2009
WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form [help]

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

Use black or blue ink to enter answers in white spaces below, or fill in electronically by clicking on fields

SKAGIT COUNTY PERMIT CTR.
NOV 25 2009
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Part 1–Project Identification

Unique project information that makes it easy to identify. [help]

1a. Unique Project Identifier Number (UPI #) [help] • Don't have one yet? Get one at http://www.epermitting.wa.gov or call the Washington Governor's Office of Regulatory Assistance at (800) 917-0043.
091898-09-01
1b. Project Name (Examples: Smith's Dock or Seabrook Lane Development) [help]
Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment Skagit County, Washington

Part 2–Applicant

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

2a. Name (Last, First, Middle) and Organization (if applicable)			
Jenny Baker, The Nature Conservancy (TNC)			
2b. Mailing Address (Street or PO Box)			
Skagit Field Office; 410 N. 4th St.,			
2c. City, State, Zip			
Mount Vernon, WA 98273			
2d. Phone (1)	**2e.** Phone (2)	**2f.** Fax	**2g.** E-mail
(360) 419-7022	(360) 333-7492	(360) 419-0817	jbaker@tnc.org

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) and Organization (if applicable)
David Munro, Tetra Tech, Inc.
3b. Mailing Address (Street or PO Box)
1020 SW Taylor St. Suite 530
3c. City, State, Zip

Portland, OR 97202			
3d. Phone (1)	**3e.** Phone (2)	**3f.** Fax	**3g.** E-mail
(503) 223-5388	( )	(503) 228-8631	david.munro@tetratech.com

Part 4–Property Owner(s) [help]

Contact information for people or organizations owning the property(ies) where the project will occur. [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 property owners. Complete the section below and use JARPA Attachment A for each additional property owner.

4a. Name (Last, First, Middle) and Organization (if applicable)			
Jenny Baker, The Nature Conservancy			
4b. Mailing Address (Street or PO Box)			
Skagit Field Office: 410 N. 4th St.			
4c. City, State, Zip			
Mt. Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 419-7022	( )	(360) 419-0817	jbaker@tnc.org

Part 5–Project Location(s)

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

☒ There are multiple properties or project locations (e.g., linear projects). Complete the section below and use JARPA Attachment B for each additional property.

5a. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5n.) [help]			
Pioneer Highway (Old SR-530) at Fisher Slough Bridge Crossing, 1.4 Miles South of Conway WA See SHEET 1: Vicinity Map			
5b. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Mount Vernon, WA 98273			
5c. County [help]			
Skagit			
5d. Provide the section, township, and range for the project location. [help]			
¼ Section	**Section**	**Township**	**Range**
NE	19, 20, 29, 30	33N	4E
5e. Provide the latitude and longitude of the project location. [help] • Example: 47.03922 N lat. / -122.89142 W long			
48.323611 N lat / 122.343889 W long			

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

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

16854, 17433, 17434, 17436, 17450, 17454, 17457, 17466, 17467, 17486, 17507, 17508, 17509, 17518, 17519, 17523, 17524

Additional properties without parcel numbers are owned by: Burlington Northern Santa Fe (BNSF), Dike District #3, Drainage District #17, state waters, and three parcels owned by Skagit County.

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

☒ State Owned Aquatic Land ☐ Tribal ☒ Private
☒ Other publicly owned (federal, state, county, city, special districts like schools, ports, etc.)

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

Name	Mailing Address	Tax Parcel # (if known)
S & B Properties	17381 Britt Rd. Mount Vernon, WA 98273	17497, 17510, 17526
Maplewood Farm, Inc.	16032 Beaver Marsh Road Mount Vernon, WA 98273	17449, 17453
Patricia Sersland	22716 Franklin Rd Mount Vernon, WA 98273	17468
Palmer Testamentary Trust and Eileen Friend	3616 Greenwood Avenue N, #9 SEATTLE, WA 98103	17455

5i. Is any part of the project area within a 100-year flood plain? [help]

☒ Yes ☐ No ☐ Don't know

5j. Briefly describe the vegetation and habitat conditions on the property. [help]

The project site lies in the Eastern Puget Riverine Lowlands ecoregion (EPA 2000). This ecoregion is composed of floodplains and terraces. The mainstem Skagit River within the project area is a large low-gradient channel ranging from 550 to 750 LF wide. The river is predominantly a run or glide throughout this area, with tidal influence. This portion of the Skagit River provides migratory and rearing habitat for all of the salmon species that utilize the Skagit River, as well as habitat for a diversity of other aquatic and terrestrial species. Salmonid species in the project area include Chinook, pink, chum, steelhead, coho, bull trout, rainbow trout, and cutthroat trout, and likely whitefish. Downstream of Mount Vernon, the river splits into the North and South Forks. The project site is located within the floodplain of the Skagit River Delta and is located to the east of the South Fork Skagit River at RM 1. The project is a freshwater tidal marsh and is upstream of the salt-water tidal areas.

The majority of the trees in the project area are medium to small in size and tend to be one of three species; black cottonwood, willows, and red alder. Weedy species, most of them invasive, dominate much of the project area and include: Himalayan blackberry, reed canary grass and knotweed. Other plants found in the project area are red osier dogwood, baldhip rose, Nootka rose, red elderberry, and crop or planted species such as wheat, potatoes, white clover, and ryegrass on historic farm areas to be restored to tidal marsh. Wetland plant species found within the project site include: narrowleaf cattail, horsetail, Douglas' spirea and rushes. A small amount of tidal forest and scrub-shrub wetland remains.

In general, the entire site is extensively altered from its natural state. Past and present agricultural operations include the installation of dikes, ditches, and drain tiles intended to drain the site to facilitate crop production.

Despite this, positive indicators for all three wetland parameters (hydrophytic vegetation, hydrology and hydric soils) were found at most sample plots during the wetland delineation conducted June 2009 (Attachment F).

Fisher Slough is a freshwater tidal marsh, that is utilized for rearing by juvenile Chinook. Wild juvenile Chinook salmon are consistently found in the estuarine habitats, including freshwater tidal marshes, from February through June. Rearing juveniles feed on insects and macroinvertebrates that feed on live or decaying marsh vegetation (Healy 1982). Most fish use the heavily vegetated blind and side channels found in estuary sloughs to escape predators and acclimate to salt water (Simenstad et al. 1982).

In addition to juvenile Chinook rearing habitat, Fisher Slough is an upstream migration corridor for spawning coho. The Fisher Slough tributaries provide upstream spawning habitat for Coho in late fall and winter months. Native cutthroat also use freshwater tidal marsh habitat for foraging, cover and protection.

In addition, the Skagit River has been identified as critical habitat for threatened Coastal/Puget Sound bull trout (USFWS 2005). Critical habitat for bull trout includes the entire project area. More specifically, adult bull trout migrate upstream in the watershed from February through March as they ascend the river to spawning grounds and then migrate downstream from May through June as they return to saltwater or estuarine habitats. Juvenile anadromous bull trout may utilize the project area for feeding, migration, and overwintering, entering in August through November and remaining until April or May. Subadults may move in and out of the project area year round.

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

Agriculture and flood control

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

Agriculture and flood control

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

The project site near the floodgate contains a county bridge on Pioneer Hwy that spans Fisher Slough; a set of floodgates that connect the Dike District #3 levee system; a flood return structure along the North Levee, the Big Ditch crossing and spillway structure, and a BNSF railroad crossing west of the Pioneer Hwy bridge. There are also utility crossings in the area including fiber optic cables and overhead electrical utilities. There is a small railroad signal box to the south of the project site.

The downstream floodgate affixed to the Pioneer Hwy bridge provides flood protection during Skagit River floods. This structure is a partial fish passage barrier and is having the gates replaced with self-regulating gates to provide fish passage in Phase I of the project.

The Dike District #3 levees are tributary crossing levees that prevent flooding of local farm areas from the Fisher Slough tributaries, and the Skagit River. The north levee has a five-gate return structure that acts to return flows to the Skagit River if levees were to break or overtop north of the project site. The south levee has an emergency spillway at the Big Ditch crossing. The entire levee structure is being set back, and the emergency spillway improved, to provide an additional 300 acre-ft of flood storage and restoration of an additional 50 acres of freshwater tidal marsh habitat.

The Big Ditch crossing is an agricultural drain that has been constructed several feet lower than the surrounding drainage system to provide interior drainage for local farm areas. The existing Big Ditch culvert crosses beneath Fisher Slough, and is a fish passage barrier. The existing structure is being demolished and realigned to the west near the Pioneer Hwy bridge as an inverted siphon structure.

On the north side of the project, the Junquist property has minor farm drainage infrastructure including ditches and farm road crossing culverts. Modification of these structures is planned as part of the Big Ditch Realignment.

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

From I-5, take the Conway Exit 221 west, and then continue south 1.4 miles on Pioneer Hwy (Old SR 530) to the Fisher Slough Bridge Crossing (SHEET 1). The 60 acre project site is located on the east side of Pioneer Hwy between the Fisher Slough levees. There are three access points for the project site: indicated in SHEET 2 as "Pioneer Hwy Junquist North Access", 'Pioneer Hwy Junquist South Access', and 'Pioneer Hwy Smith A South Access'. A real estate plan is shown in SHEET 3.

Part 6–Project Description

6a. Summarize the overall project. You can provide more detail in 6d. [help]

Fisher Slough and the surrounding farmland has been highly modified from historic conditions as a result of channelization, levee construction for flood control, drainage, and agricultural development on the Skagit River delta for the past 150 years. Currently, the presence of the floodgate that closes during high tidal and river flow events is a fish passage barrier. In addition, the Big Ditch culvert crossing is also a fish passage barrier at low tides and low tributary flows.

The levee system prevents flooding from the surrounding farm areas. However, due to sedimentation at the confluence of the tributaries entering the site from the east, flood storage is limited. The levee setback will provide additional 247 acre-ft of flood storage and provide flood damage reduction benefits that occur upstream along Hill Ditch levee system.

In addition, the levee setback project will provide an additional 53 acres of tidal marsh habitat, which is key habitat for juvenile Chinook rearing.

Overall, the project will provide multiple habitat restoration, improved fish passage, natural hydrology and flood control benefits. The project is a collaborative effort led by The Nature Conservancy with their partners including

Dike District #3, Drainage District #1, Skagit County and other partners.

Project development and implementation is occurring in the following three phases:

Phase I (SHEET 4): Floodgate replacement - involves retrofit of an existing floodgate that is a fish passage barrier and contributes to increased water temperature and decreased dissolved oxygen in the slough during low tides. A self-regulating floodgate will be installed to increase the period of time water is flowing through the structure, and improve fish passage to tidal marsh rearing areas during juvenile Chinook spring migration, and fall coho spawning migration periods. Permits for this work have been approved and work was completed between August 1 - November 30, 2009.

Phase II (SHEET 5): Big Ditch Realignment & South Levee Setback Pre-loading, and Tidal Marsh Restoration Pre-Excavation - involves realigning Big Ditch to the west to consolidate with other crossing infrastructure, constructing an inverted siphon crossing, constructing the levee setback initial pre-load, pre-excavating the tidal marsh restoration pilot channels, main tidal channel and tributary realignments in the dry, and regrading local irrigation drainage ditches.

Phase III (SHEET 6): South Levee Setback Final Loading, South Levee Removal & Tidal Marsh Restoration Channel Connections - involves final loading of the levee setback structure, tidal marsh restoration connection of the tidal marsh restoration pilot channels, and main tidal channel and tributary channel realignments, and removal of the existing south levee and demolition of the Big Ditch crossing.

