SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to <u>all parts of your proposal</u>, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the <u>SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)</u>. Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [help]

- 1. Name of proposed project, if applicable: Zackuse Creek Fish Passage and Stream Restoration Project
- 2. Name of applicant: [help]

City of Sammamish

3. Address and phone number of applicant and contact person:

Applicant: Department of Public Works

City of Sammamish 801 228th Avenue SE

Sammamish, Washington 98075

Contact person: Tawni Dalziel

Senior Stormwater Program Manager

Department of Public Works

City of Sammamish

425-295-0567

Tdalziel@sammamish.us

4. Date checklist prepared: June 16, 2017

5. Agency requesting checklist: City of Sammamish

6. Proposed timing or schedule (including phasing, if applicable): [help]

Construction is estimated to begin June 2018, pending permit and construction contract approvals. The project will take approximately four months to construct.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]

None at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]

Preliminary Geotechnical Report September 2017, Aspect Consulting, Inc.

Geotechnical Report
January 2018, Aspect Consulting, Inc.

Critical Areas Study – Wetland Delineation and Stream Assessment Report October 2017, Otak

Final Plans, Specifications, and Estimates January 2018, Otak

Final Technical Information Report
January 2018, City of Sammamish Public Works

Joint Aquatic Resources Permit Application (JARPA) May 2017, Otak

Specific Project Information Form (SPIF)

May 2017, Otak

Cultural Resources Review
October 2017, Cultural Resource Consultants

Culvert Sizing Memo October 2017, Otak

Zackuse Creek Bed Material Stability Sept 2017, Otak

SEPA/NEPA Final Environmental Impact Statement – ELS Master Plan Trail 2000, U.S. Dept. of Transportation, FHA, Washington Division, Washington State DOT, King County Facilities Management Division

60% Design East Lake Sammamish Trail 2B September 2016, Parametrix

Critical Areas Study Revised – East Lake Sammamish Trail 2B July 2017, Parametrix

Preliminary Technical Information Report – East Lake Sammamish Trail 2B October 2016, Parametrix

Preliminary Geotechnical Report - East Lake Sammamish Trail 2B Parametrix

Fish Passage TM Supplement FINAL – East Lake Sammamish Trail 2B May 2015, Parametrix

Mitigation Sequencing Compliance Narrrative – East Lake Sammamish Trail 2B July 2017, Parametrix

Arborist Report – East Lake Sammamish Trail 2B July 2017, American Forest Management

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]

King County East Lake Sammamish Trail 2B is currently in review for Shoreline Substantial Development Permit. The fish passage culvert associated with this SEPA is incorporated in the proposed trail improvements.

10. List any government approvals or permits that will be needed for your proposal, if known. [help]

City of Sammamish – Public Agency and Utility Exemption
City of Sammamish – Clear and Grade Permit
Department of Ecology - Construction Stormwater General Permit
Washington Department of Fish and Wildlife - Hydraulic Permit Approval (HPA)
Army Corps of Engineers – Nationawide Permit

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]

The City of Sammamish Public Works Department proposes to construct the Zackuse Creek Fish Passage and Stream Restoration Project to improve salmon spawning habitat in the Lake Sammamish watershed. The project includes replacing two undersized pipe culverts and one undersized box culvert that partially or completely block migrating salmon with fish passable culverts. The three culverts being replaced are located under East Lake Sammamish Parkway NE, the East Lake Sammamish Trail, and East Lake Sammamish Shore Lane NE in the City of Sammamish. Additionally, approximately 490 linear feet of Zackuse Creek will be restored and reestablished to improve salmon spawning habitat upstream of the culvert replacements.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]

The project includes work on both private property and public right of way. The three culvert replacements are planned in the following locations 1) East Lake Sammamish Parkway, approximately 900 ft south of its intersection with Louis Thompson Hill Road, 2) King County Parks East Lake Sammamish Trail - Tax Parcel 3225069015, 3) East Lake Sammamish Shore Lane - Tax Parcel 1738700085 (Weber), and 4) East Lake Sammamish Shore Lane - Tax Parcel 1738700090 (Ivanhoff). Additional private property work will be completed on Tax Parcels 3225069021 (Pereyra) for the stream restoration portion of the work.

