WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form[1,2] [help]

US Army Corps of Engineers ®
Seattle District

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

_____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
Zackuse Creek Fish Passage Project

Part 2–Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Middle)			
Dalziel, Tawni			
2b. Organization (If applicable)			
City of Sammamish			
2c. Mailing Address (Street or PO Box)			
801 228th Ave SE			
2d. City, State, Zip			
Sammamish, Washington, 98075			
2e. Phone (1)	**2f.** Phone (2)	**2g.** Fax	**2h.** E-mail
425-295-0500			tdalziel@sammamish.us

[1] Additional forms may be required for the following permits:
- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

[2] To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias__resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [help]

3a. Name (Last, First, Middle)			
Kevin O'Brien			
3b. Organization (If applicable)			
Otak, Inc.			
3c. Mailing Address (Street or PO Box)			
11241 Willows Road NE			
3d. City, State, Zip			
Redmond, Washington, 98052			
3e. Phone (1)	**3f.** Phone (2)	**3g.** Fax	**3h.** E-mail
425-822-4446			

Part 4–Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [help]

☒ Same as applicant. (Skip to Part 5.)

☒ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☒ There are multiple upland property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.

☐ Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete JARPA Attachment E to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
See Attachment A(s).			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4d. City, State, Zip			
4e. Phone (1)	**4f.** Phone (2)	**4g.** Fax	**4h.** E-mail

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

☐ There are multiple project locations (e.g. linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]

☒ Private
☐ Federal
☒ Publicly owned (state, county, city, special districts like schools, ports, etc.)
☐ Tribal
☐ Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)

5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]

East Lake Sammamish Parkway NE, East Lake Sammamish Trail, East Lake Sammamish Shore Lane NE

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]

Sammamish, Washington, 98075

5d. County [help]

King

5e. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range
	32	25 North	06 East

5f. Provide the latitude and longitude of the project location. [help]

- Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

47.609968 N lat. / -122.070294 W long.

5g. List the tax parcel number(s) for the project location. [help]

- The local county assessor's office can provide this information.

3225069021 (Pereyra), 3225069015 (King County ROW), 1738700085 (Weber), 1738700090 (Ivanoff)

5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]

Name	Mailing Address	Tax Parcel # (if known)
See Attachment C.		

5i. List all wetlands on or adjacent to the project location. [help]

Two critical areas reports have been completed for this project that document all wetlands and streams in the project area: 1) *Critical Areas Study – East Lake Sammamish Master Plan Trail – South Sammamish Segment B* (Parametrix 2016), and 2) *Wetland Delineation and Stream Assessment Report – Zackuse Creek Fish Passage Project* (Otak 2016). A Technical Memorandum dated May 10, 2017 from Parametrix provides a summary of the wetlands documented only within the Zackuse Creek Fish Passage project area, and is included as an attachment with this JARPA submittal package along with the Otak report. The Parametrix report documented Wetland 26A between East Lake Sammamish Parkway NE and East Lake Sammamish Trail, and Wetlands 26B and 26C between East Lake Sammamish Shore Lane NE. The Otak report documents Wetland 1 (identified as Wetland 26A by Parametrix), and Wetland 2 east of East Lake Sammamish Parkway NE. Both baseline reports document Zackuse Creek as the only watercourse in the project area.

The table below summarizes the characteristics of each wetland in the project area.

Wetland ID		Classification		Area (acres)	Ecology Rating[2] (habitat score[3])	Buffer Width (feet)
Otak	Parametrix	Cowardin Class[1]	HGM for Rating			
1	26A	PFO,PSS	Depressional	0.91	III (6)	50
2	-	PFO,PSS, PEM	Depressional	>3.85	II (8)	150
-	26B	PEM	Slope	0.33	IV (3-4)	50
-	26C	PSS,PEM	Depressional	0.02	IV (3-4)	50

1. Cowardin et al. (1979). Class based on vegetation: PSS = Palustrine Scrub-Shrub; PFO = Palustrine Forested; PEM = Palustrine Emergent.
2. Wetlands rated according to Hruby (2004 and 2014) per SMC 21A.50.290.
3. Habitat scores for Wetlands 1 and 2 are from Otak (2016). Habitat scores for Wetlands 26B and 26C are from Parametrix (2016), and then converted using Ecology's category and functions conversion chart (http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems/2014updates.html#tables) for application of SMC 21A.50.290.

