonight probably can appreciate that.

Two, it provides continuous and equal access to all users of the trail.

And finally, it provides by far the best value for the public.

Cascade's mission is to build better communities through bicycling. And to that end, we always encourage our members to be good neighbors no matter where they are and no matter what right-of-way they're using.

So we look forward to cooperating with cyclists and residents of Sammamish to make sure that we have a smooth, ongoing relationship.

BUD PARKER: Benta Pasko. State your name and give your address, please.

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H-015-001

Your support of the Corridor Alternative has been noted.

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H-016-002 9

H-016-003 4

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TESTIMONY OF BENTE PASKO

Bente Pasko, 22109 Northeast 21st Way in Sammamish. First, I'd like to state my support for the Corridor Alternative. I think the cost, the impact on adjacent properties, and its environmental impact, as well as paving the 12-foot wide trail along the rail bed will meet the best and highest use of the project, of the property.

Also, I would like to encourage wherever possible that a six-foot wide, soft-surface trail be maintained next to the 12-foot wide paved trail as a way to help minimize conflict between slower moving users and faster users. I think that's always a good idea.

And finally, I would urge to the County to move the fencing back a bit. Right now what we're seeing is fencing and tall hedges right up against the Interim Trail, which I think detracts quite a bit. I understand that there are areas where it's quite constricted, and I have no problem with that in those areas. But there are many areas where there is more space, and I would like -- hope for the County to move those vertical barriers a bit farther back. Thank you.

BUD PARKER: Anyone else? Yes. State your name, please and your address.

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H-016-001

Your support of the Corridor Alternative has been noted.

H-016-002

Figures 2-2 through 2-8 in Chapter 2 illustrate proposed trail cross sections that would occur at various points along the trail. Figure 2-2 illustrates the ideal trail width to accommodate multiple uses. This 27foot width includes a 3-foot clear zone, 4-foot pedestrian trail, 3-foot vegetated buffer, two 2-foot gravel shoulders, 12-foot paved zone, and 1foot vegetated clear zone. The soft surface adjacent to the paved trail would be gravel.

H-016-003

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during

the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way. The use of chain link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives provide an equivalent level of protection based on site-specific conditions.

East Lake Sammamish Master Plan Trail EIS
Page 277

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H-017-001

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TESTIMONY OF MARK CROSS

Yes. My name is Mark Cross. I live at 247 208th Avenue Northeast in Sammamish.

I am the Deputy Mayor of the City of Sammamish, but I'm not here on behalf of the City Council. I'm here on behalf of myself and my family.

I have been a supporter of the trail in the past. I continue to be a supporter of having a trail. I think it's become huge asset to the community.

The things that I would ask is that in supporting and echoing what Bente said is where you don't need to have rigid fences right near this, that having a little more room for people to fall or to spill or to step out of the way of other people once you have fast-moving bicycles or faster-moving bicycles would be good.

So where you need to have fencing to protect private property rights, certainly understood. Where you need fencing for safety, certainly understood. But where you don't need to have that, giving the room, a little bit more space for people who are learning to ride bicycles, people who are stepping out of the way of bicycles, would be appreciated.

The main thing I came here to talk to you about is the relationship of the Parkway to the trail.

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H-017-001

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way. The use of chain link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives provide an equivalent level of protection based on site-specific conditions.

H-017-002 1 There are many informal gravel lots along the edge of the Parkway that now currently serve as places for people to park to then go and use the trail. And I hope that the King County and the environmental analysis will provide for two things: one is to look at the more informal trail locations where people are parking, and looking to see what H-017-003 can be done to make sure that those are safe locations; and two, to look at the bottom of Thompson Hill Road where the City is building a signalized intersection and to consider and evaluate in your environmental document the potential to have a pedestrian and bicycle link between the Thompson Hill intersection and the Parkway and the new trail. Thank you. 14 BUD PARKER: Any more comments? Comments that you 15 want to share? Yes, please. 16 State your name and give your address. 17 18 TESTIMONY OF BARBARA JUSTICE 19 20 Thank you. My name is Barbara Justice. And I live in 21 Klahanie on the plateau in unincorporated King County. 22 I've been a member of a citizen advisory group since 2.3 the inception of it, and our historical society in Issaguah 24 has a trolley project; and on page 2-45, there is a listing

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for the Millennium Trolly. And we are hoping at some point

H-017-002

Refer to Sections 3.11.3 and 3.11.6 for discussions on parking strategies and mitigation. As noted in Section 3.11.6, signs will be posted to prevent trail users from parking in inappropriate places.