Owner: Wally Pereyra Parcel No.: 3225069021

Address: 202 East Lake Sammamish Parkway NE

Legal Description:

LOT B SAMMAMISH BLA# BLA2013-00180 REC# 20140307900003 SD BLA BEING POR

OF SE 1/4 OF NW 1/4 SD STR LY ELY OF E LK SAMMAMISH PKWY NE

Owner: Peter Weber Parcel No.: 1738700085

Address: 205 East Lake Sammamish Shore Lane

Legal Description:

CONNELLS SUBDIV GOVT LOT 2 UNREC PORTION GOVT LOT 2 STR 32-25-06 DESCRIBED AS FOLLOWS: BEGINNING AT INTERSECTION OF SOUTH LINE SD GOVT LOT 2 WITH WLY LINE NORTHERN PACIFIC RAILWAY R/W TH N 38-00 E ALONG SD WLY LINE 813.29 FT TO TPOB TH CONTG N 38-00 E 75 FT TH N 52-00 W 225 FT M/L TO WLY LINE SD GOVT LOT 2 TH SWLY ALONG SD LOT LINE TO PT N 52-00 W FROM TPOB TH S 52-00 E 220 FT M/L TO TPOB TGW 2ND CLASS SHORELANDS ADJ -AKA

TRACT 18 & NORTH HALF TRACT 17 WILLIS J CONNELL'S SUBDIVISION UNRECORDED

Owner: King County Parks Parcel No.: 322506-9015

Address: King County Parks East Lake Sammamish Regional Trail

Legal Description:

PORTION BURLINGTON NORTHERN & SANTA FE RAILWAY CO'S (FORMERLY NP RAILWAY CO) SNOQUALMIE BRANCH LINE R/W 100 FT IN WIDTH OVER & ACROSS GOVT LOTS 1, 2, 3 & 4 & NE QTR OF SW QTR STR 32-25-06 LESS PORTION AS DEEDED TO A. H. & S. HOLMBOE UNDER REC NO 9410200685; LESS PORTION DEEDED TO G. & J. EPPERSON UNDER REC NO 9902101586; TGW PORTION SD RAILWAY CO'S SNOQUALMIE BRANCH LINE R/W 100 FT IN WIDTH OVER & ACROSS GOVT LOT 2 STR 31-25-06

Owner: Daniel and Laurie Ivanhoff

Parcel No.: 173870-0090

Address: 207 East Lake Sammamish Shore Lane NE

Legal Description:

CONNELLS SUBDIV GOVT LOT 2 UNREC SOUTH ONE-HALF OF FOLLOWING: BEGINNING AT PT OF INTERSECTION OF SOUTH LINE GOVT LOT 2 STR 32-25-06 WITH WLY LINE OF NORTHERN PACIFIC RAILWAY R/W TH N 38-00 E ALONG SAID R/W LINE 888.29 FT TO TPOB TH N 38-00 E ALONG SD R/W LINE 100 FT TH N 52-00 W 230 FT M/L TO WLY LINE SAID LOT TH SWLY ALONG SD LOT LINE TO PT N 52-00 W OF TPOB TH S 52-00 E 230 FT M/L TO TPOB TGW SHORELANDS ADJ -AKA LOT 19 CONNELL'S SUBDIVISION OF GOVT LOT 2 UNRECORDED

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth	[help	וכ
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2	General	doco	rintion	of the	cito:	[hala]
a.	General	uesci	IDUIDIT	or trie	SILE.	meioi

(circle one): Flat, <u>rolling</u>, hilly, steep slopes, mountainous, other _____

The project area gently slopes to the west toward the Lake Sammamish shoreline.

b. What is the steepest slope on the site (approximate percent slope)? [help]

Steepest slopes range from 2-6%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]

Soil units mapped within the study area include Ragnar-Indianola association, Everett very gravelly sandy loam, mixed alluvial land, and Alderwood and Kitsap soils. The majority of the study area is mapped as Everett very gravelly sandy loam, and Alderwood and Kitsap soils. None of the listed soil units are mapped as hydric.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]

According to the City's Landslide Hazard map, the project area does lies not within landslide, seismic hazard and erosion hazard near sensitive water body overlay area (SO-190). A portion of the site lies in the erosion hazard area. To the east and upstream of the project area, the area is mapped as Landslide Hazard and Landslide Hazard Drainage Area. Landslide activity in this area has been documented in 2015 and 2017.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]