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

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

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

☐ Aquaculture	☒ Culvert	☐ Float	☐ Road
☐ Bank Stabilization	☐ Dam / Weir	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat House	☒ Dike / Levee / Jetty	☒ Land Clearing	☐ Stairs
☐ Boat Launch	☒ Ditch	☐ Marina / Moorage	☐ Stormwater facility
☐ Boat Lift	☐ Dock / Pier	☐ Mining	☐ Swimming Pool
☒ Bridge	☒ Dredging	☐ Outfall Structure	☐ Utility Line
☐ Bulkhead	☐ Fence	☐ Piling	
☐ Buoy	☐ Ferry Terminal	☐ Retaining Wall (upland)	
☒ Channel Modification	☐ Fishway		

☒ Other: _Floodgate Replacement (Phase I)

6d. Describe how you plan to construct each project element checked in 6c. 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 flood plain.

Fisher Slough is the major waterbody nearest to each project element identified in 6c and below. Big Ditch is a secondary waterbody included in the work. The tributaries to Fisher Slough are also project water bodies.

All project activities will occur within the 100-year floodplain. TASK numbers below are intended to draw the reader's attention to specific project features as shown on SHEET 7 and in ATTACHMENTS H and I.

Floodgates (SHEETS 2, 4,7, and 9): Under Phase I (Task 1.0). Floodgates that are currently in use will be replaced by self-regulating floodgates and modification of an existing submerged flapgate. This will involve removal and demolition of the existing floodgates, drilling new holes in the concrete support structure, and installing the new gates. In addition, a regulating control structure (MTR) will be installed to keep the gates open for fish passage. Installation of the gates will be performed during low tide periods. Floodgate replacement will be land and bridge based with assistance from laborers working from a floating deck or small boat. Equipment will include excavators and industrial fork lifts for handing the gates from the land to the floodgate headwall.

The structure has a control box and access platform beneath the Fisher Slough Hwy bridge. The installation of this structure will require minor excavation and pile driving to install the work platform and affix the MTR to the bridge. MTR work will also occur during low tide periods.

A final piece of work involves maintenance of (1) submerged flap gate and replacement of (1) additional flap-gate. The submerged flap gate work will be performed by divers.

Permitting for the Phase I Floodgate Replacement is complete and construction will occur August 1 2009 to October 15, 2009.

Bridge (SHEETS 2 and16): Four temporary channel crossings are planned for the crossing the Big Ditch channel realignment. The plan is to install pre-frabicated or recycled railroad car for each crossing (as is currently used). Three crossings are located on the Junquist property to the north (S, N, and NE) and one on Smith A.

Channel Modification (SHEETS 2, 6 and 15): The channel modifications are as follows, Big Ditch Realignment, (2) tidal marsh pilot channels (new), realignment of Big Fisher and Little Fisher Creek, and realignment of Hill Ditch/Main Tidal Channel as it enters the Fisher Slough Marsh Areas.

Big Ditch channel realignment will be constructed in Phase II and will be built using dozers and excavators. The channel will be constructed in the dry, and connected to the existing channel in the Phase II in-water work window in 2010.

Two pilot tidal channels will be constructed, one in Smith A and one in Smith B. Pre-excavation of the pilot channels will occur in Phase II work, in the dry prior to levee breaching and channel connection, as Tasks 2.8.1 and 2.8.2. These channels will be excavated using a backhoe and will be approximately 3ft to 6ft wide and 2ft to 3ft deep. Connections will occur in Phase III as part of the levee breaching in the in-water work window in 2011 as part of Tasks 3.1, 3.2 and 3.3.

Big Fisher and Little Fisher Creeks realignments will be realigned across the historical alluvial fann and pre-excavated in Phase II work, in the dry prior to levee breaching and channel connections, as Tasks 2.9.1 and 2.9.2. These channels will be excavated using a backhoe and range from 4ft to 20ft wide and are 2ft to 3ft deep. Connections will occur in Phase III as part of the levee breaching in the in-water work window in 2011 as part of Tasks 3.1, 3.2 and 3.3.

The Main Tidal channel realignment will be pre-constructed in Phase II work, in the dry prior to levee breaching and channel connections, as Tasks 2.10.1, to connect with the tributary realignments and pilot channels. The Main Tidal channel realignment is 35ft wide and 4ft deep. Connections will occur in Phase III during levee breaching in the in-water work window in 2011 as part of Tasks 3.4.1 and 3.4.2. A plug will be installed in the existing main tidal channel for flow to follow the newly constructed channel.

Culverts on the project site include the existing Big Ditch culvert crossing, and two smaller drainage culverts, one on the Junquist farm to the north and the second on the Sersland driveway access on southeastern corner of the project. The existing Big Ditch culvert is to be demolished and removed as part of the Big Ditch realignment. Removal of this structure will require a diversion of Fisher Slough during the Phase III in-water work window in July 15 - Oct. 15, 2011. The replacement of the structure is with an inverted siphon near the Pioneer Hwy Bridge. The currrent plan is to use an open trench across the Slough for installation of the drainage pipes. The construction contractor may select a different construction methods, if feasible within the cost budget that could change the construction method of this structure. The final construction plan and water control plans will be made available for permit review as part of the process. Construction of this structure will also require a diversion and by-pass structure in the Phase II in-water work window from Aug. 1 - Oct. 15, 2010. The Junquist farm and Sersland driveway culverts are to be replaced (SHEETS 2, 4, 12, and 13 and TASKS 2.9.1, 2.9.2, 3.1.3).

Levees (SHEETS 2, 5, 6, 7, 14, 18): The Levee Setback is 3,900ft in length and will replace the existing 5,470ft long existing levee. The Levee Setback begins at the existing levee connection with Fisher Slough and the Pioneer Highway Bridge. Pre-loading of the setback levee will take place in Phase II, 2010. Final loading of the levee setback will take place in Phase III, 2011 (TASKS 2.7.1, 2.7.2 and 3.5). Approximately 30,000CY net of fill material are necessary to build the Levee Setback. The Levee Setback has an emergency spillway in place of the current overflow at the Big Ditch crossing. The Existing Levee Removal will take place in Phase III, 2011, and breaching of the levee will occur during the in-water work window of July 15 through Oct. 15, 2011. Placement and removal of levee materials will be performed using excavators, dozers, and sheepsfoot compactors.

Ditches (SHEETS 2, 5, 7, AND 11): There are a number of small irrigation and drainage ditches on the project site. The existing Big Ditch is being realigned to the west, as described in channel modifications. Smaller, abandoned farm ditches on the Smith A and Smith B tidal marsh restoration areas will be filled, lightly compacted and seeded prior to levee breaching (TASKS 2.11.1, 2.11.2). The Junquist farm ditch north of the north levee is being cleaned out and regraded to the west for drainage maintenance as part of the realignment of the Big Ditch channel (TASK 2.5).

Dredging (SHEET 7) includes sediment removal work for the installation of the inverted siphon pipes (TASK 2.4.2), and the realignment of the main tidal channel (TASK 3.4.1). The spoils will be salvaged and graded on site as part of levee features, ditch fill and localized grading plans.

It is noted that a majority of excavated soils will be recycled and salvaged on site as engineered levee fill, ditch fill material, and placement of topsoils on adjacent farm lands.

Clearing: Clearing and grubbing of vegetation and trees will be required for the project. Haul routes, channel realignment, levee setback areas will be cleared and grubbed as necessary. Materials gained through clearing and grubbing activities can be salvaged and recylced as topsoil, used as fill and landscaping mulch, disposed of off site, or the contractor can be required to chip the materials and stockpile for gathering and use by others. 21 large cottonwood trees are being removed along the S. Levee setback alignment and are planned for salvage and use as habitat feature in the marsh (contingent upon Dike District #3 approval). All other large tree species have been identified on plans for preservation and protection. The Levee Setback, restored marsh, and riparian areas will be revegetated (SHEET 20).

6e. What are the 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:	End date:	☒ See JARPA Attachment D

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

The purpose of the Fisher Slough Tidal Marsh Restoration Project is to reconnect natural hydrology to approximately 50 acres of currently diked floodplain, restore historical tidal marsh vegetation communities, and remove fish passage barriers. This work is needed to restore rearing areas for juvenile Chinook, increase watershed connectivity for coho, chum and other native fish species, and improve flood and sediment storage conditions for the tributary levee system.

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

$5 Million

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

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

☒ Yes ☐ No ☐ Don't know

NOAA, EPA

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.)

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

☐ Not applicable

With the exception of existing constructed upland areas such as levees, the vast majority of the project site was historically a natural wetland. Much of the site, however, has been diked and drained and is considered poor quality, prior converted cropland. Anticipated outcomes of this project include increased fish passage and the restoration and enhancement of nearly 50 acres of tidal marsh and tributary riparian areas.

See Appendix E: Wetland Mitigation Table
See Appendix F: Wetland and Waters of the U.S. Delineation Report

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

☒ Yes ☐ No ☐ Don't know

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.

☐ Yes ☒ No ☐ Not applicable

7g. Use the table below to list the type and rating of each wetland that will be impacted; the extent and duration of the impact; and the type and amount of compensatory mitigation proposed. If you are submitting a compensatory mitigation plan with a similar table, you may simply state (below) where we can find this information in the mitigation plan. [help]

Activity causing impact (fill, drain, excavate, flood, etc.)	Wetland type and rating category[1]	Impact area (sq. ft. or acres)	Duration of impact[2]	Proposed mitigation type[3]	Wetland mitigation area (sq. ft. or acres)
See Attachment H					

[1] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

[2] Indicate the time (in months or years, as appropriate) the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

[3] 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:

7h. For all filling activities identified in 7g., 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]

See Attachment H

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

See Attachment H

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

No compensatory mitigation is planned, the project is a habitat restoration project and will restore nearly 50 acres of prior converted farmland to wetlands.

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

The project is designed to minimize adverse impacts to the aquatic environment through the following:

1. Construction work will be performed during low tide cycles

2. Construction will be performed during the designated in-water work window for Skagit River bull trout and for Fisher Creek and Carpenter Creek coho (August 1, 2010 to October 15, 2010 for Phase II and July 15, 2010 to October 15, 2011 for Phase III.)

3. Existing infrastructure (i.e., floodgates installed during Phase I) will be used to isolate the site from tidal fluctuation. More specifically, the floodgates will be closed and a pump diversion and bypass pipe will be installed during construction of the inverted siphon (Phase II). During removal of the South Levee (Phase III), the levee will be pre-excavated down to the OHW as a small berm, then removed while the floodgates controls are disengaged protecting the site from tidal inflows and exposure during construction. The site will be isolated during Phase II and Phase III construction using the floodgate and levees to protect the tidal marsh restoration areas.

4. Contractor will be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPP) (if required by Ecology) that includes a Temporary Erosion and Sediment Control (TESC) plan.

5. Contractor will be required to develop a Care and Diversion (Water Control) Plan including measures to isolate construction work areas from aquatic water bodies, by-pass flow through the construction site, and provide exclusion, removal and protection of fish.

6. All pilot channels and tributary realignment channels will be pre-excavated under dry conditions and connected during Phase III in-water work window July 15 - OCt. 15, 2011. The floodgates will be operated to exclude tidal inflow during levee removal. Upon completion of levee removal, the gates will be reopened, which will connect the channels.

7. The planting plan calls for hydroseeding, seeding and planting multiple areas in the project. In particular, exposed and bare construction surfaces will be planted and watered prior to levee breaching. This will establish plants and protect against erosion as tidal flows are reestablished. (SHEET 20)

8. Background trubidity of the Skagit River is typically high during summer months due to glacial runoff. Minimal surface soil exposure from levee removal and newly constructed channels will have turbidity measurements that will fall within water quality criteria <50 NTU above background.

