



**WASHINGTON STATE**  
**Joint Aquatic Resources Permit**  
**Application (JARPA) Form<sup>1,2</sup>** [\[help\]](#)

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



US Army Corps  
of Engineers  
Seattle District

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) [\[help\]](#)

Kittitas Reclamation District (KRD) 2018 Naneum Creek Channel Maintenance and Intake Structure Protection

**Part 2–Applicant**

The person and/or organization responsible for the project. [\[help\]](#)

**RECEIVED**  
 OCT 05 2018  
 Kittitas County CDS

**2a. Name** (Last, First, Middle)

Eslinger, Kevin – Assistant Manager, KRD

**2b. Organization** (If applicable)

Kittitas Reclamation District

**2c. Mailing Address** (Street or PO Box)

315 North Water Street

**2d. City, State, Zip**

Ellensburg, WA

**2e. Phone (1)**

(509) 925-6158

**2f. Phone (2)**

**2g. Fax**

**2h. E-mail**

kevin@krdistrict.org

<sup>1</sup>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.

<sup>2</sup>To access an online JARPA form with [help] screens, go to

[http://www.epermittng.wa.gov/site/alias\\_resourcecenter/jarpa\\_jarpa\\_form/9984/jarpa\\_form.aspx](http://www.epermittng.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](mailto: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.) [\[help\]](#)

<b>3a. Name</b> (Last, First, Middle)			
Broadhead, Craig D.			
<b>3b. Organization</b> (If applicable)			
Jacobs Engineering Group Inc.			
<b>3c. Mailing Address</b> (Street or PO Box)			
32 North 3rd Street, Suite 304			
<b>3d. City, State, Zip</b>			
Yakima, WA 98901			
<b>3e. Phone (1)</b>	<b>3f. Phone (2)</b>	<b>3g. Fax</b>	<b>3h. E-mail</b>
509-312-0375			Craig.broadhead@jacobs.com

### 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.

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

## 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.

<b>5a. Indicate the type of ownership of the property. (Check all that apply.)</b> <a href="#">[help]</a>			
<input type="checkbox"/> Private <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Publicly owned (state, county, city, special districts like schools, ports, etc.) <input type="checkbox"/> Tribal <input type="checkbox"/> Department of Natural Resources (DNR) – managed aquatic lands (Complete <a href="#">JARPA Attachment E</a> )			
<b>5b. Street Address</b> (Cannot be a PO Box. If there is no address, provide other location information in 5p.) <a href="#">[help]</a>			
See 5p			
<b>5c. City, State, Zip</b> (If the project is not in a city or town, provide the name of the nearest city or town.) <a href="#">[help]</a>			
Ellensburg, WA, 98926			
<b>5d. County</b> <a href="#">[help]</a>			
Kittitas			
<b>5e. Provide the section, township, and range for the project location.</b> <a href="#">[help]</a>			
<b>¼ Section</b>	<b>Section</b>	<b>Township</b>	<b>Range</b>
NW	09	18N	19E
<b>5f. Provide the latitude and longitude of the project location.</b> <a href="#">[help]</a>			
<ul style="list-style-type: none"> <li>Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)</li> </ul>			
47.071526N/-120.473207W			
<b>5g. List the tax parcel number(s) for the project location.</b> <a href="#">[help]</a>			
<ul style="list-style-type: none"> <li>The local county assessor's office can provide this information.</li> </ul>			
KRD North Branch Canal Ownership, maintenance easement and Naneum Creek channel.			
<b>5h. Contact information for all adjoining property owners.</b> (If you need more space, use <a href="#">JARPA Attachment C.</a> ) <a href="#">[help]</a>			
<b>Name</b>	<b>Mailing Address</b>		<b>Tax Parcel # (if known)</b>
Brian Downey	1720 Bar 14 Road		094324
	Ellensburg, WA 98926		
Howard Miles	1942 Bar 14 Road		084234
	Ellensburg, WA 98926		

**5i.** List all wetlands on or adjacent to the project location. [\[help\]](#)

Vehicle and equipment access to the channel maintenance location will require temporary impact to one wetland. The wetland is associated with a remnant side channel of Naneum Creek.

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

Naneum Creek.

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

Yes    No    Don't know

**5l.** Briefly describe the vegetation and habitat conditions on the property. [\[help\]](#)

The project will occur within the channel of Naneum Creek, from the KRD North Branch (NB) canal upstream approximately 350 feet. Most of the vegetation adjacent to the project area is a riparian band of mostly native cottonwood and willow, and non-native invasive crack willow. Land use adjacent to the narrow band of riparian vegetation is agricultural fields, cattle pastures, and rural residences.

Aquatic habitat within the project footprint is limited due to the large amount of aggradation and bank scour. There are some scour pools, but little to no habitat structure or large wood.

**5m.** Describe how the property is currently used. [\[help\]](#)

The property is currently used for KRD maintenance easements and rights-of-way, and the main active channel of Naneum Creek.

**5n.** Describe how the adjacent properties are currently used. [\[help\]](#)

Adjacent properties are used for agriculture and rural residences. During flood events, Naneum Creek heavily impacts these properties and KRD infrastructure.

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

The Naneum Creek NB canal intake is the main structure. There are also two canal undershots (a culvert that moves water under the canal) in the vicinity of the required maintenance. These undershots are impacted by sedimentation and require regular sediment and debris removal.

The current function and condition of the structure(s) are heavily impacted by sediment and debris. The Naneum Creek Intake Structure is designed to both convey Naneum Creek around the NB canal, and discharge flows from the NB canal to Naneum Creek. It was designed and installed by the US Bureau of Reclamation (USBR) between 1928-1933. If debris from Naneum Creek blocks flows or plugs the structure with sediment and debris, there is the risk of catastrophic failure of the structure and the NB Canal.

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

Exit Interstate 90 at Exit 109 (Canyon Road) and proceed north through Ellensburg to University Way. Proceed east on University Way to Naneum Road. Proceed North on Naneum Road to Bar 14 Road. Proceed west to project area. (See Attachment 1 – Sheet 1).

## Part 6—Project Description

**6a.** Briefly summarize the overall project. You can provide more detail in 6b. [\[help\]](#)

Kittitas Reclamation District (KRD) needs to prevent imminent damage to irrigation infrastructure by removing accumulated sediment and debris from Naneum Creek (Attachment 2 – Photos 1 and 2) and armoring an eroded bank at the KRD intake structure (Attachment 2 – Photo 3). KRD needs to remove approximately 2,000 cy of blocking debris from Naneum Creek, in an area from the intake structure upstream approximately 350 feet. This section of the creek is completely blocked with sediment, and Naneum Creek flows are currently forced out of the channel and will cause further damage to the KRD NB canal. Work will be completed by isolating flows within the channel but outside the work area. KRD will utilize Bar 14 Road and the adjacent property to the east for access to the project area.

In 2017, Kittitas County and KRD completed a joint project to remove the Bar 14 Road Bridge upstream of the NB intake and remove accumulated sediment and debris. Since that time, high water events have mobilized the upstream sediment that was held in place by the bridge for several years. Approximately 2,000 cubic yards of cobble and debris were mobilized and is now perched immediately above the NB intake structure (Attachment 2 – Photo – 2), and if not removed will mobilize into the intake structure and erosive flows will breach the canal intake. The removal of the accumulated sediment needs to be completed as soon as possible to alleviate the imminent threat to irrigation infrastructure.

Aggraded sediment is completely blocking the Naneum Creek channel upstream of the intake structure, which has forced flows into a bank of unconsolidated material protecting the right bank. This material has eroded, and now requires large rock armor to protect the intake structure and prevent Naneum Creek from flanking the structure and breaching the NB Canal. Approximately 60 linear feet of bank will be armored from the intake structure upstream, requiring approximately 27 cubic yards of armoring below the Ordinary High Water Mark.

The project is proposed for construction as soon as possible in October 2018, and will take less than 2 weeks once underway. The intent is to complete the project prior to high water events and remove the bedload material before flooding mobilizes the material into the intake structure.

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

The purpose of this project is to remove perched bedload material and re-establish flow and capacity in the Naneum Creek channel upstream of the NB intake structure, and prevent both on-going and expected damage to irrigation infrastructure by armoring a failing bank.

**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) [\[help\]](#)

- |  |  |   |  |
|--|--|---|--|
| <input type="checkbox"/> Aquaculture                   | <input type="checkbox"/> Culvert                           | <input type="checkbox"/> Float                        | <input type="checkbox"/> Retaining Wall (upland)       |
| <input checked="" type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Dam / Weir                        | <input type="checkbox"/> Floating Home                | <input type="checkbox"/> Road                          |
| <input type="checkbox"/> Boat House                    | <input type="checkbox"/> Dike / Levee / Jetty              | <input type="checkbox"/> Geotechnical Survey          | <input type="checkbox"/> Scientific Measurement Device |
| <input type="checkbox"/> Boat Launch                   | <input type="checkbox"/> Ditch                             | <input type="checkbox"/> Land Clearing                | <input type="checkbox"/> Stairs                        |
| <input type="checkbox"/> Boat Lift                     | <input type="checkbox"/> Dock / Pier                       | <input type="checkbox"/> Marina / Moorage             | <input type="checkbox"/> Stormwater facility           |
| <input type="checkbox"/> Bridge                        | <input checked="" type="checkbox"/> Dredging (Maintenance) | <input type="checkbox"/> Mining                       | <input type="checkbox"/> Swimming Pool                 |
| <input type="checkbox"/> Bulkhead                      | <input type="checkbox"/> Fence                             | <input checked="" type="checkbox"/> Outfall Structure | <input type="checkbox"/> Utility Line                  |
| <input type="checkbox"/> Buoy                          | <input type="checkbox"/> Ferry Terminal                    | <input type="checkbox"/> Piling/Dolphin               |  |
| <input type="checkbox"/> Channel Modification          |  |   |  |

	<input type="checkbox"/> Fishway	<input type="checkbox"/> Raft	
--	----------------------------------	-------------------------------	--

Other: Irrigation Infrastructure protection

**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.

Project Summary:

KRD needs to remove approximately 2,000 cy of accumulated sediment and debris from an approximate 350-linear foot section of Naneum Creek immediately upstream of the NB intake structure, and armor approximately 60 linear feet of eroding bank.