The stream restoration work will include excavation and filling necessary to reestablish approximately 490 linear feet of Zackuse Creek with approximately 590 cubic yards of excavation and 320 cubic yards fo fill. Total affected area is approximately 5930 sqare feet.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]

Erosion control methods, best management practices will be used to reduce impacts to wetlands. The project will minimally impact Wetland 1 via culvert removal and replacement. Impacts to wetland 2 will be limited to the lower reaches of the wetland closest to ELS Parkway, and extend appx. 530 feet into the wetland, for a total area of 4,240 square feet. Impacts will further be minimized by clearly marking project boundaries to avoid unnecessary disturbance to the wetlands. Areas where vegetation is removed or disturbed will be replanted with native woody shrubs and reseeded.

During construction, the exposed soil will have some erosive potential from rainfall. Construction erosion will be mitigated using Temporary Erosion and Sediment Control Best Management Practices.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]

New pollution generating impervious surface (PGIS) is limited to necessary shoulder work to accommodate a guard rail over the proposed culvert headwall on ELSP. The project will add approximately 4-ft on either side of road pavement with less than 2000-SQ of new pollution generating impervious surface proposed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]

Temporary erosion and sediment control (TESC) plans will be prepared as part of the design to address erosion concerns. A draft construction stormwater pollution prevention plan (SWPPP) will also be developed. The SWPPP will include the following elements to minimize and address potential erosion, each of which rely on the use of best management practices:

- Mark clearing limits
- Establish construction access
- Control flow rates
- Install sediment controls, (including silt fence at the OHWM)

- Stabilize soils
- Protect slopes
- · Protect drain inlets
- Stabilize channels and outlets
- Control pollutants
- Control dewatering
- Maintain BMPs
- Manage the project

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

Construction activities have the potential to create temporary fugitive dust emissions from demolition, materials handling, and earth-moving activities. Also, mobile and stationary equipment would be used to construct the proposed project, generating exhaust emissions (e.g. carbon monoxide, sulfur, and particulates) due to the combustion of gasoline and diesel fuels. These dust and exhaust emissions are expected to be minimal, localized, and temporary.

This project would also generate greenhouse gas (GHG) emissions in two ways: concrete, asphalt, and other materials usage (embodied); and construction activity.

No emissions will occur after the project completion.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]

Off-site sources include traffic on E Lake Sammamish Parkway NE and motorized watercraft on Lake Sammamish. These will not affect the project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]

During construction, dust impacts would be controlled by best management practices such as sweeping and water trucks, as needed. Impacts to air quality could be reduced by implementation of standard federal, state, and local emission control criteria for vehicles and equipment.

- 3. Water [help]
- a. Surface Water:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [help]
 - Lake Sammamish
 - Zackuse Creek, Type F
 - Wetland 1, Rating III

Wetland 2, Rating II

Zackuse Creek (Stream #08.0148) flows through the project site. Zackuse Creek is classified as a Type F (current or future use by salmonids) stream by the City of Sammamish, and has a 150-foot buffer. In the project area, Zackuse Creek flows through Wetland 2 and then through three undersized culverts before discharging into Lake Sammamish. The culverts are all partial or full fish passage barriers per WDFW, and are located under East Lake Sammamish Parkway NE (30-inch diameter pipe), East Lake Sammamish Trail (36-inch diameter pipe), and East Lake Sammamish Shore Lane NE (1.9 feet wide box).

Below 206th Avenue NE, Zackuse Creek transitions from steeper to lower gradients approaching a deposition zone on the east side of East Lake Sammamish Parkway NE in Wetland 2. The stream channel location has adjusted over time in this alluvial fan in response to high flows, fine sediment yields from upgradient stream reaches, and human modifications associated with both surrounding land uses, and the impounding influence of the ELS Parkway road prism on the Zackuse system. An unnatural, 90-degree bend in the channel occurs approximately halfway between 206th Avenue NE and the ELS Parkway that causes localized bank degradation. Downstream of this bend, the coarse substrates in the stream channel diminish and fine sediment is deposited across the floodplain/Wetland 2 complex (alluvial fan). The stream splits into multiple branches, flows subsurface, and surfaces again throughout this area, which is comprised primarily of silts and organic materials (e.g., leaf litter) at the surficial layers. Surface waters rejoin along the east side of the ELS Parkway road embankment, and flow north in a roadside channel for approximately 100 feet before entering the culvert underneath the ELS Parkway road embankment.