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

☒ Yes ☐ No

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

Activity causing impact (clear, dredge, fill, pile drive, etc.)	Waterbody name	Impact location[1]	Duration of impact[2]	Amount of material to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
See Attachment I					

[1] 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.

[2] Indicate the time (in months or years, as appropriate) the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8d. 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.

☐ Yes ☒ No ☐ Not applicable

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

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

No compensatory mitigation is planned. The project is a habitat restoration and fish passagement improvement project that will restore 50 acres of tidal marsh, and provide juvenile Chinook habitat, fish passage and improved flood and sediment storage. Mitigation is not required.

8f. For all activities identified in 8c., 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]

See Attachment I

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

See Attachment I

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project.

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
See Attachment J		( )	
		( )	
		( )	

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 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

Big Fisher Creek: dissolved oxygen (Cat. 5); Big Ditch: DO, temperature, fecal coliform, pH (all Cat. 5); and Hill Ditch (Carpenter Creek): DO (Cat. 5)

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.

17110007

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

- Go to http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm to find the WRIA #.

WRIA 3.0176

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.

☒ Rural ☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☐ Other _____

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

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

☐ S ☒ F ☐ Np ☐ Ns

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: WSDOE February 2005 Stormwater Management Manual for Western Washington Vols. 1-5

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

Agriculture and flood control

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

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

☒ Yes ☐ No

9k. 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]

Marbled murrelet (Brachyramphus marmoratus)*
Northern spotted owl (Strix occidentalis caurina)*
Coastal/Puget Sound bull trout (Salvelinus confluentus)*
Chinook salmon (Onchorynchus tshawytscha) **
Steelhead trout (O. mykiss)**
Coho salmon (O. kisutch) **
* Species for which Section 7 consultation has been initiated with USFWS
** Anadromous species covered under Limit 8 Programmatic Biological Opinion (Attachment L)

9l. 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]

I. Habitats:
  a. Riparian
  b. Freshwater Wetlands & Fresh Deepwater
  c. Instream
II. Fishes
  a. Pacific Lamprey
  b. River Lamprey
  c. Bull Trout/Dolly Varden
  d. Chinook Salmon
  e. Coho
  f. Steelhead
III. Amphibians
  a. Western Toad
IV. Birds
  a. Great Blue Heron
  b. Wood Duck
  c. Snow Goose (winter)
  d. Tundra Swan (winter)
  e. Waterfowl Concentrations (winter)
  f. Bald Eagle

Part 10–Identify the Permits You Are Applying For

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

- Online Project Questionnaire at http://apps.ecy.wa.gov/opas/.
- Governor's Office of Regulatory Assistance at (800) 917-0043 or help@ora.wa.gov.

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.)

- Submit the Fish Habitat Enhancement Project form with this application. The form can be found at http://www.epermitting.wa.gov/Portals/_JarpaResourceCenter/images/default/JARPA_supplement_fish_enhancement4_23_09.doc

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

☒ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?
RCW 77.55.181

☐ Other

☐ SEPA is pre-empted by federal law. [help]

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

Washington Department of Ecology:

☒ Section 401 Water Quality Certification

Washington Department of Natural Resources:

☐ Aquatic Resources Use Authorization

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:

☐ General Bridge Act Permit ☐ Private Aids to Navigation (for non-bridge projects)

Part 11–Authorizing Signatures

Signatures required before submitting the JARPA package.

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 GLB (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. GLB (initial)

Applicant

11/24/09
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.

Authorized Agent

11-24-09
Date

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

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

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 fo[illegible], contact The Governor's Office of Regulatory [illegible]sistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORA publication number: ENV-019-09

JARPA Attachments

UPI #: 091898-09-01
Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Attachment A.	Additional Property Owners
Attachment B.	N/A
Attachment C.	N/A
Attachment D.	Question 6e. Construction Sequence
Attachment E.	Question 7a. Wetland Mitigation Table
Attachment F.	Question 7a. Wetland and Waters of the U.S. Delineation Report
Attachment G.	Question 7e. Western Washington Wetland Ratings
Attachment H.	Question 7g. Type and Rating of Each Impacted Wetland Question 7h. Source and Nature of Fill Material Question 7i. Excavation Method and Disposal Location
Attachment H Addendum	Fisher Slough Restoration Project Impacts
Attachment I.	Question 8c. Type and Rating of Each Impacted Waterbody Question 8f. Source and Nature of Fill Material Question 8g. Excavation Method and Disposal Location
Attachment J.	Question 9a. Additional Information
Attachment K.	Question 9j. Cultural Resources
Attachment L.	Question 9k. Self-certification HRP Limit 8
Attachment M.	Question 10a. Fish Habitat Enhancement Exemption

TETRA TECH

2009
WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form [help]

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

JARPA Attachment A:
For additional property owner(s) [help]

Use this attachment only if you have more than one property owner.

TO BE COMPLETED BY APPLICANT [help]

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

4a. Name (Last, First, Middle) and Organization (if applicable)			
Burlington Northern Santa Fe (BNSF) Railroad			
4b. Mailing Address (Street or PO Box)			
David Agee			
4c. City, State, Zip			
2454 Occidental Ave S, Seattle, WA 98134			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(206) 418-9859	( )	( )	
Address or tax parcel number of property you own:			
No_ID			

4a. Name (Last, First, Middle) and Organization (if applicable)			
Diking District #3			
4b. Mailing Address (Street or PO Box)			
C/O Judith Olson PO Box 324			
4c. City, State, Zip			
Conway, WA 98238			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 445-3375	( )	( )	
Address or tax parcel number of property you own:			
17524, 17509, 17434, 17457, 17454, and one parcel with no tax parcel number			

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-020-09

2009

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

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Agency reference #: _____

Tax Parcel #(s): _____

_____

JARPA Attachment A:
For additional property owner(s) [help]

Use this attachment only if you have more than one property owner.

TO BE COMPLETED BY APPLICANT [help]

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

4a. Name (Last, First, Middle) and Organization (if applicable)			
Drainage District #17			
4b. Mailing Address (Street or PO Box)			
c/o Brian Olson			
4c. City, State, Zip			
Mount Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
( )	( )	( )	
Address or tax parcel number of property you own:			
17507, and one parcel with no tax parcel number			
4a. Name (Last, First, Middle) and Organization (if applicable)			
Earl Hanson			
4b. Mailing Address (Street or PO Box)			
3316 Trumpeter Dr.			
4c. City, State, Zip			
Mount Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 708-7943	( )	( )	
Address or tax parcel number of property you own:			
17450			

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-020-09

2009

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

JARPA Attachment A:
For additional property owner(s) [help]

Use this attachment only if you have more than one property owner.

TO BE COMPLETED BY APPLICANT [help]

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

4a. Name (Last, First, Middle) and Organization (if applicable)			
Roger Jungquist et al.			
4b. Mailing Address (Street or PO Box)			
16032 Beaver Marsh Rd.			
4c. City, State, Zip			
Mount Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 424-8667	( )	( )	
Address or tax parcel number of property you own:			
16854			
4a. Name (Last, First, Middle) and Organization (if applicable)			
Maple Wood Farm Inc.			
4b. Mailing Address (Street or PO Box)			
16032 Beaver Marsh Rd.			
4c. City, State, Zip			
Mount Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 424-8667	( )	( )	
Address or tax parcel number of property you own:			
17486, 17523			

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-020-09

2009

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

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Agency reference #: _____

Tax Parcel #(s): _____

_____

JARPA Attachment A:
For additional property owner(s) [help]

Use this attachment only if you have more than one property owner.

TO BE COMPLETED BY APPLICANT [help]

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

4a. Name (Last, First, Middle) and Organization (if applicable)			
Harvey L. Moyer			
4b. Mailing Address (Street or PO Box)			
22556 Franklin Rd			
4c. City, State, Zip			
Mount Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 445-2445	( )	( )	
Address or tax parcel number of property you own:			
17433, 17466, 17467, 17518			

4a. Name (Last, First, Middle) and Organization (if applicable)			
Skagit County			
4b. Mailing Address (Street or PO Box)			
c/o Jeff McGowan, 1800 Continental Pl			
4c. City, State, Zip			
Mount Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 419-3427	( )	( )	
Address or tax parcel number of property you own:			
17509, Three parcels with no tax parcel number.			

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-020-09

2009
WASHINGTON STATE
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US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

JARPA Attachment A:
For additional property owner(s) [help]

Use this attachment only if you have more than one property owner.

TO BE COMPLETED BY APPLICANT [help]

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

4a. Name (Last, First, Middle) and Organization (if applicable)			
State Waters			
4b. Mailing Address (Street or PO Box)			
4c. City, State, Zip			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
( )	( )	( )	
Address or tax parcel number of property you own:			
No_ID			
4a. Name (Last, First, Middle) and Organization (if applicable)			
The Nature Conservancy			
4b. Mailing Address (Street or PO Box)			
Skagit Field Office: 410 N. 4th St			
4c. City, State, Zip			
Mt. Vernon, WA 98273			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
(360) 419-7022	( )	( )	
Address or tax parcel number of property you own:			
17436, 17508, 17519			

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-020-09

2009

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

JARPA Attachment D: Construction Sequence [help]

Use this attachment only if your project will be constructed in phases or stages. Complete the outline showing the construction sequence and timing of activities, including the start and end dates of each phase or stage.

TO BE COMPLETED BY APPLICANT [help]

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

Use black or blue ink to enter answers in white spaces below or fill in electronically by clicking on fields.

Phase or Stage	Start Date	End Date	Activity Description
1	08/01/09	10/15/09	Fisher Slough floodgate replacement
2	6/01/10	10/15/10	Big Ditch Realignment & Levee Setback Pre-loading and Tributary and Tidal Marsh Channel Pre-Excavation
3	6/01/11	10/15/10	Levee Setback Final Loading, Levee Removal, Marsh and Riparian Plantings, Tributary & Tidal Marsh Channel Connections

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

JARPA Attachment H:

Question 7g. Type and Rating of Each Impacted Wetland
Question 7h. Source and Nature of Fill Material
Question 7i. Excavation Method and Disposal Location

UPI #: 091898-09-01
Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment, Skagit County, Washington

TETRA TECH

JARPA Attachment H:

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Siphon Realignment; Skagit County, Washington

	Activity causing impact (fill, drain, excavate, flood, etc.	Task(s)[1]	Description	Wetland type and rating category[2]	Impact area (acres)	Duration of Impact[3]	Proposed mitigation type[4]	Wetland mitigation area (acres)	Question 7h. Source and nature of fill, CY used, placement in wetland	Question 7i. Excavation method, type and amount of fill, CY removed, where disposed	Soil Notes
PHASE II	Excavate	2.1	Clear/Strip Parking Areas	Site 1 – PEM1h, Cat. 3 Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2		< 1 mo.	-	-	-	2,255 CY	
	Excavate	2.2.1	Big Ditch Strip (Junquist)	Site 1 – PEM1h, Cat. 3	1.52	Permanent	-	-	-	4,767 CY	Dispose: on site (adjacent prior converted cropland)
	Excavate	2.2.2	Big Ditch Cut (Junquist)	Site 1 – PEM1h, Cat. 3		Permanent	-	-	-	19,003 CY	Dispose: use for S. Levee Pre-load (Task 2.7.3 or 2.7.5)
	Excavate	2.3.1	Big Ditch Strip (Smith A)	Site 2 – PEM1h, Cat. 2	0.52	Permanent	-	-	-	1,667 CY	Dispose: on site (adjacent prior converted cropland)
	Excavate	2.3.2	Big Ditch Cut (Smith A)	Site 2 – PEM1h, Cat. 2		Permanent	-	-	-	7,260 CY	Dispose: use for S. Levee Pre-load (Task 2.7.3 or 2.7.5) and stockpile for other activities
	Excavate	2.4.1	Big Ditch Inverted Siphon Strip	Site 2- R1EM, Cat. 2	0.14	<3 mo.	-	-	-	233 CY	Dispose: on site (adjacent prior converted cropland)
	Excavate	2.5	Drainage Regrade	Site 1 – PEM1h, Cat. 3	0.75	Permanent	-	-	-	5,419 CY	Dispose: on site (adjacent prior converted cropland)

