

East Lake Sammamish Trail Segment 2B SSDP2016-00415

Responses to Comments in letter from TWC to the City of Sammamish, dated March 22, 2017

Comment Number	Watershed Comment text or summary	King County Response
Table 1	Field observations that warrant further review by applicant and recommendations	Table 1 has been annotated to include a response column. It is attached to this section for review.
Comment 1:	Potential wetlands areas were observed near Stations 291, 331 (Wetland 18C), and 409; these areas are described in Table [1] above. <u>These areas may be indicative of wetlands not captured by the wetland delineation study.</u>	On May 12, 2017, a Parametrix biologist field reviewed the findings of TWC and there was no water and no wetland signatures. Accordingly, no boundary changes will be made to the 2014 delineations in these areas. Ponding observed by TWC was likely from the intensive rainfall recorded in first 16 days of February (7.84 inches). Moreover, 2.13" of rain fell the two days before this TWC observation.
Comment 2:	In some cases, jurisdictional ditches are indistinguishable from delineated wetlands.	"Jurisdictional ditches" are not regulated by the City CAO or the SMA. Hence they were not specifically described in the Critical Areas Study (CAS). The ditches shown in the plan set were included so that plan sets would be consistent for other regulatory agencies. For the purpose of CAS review, the important determination is whether or not the resource is a regulated critical area, such as a stream. Conveyance channels and flow arrows are shown on the plan set attached to the Revised CAS, but for clarity, jurisdictional ditch labels have been removed from the plan set. Also see specific responses below.
Comment 3:	Wetlands 15D, 15E, and 28D are confined exclusively to excavated ditches with no indication of historic wetland conditions.	Although Wetlands 15D, 15E, and 28D received maintenance activities in 2016, they have revegetated with facultative-wetland and/or obligate wetland plants and are inundated or saturated throughout the spring at least. Their wetland designation has been retained.
Comment 4:	The delineated boundary of some wetlands, such as Wetlands 22AB, 22CD and 24C, include ditched areas that are not continuous with broader wetland area.	These wetlands developed in a channelized setting. They have been maintained from time to time, most recently in 2016. They have revegetated with wetlands plants in 2017. No change is proposed to their status.
Comment 5:	A rationale for the reported and mapped determinations, wetland or jurisdictional ditch, should be provided for consistent and accurate application of regulations	The rationale and methods used for wetland delineation were described in the CAS. In many cases if the ditches were vegetated with hydrophytes, water was present, and saturated or inundated soils were present, then it was delineated as a wetland. "Jurisdictional ditches" are not regulated by the City CAO or SMA.
Comment 6:	As depicted on the existing conditions plan set, several wetland boundaries include constructed stairs. The stair areas do not meet wetland criteria and should be excluded from the wetland areas on the drawings and in impact calculations.	In the Existing Conditions design drawings stairs are shown over wetland hatching. The stairs were not included in wetland area calculations. Impact figures (1-22) which were presented in Appendix D, CAS do show individual stairs, but they are not included in the wetland boundaries. Stairs were excluded from the impact calculations.
Comment 7:	In general, the CAS does not provide a rationale for categorization of ditch versus stream.	The methodology for identifying streams was described on p. 2-4 of the CAS. Streams meeting the definition of streams under City of Sammamish Code were reported in the Critical Areas Study but conveyance channels or ditches were not, because they are not regulated by the City CAO or SMA. For clarity, jurisdictional ditch labels have been removed from the plan set attached to the Revised CAS.
Comment 8:	We have applied our best professional judgment in most of these cases, but ask that further investigation be undertaken to provide confirmation for Streams 5 and 6, as itemized below.	A Parametrix biologist reviewed the mapping of Streams 5 and 6. See responses 9 and 10 below.