Project Timeline, Work Elements, and Sequencing

The project will begin in October 2018 as soon as expedited permits are received, and will take less than 2 weeks to complete.

Project sequencing will likely be:

- Temporary access route construction;
- Worksite isolation, fish removal, and pump installation;
- Bank repair;
- Bedload removal;
- Demobilize and remove temporary access road.

Equipment

Heavy equipment to be used will include, but is not limited to: excavator with thumbed bucket and dump trucks. Pumps large enough to convey turbid water from the work area into the NB canal will be placed at the intake structure.

Temporary Access Route Construction

Access for material removal will be from existing Bar 14 Road and through the adjacent property to the east (Attachment 1- Sheet 5). A historic side channel of Naneum Creek and associated wetlands will require a temporary crossing. This crossing will be in the location of a previous foot bridge that was damaged during flood flows prior to the Bar 14 Road Bridge removal (Attachment 2 – Photo 6).

In order to minimize impacts from the temporary crossing, KRD will first place geotextile fabric over the wetland and aquatic bed. A culvert will be placed in the side channel, and clean rock material will be placed over the culvert and geotextile fabric to provide truck and equipment access. Once complete, all material will be removed back to native ground. No wetland vegetation will be cleared or grubbed, and no excavation will occur within the wetland. Approximately 200 square feet (sf) of wetland and 160 sf of side channel aquatic bed will be temporarily impacted.

The access route is primarily through pasture and upland grasses that will be mowed prior to construction (Attachment 2 – Photo 5). When possible, vegetation will be avoided. Access may require trimming branches or other temporary methods to clear a path for the temporary route while preserving vegetation. The removal of large trees and riparian vegetation will only occur as a last resort. The removal of one small hawthorn tree and four black cottonwoods from the upland area is necessary for equipment access to Naneum Creek. These trees will remain onsite and either in the riparian area or incorporated into the bank repair area.

Staging of equipment and materials will occur within the project area on uplands. Bed load material will be hauled to an approved upland location, likely an existing County stockpile site.

Worksite Isolation, Fish Removal, and Pump Installation

In order to complete the work out of flowing water and allow access for haul trucks, KRD will first excavate a ditch on the west side of the channel to convey flows around the direct work area. Prior to working in the

channel, biologists will set upstream block nets to isolate the work area. The KRD intake structure prevents fish passage upstream into the work area. With assistance from WDFW, KRD will electro-fish and remove fish and aquatic species from the work area. If necessary, small pumps may be used to draw down isolated pools for easier salvage and removal of fish.

After fish have been removed, nets will remain in place and work will occur within the active channel. KRD is able to close the existing irrigation intake during construction, and manage any turbid flows before discharge outside the project area. Similar to the 2017 project, the intake structure will be closed and large pumps will be set up at the intake structure to pump turbid water into the NB canal and prevent discharge into the Naneum Creek channel downstream of the KRD intake structure. Turbid water pumped into the KRD canal will gravity flow away from Naneum Creek with no downstream water quality impacts. To maintain flow within Naneum Creek downstream of the intake structure, KRD will simultaneously release clean flows from the NB canal into Naneum Creek on the downstream side of the irrigation intake for the duration of construction. This same method was used for the 2017 project, which resulted in no impacts to water quality downstream of the immediate work area.

#### Bank Repair

Once the access route is constructed and worksite isolation is complete, dump trucks will haul large rock armoring and place it adjacent to the channel near the eroded bank to be repaired. KRD will remove the material that has been washed out of the bank, and flatten the now vertical eroded bank to an approximate 2:1 slope. Larger rock will be placed at the toe of the slope, in an irregular fashion to provide channel roughness. Large wood, including logs with root wads, will be incorporated into the rock armored slope where possible to provide habitat value. Armoring rock will be placed to just above the OHWM. Willow and cottonwood poles, harvested from on-site, will be incorporated into the bank as the armoring is placed. Approximately 27 cy of large rock will be placed below the OHWM.

#### Bedload Removal

Heavy equipment, including excavators and dump trucks will use the access route and stream channel as a work area and haul route to remove bed load material. The amount of material and exact footprint of channel cleaning that is necessary is not known. For permitting and analysis, it is assumed an average channel width of 24 feet may require excavating bed load to a depth of four feet to re-establish the channel. Excavation will occur from the bank at a 2:1 slope to the depth of four feet, which will re-establish a channel bottom width of eight feet. This is an average, as some areas may require more material removal and other areas, such as scour holes, may require less. This average will result in bed load removal of approximately 2,000 cy of material.

Work will progress from downstream to upstream, allowing trucks to access on the dry accumulated bed load material. By utilizing this method, only the excavator will work in flowing water. As described above, all turbid water will be caught at the intake and pumped into the canal, with no discharges outside the work area.

#### Demobilization

When the channel maintenance is complete, material needed for the access route and any associated BMPs will be removed. The temporary fill required for the wetland crossing will be removed in its entirety. Any banks where vegetation was removed will be replanted with on-site native vegetation, and disturbed upland areas will be reseeded with native mix or stabilized prior to completion.

Pumps will remain on site and in operation until all turbid water has settled, at which time the intake structure will be opened to allow the clean flows of Naneum Creek to again bypass the intake structure.

**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: October 2018      End Date: November 2018       See JARPA Attachment D

**6g.** Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

\$120,000

**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

The access route was chosen to minimize impacts to wetlands and riparian vegetation as much as possible. Other possible routes required significantly more wetland and vegetation impact and dewatering of Naneum Creek. Geotextile fabric will be used to protect wetland soils and vegetation. No wetland shrubs or trees will be removed, and no soil disturbance will occur. Temporary fill will be in place less than two weeks.

**7b.** Will the project impact wetlands? [\[help\]](#)

Yes  No  Don't know Temporary impacts only

**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 Summary provided in 7f. below.

**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 Summary provided in 7f. below. Ratings form was not completed due to the short-term and temporary nature of the impact.

**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 wetland impacts are short-term and temporary, in place less than two weeks. Fabric will ensure all temporary fills are removed and no wetland vegetation is removed. The wetland within and adjacent to the proposed access route consists of standing, open water that is approximately 8 feet across and several inches deep within an old side channel of Naneum Creek. The wetland is isolated from the creek except during flooding and common duckweed was observed near the proposed crossing indicating this site contains minimal to no flow.

The wetland extends 5 feet, on average, from the open water up both banks throughout the proposed area of impact (Attachment 1 – Sheet 6 and Attachment 2 – Photo 6). Dominant species within the wetland consist of black cottonwood, European water plantain, fringed willowherb, common rush, spotted ladythumb, climbing nightshade, and Mexican hedgenettle (see Table 1). Adjacent uplands consist primarily of oceanspray, black hawthorn, chokecherry, basin wildrye, tumble mustard, and whitetop.



Table 1. Species list for area of temporary wetland impacts.

Scientific Name	Common Name	Westland Indicator Status	Estimated % Cover
<b>Trees</b>			
<i>Populus balsamifera</i>	black cottonwood	FAC	25
<i>Salix lasiandra</i>	Pacific willow	FACW	5
<b>Shrubs</b>			
<i>Alnus sp.</i>	Alder	FACW	3
<i>Cornus sericea</i>	red-osier dogwood	FACW	5
<b>Herbs</b>			
<i>Agrostis exarata</i>	spike bentgrass	FACW	3
<i>Alisma plantago-aquatica</i>	European water plantain	OBL	10
<i>Carex sp.</i>	sedge	FACW	1
<i>Cirsium arvense</i>	Canadian thistle	FACU	1
<i>Echinochloa crus-galli</i>	barnyard grass	FACW	1
<i>Epilobium ciliatum</i>	fringed willowherb	FACW	25
<i>Gnaphalium palustre</i>	western marsh cudweed	FACW	1
<i>Juncus effusus</i>	common rush	FACW	10
<i>Juncus ensifolius</i>	dagger leaf rush	FACW	1
<i>Lactuca serriola</i>	prickly lettuce	FACU	1
<i>Marrubium vulgare</i>	horhound	FACU	1
<i>Mimulus floribundus</i>	manyflowered monkeyflower	OBL	1
<i>Mimulus guttatus</i>	seep monkey flower	OBL	1
<i>Myosotis laxa</i>	bay forget-me-not	OBL	1
<i>Polygonum persicaria</i>	spotted ladythumb	FACW	10
<i>Rumex crispus</i>	curly dock	FAC	1
<i>Solanum dulcamara</i>	climbing nightshade	FAC	25
<i>Stachys mexicana</i>	Mexican hedgenettle	FACW	10

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

N/A

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 <sup>1</sup>	Wetland type and rating category <sup>2</sup>	Impact area (sq. ft. or Acres)	Duration of impact <sup>3</sup>	Proposed mitigation type <sup>4</sup>	Wetland mitigation area (sq. ft. or acres)
Temporary Fill	Wetland One	Presumed Riverine, Cat II	200 sf	Temporary – less than 2 weeks	N/A	N/A

<sup>1</sup> 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.