Downstream of the East Lake Sammamish Trail, channel morphology is a riffle/glide combination. Substrate consists of approximately 40 percent cobble (apparently placed in-stream) and 60 percent sand/gravel. The stream bank appears to be stable, with no evidence of deep erosional sides or soil sloughing. No large woody debris is present. A 3-foot by 10-foot plunge pool is located at the downstream end of the culvert under the East Lake Sammamish Trail (Parametrix 2016). Stream buffers are limited by the travel corridors and residential uses west of East Lake Sammamish Shore Lane NE.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [help]

The project will require work adjacent to Lake Sammamish. The fish passage culverts will be placed in the alignment of Zackuse Creek. The stream restoration work is proposed within Wetland 2. See JARPA plan set.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [help]

The stream restoration work will include excavation and filling necessary to reestablish approximately 490 linear feet of Zackuse Creek with approximately 590 cubic yards of excavation and 320 cubic yards fo fill. Total affected area is approximately 5930 sqare feet. Fill material will primarily include large wood debris from onsite cleared trees and river rock cobbles sourced locally.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]

The project will require temporary bypass of Zackuse Creek during construction of culverts through the use of gravity drains or pumped systems. The work will take place during the fish passage winder July 1-September 30. Fish screens will be used with all bypass systems.

Dewatering of groundwater in accordance to the SWPPP may be also needed during excavation for stream restoration and culvert replacement.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]

The floodplain around Lake Sammamish is at a standard elevation of 33 feet NGVD29. Ordinary high water is at an elevation of 28.18 feet NGVD29. No project components are located within the lake ordinary high water mark.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]

Discharge of waste materials into surface waters is not expected due to BMP measures taken to contain and control waste materials. However, several construction activities such as sawcutting, grinding of existing surfaces, concrete pouring and handling, etc., will generate pollutants that could potentially enter the drainage conveyance system. Non-sediment pollutants that may be present during construction activities include:

- Petroleum products including fuel, lubricants, hydraulic fluids, and form oils
- Paints, glues, solvents, and adhesives
- Concrete and concrete wash water
- Chemicals associated with portable toilets

Procedures to prevent and control pollutants including hazardous materials, such as hydrocarbons and pH-modifying substances, will be described in the Spill Prevention, Control, and Countermeasures (SPCC) plan. The SPCC plan will meet the requirements of the WSDOT 2016 Standard Specifications for Road, Bridges, and Municipal Construction.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]

No well water withdraws are planned. If dewatering during excavation is necessary during construction, the collected water would be managed according to the SWPPP. Quantities of water potentially collected by dewatering are unknown. No other ground water withdrawals or discharge are anticipated.

For surface flows that recharge groundwater, base flows to the existing stream channel will be maintained.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [help]

There will be no waste material from septic tanks or other sources discharged into ground water associated with this project.

- c. Water runoff (including stormwater):
 - 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]

Zackuse Creek will be isolated from the construction area during the culvert replacements. A stream bypass pipe will be installed to bypass Zackuse Creek during the culvert replacement, and all in-water work will occur during WDFW-approved in-water work window.

The new stream channel will be constructed previous to or concurrently with the culvert replacements. Zackuse Creek will be allowed to flow in its current flow path until the new channel has been constructed and stabilized, and all construction of the new channel will be isolated from the existing channel until completion of the new channel. Zackuse Creek will be diverted into the new stream channel after the new culverts are in place, the stream bypass is removed, and the new channel has been constructed.

In order to limit turbidity during removal and replacement of the culverts, a silt curtain may be installed at mouth of Zackuse Creek along Lake Sammamish shoreline.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]

This project would not generate waste materials that could enter groundwater or surface waters. Construction activities such as sawcutting, concrete pouring and handling will generate pollutants that could potentially enter the drainage conveyance system. Procedures to prevent and control pollutants including process water will be described in the SPCC plan. Turbidity generated by construction would be contained on the project location or (with the proper approvals) discharged to a sanitary sewer, according to the TESC Plan.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [help]

The project is designed to provide fish passage and fish spawning habitat. Zackuse Creek upstream of ELSP is braided and forced through multiple sediment choked channels. The stream restoration work will route Zackuse Creek through a primarily channel connected to new fish passable culverts under ELSP, the King County trail, and East Lake Sammamish Shore Lane.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage

pattern impacts, if any: [help]

Upon completion, the project is designed to improve fish passage and conveyance within the project area, and to have no permanent impacts on surface and groundwater. Stormwater, groundwater, and runoff impacts associated with construction will be avoided and minimized according to the Construction SWPPP.

