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

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
Fir Island Farm Estuary Restoration Project

Part 2–Applicant

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

2a. Name (Last, First, Middle)			
Williams, Brian			
2b. Organization (If applicable)			
Washington State Department of Fish and Wildlife (WDFW)			
2c. Mailing Address (Street or PO Box)			
PO Box 1100			
2d. City, State, Zip			
La Conner, WA 98257			
2e. Phone (1)	**2f.** Phone (2)	**2g.** Fax	**2h.** E-mail
(360) 466-4345 EXT. 250	( )	( )	brian.williams@dfw.wa.gov

[1] Additional forms may be required for the following permits:

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

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

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

Part 3–Authorized Agent or Contact

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

3a. Name (Last, First, Middle)			
Johnson, Per			
3b. Organization (If applicable)			
Shannon & Wilson, Inc.			
3c. Mailing Address (Street or PO Box)			
400 N 34th Street, Suite 100			
3d. City, State, Zip			
Seattle, WA 98103			
3e. Phone (1)	**3f.** Phone (2)	**3g.** Fax	**3h.** E-mail
(206) 695-6699	(206) 632-8020	(206) 695-6777	pcj@shanwil.com

Part 4–Property Owner(s)

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

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

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

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

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

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

Part 5–Project Location(s)

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

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

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

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

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

15802 Fir Island Road (Figure 1)

5c. 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

5d. County [help]

Skagit

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

¼ Section	Section	Township	Range
	22	33 N	03 E

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

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

48.333996, -122.407278

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

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

P15992, P15997, P15998, P15999, P16000, P16001, P16002, P16003, P16004, P16006, P16007, P16008, P16009, and P16011

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

Name	Mailing Address	Tax Parcel # (if known)
See JARPA attachment C		

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

Brown Slough Complex, No Name Slough Complex, Claude O. Davis Slough Complex, Dry Slough Complex, Skagit Bay Marsh. Farmed potential wetlands also occur on site (Figure 2).

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

Brown Slough, No Name Slough, Claude O. Davis Slough, Dry Slough, Skagit Bay (Figure 2)

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

☒ Yes ☐ No ☐ Don't know

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

The Fir Island Farm site is presently managed by WDFW as a snow goose reserve. As such, the reserve currently provides wintering snow goose access to winter wheat crops, fresh water, and refuge during the pre-hunting season, throughout the 107-day hunting season, and post hunting season until snow goose departure in mid-April. During the spring and summer seasons, when snow geese are not present, other commodity row crops are cultivated on site.

Estuarine, palustrine, and farmed potential wetlands are present throughout the project site (Figure 2). These include estuarine wetlands predominantly located south and southwest (bayward) of the existing dikes and between the Brown Slough tide gate complexes. Based on salinity measurements within the interior drainages at the Fir Island Farm site, estuarine wetland conditions also exist in No Name Slough upstream of Claude O. Davis Slough tide gates. Palustrine wetland conditions are present within Dry Slough and Claude O. Davis Slough. Farmed potential wetlands occur at the southern extent of the project site, north of the existing dike and within the actively farmed fields.

The estuarine wetlands, bayward of the existing dike, are part of the Skagit River delta estuary and where freshwater-saltwater mixing occurs. Research shows that these estuarine wetlands provide four interrelated functions for juvenile salmonids by providing opportunities for:

1. Physiological transition,
2. Foraging and growth,
3. Predator avoidance, and
4. Migratory corridors.

Tide gates connect the bayfront estuarine wetlands within the Skagit Delta to the historic distributary channels within the project site. While these tide gates do not completely block fish passage, passage is significantly confined to narrow windows of time during the tidal cycles. Baseline fish passage conditions at the project site were documented within the Fir Island Farm Restoration Feasibility Study Fisheries Baseline Memo dated October 14, 2011, and authored by Mr. Ed Conner with Seattle City Light and Mr. Brian Williams and Bob Warinner with WDFW. According to this memo, fish sampling in the vicinity of the Dry Slough tide gates, conducted by the Skagit Fisheries Enhancement Group in 2008, captured very few fish species (Chinook and stickleback) upstream of the tide gates. Fish sampling hasn't occurred at the Claude O. Davis Slough tide gates, although it is presumed that fish passage through these tide gates is confined to narrow windows of time similar to the Dry Slough tide gates.