<sup>2</sup> Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

<sup>3</sup> Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

<sup>4</sup> 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. [\[help\]](#)

In order to minimize impacts from the temporary crossing, geotextile fabric will be placed over the wetland and aquatic bed. A culvert will be placed in the side channel, and clean rock material will be placed over the culvert and geotextile fabric to provide truck and equipment access. Once project is complete, all material will be removed back to native ground. Approximately 200 square feet (sf) of wetland and 160 sf of side channel aquatic bed will be temporarily impacted.

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. [\[help\]](#)

N/A

## 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

Water quality will be maintained at all times within the Washington State Department of Ecology guidelines in Washington Administrative Code (WAC) 173-201A. Minimization measures that will further minimize or prevent impacts are below:

MM 1 – Pumps will be used to remove turbid water from the work zone and discharge into the KRD canal.

MM 2 – All equipment will be inspected for leaks prior to work each day.

MM 3 – Staging and fueling of equipment will occur more than 50 feet from the OHWM of Naneum Creek.

MM 4 – Fish exclusion will be conducted by qualified biologists.

MM 5 – If small pumps are used to dewater holding pools or hyporheic flows, they will be screened to National Marine Fisheries Service (NMFS) or WDFW criteria.

MM 6 – Aggraded sediment will be removed from the project site to an approved upland location.

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

Yes  No

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

The project is a maintenance action that is self-mitigating in that aggraded bed load material will be removed to allow more natural stream processes to occur during high water events. The location has been experiencing chronic sediment and aggradation which requires annual maintenance and impacts irrigation infrastructure.

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. [\[help\]](#)

See above. Post project, this reach of Naneum Creek will be subject to more natural stream processes, and will have increased opportunity for long-term aquatic and riparian habitat development. Currently, aggraded sediment is negatively impacting the stream by causing bank erosion and out-of-bank flows impacting the KRD canal.

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

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name <sup>1</sup>	Impact location <sup>2</sup>	Duration of impact <sup>3</sup>	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Excavation	Naneum Creek	Below OHWM	Permanent (aggraded bed load material )	Appx. 2,000 cubic yards (Bed load removed to pre-flood elevations)	Appx. 350 lf Appx. 8,400 sf
Fill	Naneum Creek	Below OHWM	Permanent (Rock armoring)	Appx. 27 cubic yards	240 sf

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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. [\[help\]](#)

Protection rock will be large, angular rock that will be placed using a thumbed excavator. Approximately 60 linear feet of eroding bank will be protected with approximately 27 cubic yards of rock.

**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. [\[help\]](#)

The existing aggraded bed load material will be removed to a depth of approximately 4 feet throughout the project length. Total material removed is approximately 2,000 cy. Material will be hauled to an approved upland facility, most likely a County-owned stockpile site.

## 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
WDFW	Jennifer Nelson	509.925.1013	9/4/2018
USACE	David Moore	206.316.3166	8/29/2018

**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

Naneum Creek (Listing ID:74038) is assessed as a Category 5 – 303(d) water for temperature.

**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.

170300010408 – Lower Naneum Creek

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

<ul style="list-style-type: none"> <li>Go to <a href="http://www.ecy.wa.gov/water/wria/index.html">http://www.ecy.wa.gov/water/wria/index.html</a> to find the WRIA #.</li> </ul>
39 – Upper Yakima
<b>9e.</b> Will the in-water construction work comply with the State of Washington water quality standards for turbidity? <a href="#">[help]</a> <ul style="list-style-type: none"> <li>Go to <a href="http://www.ecy.wa.gov/programs/wq/swqs/criteria.html">http://www.ecy.wa.gov/programs/wq/swqs/criteria.html</a> for the standards.</li> </ul>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable
<b>9f.</b> If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? <a href="#">[help]</a> <ul style="list-style-type: none"> <li>If you don't know, contact the local planning department.</li> <li>For more information, go to: <a href="http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html">http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html</a>.</li> </ul>
<input type="checkbox"/> Urban <input type="checkbox"/> Natural <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Conservancy <input type="checkbox"/> Other: <u>Rural conservancy</u>
<b>9g.</b> What is the Washington Department of Natural Resources Water Type? <a href="#">[help]</a> <ul style="list-style-type: none"> <li>Go to <a href="http://www.dnr.wa.gov/forest-practices-water-typing">http://www.dnr.wa.gov/forest-practices-water-typing</a> for the Forest Practices Water Typing System.</li> </ul>
<input type="checkbox"/> Shoreline <input checked="" type="checkbox"/> Fish <input type="checkbox"/> Non-Fish Perennial <input type="checkbox"/> Non-Fish Seasonal TYPE 2
<b>9h.</b> Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? <a href="#">[help]</a> <ul style="list-style-type: none"> <li><b>If No</b>, provide the name of the manual your project is designed to meet.</li> </ul>
<input type="checkbox"/> Yes <input type="checkbox"/> No N/A
Name of manual: <u>N/A</u>
<b>9i.</b> Does the project site have known contaminated sediment? <a href="#">[help]</a> <ul style="list-style-type: none"> <li><b>If Yes</b>, please describe below.</li> </ul>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>9j.</b> If you know what the property was used for in the past, describe below. <a href="#">[help]</a>
The project site is and has been maintenance easement and bed and bank of Naneum Creek.
<b>9k.</b> Has a cultural resource (archaeological) survey been performed on the project area? <a href="#">[help]</a> <ul style="list-style-type: none"> <li><b>If Yes</b>, attach it to your JARPA package.</li> </ul>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>(Report to be sent under separate cover)</b>
<b>9l.</b> 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. <a href="#">[help]</a>
Columbia River DPS bull trout Middle Columbia River summer-run DPS steelhead Designated Critical Habitat for bull trout and steelhead  (see ESA No Effect letter (Attachment 3))
<b>9m.</b> 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. <a href="#">[help]</a>

The project will not affect any Priority Habitats and Species.

## 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](mailto: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](http://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.  
SEPA exemption letter is pending with Kittitas County.

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: WDFW EXPEDITED HPA – SEPA NOT REQUIRED

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): WAC 173-27-040(2)(b) – Normal maintenance or repair

##### 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 N/A  
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.) NWP 3 for Maintenance anticipated     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. \_\_\_\_\_ (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. \_\_\_\_\_ (initial)

Kevin Eslinger

Applicant Printed Name



Applicant Signature

9/10/18

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.

Craig Broadhead

Authorized Agent Printed Name



Authorized Agent Signature

9/10/18

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.

Property Owner Printed Name

Property Owner Signature

Date

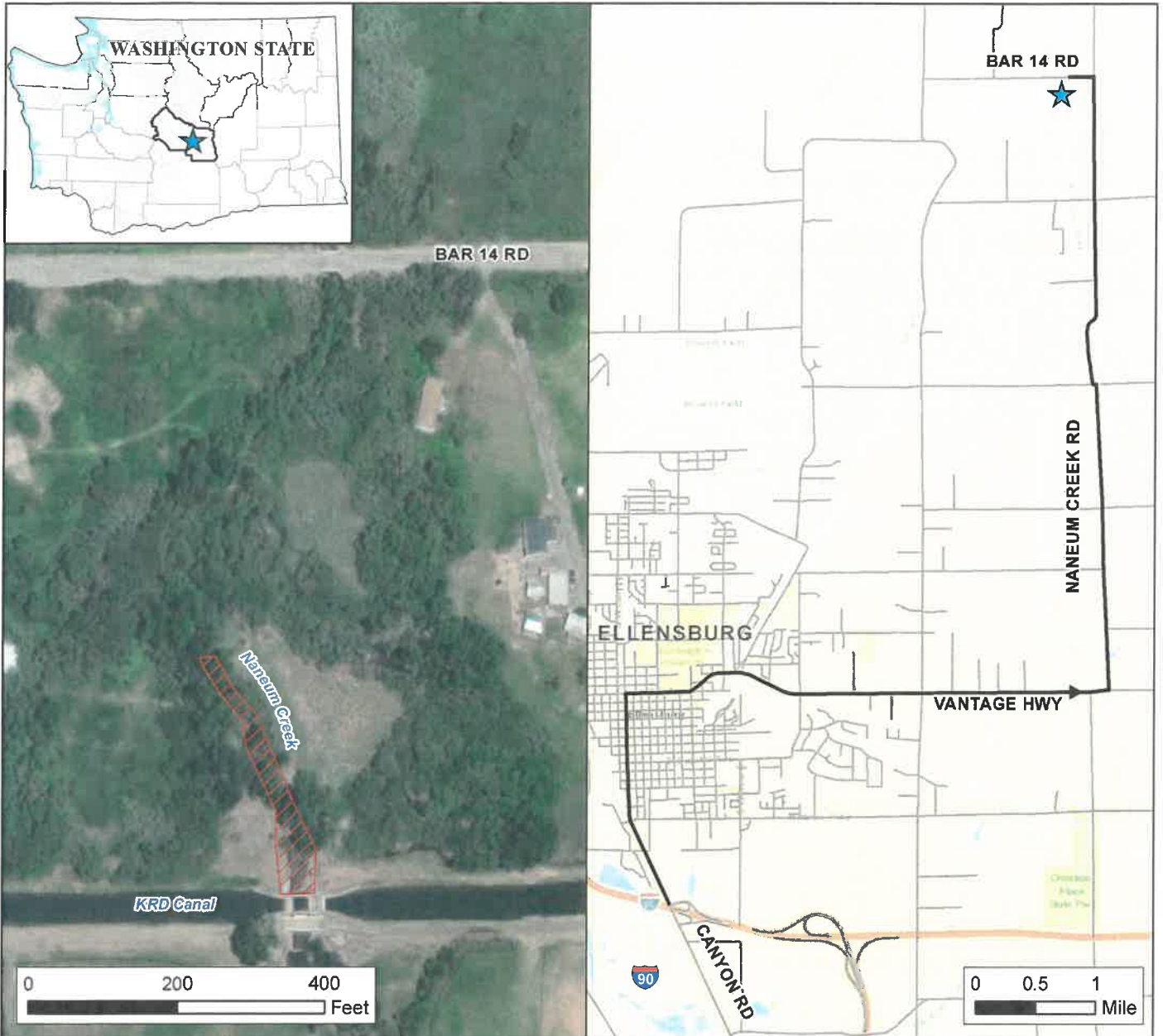
18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes 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. 09/2016