Comment 9:	Stream 5 is mapped as extending upstream, northward along the east side of the trail within JD Ditch 11A from a trail crossing near Station 317+00 to end near Station 318+70. However, based on our field observations, Stream 5 should be shown extending considerably farther northward, upstream along the east side of the trail to near Station 324+00. Flow in the ditch is continuous with Stream 5 along the east side of the trail to that location, where flow enters the trail corridor from the east via a 12-18-inch corrugated metal pipe (CMP) perched 3 or 4 feet up a steep bank. The east side ditch at that location (Station 324+00) is at a high point along the ditch profile, so, without intervention, water could flow either to the north or to the south. However, water has been largely prevented from flowing northward by the recent placement of an obstruction in the ditch consisting of wooden stakes, gravel, and two lifts of straw wattle, though a minor amount of seepage still does flow to the north. This diversion structure may have been placed because the ditch to the north eventually is constricted by a small-diameter pipe (less than one-foot diameter) with little flow capacity.	The area in question is fairly flat. Culverts at Stations 320+30 (47.55'), 320+60 (47.59'), and 324+90 (47.54') indicate this profile. Maintenance activities in the area could have changed the flow direction in this area. In general, the Parametrix biologist agrees with the TWC assessment about water flow in this area. The flow direction arrows in these areas will be changed on the plan set. This flow passes through Wetlands 15D and 15BC. Both of which were disturbed during 2016 maintenance activities. However, observations in May 12, 2017 noted extensive revegetation in these wetlands. These areas will remain designated as wetlands. No change to the extent of Stream 5 is proposed.
Comment 10:	Water in a defined channel flows to the southwest along the east side of the trail from approx. STA 359+00 towards the mapped Stream 6 crossing at approximately Station 357+00. However, no stream is shown as mapped along that alignment. Scour and sorting of channel substrate was observed in the channel parallel to the trail. We recommend that this area be further investigated to determine if a stream channel segment should be mapped there. If not found to be a stream, the rationale used should be provided.	Details for the water flow patterns between STA 357+00 – 360+00 are shown on Figures 10-11, Appendix D of the CAS. The water is conveyed through a series of PVC culverts and an open maintained channel in Wetland 21D (a wetland lawn) before comingling with Stream #6 on the downhill side of the trail. Here the stream discharges through Wetland 21AC before flowing to the lake. A small reach of this stream was not labeled on Figure 10. The labeling will be added.
Comment 11:	[T]he OHWM of Lake Sammamish is outside of the trail corridor and was therefore, approximated. ... Shoreline setback impacts, which are proposed toward the south end of the project area, are calculated from this approximation.	The King County 2010 open water geographic information system (GIS) data were used to determine OHWM and the shoreline setback area (P.2-7, CAS).
Comment 12:	The existing conditions plan (EX- sheets) and the landscape plan (LA sheets) included in the Critical Areas Study both indicate the approximate extent of the 200-foot shoreline jurisdiction line (however, this line is incorrectly labeled as a buffer). These shoreline features are not fully addressed in the provided Critical Areas Study. See further discussion in Section 4.2.3 below.	"Shoreline Buffer" was changed to "Shoreline Zone" on the maps. Please refer to Responses 34 and 35 below regarding shoreline features.

Comment Number	Watershed Comment text or summary	King County Response
Comment 13:	Pileated woodpeckers are discussed in the FEIS and not in the Critical Areas Study; the presumption being that they do not have a known "primary association" with habitat in the study area. Three individuals were observed foraging in the northern half of the trail segment on February 20, 2017. In addition, snags in and adjacent to the study area showed evidence of use by pileated woodpeckers. WDFW recommends management within use areas (home ranges) of pileated woodpeckers. Based on field observations, we conclude that the project area should be managed for pileated woodpecker habitat. Management recommendations include snag, large woody debris, and forest patch retention.	The CAS did not address pileated woodpeckers because the City of Sammamish does not establish Fish and Wildlife Habitat Conservation Areas (FWHCAs) for that species. According to SMC 21A.15.468, FWHCAs are established for state- or federally designated endangered, threatened, or sensitive species; the pileated woodpecker has no federal listing status and is a candidate for listing at the state level. Although the City code (SMC 21A.15.468) does not establish FWHCAs for pileated woodpeckers, the City has directed the County to add pileated woodpecker to the FWCA sections of the CAS and to protect pileated woodpecker habitat. These changes have been included in the Revised CAS.
Comment 14:	The study area corridor provides habitat for many other resident and migratory birds protected under the Migratory Bird Treaty Act. Those protections typically include timing restrictions and noise limitations.	The CAS did not address migratory birds because the City of Sammamish does not establish FWHCAs for migratory birds. However, the County will develop measures to comply with applicable federal regulations, including MBTA (which is administered by USFWS), and these will be incorporated in the 90-percent plans or specifications.