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

WDFW's Fir Island Farm is productive agriculture land that is currently managed by WDFW as a snow goose reserve. As such, the farm is leased to a neighboring farm to grow row crops during the spring, summer, fall, and snow goose forage crops during the winter. The agriculture potential of the farm is maintained through a system of flood dikes, drainage watercourses, and tide gates that are managed by Skagit County Consolidated Diking District #22 (CDD#22) in consultation with WDFW. Watchable wildlife recreation is encouraged at the farm through a driveway access, parking lot, and short dike top trail. Hunting is not a permitted activity at the farm.

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

The project site is bordered by Skagit Bay to the southwest, Brown Slough to the north and west, Fir Island Road to the north, and Dry Slough to the east and southeast. Surrounding land uses include rural residential and commercial agriculture to the north, east, and west. A private gun club uses their estuarine marsh ownership on the bayside of the project site flood dike between the Claude O. Davis Slough tide gates and Brown Slough for hunting.

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

The site currently includes two primary structure types: the existing flood dike and tide gates. Additional structures and facilities on site include a public parking facility, access road, fencing, informational signage for visitors, and ancillary culverts and crossings over the internal drainages to support the agricultural activities on site.

Existing Dike

The existing dike is located along the project site's south and west boundaries, and provides coastal flood protection to Fir Island. The dike, which currently has a top elevation of 13-14.5 NAVD88 (15.2 to 16.7 mean lower low water [MLLW]), is part of a diking system operated and managed by CDD#22 and constructed between the mid- to late-1800s to 1930s using on-site borrow materials. The southwest corner of the dike, near Brown Slough, has overtopped several times during high astronomical tides and deep low-pressure weather system storm surges. The dike failed and was manually breached near Claude O. Davis and Brown Sloughs during the 1990/1991 floods. Repairs were then completed by CDD#22 with assistance from the U.S. Department of Agriculture's Natural Resource Conservation Service.

Existing Tide Gates

Tide gates currently exist in Brown Slough, Claude O. Davis Slough, and Dry Slough. The existing tide gates on or near the site are as follows:

- ***Claude O'Davis Slough:*** No Name Slough joins with Claude O. Davis Slough before draining through two 48-inch, top-hinge flapgates.
- ***Brown Slough:*** Brown Slough, located west of the site, drains through two 48-inch, top-hinge flapgates and one 48-inch screwgate flapgate. The screwgate flapgate is operated in a full open position with the exception of during periods of river flooding.
- ***Dry Slough:*** Dry Slough drains through two 48-inch, top-hinge flapgates.

The Claude O. Davis Slough and Dry Slough tide gates were both installed in 1913. The Claude O. Davis Slough tide gates currently leak and allow for saltwater intrusion into No Name Slough and Claude O. Davis Slough, which are used for interior drainage. The existing tide gates on Claude O. Davis Slough and Dry Slough allow for upland interior gravity drainage to Skagit Bay.

Existing Interior Crossings

Three existing farm crossings over interior drainages exist on site landward of the existing dike. These crossings include:

- One 21-foot-long by 15-inch-diameter polyethylene pipe culvert in Claude O. Davis Slough, upstream of its confluence with No Name Slough.
- One 21-foot-long by 48-inch-diameter corrugated metal pipe culvert within Claude O. Davis Slough, below an access road off of the existing dike and into the farm fields.
- A concrete farm bridge spanning No Name Slough, downstream of the setback dike.