## **Attachment 1**

### **Vicinity Maps, Site Plans, and Drawings**





### NANEUM CREEK @ KRDC INTAKE STRUCTURE VICINITY MAP

- Driving Route
- Project Area
- Project Location

Bank Protection	
Element	Value
Length of Bank Prot.	60 LF
Bank Prot. Area Below OHWM	240 SF
Bank Prot. Fill Below OHWM	27 CY

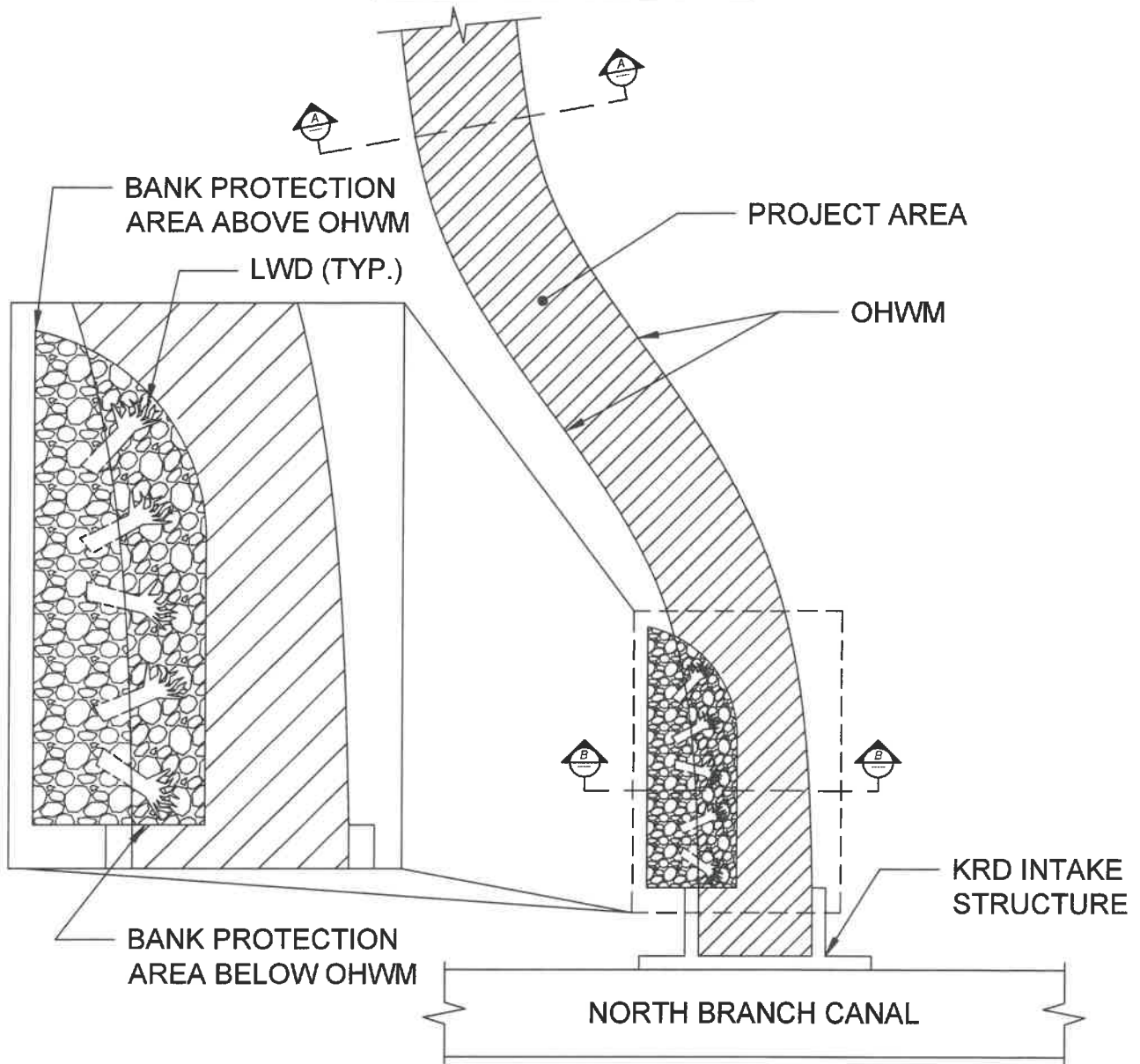
Channel Maintenance	
Element	Value
Length of Channel Maintenance	350 LF
Excavation Volume below OHWM	2,000 CY
Excavation Area below OHWM	8,400 SF



LAT/LONG: 47.071526N/-120.473207W  
 TRS: T18N R19E S09  
 PROPOSED PROJECT: NANEUM CREEK CHANNEL  
 MAINTENANCE AND INTAKE STRUCTURE PROTECTION  
 ADJACENT PROPERTY OWNERS: SEE JARPA  
 APPLICANT: KITTITAS RECLAMATION DISTRICT  
 REFERENCE NO.:

DATE: 9/4/2018  
 IN: NANEUM CREEK  
 COUNTY: KITTITAS  
 NEAR: KITTITAS  
 STATE: WA  
 SHEET: 1 OF 6

### NANEUM CREEK PLAN VIEW TYPICAL PROJECT LAYOUT



\*NOT TO SCALE

Channel Maintenance	
Element	Value
Length of Channel Maintenance	350 LF
Excavation Volume Below OHWM	2,000 CY
Excavation Area Below OHWM	8,400 SF

Bank Protection	
Element	Value
Length of Bank Prot.	60 LF
Bank Prot. Area Below OHWM	240 SF
Bank Prot. Fill Below OHWM	27 CY

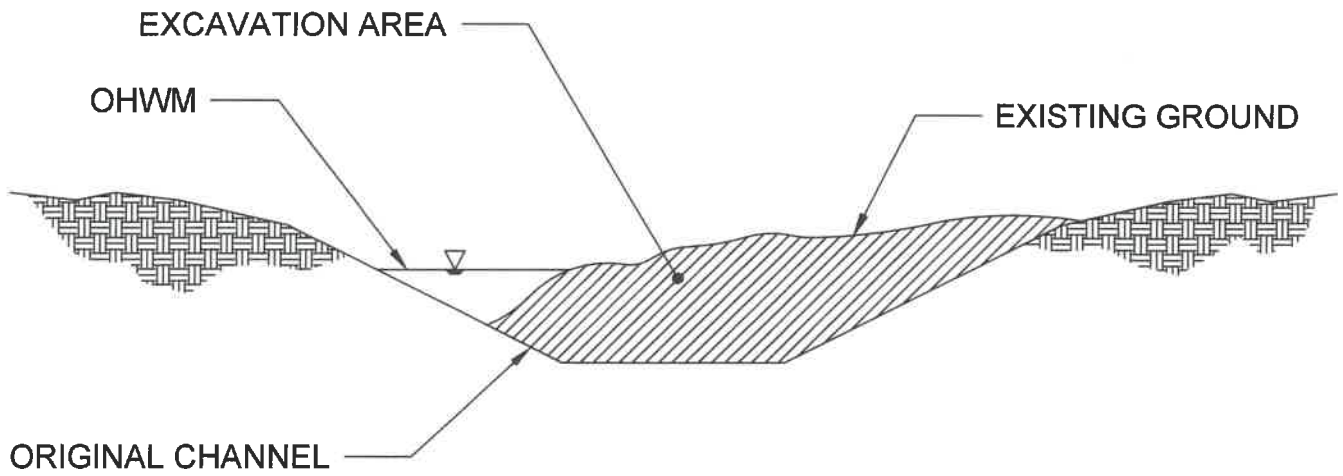


LAT/LONG: .....  
 TRS: T08N R19E S09  
 PROPOSED PROJECT: NANEUM CREEK MAINT.  
 ADJACENT PROPERTY OWNERS: SEE JARPA  
 APPLICANT: KITTTAS RECLAMATION DISTRICT  
 REFERENCE NO.:

DATE: 9/10/18 .....  
 IN: NANEUM CREEK  
 COUNTY: KITTTAS  
 NEAR: KITTTAS  
 STATE: WA  
 SHEET: 2 OF 6

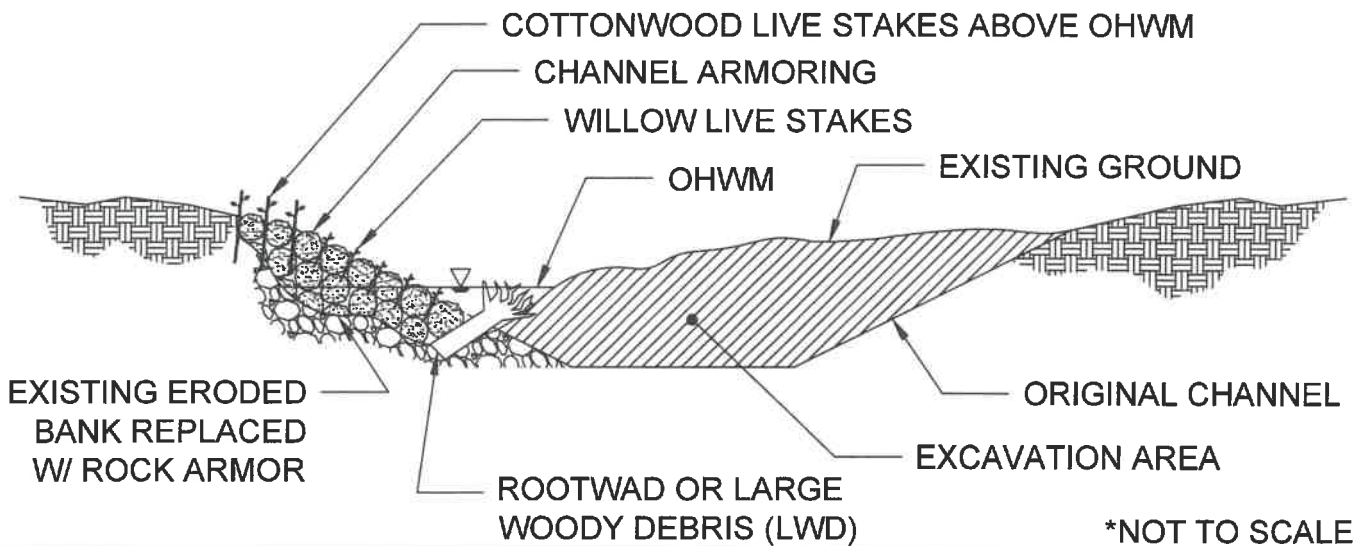
### NANEUM CREEK CROSS SECTIONS

#### TYP. CHANNEL EXCAVATION SECTION A



\*NOT TO SCALE

#### TYP. CHANNEL ARMORING PLACEMENT SECTION B



\*NOT TO SCALE

Channel Maintenance	
Element	Value
Length of Channel Maintenance	350 LF
Excavation Volume Below OHWM	2,000 CY
Excavation Area Below OHWM	8,400 SF

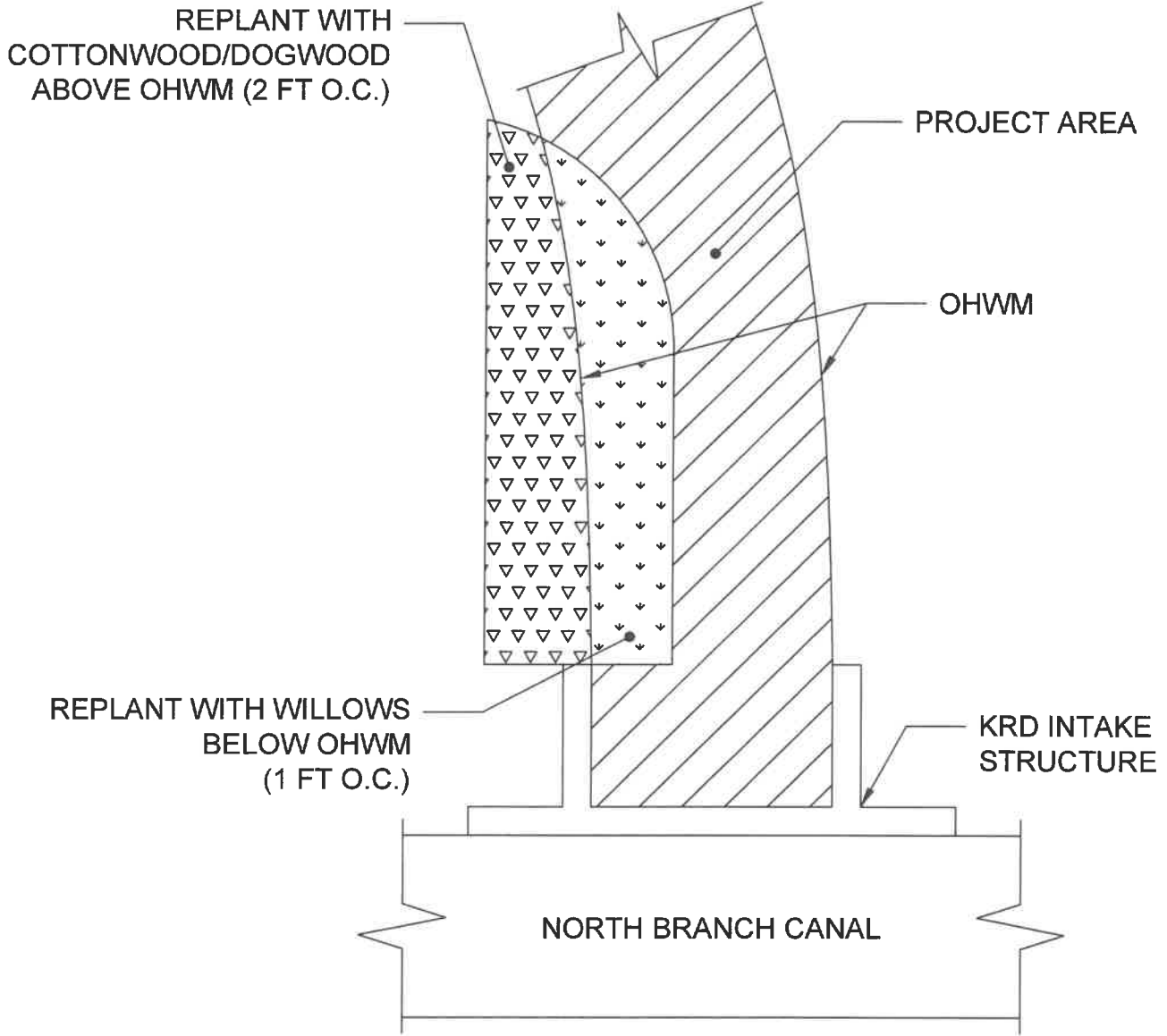
Bank Protection	
Element	Value
Length of Bank Prot.	60 LF
Bank Prot. Area Below OHWM	240 SF
Bank Prot. Fill Below OHWM	27 CY



LAT/LONG: .....  
 TRS: T08N R19E S09  
 PROPOSED PROJECT: NANEUM CREEK MAINT.  
 ADJACENT PROPERTY OWNERS: SEE JARPA  
 APPLICANT: KITTITAS RECLAMATION DISTRICT  
 REFERENCE NO.:

DATE: 8/30/18  
 IN: NANEUM CREEK  
 COUNTY: KITTITAS  
 NEAR: KITTITAS  
 STATE: WA  
 SHEET: 3 OF 6

### NANEUM CREEK PLAN VIEW TYPICAL BANK PROTECTION PLANTING PLAN



\*NOT TO SCALE

Bank Replanting	
Element	Value
Length of Bank Prot.	60 LF
Bank Planting Area Below OHWM	240 SF



**JACOBS**

LAT/LONG:.....  
 TRS:T08N R19E S09  
 PROPOSED PROJECT:NANEUM CREEK MAINT.  
 ADJACENT PROPERTY OWNERS: SEE JARPA  
 APPLICANT: KITTITAS RECLAMATION DISTRICT  
 REFERENCE NO.:

DATE:9/10/18  
 IN:NANEUM CREEK  
 COUNTY: KITTITAS  
 NEAR: KITTITAS  
 STATE: WA  
 SHEET: 4 OF 6



## NANEUM CREEK @ KRDCANAL INTAKE STRUCTURE ACCESS ROUTE

- Proposed Access Route
- Project Area
- Wetland



Channel Maintenance	
Element	Value
Wetland Temporary Fill Volume	14 CY
Wetland Temporary Impact Area	360 SF

NOTE: Only area of wetland adjacent to access route is depicted.  
Wetland continues along historic side channel.