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

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 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.

5k. Is any part of the project area within a 100-year floodplain? [help]

☐ Yes ☒ No ☐ Don't know

The project does not occur within a FEMA-mapped 100-year floodplain.

5l. Briefly describe the vegetation and habitat conditions on the property. [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).

5m. Describe how the property is currently used. [help]

The project area spans a large forested complex west of 206th Avenue NE, the three travel corridors, and residential areas west of East Lake Sammamish Shore Lane NE. East Lake Sammamish Shore Lane NE is a private road. East Lake Sammamish Trail is an unpaved recreational walking and biking trail owned by King County. East Lake Sammamish Parkway is a minor arterial roadway on the east side of Lake Sammamish.

5n. Describe how the adjacent properties are currently used. [help]

Adjacent properties are comprised of single family residences west of East Lake Sammamish Shore Lane NE. Gravel parking areas, community gardens, lawns, and patches of trees and shrubs are interspersed between East Lake Sammamish Trail and East Lake Sammamish Shore Lane NE. A small pasture is located south of the forested area east of East Lake Sammamish Parkway NE. Undeveloped forested land and single-family residences along 206 Avenue NE and NE 3rd Street abut the north and east sides of the forest within which Zackuse flows.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]

Structures within the project area include the three transportation routes and culverts 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). A split rail fence is located along both sides of the East Lake Sammamish Trail. Utilities associated with the culverts include communications and water lines.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]

Driving from 520 East to WA-202 E/Redmond Way in Redmond. Take the WA-202/Redmond Way exist from WA-520 E. Drive south to East Lake Sammamish Parkway NE. Project site is between Louise Thompson Rd NE and East Lake Sammamish Shore Lane SE.

Part 6–Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [help]

There are two components for this project. The first component will replace three partial fish passage blocking concrete culverts with fish passable box culverts. The second project component is to restore and realign a portion of Zackuse Creek in order to create enhanced stream channel morphology that is better suited for kokanee spawning and rearing habitat.

6b. Describe the purpose of the project and why you want or need to perform it. [help]

The purpose of the project is to provide fish passage and suitable spawning and rearing habitat for native kokanee salmon within Zackuse Creek. The need for this project is to increase the abundance and distribution of spawning locations for kokanee salmon.

Currently three undersized culverts impede fish passage in Zackuse Creek. The concrete culverts are a partial fish passage barrier due to their slight elevations which contribute to high velocity water flows (Lake Sammamish Kokanee Work Group, 2014). Immediately upstream of the culverts and east of ELS Parkway, Zackuse Creek flows in a poorly defined channel through a valley bottom wetland before turning 90 degrees at the ELS Parkway road embankment to enter the culvert. The lack of a linear channel results in poor sediment transport and an accumulation of sediment and debris.

The project is comprised of two components to improve fish passage and habitat within the creek. The first project component includes replacing the three existing concrete culverts under ELS Parkway, ELS Trail and East Shore Lane with fish passable box culverts. The design of the culverts is based on accepted Washington Department of Fish and Wildlife (WDFW) stream simulation and hydraulic design criteria to provide appropriate fish passage. A technical memorandum that documents the culvert sizing methodology used for this project is included with this JARPA package. The existing culverts will be replaced with 12-foot wide concrete box culverts. A minimum depth of two feet of streambed gravels will be placed inside the culvert for scour protection.

The second project component is to restore, reconstruct, and realign the existing Zackuse Creek channel through the wetland complex upstream of the ELS Parkway culvert. The work will include altering the channel morphology and gradient to enhance kokanee spawning habitat and reduce the risk of major, lateral channel migration. The linear length of the channel will be reduced from approximately 530 feet to 400 feet to improve sediment transport and spawning habitat for kokanee salmon.