H-017-003

As shown in Volume II, Figure 23, of the EIS, the County is proposing an access path between the Parkway and the trail.

1 There are many informal gravel lots along the edge of 2 the Parkway that now currently serve as places for people 3 to park to then go and use the trail. And I hope that the King County and the environmental analysis will provide for 4 two things: one is to look at the more informal trail 5 6 locations where people are parking, and looking to see what 7 can be done to make sure that those are safe locations; and 8 two, to look at the bottom of Thompson Hill Road where the 9 City is building a signalized intersection and to consider 10 and evaluate in your environmental document the potential 11 to have a pedestrian and bicycle link between the Thompson Hill intersection and the Parkway and the new trail. Thank 12 13 you. 14 BUD PARKER: Any more comments? Comments that you 15 want to share? Yes, please. 16 State your name and give your address. 17 18 TESTIMONY OF BARBARA JUSTICE 19 20 Thank you. My name is Barbara Justice. And I live in 21 Klahanie on the plateau in unincorporated King County. 22 I've been a member of a citizen advisory group since 23 the inception of it, and our historical society in Issaguah 24 has a trolley project; and on page 2-45, there is a listing 25 for the Millennium Trolly. And we are hoping at some point

that we would be able to share the trail -- rail and trail -- share the corridor with the trolley as far as -- from the depot in Issaquah -- which we already have a track -- to Gilman, and then from Gilman to as far north as would be feasible with the population and all.

And so on the following page on page 2-46, there is a word that says that the "track" needs to be moved in order to accommodate rail and trail, and it needs to read that the "trail" must be moved, because it's impossible in that kind of land to build a superstructure to support a rail vehicle. It's much easier to build the superstructure to put in the trail. And so I wanted to have that word changed. And I've talked about that word all the time, and I think it was understood. But I would like to see that changed.

And I also am totally against selling off any portion of the right-of-way, and I think that the entire right-of-way must be saved for future generations. We do not know 50 years, a hundred years from now whether we will need to use that. And it would be a crime, a travesty to sell off any of that rail. Thank you. Or that right-of-way, Thanks.

BUD PARKER: Are you going to submit that in written -- you can submit that written comment, too, if you'd like.

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H-018-001

The text of the Final EIS has been revised in response to your comment.

H-018-002

King County has no plans to sell any portion of the right of way.

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1 BARBARA JUSTICE: I will. 2 BUD PARKER: By the way, this is Gina Auld. Gina, 3 wave your hand there. She's the Project Manager that if 4 you have other questions and want to call or e-mail her, 5 you will be talking to her. So she's the person that could help you with any details of the plans or the proposals 7 that you would like to see. 8 Comments, any more? Please come up. State your name 9 and give your address, please. 10 11 TESTIMONY OF ERNIE GRILLO 12 My name is Ernie Grillo. I live on 22nd Street in the 13 н-019-001 4 city of Sammamish. I'm also a proponent of the Corridor Alternative. But I would urge the County to quickly get with the City of Redmond and the Washington State Department of Transportation. H-019-002 Currently the Master Plan states that the trail will connect with the Bear Creek Trail. The detour alternative that is proposed near the State Route 520 will require a detour of a half a mile, and crossing a six-lane highway three times just to connect from the East Lake Sammamish Trail to the Bear Creek Trail. So while the State Department of Transportation is working on SR520 in that intersection, we need to get a Van Pelt, Corbett & Bellows

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H-019-001

Your support of the Corridor Alternative has been noted.

H-019-002

Refer to Section 3.11.3 for a discussion of trail crossings and mitigation measures by alternative. Also refer to the responses to Comment Letter G-003 from the City of Redmond.

H-019-002 1 H-019-003 2

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crossing at that highway.