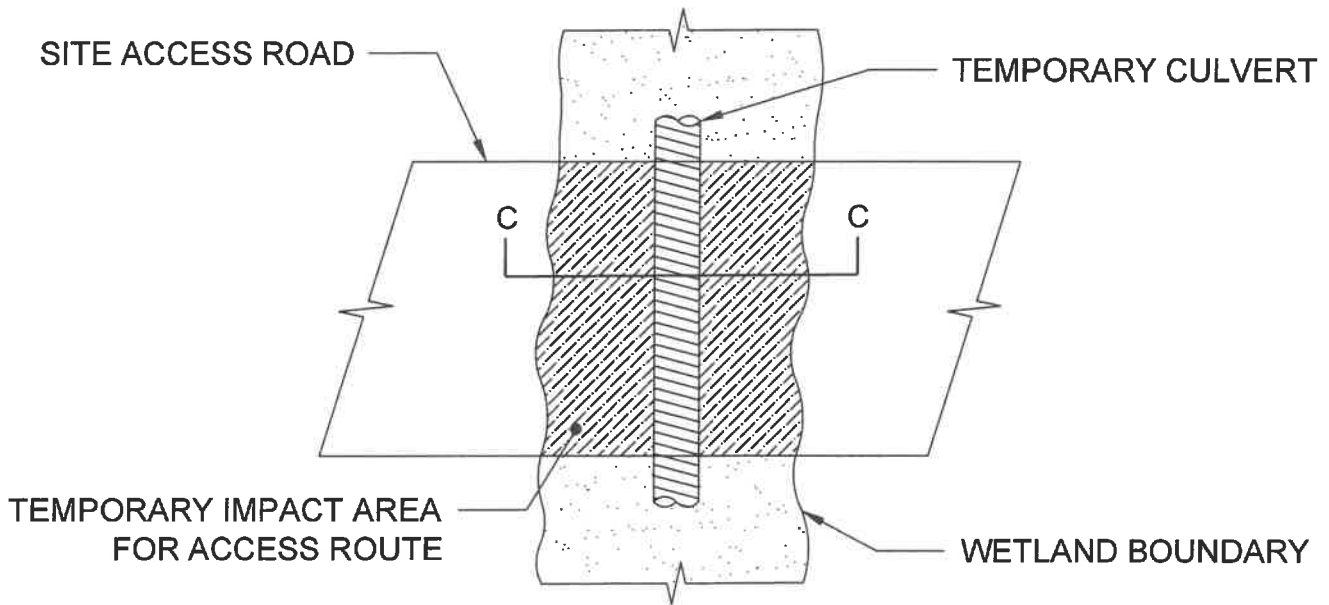


LAT/LONG: 47.071526N/-120.473207W  
 TRS: T18N R19E S09  
 PROPOSED PROJECT: NANEUM CREEK CHANNEL  
 MAINTENANCE AND INTAKE STRUCTURE PROTECTION  
 ADJACENT PROPERTY OWNERS: SEE JARPA  
 APPLICANT: KITTITAS RECLAMATION DISTRICT  
 REFERENCE NO.:

DATE: 9/4/2018  
 IN: NANEUM CREEK  
 COUNTY: KITTITAS  
 NEAR: KITTITAS  
 STATE: WA  
 SHEET: 5 OF 6

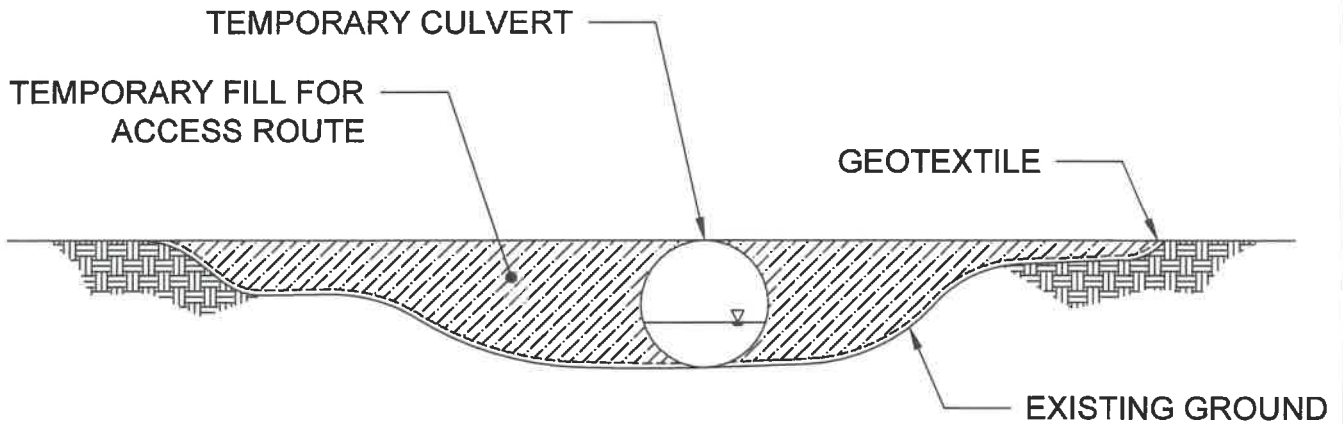
**TEMPORARY WETLAND IMPACTS ALONG ACCESS ROUTE**

PLAN



\* NOT TO SCALE

CROSS SECTION C



\* NOT TO SCALE

Channel Maintenance	
Element	Value
Wetland Temporary Fill Volume	14 CY
Wetland Temporary Impact Area	360 SF

C:\Civil 3D Project Templates\TYPCX.dwg



LAT/LONG: .....  
 TRS: T18N R19E S09  
 PROPOSED PROJECT: NANEUM CREEK MAINT.  
 ADJACENT PROPERTY OWNERS: SEE JARPA  
 APPLICANT: KITTITAS RECLAMATION DISTRICT  
 REFERENCE NO.:

DATE: 8/30/18  
 IN: NANEUM CREEK  
 COUNTY: KITTITAS  
 NEAR: KITTITAS  
 STATE: WA  
 SHEET: 6 OF 6

## **Attachment 2**

### **Photographs**

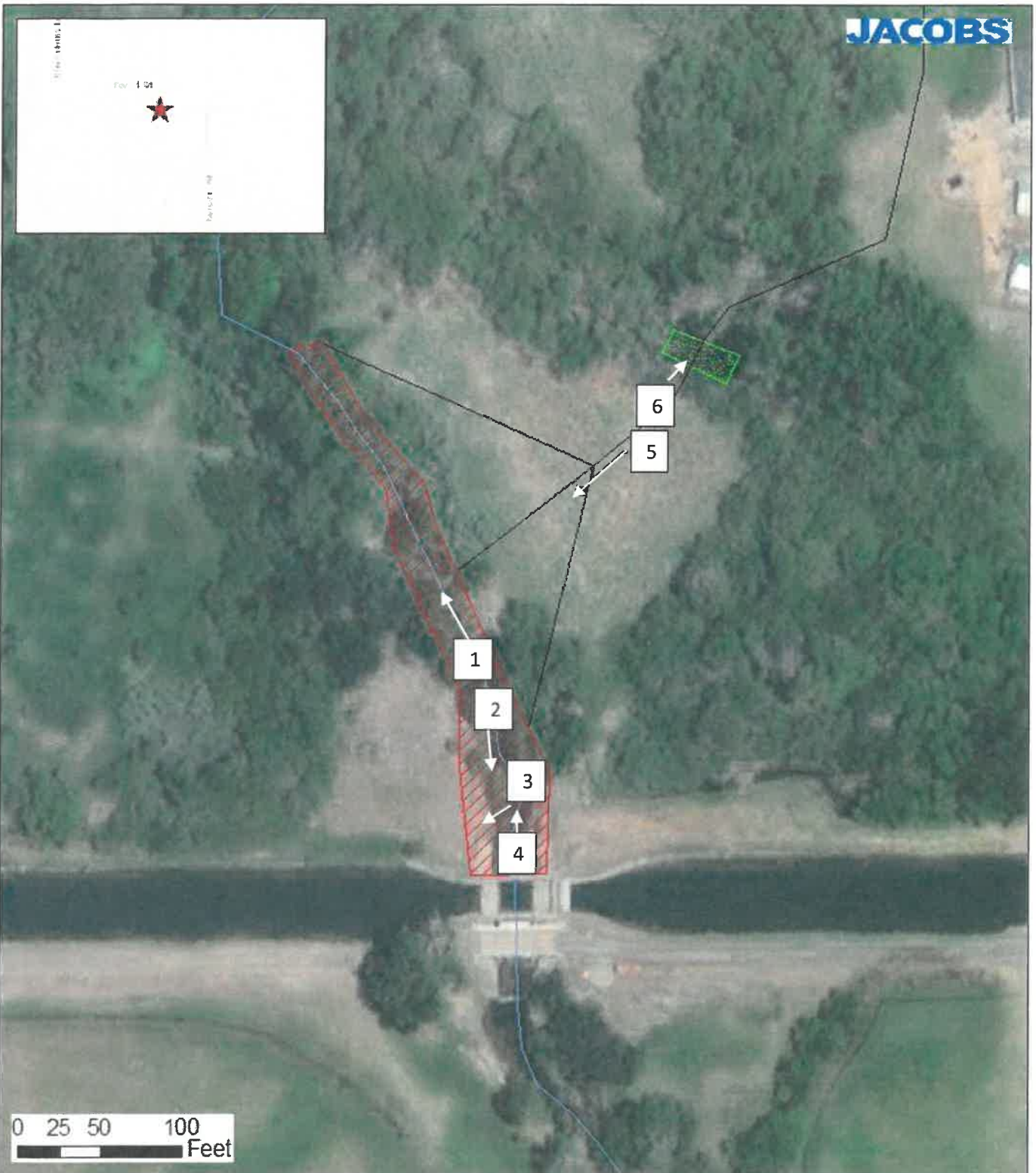


Figure 1. Location and Direction of Photos Described in Attachment 2

-  Project Location
-  Proposed Access Route
-  Project Area

-  Wetland
-  Creek



Imagery Source: Esri  
Date: September 4, 2018  
PLSS: T18N, R19E, S09  
Lat/Long: 47.071526N/-120.473207W





Photo 1. Accumulated sediment upstream of the KRD canal intake has forced Naneum Creek out of the current channel. Naneum Creek flows are seen on the right edge of the photo. Keeping flows isolated like this will allow a dry work area for equipment.



Photo 2: View downstream to KRD intake structure. Note perched bedload elevation is higher than the KRD structure.



Photo 3. Eroded bank just upstream of the KRD canal intake structure that requires armoring. Sediment deposition in the channel forced the creek into this bank, causing rapid erosion.