JARPA Attachment H:

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Siphon Realignment; Skagit County, Washington

	Activity causing impact (fill, drain, excavate, flood, etc.	Task(s)[1]	Description	Wetland type and rating category[2]	Impact area (acres)	Duration of Impact[3]	Proposed mitigation type[4]	Wetland mitigation area (acres)	Question 7h. Source and nature of fill, CY used, placement in wetland	Question 7i. Excavation method, type and amount of fill, CY removed, where disposed	Soil Notes
PHASE II cont.	Excavate	2.7.1	South Levee Setback Pre-load 1' Strip	Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2		Permanent	R	-	-	7,407 CY	Dispose: on site (adjacent prior converted cropland)
	Fill	2.7.2	South Levee Setback Pre-load	Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2		Permanent	R	-	45,713 CY	-	Phase II pre-load using existing and imported materials
	Fill	2.7.3	S. Levee Setback Pre-load Fill	Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2	4.79	Permanent	R	-		-	
	Excavate	2.7.4	S. Levee Realign Pre-load 2' Strip	Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2		Permanent	R	-	-	12,133 CY	Material not suitable for restoration site or adjacent farm due to invasive plant species
	Fill	2.7.5	S. Levee Realign Pre-load 2' Fill	Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2		Permanent	R	-	26,726 CY	-	
	Excavate	2.8.1	Smith A Pilot Channel Cut	Site 2 – PEM1h, Cat. 2	0.07	Permanent	R	-	-	471 CY	Dispose: on site (adjacent prior converted cropland)

JARPA Attachment H:

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Siphon Realignment; Skagit County, Washington

	Activity causing impact (fill, drain, excavate, flood, etc.	Task(s)[1]	Description	Wetland type and rating category[2]	Impact area (acres)	Duration of Impact[3]	Proposed mitigation type[4]	Wetland mitigation area (acres)	Question 7h. Source and nature of fill, CY used, placement in wetland	Question 7i. Excavation method, type and amount of fill, CY removed, where disposed	Soil Notes
PHASE II cont.	Excavate	2.8.2	Smith B Pilot Channel Cut	Site 3 – PEM1h, Cat. 2	0.10	Permanent	R	-	-	952 CY	Dispose: on site (adjacent prior converted cropland)
	Excavate	2.9.1	Big Fisher Tributary Realign	Site 3 – PEM1h, Cat. 2	0.50	Permanent	-	-	-	761 CY	Dispose: on site (adjacent prior converted cropland)
	Excavate	2.9.2	Little Fisher Tributary Realign	Site 3 – Pem1h, Cat. 2	0.02	Permanent	-	-	-	3,353 CY	Dispose: on site (adjacent prior converted cropland)
	Excavate	2.10.1	Main Tidal Realign Cut	Site 3 – Pem1h, Cat. 2	0.41	Permanent	-	-	-	2,560 CY	Dispose: on site (adjacent prior converted cropland)
	Fill	2.11.1	Smith A Drainage Fill	Site 2 – PEM1h, Cat. 2	-	Permanent	-	-	3,000 CY		Source: on site
	Fill	2.11.2	Smith B Drainage Fill	Site 3 – PEM1h, Cat. 2	-	Permanent	-	-	2,150 CY		Source: on site
	Fill[5]	2.12	Haul and Grade Topsoil on Junquist Farm	PCC	17.79[5]	Permanent	-	-	20,000 CY (Not included in total; see below[5])	-	Dispose: on site (prior converted cropland)

JARPA Attachment H:

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Siphon Realignment; Skagit County, Washington

	Activity causing impact (fill, drain, excavate, flood, etc.	Task(s)[1]	Description	Wetland type and rating category[2]	Impact area (acres)	Duration of Impact[3]	Proposed mitigation type[4]	Wetland mitigation area (acres)	Question 7h. Source and nature of fill, CY used, placement in wetland	Question 7i. Excavation method, type and amount of fill, CY removed, where disposed	Soil Notes
PHASE III	Excavate	3.1.1	South Levee Removal Strip 1' Topsoil	Site 2 – PEM1h, Cat. 2 Site 3 – PEM1h, Cat. 2; Site 4 – R2EM, Cat IV	4.79	Permanent	-	-	-	9,178 CY	
	Excavate	3.1.2	South Levee Removal Suitable Material			Permanent	-	-	-	28,179 CY[6]	Assume 75% suitable material
	Excavate	3.1.3	South Levee Removal Unuitable Material			Permanent	-	-	-	9,393	
				Total	**13.60**				**77,589 CY[5] -**	**114,990 CY**	

JARPA Attachment H:

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Siphon Realignment; Skagit County, Washington

[1] See SHEET 7

[2] Ecology wetland category based on current Western Washington Wetland Rating System. See Attachment G

[3] Indicate the time (in months or years, as appropriate) the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

[4] Creation (C), Re-establishment (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

[5] Additional of topsoil to the Junquist property will not convert wetland to upland; it will remain as prior converted cropland.

6 1,500 CY of material are waterbody removal as part of existing Big Ditch Culvert demo

JARPA Attachment H Addendum

UPI #: 091898-09-01
Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment, Skagit County, Washington

Fisher Slough Restoration Project Impacts

Wetland fill
South Levee Setback: 6.69 ac

Fill of Existing Channels
Big Ditch (2 areas): 2,070 lf 2.46 ac
Little Fisher Creek Ditch: 1,550 lf 0.35 ac (Note: convert to riparian)
South Levee ditches: 4,420 lf 1.80 ac (Note: convert to tidal wetlands)
Little Fisher Creek channel: 1,550 lf 0.35 ac (Note: convert to riparian area)
Big Fisher Creek channel: 100 lf 0.03 ac
Main Tidal Channel Plug: 100 lf 0.11 ac

Conversion of Wetlands to channel
Big Ditch: 4145 lf 4.25 ac
Tidal Channel Realignment: 1,000 lf 0.79 ac
Pilot Channel A: 1,025 lf 0.07 ac
Pilot Channel B: 1,600 lf 0.11 ac
Big Fisher Creek: 1,671 lf 0.67 ac
Little Fisher Creek: 1,250 lf 0.11 ac

Excavation of Existing Channels
North Levee ditch: 1,920 lf 0.75 ac

Inverted Siphon Excavation/Backfill Area
Wetlands: 0.11 ac
Channel: 0.33 ac

Temporary Fill
Staging/stockpiling areas (3): 1.42 ac (Note: Temporary gravel fill area, only as needed, removed and restored upon project completion)

Restored Wetland Area
Tidal Marsh: 49.7 ac (Note: 60.0 ac restored tidal marsh total acreage if including existing 10.0ac)

JARPA Attachment I:

Question 8c. Waterbody Impacts
Question 8f. Source and Nature of Fill Material
Question 8g. Excavation Method and Disposal Location

UPI #: 091898-09-01
Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

TETRA TECH

JARPA Attachment I:

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Siphon Realignment; Skagit County, Washington

	Activity causing impact (fill, drain, excavate, flood, etc.	Task(s)[1]	Waterbody Name	Impact location[2]	Duration of Impact[3]	Question 8f. Source and nature of fill, CY used, placement in wetland	Question 8g. Excavation method, type and amount of fill, CY removed, where disposed	Soil Notes
PHASE II	Excavate	1.0	Floodgate Replacement	Fisher Slough	Permanent	25 CY	40 CY	Dispose: off site, upland location
	Excavate/Fill	2.4.2	Big Ditch Inverted Siphon Cut	Fisher Slough	<3 mo.	2,494 CY	4,989 CY	Dispose: use for S. Levee Pre-load (Task 2.7.3 or 2.7.5) and stockpile for other activities
	Fill	2.6	Big Ditch Fill U/S	Big Ditch	Permanent	1,000 CY	-	Source: on site from Task 2.2.1
PHASE III	Fill	3.2	Little Fisher Fill	Little Fisher Cr.	Permanent	1,000 CY	-	Source: S. Levee (Tasks 3.1.1 and 3.1.2)
	Fill	3.3	Big Fisher Fill	Big Fisher Cr.	Permanent	5,000 CY	-	Source: S. Levee (Tasks 3.1.1 and 3.1.2)
	Excavate	3.4.1	Main Tidal Realign Plug Cut	Fisher Slough	Permanent	741 CY	-	Small fill at head of main tidal channel; source: on site
	Fill	3.4.2	Main Tidal Realign Plug Fill	Fisher Slough	Permanent	-	2,560 CY	
	Fill	3.6	Big Ditch Fill D/S	Big Ditch	Permanent	6,222 CY	-	Big Ditch fill needs suitable material due to connection to levee
					Total	**16,482 CY**	**7,589 CY**	

[1] See SHEET 7

[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 floodplain.

[3] Indicate the time (in months or years, as appropriate) the waterbody will be measurably impacted by the activity. Enter "permanent" if applicable.

JARPA Attachment J: Additional Information

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

9a. If you have already worked with any government agencies on this project, list them below.			
Agency Name	**Contact Name**	**Phone**	**Most Recent Date of Contact**
US Army Corps of Engineers	Randel Perry	206-764-6985	9/2/09
US Fish and Wildlife Service	Ginger Phalen	360-753-5819	8/10/09
WA State Dept. of Ecology	Paul Anderson	425-649-7148	5/1/09
	Rebecca Piaget	425-649-7129	5/1/09
Skagit County	Daniel Downs	360-336-9410	6/25/09
	Ronny Audette	360-755-0988	8/1/08
WA State Dept. of Fish & Wildlife	Brian Williams	360-466-4345 x250	9/1/09
	Theresa Eturaspe	360-902-2575	8/1/08
WA State Dept. of Historic Preservation	Allison Brooks	360-586-3065	5/15/09
WA Department of Natural Resources	Brenda Worden	360-856-3500	9/1/09

JARPA Attachment K: Cultural Resources

UPI #: 091898-09-01
Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

TETRA TECH

CULTURAL RESOURCES SURVEY COVER SHEET

Please submit reports unbound

Author: Frank Stipe M.A.

Title of Report: Cultural Resource Survey for the Proposed Fisher Slough Restoration Project

Date: 6/26/09

County(ies): Skagit County Sec.: 30 Township: 33N, Range: 4E
7.5′ Quad: Conway, WA, 1985
Acres: 20 acres

Does this replace a draft? No

Sites Found? None

TCP(s) found? No traditional cultural properties were found

DAHP Archaeological Site #:

_____
_____
_____
_____
_____
_____
_____
_____

REPORT CHECK LIST

Report should contain the following items:

- Clear objectives and methods
- A summary of the results of the survey
- A report of where the survey records and data are stored
- A research design that:
  - Details survey objectives
  - Details specific methods
  - Details expected results
  - Details area surveyed including map(s) and legal locational information
  - Details how results will be feedback in the planning process

Reports are now being accepted as single file PDF's and can be submitted on a CD along with the paper copy.