ı.	Check the types of vegetation found on the site: [help]
	X Deciduous tree: alder, maple, aspen, other
	X_ Evergreen tree: fir, cedar, pine, other
	X_Shrubs
	<u>X</u> _Grass
	XPasture
	Crop or grain
	Orchards, vineyards or other permanent crops.
	XWet soil plants: cattail, buttercup, bullrush, skunk cabbage, othe
	Water plants: water lily, eelgrass, milfoil, other
	Other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [help]

Vegetation within the project area largely consists of forested and shrub wetland habitats, residential landscaping, roadside grass buffers, and maintained lawns. A large forested wetland/upland complex is located east of East lake Sammamish Parkway NE. Wetland vegetation typically includes Black cottonwood (*Populus balsamifera*), red alder (*Alnus rubra*), redstem dogwood (*Cornus alba*), nootka rose (*Rosa nutkana*), salmonberry (*Rubus spectabilis*), reed canarygrass (*Phalaris arundinacea*), and field horsetail (*Equisetum arvense*). Wetland and buffer specific vegetation communities are described in the delineation reports completed for the project (Otak 2016 and Parametrix 2016). For site access, 35-60 trees, less than 24 inches db, and a combination of red alder, black cottonwood, and big leaf maple will be felled and used for large wood debris within the stream restoration area.

c. List threatened and endangered species known to be on or near the site. [help]

No threatened or endangered plant species are known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

Clearing limits will be clearly marked to preserve existing vegetation. No stockpiling of materials, vehicular traffic, or storage equipment or machinery will be allowed outside of the clearing limits. Removed trees will provide large woody debris for stream restoration.

Final plans and specifications will include new plantings in the stream restoration area.

e. List all noxious weeds and invasive species known to be on or near the site. [help]

No noxious weeds are known to be within the project area.

- 5. Animals [help]
- a. <u>List</u> any birds and <u>other</u> animals which have been observed on or near the site or are known to be on or near the site. [help]

Examples include:

birds: hawk, heron, eagle, songbirds, other: waterfowl mammals: deer, beaver, other: raccoons and other urban wildlife fish: bass, salmon, trout, herring, shellfish, other <a href="mailto:mailt

b. List any threatened and endangered species known to be on or near the site. [help]

Adult and juvenile Chinook salmon and steelhead trout (listed as Threatened under the Federal Endangered Species Act) migrate through Lake Sammamish. Adults migrate upstream to reach spawning grounds in Issaquah Creek and Lake Sammamish tributaries; juveniles migrate downstream from their natal streams to reach the ocean. Lake Sammamish also contains coho salmon and bull trout (Threatened under the Federal Endangered Species Act). Kokanee salmon is a special species of concern for Lake Sammamish.

c. Is the site part of a migration route? If so, explain. [help]

As described above, adult and juvenile salmon migrate up and downstream, respectively, through Lake Sammamish. Migrating waterfowl may use the lake as resting and foraging areas during spring and fall migrations.

d. Proposed measures to preserve or enhance wildlife, if any: [help]

The project is a fish enhancement project that provides fish passage through three culverts and the restoration of spawning grounds for approximaltey 490-ft.

Existing trees will be preserved and protected to the extent feasible. Mitigation plantings will enhance the habitat value of the stream and stream buffer.

e. List any invasive animal species known to be on or near the site. [help]

King County lists the European starling, house sparrow, Eastern gray squirrel, and fox squirrel as terrestrial invasive species for this area.

- 6. Energy and Natural Resources [help]
- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]

The project has no new energy needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]

No measures are necessary.