	The qualitative stream assessment Parametrix applied to classify streams in the project area is appropriate for the trail project and we generally concur with the reported classifications.	Comment noted.
Comment 15:	The stream summary table in the Critical Areas Study (Table 3-3) confuses stream classification with fish use, which are related, but not the same. There are separate columns for stream classification and fish use; however, fish use is also given under the classification column. The entire stream classification column needs to be reviewed and revised so that it is consistent with the stream typing criteria in the Sammamish SMC.	The presentation of stream classifications in Table 3-3 have been revised to provide the requested clarification.
	Parametrix used the 2004 Ecology rating system, which is acceptable in Sammamish per the Code to which this project is vested.	Comment noted.
Comment 16:	Some scoring inconsistencies were identified in our review of the wetland rating forms. For example, the hydrologic functions multiplier was applied to some wetlands and not others despite the common landscape context. A few wetlands were underscored given proximity to priority habitats, most commonly "riparian" and "instream." Some of the contributing basin estimates appeared to be high or inconsistent; no figures were provided with the rating forms to clarify the basin estimates. However, only five out of the 37 wetland ratings require further review to resolve substantive scoring differences. Wetland rating forms for Wetlands 18C, 22E, 25F, 26C and 28E need to be reviewed and revised as noted in the table below.	Wetland rating forms for Wetlands 18C, 22E, 25F, 26C and 28E were reviewed. The ratings for Wetlands 25F and 28E were changed from Category IV to Category III, while the categories for the other wetlands were not changed.
Comment 17:	Wetlands 22E and 28D are less than 1/10th of an acre in size. Since the wetland rating system was calibrated using larger wetlands, the very small wetlands discussion in the guidance (Ecology Publication 04-06-025) should be reviewed for applicability to those two wetland ratings.	The very small wetland discussion presented on pp 21-22 in Hruby 2004 applies to wetlands less than 0.10 acre. In the project area 22 wetlands are less than 0.10 acre. Wetlands 22E and 28D are less than 0.01 acre. In the referenced discussion, it states that the rating method was not tested for wetlands below 0.10 acre. It further states that water quality and hydrologic functions are independent of size, because the potential is rated on a per unit area or volume basis. For wildlife functions, the method was accurate to 0.10 acre and Ecology did not produce specific questions less than this area. Thus, the rating of Wetlands 22E and 28D using Hruby 2004 would not change just because of their small size.
Comment 18:	The proposed trail alignment shifts east and west of the existing interim trail to avoid critical area impacts where feasible when applying the designed 18-foot trail width. However, the proposed trail design does not consider other avoidance measures, such as alternate trail designs that incorporate boardwalks, narrowing or "necking down" the trail where it crosses the critical area. Past regional trail projects have employed those avoidance measures. Further avoidance analysis is needed to demonstrate why additional avoidance measures, such as boardwalk and narrower trail segments, are not utilized in the proposed design.	Please refer to the response provided for City of Sammamish Department of Community Development comments in Tab 1, the Mitigation Sequencing Compliance Narrative in Tab 6, the Trail Demand Analyses in Tab 7, and the Trail Width Analysis in Tab 8.
Comment 19:	The 18-foot wide trail design King County chose for Segment B is the narrowest of the options considered through their master plan and FEIS process. The proposed plan utilizes retaining walls to minimize impacts. In total, retaining walls are proposed along approximately 1.5 miles of the 3.5 mile trail segment. Fencing, both chain link and split-rail, and signage are proposed. Timing restrictions and commonly employed best management practices (BMPs) are also listed minimization measures for the project. As noted above, narrowing or "necking down" the trail where it crosses critical areas is another way to minimize impacts to critical areas and their buffers. This potential minimization tactic is not addressed in the submitted CAR.	Please refer to the response provided for City of Sammamish Department of Community Development comments in Tab 1, the Mitigation Sequencing Compliance Narrative in Tab 6, the Trail Demand Analyses in Tab 7, and the Trail Width Analysis in Tab 8.