(Attach additional sheets as necessary)

INTRODUCTION

On behalf of The Nature Conservancy Tetra Tech conducted a cultural resource literature search, a pedestrian archaeological survey and subsurface testing regime for the proposed Fisher Slough Restoration Project. The project area is located in the southern part of Skagit County, Washington, south of the city of Conway in Section 30 of Township 33 North, Range 4 East, Willamette Meridian (Figure 1).

The proposed restoration project includes the replacement of an existing levee that runs along the south side of Fisher Slough, realigning Big Fisher Creek, realigning Little Fisher Creek, demolishing the existing Big Ditch culvert crossing and fill/re-grade the existing ditch which travels south through the southern levee. All of these project components are aimed at restoring the wetland south of Fisher Slough.

Tetra Tech conducted background research for information about historic and ethnographic uses of the project area and surveyed the project area and proposed staging areas. This study was done to meet the requirements of Section 106 of the National Historic Preservation Act for the U.S. Army Corps of Engineers Section 404 permit and funding under the National Oceanic and Atmospheric Administration. The work was also done to address state requirements for the protection of archaeological resources. No archaeological resources were identified during the survey, and no information about traditional Native American uses of the project location was found during the background research and literature review.

ENVIRONMENTAL SETTING

The project area is located in Skagit County on the east side of Pioneer Highway, approximately 1 mile south of the city of Conway. Vegetation within the project area is composed of agricultural crops, grasses and forbs associated with open field re-growth, and cottonwood trees along agricultural field boundaries. Native vegetation has been disturbed by the presence of the dikes, levees, and agricultural activities. Within the surveyed areas the ground surface has undergone severe disturbance by levee and road construction, causing disturbed soils throughout the levee as well as those areas surrounding the levee. Presumably the soil for the levee came from these nearby fields.

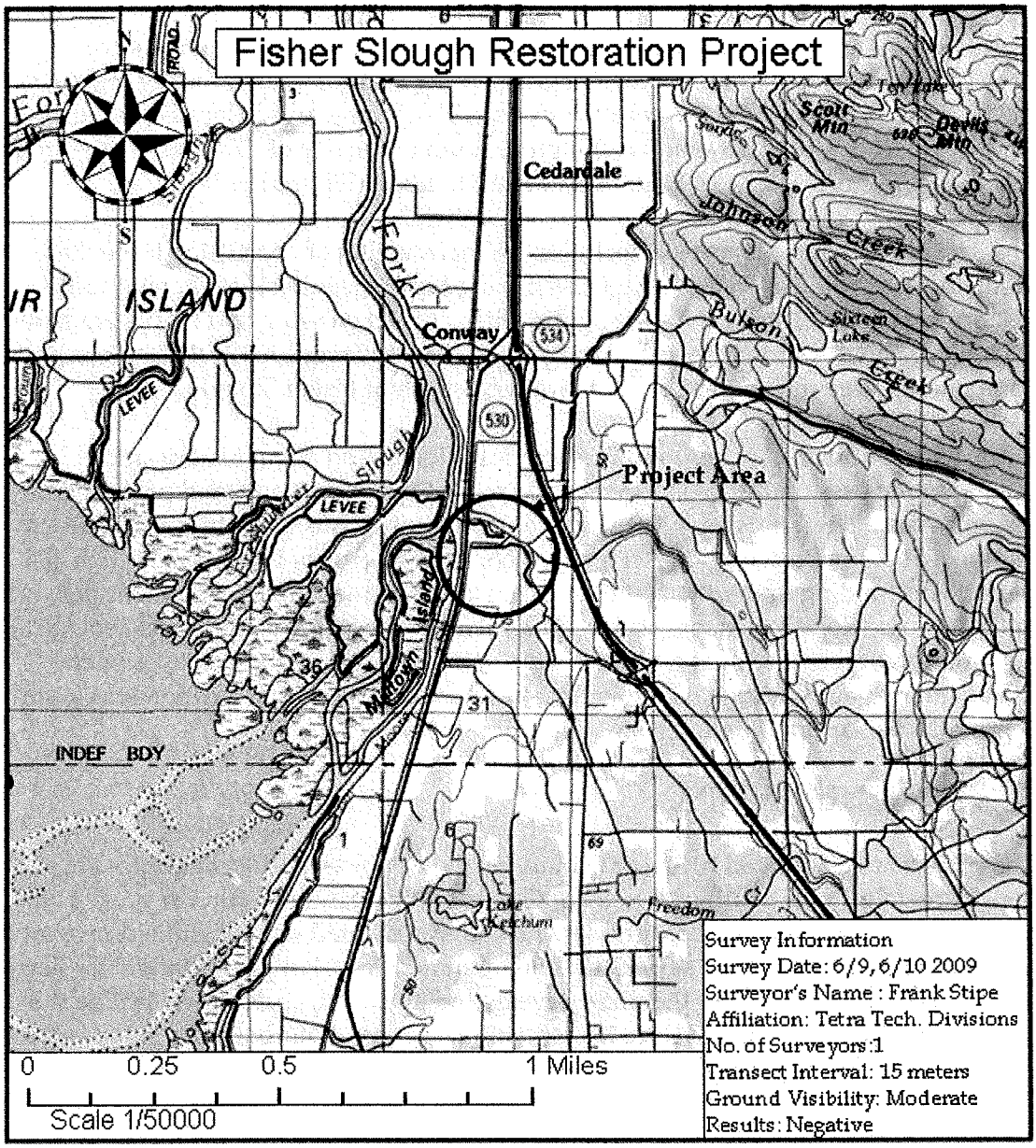

Figure 1. Project Location Map

BACKGROUND RESEARCH

Records from the Washington Department of Archaeology and Historic Preservation (DAHP) and historic-period General Land Office (GLO) maps were examined to determine if archaeological sites or historic-period structures or features were present in or in the vicinity of the project area. The literature review and records search determined that several archaeological surveys have been conducted and several archaeological sites have been recorded in the vicinity of the Fisher Slough project area.

Ethnographic Background

The project area falls within territory traditional occupied by northern Lushootseed speaking people. These people traditionally occupied villages containing one or more houses made from cedar planks. In the Puget Sound area, houses were traditionally occupied by multiple families. The primary occupation of the houses was winter, with only the disabled, elderly, and very young children remaining in the houses other times of year. Winter villages were typically located near rivers or near the shores of Puget Sound. In early Spring to late Fall, families typically left the winter villages to procure fish, game, and plant resources at seasonal camps (Suttles and Lane 1990).

Historical Background

The first well-documented European explorations in the region took place in the 1770's, when explorers from England and Spain visited the region. After a period in which Euro American interests in the region were dominated by the fur trade in the early part of the nineteenth century, larger numbers of American settlers came to the Puget Sound area in the 1840's, especially after 1846, when the border between the United States and British North America was established at the 49th parallel (Ficken and LeWarne 1988:21-22). By the early 1850's, there were several American settlements on harbors and river mouths around Puget Sound (Ficken and LeWarne 1988:14-17).

In Skagit County, agriculture was an important economic activity in the early years of Euro American settlement. The construction of dikes and levees around the lower Skagit River area protected large tracts of land from spring flooding and allowed for the successful cultivation of oats, hay, fruits, and vegetables (Kunzler 2005). Dikes and levees were built from the time of the earliest Euro American settlement in the area in the 1860's. By 1884, 150 miles of dikes had been built in Skagit County and by the 1890's farmers along the Skagit River had organized themselves into diking districts to manage the construction of dikes and levees (Dwelly 1979:124; Willis 1975:169). The 1873 GLO map of Township 33N, Range 4 E, depicts two historic dikes mapped in the northeast corner of Section 30, within close proximity to the project area (GLO 1873). However, the locations of these dikes do not correspond to any of the existing dikes within and around the project area. A 1956 Conway, WA, USGS topographic quadrangle map depicts levees on each side of Fisher Slough, possibly corresponding to the current levees.

The abundant timber in the hills to the east of the Skagit River floodplain was heavily harvested and prompted the development of an extensive railroad network to transport timber (Thompson 1989:1-3, 1-4). One of the early railroad tracks built by the English Lumber Company in 1901 ran along the southern end of the Fisher Slough Restoration Project area (Thompson 1989:1-4). This early railroad network is depicted on the Mount Vernon, WA 1911 USGS topographic map. In the area to the immediate west of the project area, the English Lumber Company also set up a log dump at the west end of the Tom Moore Slough (Thompson 1989:1-4).

Previous Archaeological Investigations

Eight cultural resource surveys have been conducted within 1 mile of the current project area.

In 2008, AINW conducted a pedestrian survey for the Fisher Slough Restoration Project, Floodgate Replacement Phase. This was the initial survey undertaken for this project. The survey did not identify any cultural resources within its project area (Adams 2008).

In 1998, Bert Rader conducted a reconnaissance survey for a deep water slough environmental enhancement project conducted by (Rader 1998). The survey was conducted approximately 100 m (330 ft) to the west of the current floodgate replacement location, and portions of the survey overlap the existing dike road to be used for project access. There were no cultural resources identified during the pedestrian survey and shovel testing conducted for this project (Rader 1998).

In 2007, Northwest Archaeological Associates (NWAA) conducted a cultural resource study for the Washington State Department of Transportation water quality improvements along Interstate 5 (Piper 2007). A portion of the study area was approximately 1 km (0.6 mi) east of the current floodgate replacement location. Due to the disturbed areas of road fill that comprised this portion of the study area, no archaeological survey work was recommended (Piper 2007).

In 2005, AINW conducted a cultural resource survey of Northwest Pipeline Corporation's Capacity Replacement Project. A segment of the survey area for this project was conducted at the City of Conway, located approximately 1.6 km (1 mi) north of the current floodgate replacement location. AINW recorded two resources during the pedestrian survey and shovel testing for this project: a historic railroad alignment (temporary field number AINWMTV-13) and a historic dike along Steamboat Slough (AINW-MTV-14) (Smits et al. 2005:6-25, 6-26, 6-29). The historic railroad alignment was originally built in 1891 as a part of the Seattle and Montana Railway (Schwantes 1993:77) and is of particular interest for the current project due to the fact that the railroad alignment is approximately 20 m (66 ft) east of the floodgate replacement area and crosses the existing dike road that will be used as a project access road.

In 2004, the U.S. Army Corps of Engineers completed a cultural resource sample survey for the Skagit River Levee Rehabilitation Projects (Kent 2004). Three of the surveyed areas were between 1.6 km (1 mi) and 2.4 km (1.5 mi) north of the current floodgate replacement project location. There were no cultural resources identified during the survey of these areas, although two of the rehabilitation locations were within the historic 1880 town site of Fir (45SK120) located approximately 1.6 km (1 mi) north of the current floodgate replacement location. The historic town site is considered eligible for listing in the National Register of Historic Places (NRHP) (Kent 2004:7).

In 2001, Western Shore Heritage Services conducted a view shed evaluation for American Tower Corporation (Hartmann 2001). The survey was conducted in the city of Conway approximately 1 mile north of the current floodgate replacement location and did not result in the identification of any new cultural resources (Hartmann 2001).

In 2000, NWAA conducted a cultural resources inventory for the Washington Department of Transportation's Washington Light Lanes Project (Juell et al. 2000). A portion of the project extended along Interstate 5 approximately 1 km (0.6 mi) east of the current floodgate replacement location, although no cultural resources were identified along this portion of the project (Juell et al. 2000).