Photo 4. Depth of recently deposited sediment looking upstream from KRD canal intake.



Photo 5: The proposed access route crosses uplands between the wetland and Naneum Creek.



Photo 6. A small side channel and associated wetland will require temporary fill to limit disturbance associated with the proposed access route.

**Attachment 3**

**ESA No Effect Letter**



32 North 3<sup>rd</sup> Street  
Suite 304  
Yakima, WA 98901  
www.jacobs.com

September 10, 2018

**Attention: David Moore**  
US Army Corps of Engineers  
Seattle Regulatory Branch  
P.O. Box 3755  
Seattle, WA 98124

**Subject: Kittitas Reclamation District  
Naneum Creek Channel Maintenance and Intake Structure Protection Project  
Endangered Species Act No Effect Letter**

Dear Mr. Moore,

Kittitas Reclamation District (KRD) needs to prevent imminent damage to irrigation infrastructure by removing accumulated sediment and debris from Naneum Creek and armoring an eroded bank at the KRD intake structure (see vicinity map). This section of the creek is completely blocked with sediment, and Naneum Creek flows are currently forced out of the channel, which has forced flows into a bank of unconsolidated material protecting the right bank. This material has eroded, and now requires large rock armor to protect the intake structure and prevent Naneum Creek from flanking the structure and breaching the North Branch (NB) Canal.

In 2017, Kittitas County and KRD completed a joint project to remove the Bar 14 Road Bridge upstream of the NB intake and remove accumulated sediment and debris. Since that time, high water events have mobilized the upstream sediment that was held in place by the bridge for several years. Approximately 2,000 cubic yards of cobble and debris are now perched immediately above the NB intake structure, which if not removed will mobilize into the intake structure and erosive flows will breach the canal intake. The removal of the accumulated sediment needs to be completed as soon as possible to alleviate the imminent threat to irrigation infrastructure.

We have prepared this assessment on behalf of the U.S. Army Corps of Engineers (Corps) to meet the Section 7 requirements of the Endangered Species Act (ESA). U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). ESA listed species and designated critical habitats are addressed. We also evaluated the presence of Essential Fish Habitat (EFH) as indicated in the Magnuson Stevens Fishery Conservation and Management Act (Magnuson Stevens Act). The federal nexus for this project is an anticipated Corps Nationwide Permit 3 for channel maintenance.

The USFWS and NMFS species lists were accessed on their websites on September 3, 2018. These indicated the potential presence of the species and critical habitat shown in Table 1.

Table 1. USFWS and NMFS listed species and critical habitat potentially present in the project action area.

Species	Federal Status	Designated Critical Habitat
Canada Lynx	Threatened	No
Gray Wolf	Endangered	No
North American Wolverine	Proposed Threatened	No
Marbled Murrelet	Threatened	No
Yellow-billed Cuckoo	Threatened	No
Bull trout – Columbia River Distinct Population Segment (DPS)	Threatened	No
Steelhead – Middle Columbia River (MCR) Summer - run DPS	Threatened	No

### Project Description:

KRD needs to remove approximately 2,000 cy of accumulated sediment and debris from an approximate 350-linear foot section of Naneum Creek immediately upstream of the NB canal intake structure. Approximately 60 linear feet of eroding bank will be armored from the intake structure upstream, requiring approximately 27 cubic yards of large rock below the Ordinary High Water Mark (OHWM).

Access for material removal will be from existing Bar 14 Road and through the adjacent property to the east (see vicinity map). A historic side channel of Naneum Creek and associated wetlands will require a temporary crossing.

In order to complete the work in Naneum Creek out of flowing water and allow access for haul trucks, KRD will first excavate a ditch on the west side of the channel to convey flows around the direct work area. Prior to working in the channel, biologists will set upstream block nets to isolate the work area. The KRD intake structure prevents fish passage upstream into the work area. With assistance from WDFW, KRD will electro-fish and remove fish and aquatic species from the work area. If necessary, small pumps may be used to draw down isolated pools for easier salvage and removal of fish.

After fish have been removed, nets will remain in place and work will occur within the active channel. KRD is able to close the existing irrigation intake during construction, and manage any turbid flows before discharge outside the project area. Similar to the 2017 project, the intake structure will be closed and large pumps will be set up at the intake structure to pump turbid water into the NB canal and prevent discharge into the Naneum Creek channel downstream of the KRD intake structure. Turbid water pumped into the KRD canal will gravity flow away from Naneum Creek with no downstream water quality impacts. To maintain flow within Naneum Creek downstream of the intake structure, KRD will simultaneously release clean flows from the NB canal into Naneum Creek on the downstream side of the irrigation intake for the duration of construction. This same method was used for the 2017 project, which resulted in no impacts to water quality downstream of the immediate work area.

The project is proposed for construction as soon as possible in October 2018, and will take less than 2 weeks to complete.

### Land Use and Action Area:

Land use in the vicinity of the project area consists of agriculture and low-density rural residences. Terrestrial habitat in the project area is limited to a narrow riparian band of mostly cottonwood,



September 10, 2018  
Endangered Species Act No Effect Letter

dogwood, native willow and non-native invasive crack willow. Aquatic habitat is degraded in the project action area due to continuing and chronic flooding events causing sediment aggradation and loss of in-stream habitat structure.

Noise from construction equipment will likely be the primary source of terrestrial disturbance. Equipment to be used will include, but is not limited to: excavators, dump trucks, and front loaders. In addition, heavy equipment will operate below the OHWM and within the dewatered area of Naneum Creek. Using defined FHWA guidance, the terrestrial zone of impact is 1 mile. The aquatic zone of impact within the action area is the 350-foot section of Naneum Creek where channel maintenance will occur (see vicinity map, Attachment 1). The aquatic zone of impact is limited to the work area, as the KRD irrigation intake will be used to control and contain any turbid water to remain compliant with State water quality standards.

### **Species and Habitat Assessment:**

A field review of the project site was conducted on August 28, 2018, by Craig Broadhead and Jennifer Bader, Jacobs biologists. This site visit was conducted to assess the potential for habitat presence and to assess potential action impacts.

Canada lynx and North American Wolverine: Canada lynx and wolverine require relatively undisturbed high-elevation montane forests. The project is within an agricultural area with no forested habitat. The actions will have **No Effect** on Canada lynx or because the action area does not contain suitable habitat for this species. Provisionally, these actions will not jeopardize the continued existence of wolverine. Should wolverine be listed prior to the completion of the actions, the actions will have **No Effect** on wolverine because the action area does not contain suitable wolverine habitat.

Gray wolf: Gray wolves are associated with mid- to high-elevation habitat with an abundance of prey species. The project is within a low elevation agricultural area that is primarily low-density rural residences and pasture. The actions will have **No Effect** on gray wolf because the action area does not contain suitable habitat for this species.

Marbled murrelet: Marbled murrelet require mature forested stands with suitable platforms for nesting, generally within 55 miles of marine environments. The action area is not forested and it is greater than 55 miles from marine environments. This project will have **No Effect** on marbled murrelet because there is no suitable habitat for marbled murrelet in the action area.

Yellow-billed cuckoo: Yellow-billed cuckoo require large, intact stands of riparian vegetation and rarely nest in sites that are less than 50 acres in size. Riparian sites under 37 acres are considered unsuitable. There are no large stands of riparian vegetation in the action area. The project will have **No Effect** on yellow-billed cuckoo because there is no suitable habitat for yellow-billed cuckoo in the action area.

MCR DPS Steelhead: Steelhead were historically present in Naneum Creek, but anthropogenic disturbance and development has limited their presence to the lower portions of the creek near the Yakima River. The project action area is approximately 10 river miles upstream of the lowest documented fish passage barrier, and there are more than 20 barriers (diversion dams, road culverts) between this barrier and the project. The actions will have **No Effect** on steelhead because this species cannot access the action area and will not be exposed to action effects.



September 10, 2018  
Endangered Species Act No Effect Letter

MCR DPS Steelhead Designated Critical Habitat: There is no MCR steelhead critical habitat designated within the project action area. The nearest critical habitat reach is over 10 river miles from the project.

Columbia River DPS Bull trout: Similar to steelhead, bull trout have not been documented in lower Naneum Creek due to passage barriers, low flows, and elevated temperatures. The actions will have **No Effect** on bull trout because this species cannot access the action area and will not be exposed to project effects.

Columbia River DPS Bull trout Designated Critical Habitat: There is no bull trout critical habitat designated within the project action area. The nearest critical habitat reach is over 12 river miles from the project.

Therefore, we have determined that this project will have **No Effect** on bull trout or MCR steelhead as passage barriers prevent access to the project area. Additionally, the project will have **No Effect** on designated critical habitats for these species because no critical habitat has been designated within the action area.

The Magnuson-Stevens Act mandates that NMFS must identify EFH for federally managed marine fish. Federal agencies are required to consult with NMFS on all activities, or proposed activities, authorized, funded, or undertaken by the agency that may adversely affect EFH. The Pacific Fishery Management Council (PFMC) has designated EFH for the Pacific salmon fishery, federally managed ground fishes, and coastal pelagic fisheries

EFH for Chinook and coho salmon occurs within the lower reaches of Naneum Creek, where these species currently have access. However, due to the presence of several miles of fish passage barriers as described above, the project will not adversely affect Pacific salmon EFH.