Comment Number	Watershed Comment text or summary	King County Response
Comment 20:	The proposed mitigation plan is detailed in the CAR and the 60-percent ELST Plan Set. It is comprised of the existing conditions plan (60-percent ELST Plan Set, sheets EX1-EX21), critical area impacts (CAR Appendix D, Figures 1-22), and the landscape plan (CAR Appendix E, sheets LA1-LA23), and eight proposed fish passage culvert replacements (60-percent ELST Plan Set, sheets FP1-FP8). The critical area impacts figures hatch each impact type, with one notable exception. All wetland impacts are hatched as, 'Temp. Wetland Impact.' Permanent wetland impacts are summarized in the Critical Areas Study report (Section 4.1.1), but are not identified or labeled on the impact figures.	Permanent wetland impacts are shown on the impact figures, but the legend box for "Perm. Wetland Impact" was missing. The legend has been corrected in the map set attached to the Revised CAS.
Comment 21:	The submitted Critical Areas Study does not include a section that specifically addresses FEIS recommendations, including mitigation commitments and potential additional measures.	The CAS addresses environmentally critical areas, as required in Sammamish Municipal Code (SMC) 21A.50.120, as well as the mitigation requirements for environmentally critical areas.
Comment 22:	Section 3.3.3 – Wetlands, Affected Environment of the FEIS describes wetland buffers in the project area as, "...too narrow to effectively protect the wetland from adjacent high-impacts land uses." No discussion of how the proposed mitigation, within a long linear corridor, addresses this issue is provided.	Please refer to the Mitigation Sequencing Compliance Narrative in Tab 6 for a discussion of how the proposed approach has evolved through project development.
Comment 23a:	o Stated strategies to avoid and minimize wetland impacts include, "evaluating options to bridge sensitive areas to reduce fill." No discussion of alternative design options, such as boardwalks, is provided.	Please refer to the Mitigation Sequencing Compliance Narrative in Tab 6.
Comment 23b:	o Reducing trail widths is recommended to avoid and minimize critical area impacts. The proposed mitigation utilizes retaining walls in place of fill slopes to reduce impacts, but no discussion of alternate trail width designs is provided.	Please refer to the Mitigation Sequencing Compliance Narrative in Tab 6.
Comment 23c:	o Mitigation banking is discussed in detail in the FEIS, but is not mentioned or considered in the Critical Areas Study. Specifically, the trail project is reported to be within the service area of the King County Mitigation Reserves Program (MRP), an in-lieu fee (ILF) mitigation program, with an ILF site near the headwaters of Laughing Jacobs Creek. Other MRP sites have been developed since the FEIS was issued. Listed benefits of the ILF include higher success rate, higher ecological functions relative to onsite mitigation, and landscape-scale benefits. Another banking alternative, the Keller Farm, is anticipated to be approved soon and should have a service area that covers this segment of Lake Sammamish.	Please refer to the Mitigation Sequencing Compliance Narrative in Tab 6 for a discussion of how the proposed approach has evolved through project development.
Comment 24:	Section 3.4 – Vegetation and Wildlife, states that bald eagle nests in the project vicinity will be screened by planting native conifers between nest sites and the trail. This detail needs to be more clearly addressed in the provided Landscape Plan.	Conifers will be added to nearby wetland mitigation and buffer enhancement areas. The number and mitigation unit to be planted with conifers with emphasis on Station areas 367-385 will be included in the 90-percent design landscape plans. Please note that, since the submittal of the CAS, in December 2016, the Washington Fish and Wildlife Commission removed the bald eagle from the list of state sensitive species (WAC 232-12-011). As a result, bald eagles are no longer among the species for which FWHCAs are established in the City of Sammamish, per SMC 21A.15.468. However, the discussion of bald eagle has been retained in the Revised CAS.
Comment 25:	mitigation banking is not mentioned in the Critical Areas Study.	Please refer to the Mitigation Sequencing Compliance Narrative in Tab 6 for the history of compensatory mitigation and proposed changes based on City comments. The Revised CAS also reflects these changes.
Comment 26:	The Critical Areas Study references bald eagle guidelines, but does not document the required consultation.	In December 2016, after the Draft CAS was completed, the USFWS established new rules and procedures for obtaining permits for the incidental take of bald eagles due to disturbance near nest sites. The County will review the permit requirements and apply for a permit and consult with USFWS if necessary. Also in December 2016, the Washington Fish and Wildlife Commission removed the bald eagle from the list of state sensitive species (WAC 232-12-011). As a result, bald eagles are no longer among the species for which FWHCAs are established in the City of Sammamish, per SMC 21A.15.468.