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

Directions from Interstate 5:

- Take Exit 221
- Turn West onto Pioneer Highway
- Turn Right (West) onto Fir Island Road
- Arrive at 15802 Fir Island Road (south side of road) in approximately 3.4 miles

Part 6–Project Description

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

The Fir Island Farm Estuary Restoration Project will restore the tidal ecosystem processes of the Skagit River delta to the project site through the following actions as illustrated on Figure 3:

- Remove approximately 3,900 lineal feet (lf) of existing coastal flood dike. Use the native substrate materials from the existing flood dike to back fill the existing man made drainage channel and borrow channel along the south and north toe of the existing dike.
- Construct approximately 5,900 lf of new setback flood dike.
- Retain and augment approximately 550 lf of existing Brown Slough flood dike along the east shore south of the existing Brown Slough tide gate complex.
- Construct 200 lf of a new spur dike that extends the existing and augmented flood dike along the east shore of Brown Slough south into the existing intertidal marsh.
- Armor the bayside toe and face of the new flood dike with large rock materials.
- Remove and dispose the of the existing Claude O. Davis Slough tide gates.
- Construct new tide gates in No Name Slough along the alignment of the new setback flood dike.
- Construct a new log boom structure on the bayside of the new No Name Slough tide gates.
- Construct a new 5- to 7-acre drainage storage pond (approximately 150 feet wide) along the landward side of the new setback dike connected to the No Name Slough interior drainage channel.
- Use existing dike materials to elevate the farm field elevations at select areas along the south side of the new flood dike to created and support high marsh habitat restoration.
- Construct a new floodgate or flow control structure that connects the new drainage storage pond with the Dry Slough interior drainage channel.
- Construct a new pump station between the new drainage storage pond and new setback flood dike. Consistent with the Skagit Drainage and Fish Initiative requirements, the new pump station will be constructed a minimum of 300 feet from the interior drainage channels of No Name Slough and Dry Slough to avoid potential juvenile salmonid entrainment.
- Construct a new culvert/tide gate at the existing Dry Slough tide gate complex.
- Excavate new tidal seed channels in the farmland area of the project site. Use native substrate material excavated from the new tidal seed channels to elevate the farm field elevations at select areas along the south side of the new flood dike to created and support high marsh habitat restoration.
- Relocate the southern end of the existing public access road towards the west, near the toe of the existing Brown Slough flood dike.

The actions associated with this restoration project are expected to restore approximately 127.5 acres of complex tidal marsh and 17.4 acres of tidal channels and produce an estimated 65,000 to 320,600 juvenile Chinook smolts annually. Snow goose management, public access, and agriculture will be maintained at the project site. Agriculture drainage, flood protection, and protection from saltwater intrusion will be maintained for the remaining farmland at the project site and for the neighboring farms. The new setback dike design incorporates the results of a 3D Hydrodynamic Model analysis of the existing coastal process of Skagit Bay as well as the latest climate change and sea level rise predictions.

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

The primary purpose of the project is to restore the tidal ecosystem processes and connectivity of the Skagit delta to increase annual Chinook smolt production by setting back the existing flood dike and tide gate infrastructure. WDFW undertook the Fir Island Farm restoration feasibility study in 2010/2011 to evaluate seven different project alternatives (four dike setbacks and two tide gate replacement alternatives) and identified a recommended restoration footprint. Using methods consistent with the Skagit Chinook Plan Model, WDFW's Fir Island Farm Estuary Restoration Feasibility Study (2011) estimates that restoring the natural tidal prism of Skagit Bay to 127.5 acres of the project site will restore 127.5 acres of tidal marsh habitat, restore 17.44 acres of new tidal channel habitat, and annually produce 65,000 to 320,600 new Chinook smolts.

In addition to restoring the tidal ecosystem processes of the Skagit River delta to the project site, the project will maintain snow goose management, public access, and agriculture at the project site. Agricultural drainage, flood protection, and protection from saltwater intrusion will be maintained for the remaining farmland at the project site, adjacent neighboring farms, and farms within the central drainage watershed of Fir Island.