This assessment satisfies the Corps responsibilities under Section 7(c) of the Endangered Species Act and the Magnuson-Stevens Act at this time. We are sending you this copy of our assessment for your files. We will continue to remain aware of any change in status of these species and will be prepared to reevaluate potential project impacts if necessary.

If you require additional information or clarification regarding this project, please contact me at 509-899-5256 or [jennifer.bader@jacobs.com](mailto:jennifer.bader@jacobs.com).

Sincerely,

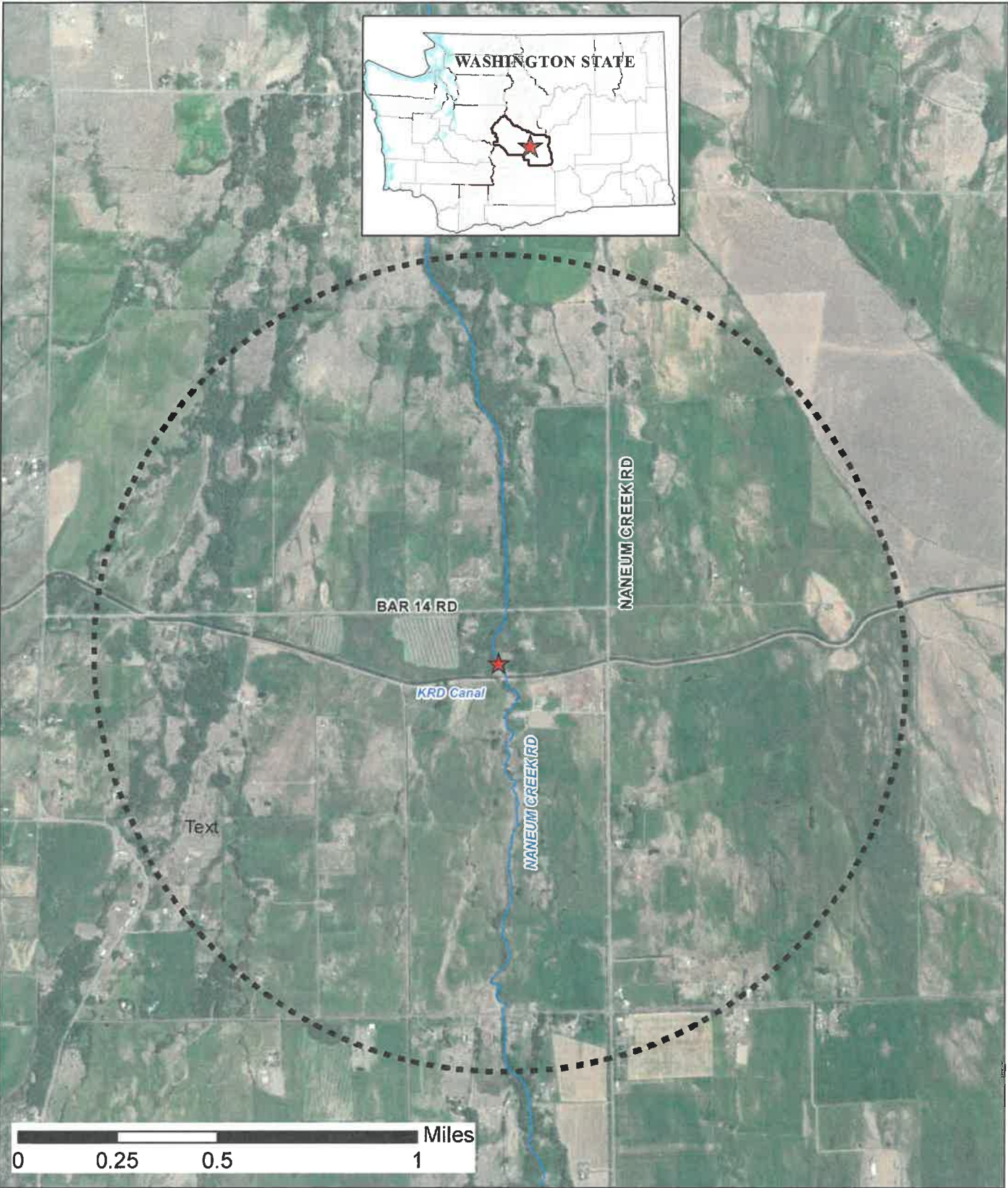
Jennifer Bader  
Biologist  
Jacobs Engineering Group

cc: Kittitas Reclamation District  
Project File




**Attachment 1**

**Vicinity Map**



**NANEUM CREEK CHANNEL MAINTENANCE  
AND INTAKE STRUCTURE PROTECTION  
VICINITY MAP**

-  Project Location
-  Action Area



## **Attachment 2**

### **Photographs**

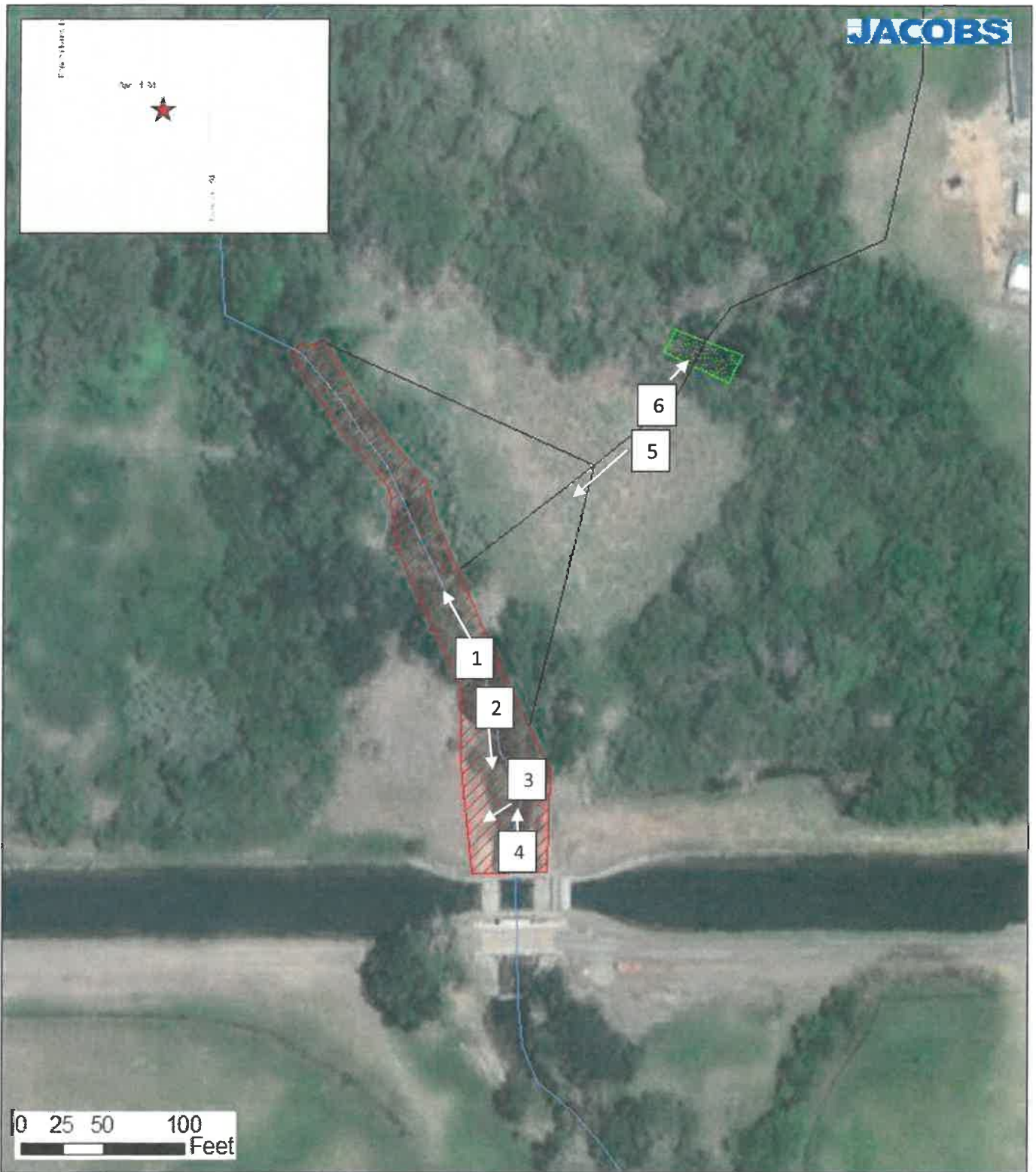


Figure 1. Location and Direction of Photos Described in Attachment 2

- ★ Project Location
- Proposed Access Route
- ▨ Project Area

- ▨ Wetland
- Creek



Imagery Source: Esri  
Date: September 4, 2018  
PLSS: T18N, R19E, S09  
Lat/Long: 47.071526N/-120.473207W



Photo 1. Accumulated sediment upstream of the KRD canal intake has forced Naneum Creek out of the current channel. Naneum Creek flows are seen on the right edge of the photo. Keeping flows isolated like this will allow a dry work area for equipment.



Photo 2: View downstream to KRD intake structure. Note perched bedload elevation is higher than the KRD structure.



Photo 3. Eroded bank just upstream of the KRD canal intake structure that requires armoring. Sediment deposition in the channel forced the creek into this bank, causing rapid erosion.



Photo 4. Depth of recently deposited sediment looking upstream from KRD canal intake.



Photo 5: The proposed access route crosses uplands between the wetland and Naneum Creek.



Photo 6. A small side channel and associated wetland will require temporary fill to limit disturbance associated with the proposed access route.