Comment 27:	Mitigation commitments and potential additional measures for fisheries, wetlands and vegetation, and wildlife, are not clearly addressed in the Critical Areas Study.	The Draft and Revised CAS provide discussion of mitigation, including avoidance and minimization, as well as compensatory mitigation, in compliance with the requirements of the City's critical areas ordinance. No "additional" measures are proposed.
Comment 28:	The trail design is presented as the narrowest option, but further analysis or supporting justifications are not provided.	Please refer to the documents provided in Tab 6, Tab 7, and Tab 8.

Comment Number	Watershed Comment text or summary	King County Response
Comment 28a:	Mitigation plans are required to include a supporting review of best available science and an analysis of the likelihood of success (SMC 21A.50.145). In our experience, small disjointed mitigation sites are less successful than larger connected areas because they are difficult to irrigate, weed/maintain and track during monitoring.	<p>Compliance with BAS review requirements</p> <p>The City's current Environmental Critical Areas regulations are based on best available science (BAS). By complying with those regulations, the proposed mitigation plan in the CAS for the ELST project is consistent with BAS.</p> <p>Ordinance O2016-410 (ECA Amendments to SMP, Amendments to SMC Title 21A.50), approved by the Sammamish City Council on June 7, 2016, determined that the City's Environmental Critical Areas regulations, as amended, "were developed through a review of the BAS literature" and "provide protection for critical areas consistent with BAS," and that the City had followed requirements established in the Growth Management Act for "including and considering BAS in modification of the regulations for critical areas." The mitigation requirements incorporated into the City's Environmental Critical Areas regulations are thus supported by best available science, as required under SMC 21A.50.145(4). By complying with those requirements, the CAS is consistent with BAS.</p> <p>The CAS complies with the impact avoidance, minimization, and mitigation requirements in the City's Environmental Critical Areas regulations by following the mitigation sequencing approach established in SMC 21A.50.135 and SMC 25.06.020. King County employed a rigorous approach to avoiding and minimizing impacts to critical areas in a manner consistent with the purpose, effectiveness, engineering feasibility, safety, and cost of the project. A detailed description and history of avoidance and minimization measures is provided in a separate section of the King County Shoreline Comment Response notebook (Mitigation Sequencing Compliance Narrative – Tab 6).</p> <p>Consistent with the requirements of SMC 21A.50.135 and SMC 21A.50.310, King County is proposing to complete compensatory mitigation for critical areas impacts at a total of 18 sites in the South Sammamish Segment B corridor (Revised CAS Table 5-1; Appendix E). The proposed mitigation will include a minimum of 0.22 acre of wetland creation/restoration credits at an off-site mitigation bank, 0.65 acre of wetland enhancement, 1.53 acres of wetland buffer addition, 0.75 acre of wetland buffer enhancement, and 0.24 acre of stream buffer enhancement. An additional 0.09 acre of shoreline setback enhancement will occur at four separate sites. The proposed mitigation equals or exceeds City critical areas mitigation requirements. A detailed description of the proposed mitigation is presented in Section 5.3 of Revised CAS, dated July 2017. By meeting or exceeding the impact mitigation ratios in SMC 21A.50.310, the project is consistent with the BAS approach for ensuring no net loss of ecological functions and values.</p> <p>Likelihood of success</p> <p>King County Parks has a formal maintenance program for all its trail projects. The program is directed at maintaining the trail corridors for recreational and aesthetic uses but it also includes many mitigation projects. The County understands that regular maintenance is necessary to achieve its mitigation commitments in public trail corridors. In conjunction with the 90-percent trail design, the County will develop a segment-specific update to the ELST Vegetation Management Plan and submit the document with the design plans to the City as part of the grading permit application package.</p> <p>King County has successfully managed a number of sites, including Redmond segment of the ELST, Marymoor Connector, and Snoqualmie Valley Trail (SVT)—Tolt River Bridge mitigation sites to achieve mitigation goals and standards.</p>
Comment 29:	The mitigation sequencing section of the CAS does not provide an adequate discussion of how the proposed mitigation will maintain critical area functions and values.	The CAS describes mitigation for project impacts in compliance with critical areas regulations. Avoidance and minimization was described - and is further explained in response 18 above. In addition, mitigation ratios established by the City are being met or exceeded for critical areas impacts. For example, proposed wetland enhancement ratios and acreage are twice that required by the City. Please refer to attached Avoidance and Minimization Narrative.