In 1979, Seattle Community College conducted a cultural resource survey for a proposed Skagit River Levee and Channel Improvement Project (Blukis Onat et al. 1979). The survey was conducted along both sides of both forks of the lower Skagit River from Burlington to Skagit Bay. During the survey, Blukis Onat et al. identified and recorded site 45SK115 (historic-period town of Conway). They also recorded a Kikiallus village site at the town of Conway, although they did not identify any cultural material at the site and thus did not give the site a permanent site number. In total, 19 prehistoric sites were identified by Blukis Onat et al. during the field reconnaissance. Ten of the sites were evident in the field, while the remaining nine were mentioned in the literature and by informants, but searches yielded no archaeological evidence (Blukis Onat et al. 1979:71). Blukis Onat et al. (1979) noted several previously recorded sites within 1.6 km (1 mi) of the current project area, including 45SK113 (historic "Milltown"), 45SK73 (a prehistoric shell midden), located 0.8 km (0.5 mi) west of the project area, 45SK56 (a prehistoric shell midden/burial site) located 1.6 km (1 mi) south of the project area, 45SK50 (a prehistoric shell midden), located 0.4 km (0.25 mi) east of the project area, 45SK63 (a prehistoric shell midden) located 1.6 km (1 mi) east of the project area, and 45SK57 (a prehistoric shell midden) located 0.4 km (0.25 mi) west of the project area. The shell midden site 45SK50 is of particular interest due to the fact that it is located on the north side of Fisher Slough within the proposed second phase of the Fisher Slough restoration project. A celt (a wedge-shaped stone tool traditionally used for woodworking by Native Americans in the region) along with fragments of broken shell and animal bone were found in an approximately 10 square-meter (33 square-foot) area when the site was originally recorded in 1960 (University of Washington 1960). The site does not present an issue for the floodgate replacement. However, AINW recommends that the site be avoided, or tested and evaluated for National Register of Historic Places eligibility if it cannot be avoided, during later phases of the project. The testing and evaluation work will need to be done under a permit issued by the DAHP.

Five additional prehistoric shell middens have been recorded within 1.6 km (1 mi) of the current project area. The shell midden sites were all recorded by the University of Washington in the 1960's. These sites include 45SK49 (a prehistoric shell midden located at the foot of a terrace approximately 1.2 km [0.75 mi] south of the current project area), 45SK59 (a prehistoric shell midden located on the west bank of Katons Slough approximately 1.6 km [1 mi] northeast of the current project area), 45SK60 (a prehistoric shell midden located on the north bank of Katons Slough approximately 1.6 [1 mi] northeast of the current project area), 45SK61 (a prehistoric shell midden located near the main course of a filled-in slough approximately 1.6 km [1 mi] northeast of the current project area), and 45SK62 (a prehistoric shell midden located on a plowed field approximately 1.6 km [1 mi] northeast of the current project area).

PEDESTRIAN SURVEY METHODS AND FINDINGS

On June 9, 10, 2009, Frank Stipe, M.A. Tetra Tech archaeologist completed the survey by walking 15 meter transects along the south levee, south of the south levee in the open fields and along all of the proposed access points and routes to be used by construction equipment. The specific areas of survey are seen in figure 2. The "Big Ditch" coming into the project area from the north will be re-graded and filled; this area is shown in red on figure 2. The soil surface could easily be seen along this corridor and no cultural materials were observed.

A total of 42 shovel test probes were completed. Shovel test probes were dug along the southern edge of the south levee and on top of the staging/stock piling areas on a 15 meter grid. The southern portion of the project area (A) near Franklin Road has been significantly disturbed by the installation of irrigation ditches. The soils have been depleted and contain little to no top soil, this is expected due to the significant amount of earth moving that took place to construct the levee. The field south (B) of the south levee was tested at 15 meter intervals 30 meters from the existing levees and contains similar soils and profiles as the southern field. Shovel test probes identified a very thin lense of darker soil near the surface but was immediately underlain by a disturbed soil which is likely the result of plowed subsoil. Intact subsoil was reached between 15 and 20 cm. below surface level. This subsoil contained light brown silty clay with less than 10% rounded gravels.

The property over and surrounding site 45SK50 was visually surveyed and no cultural materials were observed, the entire area where the site is located has been impacted by an existing road, agricultural activities on the adjacent property and the north levee construction. The agricultural field was intensively surveyed at 5 meter intervals and no cultural resources or features were observed. No cultural resources have been identified at the site location during this and 1 previous archaeological survey (Adams 2008).

No evidence of archaeological resources was found during the survey of the Fisher Slough Restoration Project and associated access roads. While the background research noted several archaeological sites in the Skagit River delta area, there was no information about ethnographic or Native American use areas for the immediate project area around the floodgate.

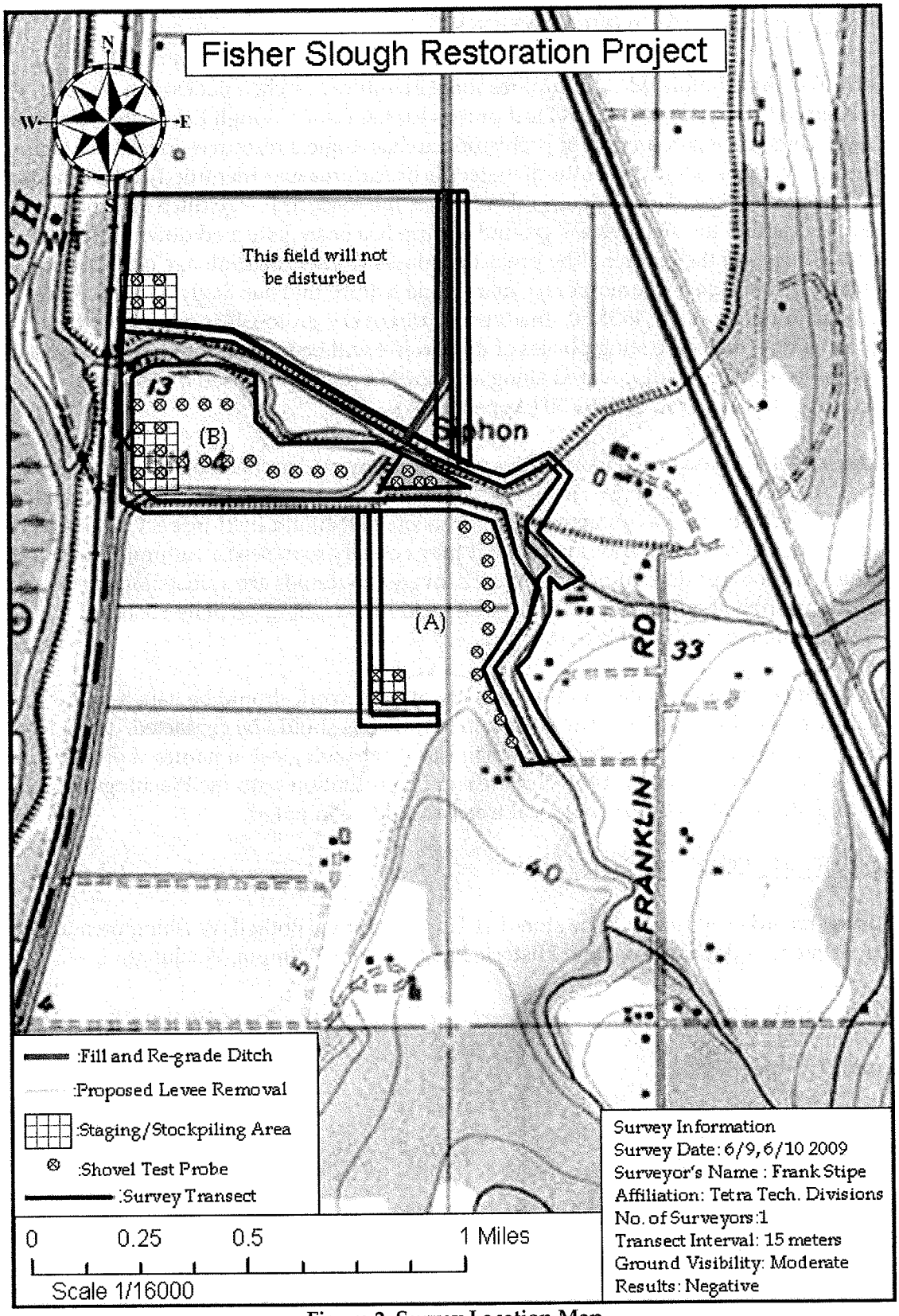

Figure 2. Survey Location Map

SUMMARY AND RECOMMENDATIONS

Tetra Tech has completed a cultural resource literature search, a pedestrian archaeological survey and shovel test probes for the Fisher Slough Restoration project. There were no historic-period or prehistoric archaeological resources identified during the survey. No evidence of cultural materials or features was identified at the location of Site 45SK50. Based on agricultural activities, the road, drainage ditch and the levee, all found within the site area the ground surface has been disturbed down to at least several inches of the surface. The project proposes to alter the drainage ditch found within the site area, a contemporary man-made feature that has likely destroyed the original integrity of site 45SK50. Inadvertent discovery protocols used during the investigation and soil testing phases of this project will be used in the event that possible cultural resources are discovered along any portion of the proposed project area including the area around 45SK50 (Appendix A).

In the event that construction activities uncover suspected archaeological materials, work should be halted in the vicinity of the inadvertent discovery and a professional archaeologist should be contacted. The archaeologist should field-inspect the suspected archaeological materials and determine if they actually represent a cultural resource site. If the archaeologist determines that the discovered materials are archaeological in nature, the find should be recorded as a site and the Washington State Historic Preservation Office should be contacted.

In the event that any human remains are discovered, work should be halted in the vicinity of the find and local law enforcement officials should be contacted. If the local coroner determines that the human remains are archaeological in nature, a professional archaeologist should inspect the find area and consultation with the Washington State Historic Preservation Office and local tribes should be initiated.

SURVEY RECORDS AND DATA

Survey records and data will be stored at Tetra Tech Inc., Bothell, Washington and at Department of Archaeology and Historic Preservation, Olympia, Washington.

PREPARER

Frank T. Stipe M.A.

Schwantes, Carlos A.
1993 *Railroad Signatures Across the Pacific Northwest*. University of Washington Press, Seattle, Washington.

Suttles, Wayne, and Barbara Lane
1990 *Southern Coast Salish*. In Northwest Coast, edited by Wayne Suttles, pp. 485-502. Handbook of North American Indians, vol. 7, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

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1989 *Logging Railroad in Skagit County*. Northwest Short Line, Seattle, Washington. University of Washington 1960 Site form for 45SK50. On file, Department of Archaeology and Historic Preservation, Olympia, Washington. Willis, Margaret (editor) 1975 Skagit Settlers, Trials and Triumphs, 1890-1920. Skagit County Historic Society Series No. 4, Mount Vernon, Washington.

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1979 *Cultural Resources Reconnaissance - Skagit River: Bibliographic Review and Field Reconnaissance for the Skagit River Levee and Channel Improvement Project.* Seattle Community College. Submitted to Seattle District, U.S. Army Corps of Engineers, Seattle, Washington.

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2001 *FCC Cellular Antennas Viewshed Evaluation, Site Name: Conway #43985, Conway, Washington.* Western Shore Heritage Services Letter Report 0110B-2. Prepared for American Tower Corporation, Bainbridge Island, Washington.

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Piper, Jessie
2007 *Cultural Resources Assessment of I-5/Dakota Creek Vicinity Water Quality Retrofit, Skagit and Whatcom Counties, Washington.* Northwest Archaeological Associates, Inc., Seattle, Washington Report Number WA06-84. Prepared for H.W. Lochner and the Washington State Department of Transportation.

Rader, Bert
1998 *Cultural Resources Reconnaissance of Deep Water Slough Environmental Enhancement, Section 1135 Project Near Milltown,* Skagit County, Washington. Prepared by Corp of Engineers, Seattle District.