6c. Indicate the project category. (Check all that apply) [help]

☐ Commercial ☐ Residential ☐ Institutional ☐ Transportation ☐ Recreational
☐ Maintenance ☒ Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [help]

☐ Aquaculture	☒ Culvert	☐ Float	☐ Retaining Wall (upland)
☐ Bank Stabilization	☐ Dam / Weir	☐ Floating Home	☐ Road
☐ Boat House	☐ Dike / Levee / Jetty	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat Launch	☐ Ditch	☐ Land Clearing	☐ Stairs
☐ Boat Lift	☐ Dock / Pier	☐ Marina / Moorage	☐ Stormwater facility
☐ Bridge	☐ Dredging	☐ Mining	
☐ Bulkhead	☐ Fence	☐ Outfall Structure	

☐ Buoy ☒ Channel Modification	☐ Ferry Terminal ☐ Fishway	☐ Piling/Dolphin ☐ Raft	☐ Swimming Pool ☐ Utility Line
☐ Other:			

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

Culvert 1: Under ELS Parkway.

Culvert 2: Under ELS Trail

Culvert 3: Under East Shore Lane

Existing culverts will be removed using a combination of stream diversion, work isolation structures, pavement cutting, and equipment to lift out the existing culvert structures. Additional excavation of roadbed/trail material to accommodate the replacement culverts will occur using backhoes and excavators. Replacement culverts will be set into place using either cranes or backhoes. Repaving of the trail and roadways will be accomplished using typical roadway repaving and resurfacing equipment. All culverts are intended to be replaced during the same construction window for in-water work.

Culvert 1 will be replaced in two stages (See Sheet 11 of drawing Set A) following the installation of the stream bypass and other temporary erosion and sediment control measures. The existing roadway surface will be expanded within the road right of way and the existing road embankment to temporarily accommodate two lanes of traffic during construction. Temporary impacts to wetlands will be minimized by constructing temporary retaining walls west and east of the road. The new culvert will then be installed half at a time.

Culverts 2 and 3 will be replaced alternately to allow for local traffic to access residences. The proposed construction access and traffic plan includes closing off the East Lake Sammamish Trail, and using it as a two-lane road for vehicle traffic. The existing trail surface will be temporarily expanded to 16-feet to accommodate emergency vehicles and placement of a traffic barrier during construction as residences cannot be isolated. See Sheet 6 of drawing Set B included with this JARPA package.

Stream channel construction: Zackuse Creek

The new stream alignment will be accomplished using a tracked excavator to create the channel, and dump trucks and excavators to backfill stream bed gravels and place large wood. The new stream channel will be constructed in isolation from stream surface water by installing a temporary stream bypass with a gravel bag berm, and placing straw wattles to minimize sediment movement in wetlands. Log corduroys or plastic mats will be used to construct the new channel alignment to minimize soil compaction by large equipment. The channel location will be accessed from an existing gravel driveway, and staging will occur at the end of the road in uplands as shown in the JARPA drawings (See Sheets 4, 5, and 6 of drawing Set A). Restoration and enhancement plantings will be installed manually in the abandoned stream channel area and in temporarily impacted wetlands and buffer areas at the conclusion of the project.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [help]

- If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.

Start Date: May 1, 2018 End Date: November 30, 2018 ☐ See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

$1.2 million

6h. Will any portion of the project receive federal funding? [help]

- **If yes**, list each agency providing funds.

☐ Yes ☒ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

☒ Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.) [help]

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

☐ Not applicable

Erosion control methods and Best Management Practices will be used to reduce impacts to wetlands. The project will minimally impact Wetlands 1/26A, 2, 26B, and 26C during culvert removal and replacement. See the table in Section 7H for itemized list of impacts to wetlands by activity and duration.

Impacts to Wetland 2 will be limited to the lower reaches of the wetland closest to East Lake Sammamish Parkway for the channel realignment, and extend approximately 400 linear feet into the wetland, for a total area of 5,930 square feet of wetland conversion. Approximately 530 linear feet (6,090 SF) of the existing Zackuse Creek stream channel will be abandoned and planted with native trees and shrubs to expedite plant succession. Overall wetland habitat is expected to increase by approximately 620 SF.