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

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

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

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

☒ Other: Tide gates

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

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

Compliance with Programmatic Restoration Biological Assessment

The project, which is entirely located within the Skagit River 100-year floodplain, is largely consistent with Action Categories 1d (Tidegate Removal) and 3 (Levee Removal and Modification) as described within the *Programmatic Biological Assessment for Restoration Actions in Washington State* (Corps, 2008), hereafter referred to as the "PBA." As such, the project will largely comply with the conservation measures for these action categories, as described in the PBA:

- "General Conservation Measures that Apply to all Proposed Restoration Actions"
  - Pre-Construction/Surveying
  - General

- Equipment
- Planting and Erosion Control
- Water Quality
- Isolation of Work Site

- "General Conservation Measures Frequently Associated with some of the Proposed Restoration Actions"
  - 7b: Groins/Spur Dikes
- "Conservation Measures for Bull Trout"

Those project elements, as described below, which are not specifically included in the PBA include the following activities:

- Temporary access road and utility construction,
- Setback dike construction,
- Interior storage pond and pump station construction,
- Pilot channel construction, and
- Tide gate construction.

While these activities are not specifically included within the PBA, they are necessary key project elements. They will be constructed to avoid and minimize impacts, and will comply with the "General Conservation Measures that Apply to all Proposed Restoration Actions" described within the PBA.

Key Project Elements

The sequencing of the following key project elements will occur such that construction activities landward of the existing dike will be completed prior to removal of the existing dike to the greatest extent practical. This will allow the work landward of the existing dike to occur, to the greatest extent, in the dry or at least under more controlled conditions isolated from the existing tidal marsh.

Temporary Access Road and Utility Construction

To facilitate (1) efficient access in and out of the site and (2) placement of imported fill during dike construction, a temporary access road will be constructed in Year 1 through the site with access off of Fir Island Road. Maintenance of existing access roads will also be required. The final temporary access road alignment will be field located by the contractor to minimize impacts. However, the alignment will require a temporary crossing over a lateral interior drainage connected to the Dry Slough West drainage channel (Figure 3).

Power will need to be brought in from Fir Island Road to power a new pump station constructed in association with a new interior drainage storage pond. It is expected that the new power line will be installed within the footprint of the temporary access road and near the property line. Due to the snow goose management on site, the power line may be installed below ground. Trenching will be required through a lateral interior drainage connected to the Dry Slough West drainage, near the temporary access road crossing, to install the power underground through the site to the new pump station location.

Setback Dike Construction

The new setback dike will be constructed during Year 1 behind the existing dike and in advance removing the existing dike. As shown on the typical north and east setback dike sections (Figure 4), the new setback dike structure will be constructed to a finished elevation of 15.0 feet (NAVD88 or 17.2 MLLW), approximately 8 to 10 feet above the existing farm field grade, with 3:1 slopes (3 feet horizontal to 1 foot height). An 18-foot-wide crushed rock access road will be constructed on its crest to provide maintenance access to WDFW and CDD#22. WDFW will negotiate with CDD#22 an appropriate easement along the landward side of the setback dike for dike maintenance.

Construction of the setback dike involves excavation of approximately 15,000 cubic yards (cy) below the footprint of the new dike and the placement of approximately 150,000 cy of soil and rock. Import fill will be hauled to the site on existing county roads including Fir Island Road and potentially Moberg Road and Wylie

Road. A temporary construction access road, as described above, will be constructed with access off of Fir Island Road. All soils excavated onsite will be reused on site predominantly to raise the elevation of the farm fields south of the setback dike to support restoration of high marsh habitat.