Project Photographs

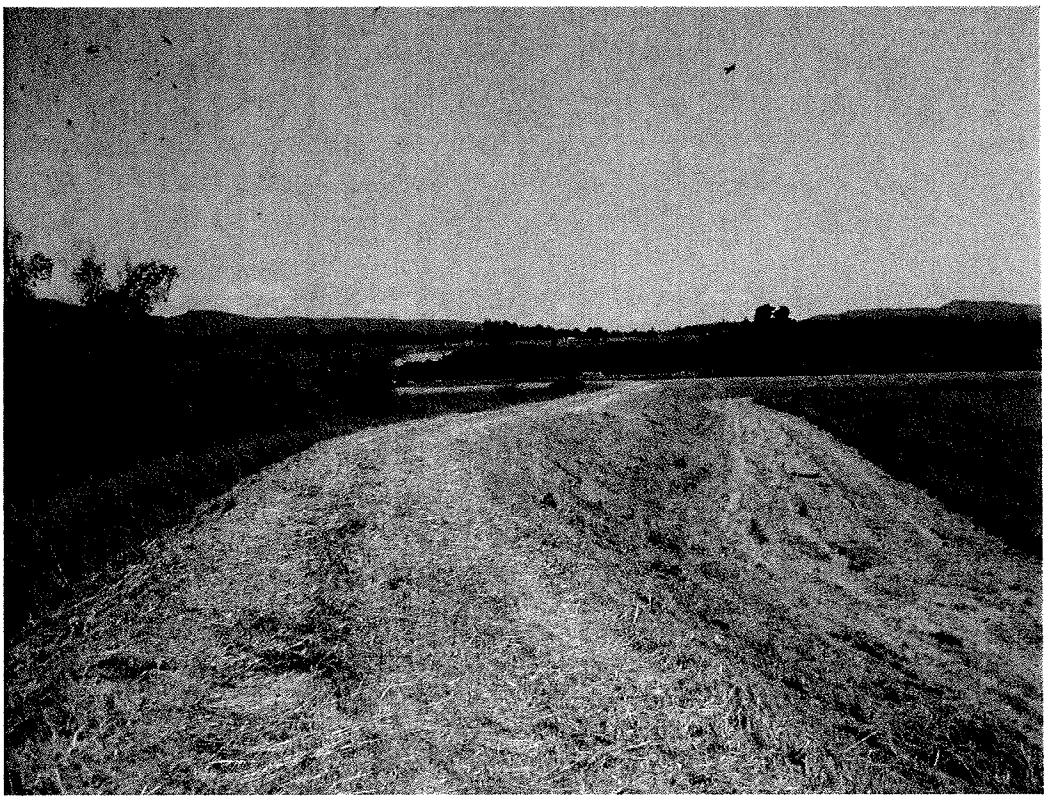

Photo 1, Facing SE along the south levee (this levee is to be removed so that those lands on the right side of the photograph can be returned to wetlands).

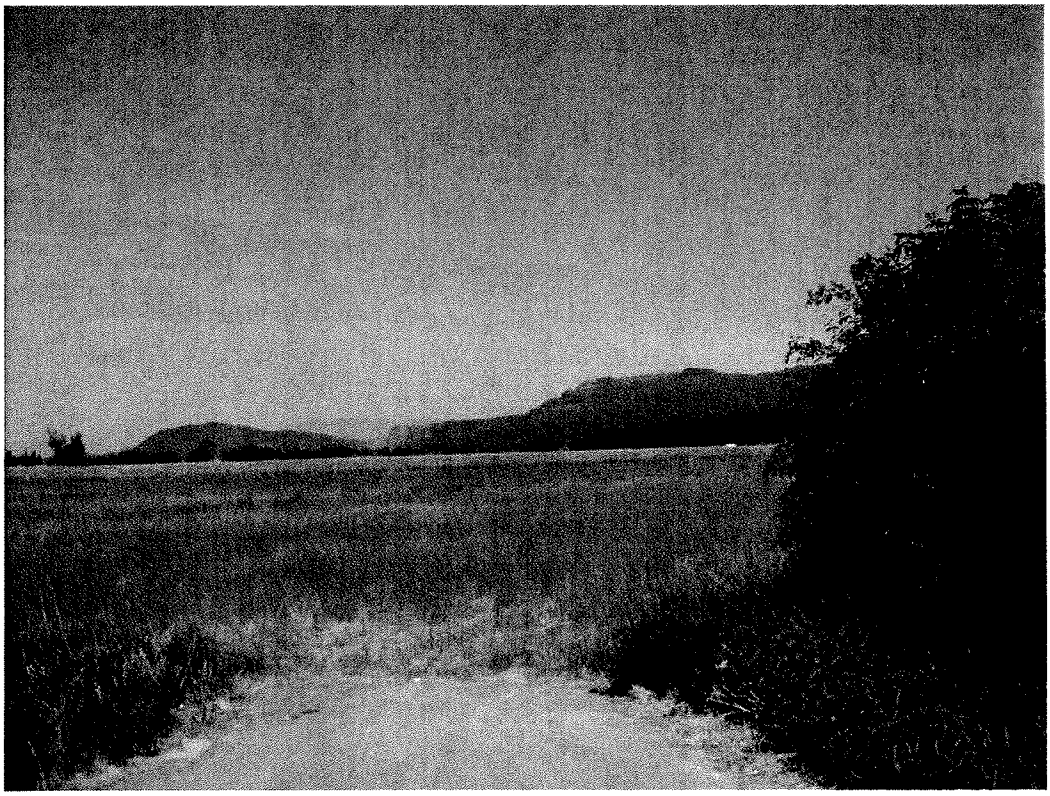

Photo 2, Facing NE towards Field B and the proposed staging/stock piling area

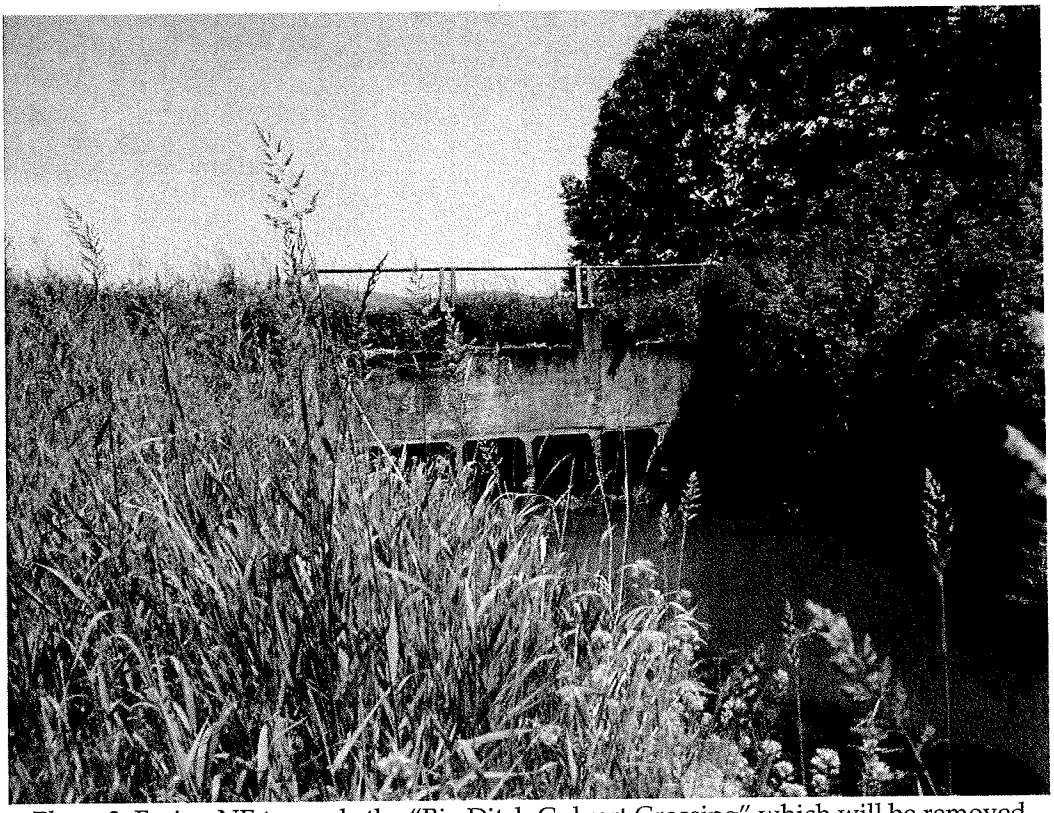

Photo 3, Facing NE towards the "Big Ditch Culvert Crossing" which will be removed

Appendix A

PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

FISHER SLOUGH RESTORATION PROJECT, SKAGIT COUNTY WASHINGTON

1. INTRODUCTION

The following Unanticipated Discovery Plan (UDP) outlines procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

2. RECOGNIZING CULTURAL RESOURCES

A cultural resource discovery could be prehistoric or historic. Examples include:

- An accumulation of shell, burned rocks, or other food related materials
- Bones or small pieces of bone,
- An area of charcoal or very dark stained soil with artifacts,
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips),
- Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years,
- Buried railroad tracks, decking, or other industrial materials.

When in doubt, assume the material is a cultural resource.

3. ON-SITE RESPONSIBILITIES

STEP 1: STOP WORK. If any employee, contractor or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work adjacent to the discovery must stop. The discovery location should be secured at all times.

STEP 2: NOTIFY MONITOR. If there is an archaeological monitor for the project, notify that person. If there is a monitoring plan in place, the monitor will follow its provisions.

STEP 3: NOTIFY PROJECT MANAGEMENT AND CULTURAL RESOURCES PROGRAM. Contact the The Nature Conservancy Project Manager and the Cultural Resources (CR) Program Manager:

The Nature Conservancy Project Manager:
Jenny Baker
360.419.7022
jbaker@tnc.org

If you can't reach the TNC Program manager, contact your project's assigned Cultural Resources Specialist or an alternate:

Assigned CR Specialist:
Frank Stipe
425-482-7821
frank.stipe@tetratech.com

Alternate:
David Cline, P.E.
206.728.9655 x112
David.cline@tetratech.com

The Project Manager or the Cultural Resources Program will make all other calls and notifications.

If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call 911 or speak with the media.

4. FURTHER CONTACTS AND CONSULTATION

A. Project Manager's Responsibilities:

- Protect Find: The Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.

- Direct Construction Elsewhere On-site: The Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.

- Contact CR Manager: If the CR Program Manager has not yet been contacted, the Project Manager will do so.

B. CR Program Manager's Responsibilities:

- Identify Find: The CR Program Manager (or a CR Specialist if so delegated), will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological.

    - If it is determined not archaeological, work may proceed with no further delay.

    - If it is determined to be archaeological, the CR Manager or CR Specialist will continue with notification.

    - If the find may be human remains or funerary objects, the CR Manager or CR Specialist will ensure that a qualified physical anthropologist examines the find. If it is determined to be human remains, the procedure described in Section 5 will be followed.

- Notify DAHP: The CR Program Manager (or a CR Specialist if so delegated) will contact the involved federal agencies (if any) and the Department of Archaeology and Historic Preservation (DAHP).

- Notify Tribes: If the discovery may relate to Native American interests, the Manager or Specialist will also contact the project's Tribal Liaison, or, if the project is not assigned a Liaison, the Executive Tribal Liaison.