Impacts will further be minimized by clearly marking project boundaries with high visibility fencing to avoid unnecessary disturbance to the wetlands, and installing all temporary erosion and sediment control measures. Areas where wetland vegetation is removed or disturbed outside of the new stream channel will be replanted with native woody trees and shrubs.

A total

7b. Will the project impact wetlands? [help]

☒ Yes ☐ No ☐ Don't know

The proposed project will permanently impact a total of 6,329 SF of wetlands from regrading associated with the new culvert installations, and the new 400 linear-foot channel of Zackuse Creek. A total of 9,783 SF of wetlands will be temporarily impacted and restored with native trees and shrubs.

7c. Will the project impact wetland buffers? [help]

☒ Yes ☐ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

- **If Yes**, submit the report, including data sheets, with the JARPA package.

☒ Yes ☐ No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]

- **If Yes**, submit the wetland rating forms and figures with the JARPA package.

☒ Yes ☐ No ☐ Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]

- **If Yes**, submit the plan with the JARPA package and answer 7g.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Don't know

The project is considered to be self-mitigating. Existing wetland habitat will be converted to fish-bearing stream/fluvial habitat, and the abandoned portion of Zackuse Creek will be allowed to convert to palustrine forested wetland habitat similar to the surrounding wetland habitat. Plantings are proposed within the abandoned channel to expedite the succession to vegetated wetland habitat. Hydrology in wetlands in the stream channel re-location area (Wetland 2) is driven by groundwater seeps rather than overbank flooding, and no loss of wetland cover is expected from re-locating the channel.

The project intends to improve environmental resources by restoring fish passage conditions and enhancing created stream channel habitat. Approximately 400 linear feet of stream channel suitable for migration, spawning, and rearing will be constructed, and three fish passage blocking culverts will be replaced with fish passable box culverts. Native trees and shrubs will be installed in temporarily disturbed areas. Increased fish access to the upstream habitat in Zackuse Creek could increase overall production within the stream's basin.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

As noted above, the project is a restoration project and is anticipated to be self-mitigating. Creation of suitable spawning, rearing, and migration habitat for kokanee salmon is based on evaluation of limiting habitat factors for kokanee in the Lake Sammamish watershed.

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Activity (fill, drain, excavate, flood, etc.)	Wetland Name[1]	Wetland type and rating category[2]	Impact area (sq. ft. or Acres)	Duration of impact[3]	Proposed mitigation type[4]	Wetland mitigation area (sq. ft. or acres)
Excavate	Wetland 2	PFO,PSS, PEM (Category II)	5,930 SF	Permanent	None	--
Fill	Wetland 2	PFO,PSS, PEM (Category II)	Same as excavation area	Permanent	None	--
Clearing	Wetland 2	PFO,PSS, PEM (Category II)	7,950 SF	Temporary	None	--
Excavate	Wetland 1 / 26A	PFO,PSS (Category III)	399 SF	Permanent	None	--
Fill	Wetland 1 / 26A	PFO,PSS (Category III)	Same as excavation	Permanent	None	--
Clearing	Wetland 1 / 26A	PFO,PSS (Category III)	1,486 SF	Temporary	None	--
Clearing	26B	PEM (Category IV)	99	Temporary	None	
Clearing	26C	PSS,PEM (Category IV)	248	Temporary	None	

[1] If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.
[2] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.
[3] Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.
[4] Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

Fill within the excavated stream channel in Wetland 2 will consist of rounded streambed gravels, per WSDOT specifications. Approximately 5 tons of quarry spall and 530 tons of 4-inch streambed cobbles will be placed within the new channel alignment. A total of 320 cubic yards will be filled.

Fill within Wetland 1 will consist of 5 cubic yards of streambed gravels.

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

Excavation will occur within Wetland 2 for the purpose of stream channel reconstruction. Excavation will be conducted using backhoes and excavator equipment. Excavated material will consist of existing wetland soils. Approximately 590 cubic yards will be excavated.