- 7. Environmental Health [help]
- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [help]
 - 1) Describe any known or possible contamination at the site from present or past uses. [help]

At the project site, there is no known contamination from present or past uses according to the Washington Department of Ecology Toxic Hazard Cleanup Site Index.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [help]

No gas transmission pipelines or hazardous liquid pipelines are located within the project area or in the vicinity.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [help]
 - Several construction activities such as sawcutting, grinding of existing surfaces, concrete pouring and handling, etc., will generate pollutants that could potentially enter the drainage conveyance system. Non-sediment pollutants that may be present during construction activities include: petroleum products including fuel, lubricants, hydraulic fluids, and form oils; paints, glues, solvents, and adhesives; concrete and concrete wash water; and chemicals associated with portable toilets. No toxic or hazardous chemicals will be stored, used, or produced during the operation of the project.
- 4) Describe special emergency services that might be required. [help]
 - Emergency services are not anticipated at the site. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local fire department and emergency medical services would respond. Spill response procedures must be implemented in a timely manner to prevent the release of pollutants. Any non-hazardous accidents may also require medical services. The full range of safety and accident response supplies will be on-site to treat any emergency.
- 5) Proposed measures to reduce or control environmental health hazards, if any: [help]

Procedures to prevent and control pollutants including hazardous materials, such as hydrocarbons and pH-modifying substances, shall be described in the Spill Prevention, Control, and Countermeasures (SPCC) plan. Common sources of pH-modifying materials include bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, and concrete pumping and mixer washout waters. Secondary containment must be provided for hazardous fluids stored on site.

All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well organized, and free of debris. Cover, containment, and protection from vandalism shall be provided for all chemicals, liquid products, petroleum products, and non-inert wastes present on the site. On-site fueling tanks shall include secondary containment. All potential pollutants other than sediment will be handled and disposed of in a manner that does not cause contamination of stormwater.

b. Noise [help]

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]

Existing noise includes traffic on East Lake Sammamish Parkway NE. Existing noise will not affect construction or operation of the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [help]

Noise and vibration levels in the vicinity of construction would temporarily increase during construction. Noise and medium vibration are expected to result from operation of heavy trucks, excavators, and front end loaders and track hoemounted pavement breakers. Temporary construction noise is exempt from state noise limits during daytime hours, per WAC 173-60-050(3)(a).

The completed project would not contribute noise or vibration beyond that which already exists in the area.

3) Proposed measures to reduce or control noise impacts, if any: [help]

Construction equipment would be muffled in accordance with applicable laws, and the project would comply with environmental noise standards set by the State of Washington, WAC 173-60, which establish limits on the level and duration of noise crossing property boundaries.

- 8. Land and Shoreline Use [help]
- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

The current use of the site includes City of Sammamish public right-of-way, King Cunty trail right of way, and private residential property. The stream restoration work wil be located on private property in a critical area/open space.

Traffic control during the project construction will have temporary impacts to adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

None of the project area is working farmland or forest land.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [help]

No working farm or forest land surrounds the project area.

c. Describe any structures on the site. [help]

The current structures in the City of Sammamish public right-of-way, King Cunty trail right of way, and East Lake Sammamish Shore Lane are limited to paved roadway and associated utility infrastructure. No current structures exist in the stream restoration area.

d. Will any structures be demolished? If so, what? [help]

Existing culverts under ELSP, King Cunty trail right of way, and East Lake Sammamish Shore Lane wil be removed.

e. What is the current zoning classification of the site? [help]

The stream restoration work on the Pereyra property lies within R-6 zoning designation (Urban Residential, 6 dwelling units per acre). All other project work lies within the R-4 zoning designation (Urban Residential, 4 dwelling units per acre).

f. What is the current comprehensive plan designation of the site? [help]

Land use designations within the project area are predominantly Single Family and a small strip of Recreation/Open Space along the East Lake Sammamish Trail.

g. If applicable, what is the current shoreline master program designation of the site? [help]

No portion of the project work falls within shoreline jurisdiction. Some of the properties (Weber and Ivanhoff) lie within the shoreline jurisdiction.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

Zackuse Creek is a Type F stream and is classified a critical area. Wetlands 1 and 2 are wetland critical areas.

The Lake Sammamish shoreline itself is a shoreline of statewide significance.

The shoreline buffer is located within a mapped seismic hazard area.

i. Approximately how many people would reside or work in the completed project? [help]

The project will not create structures in which people may live or work.

j. Approximately how many people would the completed project displace? [help]

Zero.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]

No measures necessary.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]

The proposed project is subject to land use and building construction permitting by the City of Sammamish.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [help]

Not applicable; no measures necessary.

- 9. **Housing** [help]
- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]

No housing units are proposed as part of this project.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]

No housing units will be eliminated as part of this project.

c. Proposed measures to reduce or control housing impacts, if any: [help]

Not applicable.