Federal Agencies:

National Oceanic and Atmospheric Administration
Name: Polly Hicks
Title: Restoration Ecologist
Number: 206-526-4861
Email: polly. hicks@noaa.gov

Department of Archaeology and Historic Preservation:

Dr. Allyson Brooks
State Historic Preservation Officer
360-586-3066

Dr. Robert Whitlam
State Archaeologist
360-586-3080

The Tribal Liaison, or CR Program Manager or Specialist, will contact the interested and affected Tribes.

Tribes consulted on this project are:

Swinomish Indian Tribal Community
Name: Larry Campbell
Title: Tribal Historical Preservation Officer
Number:360-466-7352
Email:
lcampbell@swinomish.nsn.us

Stillaguamish Tribe
Name: Victoria Yaeger
Title: Cultural Resource Specialist
Number: 360-652-7362 ext 228
Email: vikkrs@comcast.net

Sauk-Suiattle Tribe
Name: Richard Wolten
Number: 360-436-1124
Email: nrd@sauk-suiattle.com

C. Further Activities

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

5. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL

Any human skeletal remains, regardless of antiquity or ethnic origin, will at all times be treated with dignity and respect.

If the project occurs on federal lands (e.g., national forest or park, military reservation) the provisions of the Native American Graves Protection and Repatriation Act of 1990 apply, and the responsible federal agency will follow its provisions. Note that state highways that cross federal lands are on an easement and are not owned by the state.

If the project occurs on non-federal lands, will comply with applicable state and federal laws, and the following procedure:

A. Notify Law Enforcement Agency or Coroner's Office:

In addition to the actions described in Sections 3 and 4, the Project Manager will immediately notify the local law enforcement agency or coroner's office.

The coroner (with assistance of law enforcement personnel) will determine if the remains are human, whether the discovery site constitutes a crime scene, and will notify DAHP.

B. Participate in Consultation:

Per RCW 27.53.030, RCW 68.50, and RCW 68.60, DAHP will have jurisdiction over non-forensic human remains. personnel will participate in consultation.

C. Further Activities:

- Documentation of human skeletal remains and funerary objects will be agreed upon through the consultation process described in RCW 27.53.030, RCW 68.50, and RCW 68.60.

- When consultation and documentation activities are complete, construction in the discovery area may resume as described in Section 7.

6. DOCUMENTATION OF ARCHAEOLOGICAL MATERIALS

Archaeological deposits discovered during construction will be assumed eligible for inclusion in the National Register of Historic Places under Criterion D.

Cultural Resources Program staff will ensure the proper documentation and assessment of any discovered cultural resources in cooperation with the federal agencies (if any), DAHP, affected tribes, and a contracted consultant (if any).

All prehistoric and historic cultural material discovered during project construction will be recorded by a professional archaeologist on State of Washington cultural resource site or isolate form using standard techniques. Site overviews, features, and artifacts will be photographed; stratigraphic profiles and soil/sediment descriptions will be prepared for subsurface exposures. Discovery locations will be documented on scaled site plans and site location maps.

Cultural features, horizons and artifacts detected in buried sediments may require further evaluation using hand-dug test units. Units may be dug in controlled fashion to expose features, collect samples from undisturbed contexts, or interpret complex stratigraphy. A test excavation unit or small trench might also be used to determine if an intact occupation surface is present. Test units will be used only when necessary to gather information on the nature, extent, and integrity of subsurface cultural deposits to evaluate the site's significance. Excavations will be conducted using state-of-the-art techniques for controlling provenience.

Spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of cultural material, and depth to sterile soil, regolith, or bedrock will be recorded for each probe on a standard form. Test excavation units will be recorded on unit-level forms, which include plan maps for each excavated level, and material type, number, and vertical provenience (depth below surface and stratum association where applicable) for all artifacts recovered from the level. A stratigraphic profile will be drawn for at least one wall of each test excavation unit.

Sediments excavated for purposes of cultural resources investigation will be screened through 1/8-inch mesh, unless soil conditions warrant ¼-inch mesh.

All prehistoric and historic artifacts collected from the surface and from probes and excavation units will be analyzed, catalogued, and temporarily curated. Ultimate disposition of cultural materials will be determined in consultation with the federal agencies (if any), DAHP, and the affected tribes.

Within 90 days of concluding fieldwork, a technical report describing any and all monitoring and resultant archaeological excavations will be provided to the Project Manager, who will forward the report to the Cultural Resources Program for review and delivery to the federal agencies (if any), SHPO, and the affected tribe(s).

If assessment activity exposes human remains (burials, isolated teeth, or bones), the process described in Section 5 above will be followed.

7. PROCEEDING WITH CONSTRUCTION

Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A CR Specialist must determine the boundaries of the discovery location. In consultation with DAHP and affected tribes, Project Manager and Cultural Resources Program staff will determine the appropriate level of documentation and treatment of the resource. If federal agencies are involved, the agencies will make the final determinations about treatment and documentation.

Construction may continue at the discovery location only after the process outlined in this plan is followed and (and the federal agencies, if any) determine that compliance with state and federal laws is complete.

JARPA Attachment L: Self-certification HRP Limit 8

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

TETRA TECH

Self-certification of Proposed Habitat Restoration Activity

Consistency with the

Habitat Restoration Program, 4(d) Rule, Limit 8

In order for a proposed habitat restoration activity to be consistent with the Habitat Restoration Program (HRP), the project proponent needs to review the elements of the HRP and certify, using the checklist below.

The HRP includes habitat protection and restoration projects funded by the SRFB that meet the following characteristics:

- ☐ Are part of a habitat portion of a salmon recovery plan approved by a Regional Salmon Recovery Organization and the State of Washington and published in the Federal Register by NMFS; and
- ☐ Are part of an adopted Implementation Schedule developed by a Regional Organization to implement the habitat portion of a Salmon Recovery Plan; and
- ☐ Are funded in part or wholly with Washington State and/or Pacific Coastal Salmon Recovery Fund (PCSRF) monies managed by the SRFB and are consistent with the technical and procedural criteria outlined by SRFB; and
- ☐ Are being done for the purpose of habitat restoration; and
- ☐ Are projects that fit within a specific list of eligible actions:

In-Stream Passage

In-Stream Diversion Screening

In-Stream Habitat

Riparian Habitat Restoration

Upland Habitat Restoration or Protection

Estuarine and Marine Nearshore Habitat Restoration

_____ _____

/s/ Project Proponent Date

JARPA Attachment M: Fish Habitat Enhancement Exemption

UPI #: 091898-09-01

Project Name: Fisher Slough - Tidal Marsh Restoration, Levee Setback, and Big Ditch Realignment; Skagit County, Washington

TETRA TECH

STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
HABITAT PROGRAM

April 20, 2009

TO: Habitat Program Staff

FROM: Greg Hueckel, Assistant Director
Habitat Program

SUBJECT: STREAMLINED FISH HABITAT ENHANCEMENT PROCESS

In 2008, Regulatory Services Section staff worked to develop size and scale criteria for the streamlined Fish Habitat Enhancement Process (FHEP), as directed by Chapter 77.55.181 RCW. However, after conversations with staff and interested parties, we have decided that it is prudent to roll the policy discussions related to size and scale criteria into the planning effort underway to develop a Habitat Conservation Plan for the Hydraulic Project Approval (HPA) program.

By doing this, we avoid making piecemeal HPA policy changes. We will also ensure that any size and scale criteria developed will be scientifically sound and well vetted through the extensive interested party involvement process associated with Habitat Conservation Plan development. This direction will delay the implementation of any new size and scale criteria, if deemed necessary through the planning process, until approximately 2011.

We have, however, updated the interim guidance for the FHEP. As part of this update, regional and headquarters managers recommended that decisions related to project eligibility for the FHEP be made by Area Habitat Biologists and Regional Habitat Program Managers.

Effective immediately, Area Habitat Biologists, in consultation with their Regional Habitat Program Manager, will be responsible for determining whether a project qualifies for use of the FHEP using the attached interim guidance. The Area Habitat Biologist will need to notify the local governments of projects considered eligible for use of the streamlined process and start the 15-day comment period.

All Area Habitat Biologists and Regional Habitat Program Managers need to review the attached interim guidance for details on how the process will be implemented. Teresa Eturaspe will continue to be available to assist with questions regarding project eligibility and she will be coming to each region later this spring to provide training designed to maintain statewide consistency in how the process is implemented.

If you have questions, Teresa can be reached at (360) 902-2575

Attachment: Streamlined Fish Habitat Enhancement Process Interim Guidance (including attachments)

cc: Kathryn McLeod, AAG
Neil Wise, AAG

Appl ıtion for Streamlined Proc ˌing of
FISH HABITAT ENHANCEMENT PROJECTS
Addition to the Joint Aquatic Permit Application (JARPA)

Under RCW 77.55.181 you may qualify for a streamlined permit process with no fees if your project is designed to enhance fish habitat. If your project meets the requirements below, you are entitled to the streamlined Hydraulic Project Approval (HPA) process, exemption from the State Environmental Policy Act (SEPA), and exemption from all local government permits and fees. To apply for the exemption process, you must provide, on the same day, a complete application package to: the Department of Fish and Wildlife (WDFW) and all applicable local government planning and permitting departments. Local governments have 15 days to provide comments to WDFW to aid it in deciding whether your project qualifies (see below for details).

To QUALIFY for the fish habitat enhancement exemption you must check at least one each from A and B and provide a letter of approval from one of the agencies listed in B. It is highly recommended you discuss your proposal with the local Area Habitat Biologist (AHB) prior to submitting your application.

A) My project (check all that apply):

- ☒ Removes a **human-made** fish passage barrier
- ☐ Restores an eroded or unstable stream bank using **bioengineering techniques**
- ☐ Places woody debris or other in-stream structures that **benefit naturally reproducing fish stocks**

B) My project is approved by (check all that apply):

- ☐ WDFW's Salmon Enhancement, or Volunteer Cooperative Fish and Wildlife Enhancement Programs
- ☐ The sponsor of a watershed restoration plan as provided in chapter 89.08RCW
- ☒ WDFW, as a department-sponsored fish enhancement or restoration project
- ☐ Conservation District, where the project complies with design standards established by the Conservation Commission through interagency agreement with the United States Fish and Wildlife Service and the Natural Resource Conservation Service
- ☐ A formal grant program established by the legislature or the Department of Fish and Wildlife for fish habitat enhancement or restoration.

To APPLY for the Exemption, submit two copies of a complete application package consisting of the following documents to the local government planning department and WDFW and indicate below which local government agency you are sending your application to and when you are sending it.

Two **copies** of:

- This addition to the JARPA
- A completed JARPA 2009
- Plan drawings (no larger than 11 x 17 format)
- Letter of approval of your specific project from one of the agencies listed in B

I am sending my application to the following local government planning department : xx/xx/20xx

Skagit County ***on:*** *11/23/2009* ***(Date)***

PLEASE NOTE:

- In addition to applying for this streamlined processing, you need to apply for all other applicable Federal and State permits identified in the JARPA.
- If WDFW determines that your project meets the fish habitat enhancement exemption criteria, SEPA and all local government permits and fees are waived. WDFW will process your HPA within 45 days of receiving your complete application.
- If significant concerns are raised during the 15-day comment period regarding adverse impacts from your project that cannot be addressed through HPA conditions, WDFW may determine that the project does not qualify for the exemption process. If WDFW makes that decision, you may re-apply to WDFW, the applicable local government, and any other applicable permitting agency for approval under the full permitting process. If WDFW determines that your project does NOT qualify for the exemption, or if your application is incomplete, you and the local government planning department will be notified.

Applicant Name:

Jenny Baker, The Nature Conservancy

Unique Project Identifier (UPI) # (See JARPA section 1a): 91898-09-01