Excavation within Wetland 1 will consist of 31 cubic yards of existing wetland soils by backhoes and excavator equipment for the purpose of widening and stabilizing the stream channel.

All excavated material will be disposed of at an approved facility.

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

☒ Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]

☐ Not applicable

Best Management Practices will be used to reduce impacts to waterbodies. Any storm water runoff from construction activities will be intercepted by installed temporary erosion and sediment control methods such as silt fencing and straw wattles. Spill containment measures will be properly implemented, monitored and maintained. Soil disturbances will be minimized to the maximum extent possible. Construction activities will occur during the dry season within WDFW's in-water work window. The project does not require any surface water or groundwater withdrawals and no water will be discharge to groundwater.

8b. Will your project impact a waterbody or the area around a waterbody? [help]

☒ Yes ☐ No

A total of 487 SF of Zackuse Creek will be permanently impacted from re-grading the stream channel and installing habitat gravels for the three new culverts. Approximately 530 linear feet of Zackuse Creek will be abandoned and converted to wetland habitat, and 400 linear feet of new channel will be constructed. Shortening the stream length is necessary to increase the overall stream grade to improve sediment transport and instream habitat for kokanee. A total of 13 linear feet of stream channel will be day-lighted by removing the existing culverts.

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help]

- **If Yes**, submit the plan with the JARPA package and answer 8d.
- **If No, or Not applicable,** explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Don't know

Project is self-mitigating. Project intends to restore fish passage for native kokanee salmon by replacing fish passage barriers and restoring stream alignment. Increased fish access to the upstream habitat in Zackuse Creek could increase overall production within the stream's basin. Replacing the culverts downstream of East Lake Sammamish Parkway NE will result in a net increase of approximately 13 linear feet of open channel.

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [help]

NA.

8e. Summarize impact(s) to each waterbody in the table below. [help]

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name[1]	Impact location[2]	Duration of impact[3]	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Excavation	Zackuse Creek	In water	Permanent	62 CY	487
Fill	Zackuse Creek	In water	Permanent	39 CY	Same area as excavation

[1] If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.
[2] Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.
[3] Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

Fill material will consist of 39 cubic yards of streambed gravels and will occur within the creek bed on the upstream and downstream ends of each culvert to tie the existing streambed grade to the new culverts.

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

Excavation will occur on the upstream and downstream ends of each culvert for the removal of existing culverts and for the installation of the new, larger box culverts. Approximately 62 cubic yards will be removed and disposed of at an approved facility.

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [help]

Agency Name	Contact Name	Phone	Most Recent Date of Contact

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [help]

- **If Yes,** list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: http://www.ecy.wa.gov/programs/wq/303d/.

☐ Yes ☒ No

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help]

- Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.

1711001202 – Lake Sammamish

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help]

- Go to http://www.ecy.wa.gov/water/wria/index.html to find the WRIA #.

WRIA 8 – Cedar/Sammamish

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]

- Go to http://www.ecy.wa.gov/programs/wq/swqs/criteria.html for the standards.

☒ Yes ☐ No ☐ Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]

- If you don't know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☐ Other: _____

9g. What is the Washington Department of Natural Resources Water Type? [help]

- Go to http://www.dnr.wa.gov/forest-practices-water-typing for the Forest Practices Water Typing System.

☐ Shoreline ☒ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]

- **If No**, provide the name of the manual your project is designed to meet.

☒ Yes ☐ No

Name of manual: _____

9i. Does the project site have known contaminated sediment? [help]

- **If Yes**, please describe below.

☐ Yes ☒ No

9j. If you know what the property was used for in the past, describe below. [help]

The properties associated with the culvert replacements are currently and have been used in the past as transportation features (trail, local access route, arterial) The subject property for the proposed stream construction previously had a residential structure and associated outbuildings located on it that are now in disrepair; currently, it is forested and unused.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [help]

- **If Yes**, attach it to your JARPA package.