The other reason, myself and my neighbors use the trail each evening. Currently the Master Plan states that in all alternatives the trail will be closed at night.

Nighttime right now is at 4:30. So in the evening when we want to go from house to house or meet, we are -- under the Master Plan process -- we will be all illegal on that trail. So I would like to see that trail open during the evening or at all hours.

Also in the Master Plan, it's stated that 30% of the users of this trail will be commuters. You will relegate those people off that trail by closing that trail at night. Again, during the winter, night here is a 4:00-4:30. So we need to keep that trail open around the clock. Thank you.

BUD PARKER: Okay. Any more comments? This is your opportunity. Okay, hearing none, seeing none, I'm going suspend the public hearing again. Again, we'll put people out in the corridor. If you'd like to ask any specific questions, we'll do that. It's 6:40 this evening. We'll start again at 7 o'clock if we have any new people. But as of right now, we're suspended again until 7 o'clock, and feel free to go out in the corridor here and ask specific questions and talk to our staff if you would like to.

[Hearing recessed for 20 minutes]

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H-019-003

King County understands that people who use the trail for commuting would be constrained by the dawn to dusk hours of operation. These hours are consistent with King County Code section 7.12.480, which establishes the general hours of operation for all facilities in the County's regional park system. However, King County has the authority to tailor specific hours of operation for each facility within its regional system, including trails. To do so, under King County Code section 7.12.030, the County would need to undertake an administrative rule making process with separate environmental review and public comment. The County presently has no plan to alter the hours of operation on the East Lake Sammamish Trail, but it could propose to do so in the future if demand warrants.

BUD PARKER: All right. We're going to resume the formal hearing for the East Lake Sammamish Trail Master Plan DEIS Hearing. This is a formal hearing. We're here to take testimony.

We're offering three opportunities to take testimony: spoken-word testimony here. We have a court reporter out and down the hall from the lobby, and you can submit written comments tonight; or on your fact sheet that you've got in front you, we have Gina Auld's -- she's not here right now, but we'll get her. We have two e-mail addresses, and we have a formal comments address for formal comments on the EIS.

And this is Gina Auld. She works for my staff, and she can answer questions and can give detailed information.

All right. Is there anyone that would like to make a comment? Any comments of support or opposition, we take everything here.

Please state your name and give your address, please.

TESTIMONY OF KEITH STOBIE

My name is Keith Stobie. I live at 13603 Southeast
Third Place in Bellevue. And I'm a bicyclist who supports
the Corridor approach.

I've biked along East Sammamish Road or Parkway,

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H-020-001

Your support of the Corridor Alternative has been noted.

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H-020-003

whatever, many times, especially when training for Flying Wheels and other things.

I was very frustrated when I found out that the Interim Trail was gravel, not paved, so I could not switch over to it.

As I was sitting here waiting for this, I heard one person, I think a home owner near by, talking about the inconvenience and the safety issues of somebody could be lurking on the trail and how much more dangerous it makes their house or something.

Well, in my house in Bellevue, I actually do have a public trail which is the dividing line between my house and the next house over, and it's part of the Lake to Lake Trail.

So I guess it's kind of the same issue. I have seen mountain bikes actually go up the steps there. They're wood steps, but mountain bikes still go up them, and certainly, people run up and down them all day and night, whenever they'd like to.

And I've never even thought about the safety issue that somebody could be lurking on the trail there. Now, granted, I have nice streetlights on my cul-de-sac, but I think -- I don't know -- I don't know of the East Lake Sammamish -- but maybe that would be the solution if safety was an issue is more streetlights or something.

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H-020-002

The Interim Use Trail was constructed to allow public use of the railbanked trail corridor, protect natural resources and human safety, and fulfill railbanking requirements until the planning for a permanent trail could be completed and the permanent trail developed.

Most build alternatives discussed in the EIS include a paved trail surface.

H-020-003

Section 3.8.2.5 of the Draft EIS discusses safety and security associated with the East Lake Sammamish Trail. As noted on Page 3.8-14, published studies on rail-trails indicate that trail neighbors typically are concerned that new trails may result in negative impacts (e.g., concerns regarding increased crime and vandalism), but the studies show that these concerns are not borne out in any substantial way, although isolated incidents have occurred across the country.