Comment 30:	SMC 21A.50.310, states that off-site mitigation may be used if it has a "greater likelihood of providing equal or improved wetland functions than the impacted wetland." The code does allow for mitigation banking pursuant to SMC 21A.50.315.	Please see the Mitigation Sequencing Compliance Narrative in Tab 6 for a discussion of how the proposed approach has evolved through project development.
Comment 31:	Adequate buffers are not proposed for wetland creation and enhancement areas in this constrained linear corridor.	The existing buffers are below the minimum standard buffers for Category III and IV wetlands. Accordingly, wetland creation credits will be obtained from an approved mitigation bank. However, wetlands can only be enhanced in their current location. To achieve the goal of providing mitigation in the trail corridor (on-site) the wetlands will be enhanced in situ to to mitigate for loss of wetland function on site.
Comment 32:	Buffer addition areas should be continuous with the wetland being buffered. Some of the proposed buffer addition areas, such as those in the vicinity of Wetland 18C, are not continuous with the wetland itself.	Designated buffer addition areas (WBA) (including near wetlands 18C and 25B) are proposed to achieve no net loss of regulated buffer area. Two areas north and south of 18C provide buffer habitat not available around the wetland buffer of 18C. Buffer addition area 18C is only 10 feet from the buffer of 18C. They are separated by a elevated wooden bridge, but habitat is continuous at ground level. Another block of WBA further north of WL 18 C will be removed as mitigation and from the landscape plans since it is currently landscaping and lawn. WBA on Sheet LA14 at Sta. 399 will be continuous to the buffer of wetland 25B after the driveway #6 is removed. WBA at Sta. 391 (LA14) has been removed. In order to achieve a 1:1 ratio of buffer mitigation, an additional 9518 SF of high quality forested buffer would be added between STA 465+70 to 468+00. These changes are shown on the revised landscape plans of the Revised CAS, Appendix E.

Comment Number	Watershed Comment text or summary	King County Response
Comment 33:	Further documentation is necessary to demonstrate compliance with the stream mitigation standards in SMC 21A.50.350, which requires a demonstration that equivalent or greater functions be realized by the project.	<p>Mitigation of impacts to streams will comply with the standards established in SMC 21A.50.350 in the following ways.</p> <p>As required by SMC 21A.50.350(1), mitigation for alterations to stream channels will achieve equivalent or greater ecological functions. As described in Sections 4.2.1 and 5.3.2 of the CAS, the replacement of culverts on six Type F streams will result in a gain of 93 linear feet (681 square feet) of stream channel, offsetting the loss of 24 linear feet (114 square feet) of stream channel habitat due to culvert extensions. The existing long, narrow culverts will be replaced with shorter, wider culverts that meet fish passage standards, improving connectivity as well as hydrologic functions within the affected streams. In addition to daylighting the stream channel (i.e., removing it from the confines of a culvert) at the locations of the culvert replacements, the project will improve habitat complexity by placing gravel and rounded cobble substrates in the newly exposed channels and within the replacement culverts.</p> <p>Mitigation for alterations to stream buffers will also achieve equivalent or greater ecological functions. As described in Section 4.2.2 of the CAS, most of the stream buffer area affected by the project consists of narrow swathes immediately adjacent to the Interim Use Trail and dominated by invasive species and landscape plantings. Minimal effects on stream buffer functions are anticipated. As described in Section 5.3.1 of the CAS, mitigation for alterations to stream buffers will include removing invasive vegetation, lawn, landscaped yard, and structures; tilling and amending soil; adding mulch; planting native vegetation, including trees and shrubs; and adding habitat features such as logs and brush piles. As such, the ecological functions of the mitigation areas are expected to exceed those of the affected areas.</p> <p>As required by SMC 21A.50.350(2) mitigation actions will be in-kind and, where reasonable opportunities exist, conducted within the same sub-basin and on the same site as the alteration. The previous two paragraphs demonstrate that mitigation for alterations to streams and stream buffers will be in-kind. In all cases, reasonable opportunities for on-site buffer mitigation were not available. However, consistent with SMC 21A.50.350(2)(c), all mitigation for alterations to streams and stream buffers will take place within the City limits and within the same drainage sub-basins as the affected areas. Two of the affected streams (Unnamed Stream 7 and Unnamed Stream 8[SF]) are in the Monohon sub-basin, as are two of the culvert replacement sites (Stream 0155 and Zackuse Creek). The third affected stream (Unnamed Stream 13) is in the same sub-basin (Panhandle) as another culvert replacement site. Similarly, mitigation for alterations to stream buffers will take place at the same location (e.g., Unnamed Stream 7), in the same sub-basin (e.g., Monohon), or in a neighboring sub-basin.</p>