☒ Yes ☐ No

The "East Lake Sammamish Master Plan Trail – Historic, Cultural, and Archeological Resources" report was completed in October 2006 by Paragon Associates for King County for future upgrades to the East Lake Sammamish Trail. The project area for the Zackuse Fish Passage Project (between approximately STA 420+00 to 426+00) was not identified in that report as having high potential for historic cultural resources related to Euro-American history. However, representatives from the Snoqualmie Tribe said that this area should be considered culturally sensitive. The City of Sammamish will coordinate with tribal representatives to avoid unnecessary impacts to cultural resources during construction.

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

No federally listed species occur within the vicinity of the project or are likely to be affected by the proposed work. Puget Sound Chinook salmon ESU and Puget Sound steelhead salmon DPS occur in the Lake Sammamish watershed; however, Zackuse Creek does not provide suitable habitat for either of these species. No designated critical habitat for either species occurs at the project location or in the vicinity. See the Specific Project Information Form (SPIF) for use of the Restoration Programmatic for the State of Washington for compliance with the Endangered Species Act.

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]

Washington Department of Fish and Wildlife's (WDFW) Priority Habitat Species (PHS) Web online mapping tool lists several priority fish species within Zackuse Creek, including: residential coastal cutthroat (*Oncorhynchus clarkii*), sockeye/kokanee salmon (*O. nerka*), winter-run steelhead (*O. mykiss*), and coho salmon (*O. kisutch*) (WDFW 2017). However, WDFW's SalmonScape (2017) indicates that the presence of Chinook, steelhead and sockeye are modeled and do not have a documented occurrence within the creek.

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at http://apps.oria.wa.gov/opas/.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.
- For a list of addresses to send your JARPA to, click on agency addresses for completed JARPA.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.

☐ A copy of the SEPA determination or letter of exemption is included with this application.

☐ A SEPA determination is pending with _____ (lead agency). The expected decision date is _____.

☒ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]

☒ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?

_____

☒ Other: Statutory Exemption of fish enhancement projects, RCW 43.21C.0382

☐ SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

☐ Substantial Development ☐ Conditional Use ☐ Variance

☐ Shoreline Exemption Type (explain): _____

Other City/County permits:

☐ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

☒ Hydraulic Project Approval (HPA) ☒ Fish Habitat Enhancement Exemption – Attach Exemption Form

You must submit a check for $150 to Washington Department of Fish and Wildlife, unless your project qualifies for an exemption or alternative payment method below. **Do not send cash.**

Check the appropriate boxes

☒ $150 check enclosed. Check # _____
Attach check made payable to Washington Department of Fish and Wildlife.

☐ My project is exempt from the application fee. (Check appropriate exemption):
- ☐ HPA processing is conducted by applicant funded WDFW staff.
  Agreement # _____
- ☐ Mineral prospecting and mining
- ☐ Project occurs on farm and agricultural land.
  (Attach a copy of current land use classification recorded with the county auditor, or other proof of current land use)
- ☐ Project is modification of an existing HPA originally applied for, prior to July 10, 2012.
  HPA # _____

Washington Department of Natural Resources:

☐ Aquatic Use Authorization

Complete JARPA Attachment E and submit a check for $25 payable to the Washington Department of Natural Resources. **Do not send cash.**

Washington Department of Ecology:

☐ Section 401 Water Quality Certification

FEDERAL GOVERNMENT

United States Department of the Army permits (U.S. Army Corps of Engineers):

☒ Section 404 (discharges into waters of the U.S.) ☐ Section 10 (work in navigable waters)

United States Coast Guard permits:

☐ Private Aids to Navigation (for non-bridge projects)

Part 11–Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

11a. Applicant Signature (required) [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. TD (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. TD (initial)

Tawni Dalziel		5/30/2017
Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Kevin O'Brien		5/30/2017
Authorized Agent Printed Name	Authorized Agent Signature	Date

11c. Property Owner Signature (if not applicant) [help]

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

See Attachment A(s).		
Property Owner Printed Name	Property Owner Signature	Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORIA publication number: ORIA-16-011 rev. 03/2017