As noted on Page 3.8-23, occasional incidents of trespass or private property vandalism could occur on properties adjacent to the trail, but these are not expected to exceed existing conditions. King County has worked closely with the Cities of Redmond, Sammamish, and Issaguah to address trail-related law enforcement and public safety issues, and will continue to do so over time. King County's experience with other trails suggests that the risk of increased trespass is likely to be counterbalanced by the increased public presence on the trail.

Finally, the King County Code also addresses these issues. In KCC section 7.12.295(H)(9), the model trail user code of conduct specifies that "[t]rail users should respect private lands adjacent to county trails and should stay on trails to avoid trespassing on or interfering with adjacent private property." Under KCC sections 7.12.650 and -.670, anyone caught violating the code of conduct may be subject to a fine of up to \$500, and loss of park or recreation facility use privileges.

H-020-004 1 But I do think it's very dangerous to have cyclists out on the Parkway, which is a fairly high-speed road in many places. And the motorists have been annoyed at me more than once or twice merely because I am a bicyclist taking up space that they think is theirs. So I guess that's the end of the testimony. I support the Corridor Alternative. 8 BUD PARKER: Thank you. Anyone else who would like to 9 give testimony, please? 10 Peter Goldman. State your name and give your address, 11 please. 12 13 TESTIMONY OF PETER GOLDMAN 14 15 Sure. I'm Peter Goldman. And I live -- my business 16 address is 615 Second Avenue, Suite 360, Seattle, 17 Washington 98104. I was one of the founders of the Friends of the East 18 Lake Sammamish Trail and have been involved in the trail 19 20 for all these years. 21 And it's extremely exciting that there appears to be

with the neighbors.

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The Friends of the East Lake Sammamish Trail have a

such community support for this, and I want to encourage

the County to move forward quickly and work very closely

H-020-004

The County recognizes that keeping physical and spatial separation between trail and vehicle traffic is important to provide a safe environment for trail users. The completed Master Plan Trail will incorporate state and local design guidelines to create a multi-use trail that will safely accommodate the anticipated users.

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H-021-001

Comment noted.

EAST LAKE SAMMAMISH MASTER PLAN DEIS HEARING, 11/09/06 49

But I do think it's very dangerous to have cyclists out on the Parkway, which is a fairly high-speed road in many places. And the motorists have been annoyed at me more than once or twice merely because I am a bicyclist taking up space that they think is theirs.

So I guess that's the end of the testimony. I support the Corridor Alternative.

BUD PARKER: Thank you. Anyone else who would like to give testimony, please?

Peter Goldman. State your name and give your address, please.

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TESTIMONY OF PETER GOLDMAN

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H-021-001

Sure. I'm Peter Goldman. And I live -- my business address is 615 Second Avenue, Suite 360, Seattle, Washington 98104.

I was one of the founders of the Friends of the East

Lake Sammamish Trail and have been involved in the trail

for all these years.

And it's extremely exciting that there appears to be such community support for this, and I want to encourage the County to move forward quickly and work very closely with the neighbors.

The Friends of the East Lake Sammamish Trail have a

H-021-002

Your support of the Corridor Alternative has been noted.

H-021-003

King County understands that trail users are concerned about the proximity of fences to the trail due to safety, aesthetics, and property concerns. King County does not routinely fence the perimeter of all parkland, whether or not it is improved. Fencing is only provided if conditions dictate. If fences are too close to the trail, trail users (especially bicyclists with protruding handle bars) either risk running into the fence or must move more toward the center of the trail to avoid conflicts (effectively reducing the width of the trail). Thus, as shown in the typical cross sections for the Corridor Alternative (Chapter 2, Figures 2-2 through 2-6), fences would be located no closer than 1 foot outside of the trail shoulder or the outermost edge of the separated soft-surface trail. This placement is consistent with recommendations in AASHTO's 1999 Guide for the Development of Bicycle Facilities. In some situations, fences could be moved further from the trail but still within the King County right of way. However, in many situations the County uses fences to delineate an edge hazard adjacent to the trail (e.g., a retaining wall), to separate an incompatible, adjacent use (e.g., driveway), or to discourage intrusion into adjacent areas (e.g., wetlands and streams). (See Section 2.5.6.9 of the EIS for additional description.) In these types of places, the County will not relocate fences. In other areas and during the design process, King County will consider minor changes in fence location, depending on the site conditions and on the nature of any adjacent, permitted uses of the right of way. The use of chain link fence has been expressed as an aesthetic concern of trail users, particularly when such fence occurs on both sides of the trail. Section 2.5.6.9 of the EIS describes the situations in which chain link fence or an "approved equivalent" would be used. During the design phase of the project, King County may consider more aesthetically pleasing alternatives to chain link fence, but only if King County determines that such alternatives