- 10. **Aesthetics** [help]
- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]

All culverts structures will be underground with the culvert ends exposed to the stream channel.

b. What views in the immediate vicinity would be altered or obstructed? [help]

Some views in the Eden Glen neighborhood may be affected by tree removal in the stream restoration and staging areas.

b. Proposed measures to reduce or control aesthetic impacts, if any: [help]

None are proposed.

- 11. Light and Glare [help]
- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]

No new lighting is proposed as part of the project.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]

No new lighting is proposed as part of the project.

c. What existing off-site sources of light or glare may affect your proposal? [help]

There are no known existing off-site sources of light or glare that would affect the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]

No light and glare impacts are anticipated and no mitigation measures are proposed.

- 12. **Recreation** [help]
- a. What designated and informal recreational opportunities are in the immediate vicinity? [help]

The East Lake Sammamish Trail in this project area is currently an interim gravel bicycle/pedestrian trail and going through the permitting process seeking approval to be developed into a paved trail. A decision on this trail improvement project has not been issued to date.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]

The completed project will not displace any existing recreational uses. Temporary displacement may occur during construction.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]

Measures may be taken to temporarily reroute the East Lake Sammamish Trail during the period of disruption.

13. Historic and cultural preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]

According to the Washington Information System for Architectural and Archaeological Records Data (WISAARD), there are no properties included in the Historic Property Inventory located within the project study area.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

According to WISAARD, there are no such cultural resources within the study area.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

To determine if National Register or Washington Heritage properties are located in or adjacent to the project area, the project location was checked against the following registers on August 19, 2015:

Washington Heritage Register and National Register of Historic Places: http://www.dahp.wa.gov/historic-register (general site on historic registers), http://www.dahp.wa.gov/washington-historic-register (a site specific to the Washington Heritage Register) and the WISAARD database (http://www.dahp.wa.gov/learn-and-research/find-a-historic-place.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [help]

No impacts anticipated; no measures proposed.

- 14. **Transportation** [help]
- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]

Public streets within the affected area include:

- E Lake Sammamish Parkway
- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

The area is not served by public transit.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]

The project will neither create nor eliminate parking spaces.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The project will not require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]

The project will not use or occur in the immediate vicinity of water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

The project is not expected to either increase or decrease the number of vehicular trips in the area.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]

The project will not interfere with, affect, or be affected by the movement of any agricultural or forest products on roads or streets in the area.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

No transportation impacts are anticipated. Temporary traffic control will be implemented during construction.

- 15. Public Services [help]
- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

The project would not create an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]

No impacts on public services are anticipated and no mitigation measures are proposed.

- 16. **Utilities** [help]
- a. Circle utilities currently available at the site: [help]
 electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,

otherstormwater				
b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]				
The project consists of stormwater conveyance improvements provided by the applicant (City of Sammamish). The fish passage and stream restoration improvements are described throughout this checklist. No new utilities are proposed as part of the project;				
Multiple existing utilities run parallel to roadways where construction would occur. Necessary utility removal, adjustment, and relocation will be conducted by an external party according to agency regulations and permits, utility provider and emergency response provider requirements, and best management practices.				
C. Signature [help]				
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.				
Signature: Tabe				
Name of signee _Tawni Dalziel				
Sammamish Date Submitted:October 2017				
D. supplemental sheet for nonproject actions [help]				
(IT IS NOT NECESSARY to use this sheet for project actions)				
Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.				
When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.				
 How would the proposal be likely to increase discharge to water; emissions to air; pro- duction, storage, or release of toxic or hazardous substances; or production of noise? 				

Proposed measures to avoid or reduce such increases are:

	Proposed measures to protect or conserve plants, animals, fish, or marine life are:
3.	How would the proposal be likely to deplete energy or natural resources?
	Proposed measures to protect or conserve energy and natural resources are:
4.	How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
	Proposed measures to protect such resources or to avoid or reduce impacts are:
5.	How would the proposal be likely to affect land and shoreline use, including whether it
0.	would allow or encourage land or shoreline uses incompatible with existing plans?
	Proposed measures to avoid or reduce shoreline and land use impacts are:
6.	How would the proposal be likely to increase demands on transportation or public services and utilities?
	Proposed measures to reduce or respond to such demand(s) are:
7.	Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?