Comment 34:	The CAS should include an assessment of the impact that the project will have on existing ecological functions present within shoreline jurisdiction, as well as justification for how proposed mitigation can result in no net loss of those functions.	<p>The CAS demonstrates the project's compliance with the requirements of the City's Environmental Critical Areas regulations. It is neither required nor intended to address all ecological functions of the shoreline environment; rather, the focus of the CAS is on critical areas. As stated in Sammamish Municipal Code (SMC) Section 21A.25.01, "The SMA [Shoreline Management Act] guidelines require that an SMP [Shoreline Master Program] result in "no net loss" of shoreline ecological functions. This SMP accomplishes that requirement through its goals, policies, and regulations noted above providing restoration program and enhancement incentives to offset the cumulative impacts of new shoreline uses and developments over time." " By complying with the City's development regulations, the East Lake Sammamish Trail will result in no net loss of shoreline ecological functions.</p> <p>To further demonstrate the project's compliance with the no-net-loss provisions of the City's SMP, we have completed additional analysis of shoreline ecological functions. In brief, the project will avoid impacts to most ecological functions in the shoreline jurisdiction, and will mitigate for unavoidable impacts. See the accompanying narrative (Tab 9) demonstrating the project has No Net Loss Of Shoreline Ecological Functions.</p>
Comment 35:	[N]o evidence has been provided for why these impacts [in the shoreline jurisdiction] are unavoidable, or what specific minimization measures were employed.	The CAS complies with City critical areas regulations. It is not intended to address all specific shoreline functions only critical areas. Please refer to the attached Avoidance and Minimization Narrative.
Comment 36:	While the CAS identifies how impacts to streams and wetlands will be mitigated for the project as a whole, the CAS does not demonstrate how the proposed mitigation for such features located in shoreline jurisdiction would result in no net loss of shoreline ecological functions.	The CAS complies with City critical areas regulations. It is not intended to address all specific shoreline functions only critical areas. See response to Comment 34. Figures depicting impacts to critical areas have been more clearly marked to show the line indicating the landward extent of the 200 foot shoreline jurisdiction zone.
Comment 37:	The proposed post-construction length of the Pine Lake Creek open channel is described in text as increasing 9-feet in length, but the footnote for summary Table 4-2 states an additional 15-feet. This discrepancy needs to be clarified or corrected.	There are two culverts that will be replaced at this location. The net gain of open channel will be 22 linear feet or 202 square feet. The text and Table 4-2 have been revised.
Comment 38:	Habitat logs, brush piles, and habitat rock piles are included in the mitigation planting details (sheet LA22). However, it is not clear where these habitat features will be placed or what quantities will be installed	The number and location of habitat features will be included in the 90-percent design landscape plans.
Comment 39:	Additionally, snag creation is not incorporated into the landscape plan and is recommended to provide additional wildlife habitat features.	Snags may be included but only in areas that may not cause a hazard in the future. If snags can be created in the project area without endangering trail users, the locations of snag creation areas will be added to the landscape plans.
Comment 40:	[T]he provided landscape plan does not clearly indicate that conifers will be concentrated in the adjacent enhancement areas located near Stations 367 – 379. Additional in-fill conifer planting may also be warranted in Wetland 24A (Stations 379-385) to adequately screen the nest near SE 8th Street.	Conifers will be added to the nearby wetland and buffer enhancement areas. The number and mitigation unit to be planted with conifers with emphasis on Station areas 367-385 will included in the 90-percent design landscape plans.
Comment 41:	Minimization and mitigation measures, such as construction timing restrictions, to reduce impacts to migratory birds should be considered in the mitigation plan.	The County will develop measures to comply with applicable federal regulations, including MBTA (which is administered by USFWS), during later design stages.