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H-021-003

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that the Friends absolutely believe that the County's preferred alternative should be the Corridor Alternative

few general comments as we move forward.

for reasons of cost, public safety, avoiding environmental degradation.

Our first comment, probably the most important one, is

Secondly, on the question of fences, we do understand that fences are appropriate for privacy, and they're appropriate for environmental -- for separating the user area from environmentally-sensitive areas. And we do all understand that there is an appropriate use for fencing; however, we ask the County to work very closely with the neighbors so that we don't create a dog run effect, and that the fences are appropriately set back so that the trail users can feel like they are enjoying some of the right-of-way.

The right-of-way does range from 50 to 200 feet. No trail users want the whole thing, but -- and we do believe that the neighbors should enjoy their backyards and should enjoy the County right-of-way, too, to the extent it's part of their backyard -- but we just don't want to see -- we're hoping not to see -- a dog run. So that users are just there, and they've got fences on both sides, and they feel imprisoned by that.

We urge the County to adopt policies to permit

1 landowners to enjoy and use the right-of-way for gardens 2 and those kinds of things. H-021-004 We think that the County ought to adopt a set of policies for how -- when owners can enjoy and use the land that's outside of the actual user right-of-way and outside of the fence. 7 Well, there's so many people here -- do you want to 8 let me go another ten seconds or --9 BUD PARKER: Finish your comments. 10 11 TESTIMONY OF PETER GOLDMAN [continued] 12 H-021-005 The other thing that we're very concerned about is safety on the crossings. And one thing, we urge the County to explore high-tech methods that could prevent user conflict between bicycles and cars. And I know that there's technologies out there where you can implant in the pavement when a car comes down it flashes a light or something on the trail. It says, Car coming, car approaching. So that would be relatively cheap, and it would certainly provide warning to anyone on the trial that a car was coming up or down some of the steep crossings. And lastly, on trail width, we agree with the County H-021-006 24 suggested trail width proposals. Thank you.

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provide an equivalent level of protection based on site-specific conditions.

H-021-004

Pursuant to King County Code 14.30 and consistent with its management of the regional trails system, King County maintains a special use permit system to authorize private use of County-owned property. These permits are typically of a 5- to 10-year duration, and King County reserves the right to revoke a special use permit. For additional information, please refer to Section 1.3.3 of the EIS.

H-021-005

Refer to Sections 3.8.20.3 and 3.11.3 for discussions of proposed trail user safety measures and trail crossing safety measures, respectively.

H-021-006

Comment noted.

H-022-001

The hearing recessed briefly and then concluded at 7:59 pm.

H-022-001	BUD PARKER: Any more comments? This is your
2	opportunity. All right. For the last time I'm going to
3	suspend the hearing again until 7:30.
4	You're welcome to go out and talk to staff outside if
5	you had specific comments you wanted to ask about the trail
6	designs and so on.
7	And we'll resume the formal hearing again at 7:30.
8	Thanks.
9	[Hearing recessed for 20 minutes]
10	
11	JENNY BAILEY: So I'd like to resume the public
12	hearing, the formal public hearing.
13	It is 7:58. And I'd like to thank everybody for
14	coming this evening and providing your comments. Just a
15	reminder that the comment period is open through December
16	19th, and we will look forward to seeing your comments.
17	And I'd like to conclude the formal public hearing.
18	[Hearing concluded at 7:59 p.m.]
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