Interior Drainage Storage Pond and Pump Station Construction

A new interior drainage storage pond, approximately 200 feet wide by 1,400 feet long by 7 feet deep, will be constructed during Year 1 to replace the flood storage capacity of farm drainage that will be displaced in No Name Slough and Claude O. Davis Slough (Figure 3). The interior drainage pond will be connected via a surface channel to No Name Slough and two 48-inch-diameter flow control culverts with vertical slide gates connecting to Dry Slough. Construction of the new interior drainage pond will result in approximately 70,000 cy of excavation, which will reused on site.

To accommodate potential risks to the setback dike, a pump station may be constructed at this interior drainage storage pond. The pump station will be largely located below ground surface north of the 21-foot-wide maintenance access road along the northern section of setback dike and in the new interior drainage storage pond. The pump station outfall and associated splash pad will be located south (bayward) of the setback dike. Consistent with the Skagit Drainage and Fish Initiative requirements, the new pump station will be located a minimum of 300 feet from the interior drainage channels of No Name Slough and Dry Slough to avoid potential juvenile salmonid entrainment. The pump station will be operated and maintained by the CDD#22.

Pilot Channel Excavation

Pilot channels will be excavated in the farm fields in Year 1 landward of the existing dike (Figure 3) prior to breaching the existing flood dike in Year 2. It is estimated that 11,000 cy of material will be excavated to create these pilot channels. All material will be reused on site. Some excavation will occur within existing No Name Slough and Claude O. Davis Slough drainages to enhance the configuration of these channels, to connect with the pilot channels, to connect with existing tidal channels and to remove existing channel structures (culverts and bridges). In-water excavation within existing interior drainages will occur during the in-water work window (July 16 through February 15). Consistent with the requirements of the Skagit Drainage and Fish Initiative, defishing of the existing interior drainages will occur within 300 feet of the existing tide gates in Claude O. Davis Slough in accordance with the Dewatering and Fish Capture Protocols described within Appendix D of the PBA.

Tide Gate Construction

Three tide gates will be constructed during Year 1 as part of the project.

- Two 48-inch-diameter, 100-foot-long culvert with side-hinge tide gates will be installed within No Name Slough through the setback dike. These two tide gates will replace the Claude O. Davis Slough tide gates within the existing dike, which will be removed with the dike removal. These tide gates will convey No Name Slough and flow from the new interior drainage storage pond.
- An additional 48-inch-diameter, 100-foot-long culvert with side-hinge tide gate will be installed at the existing Dry Slough tide gate complex to provide sufficient conveyance to accommodate the additional flow modeled within Dry Slough following the dike setback.

None of the tide gates are designed for fish passage as the state and federal fish passage requirements for marine tide gates are addressed through Washington State House Bill 1418 and through the 2010 *Skagit Delta Tidegates and Fish Initiative Implementation Agreement*, between the Western Washington Agricultural Association, National Marine Fisheries Service, and WDFW.

Existing Dike Removal

Removal of approximately 3,900 lf of existing dike will occur during Year 2 following the completion of all interior construction activities. Substrate materials removed from the existing dike will be used to fill the existing borrow ditch along the bayside of the dike and the existing drainage ditch along the farmland side of the existing dike. Additional dike materials will be used to elevate specific areas of farmland at the project site to restore high marsh habitat. An estimated 60,000 cy of dike material will be reused on site. The strategy for

reusing the dike materials is based on hydrodynamic modeling and necessary to control tidal velocities expected during post-construction conditions and reduce the potential of erosion and deposition within the bayfront estuarine wetlands.

Spur Dike Construction

To minimize the effects of the dynamic tidal activity expected to result following the removal of the existing dike structure to the drainage in Brown Slough, the section of existing dike along the east shore of Brown Slough will be retained, augmented, and extended into the tidal marsh by 200 lf as a spur dike.

Relocate Existing Access Road to West

A portion of the southern extent of existing access road will be relocated to the west near the toe of the existing Brown Slough flood dike. Relocating this portion of the access road will reconnect currently fallow fields, which are presently isolated from the remainder of the farm site, and allow agricultural and snow goose reserve uses to occur on them.

Due to the presence of an active bald eagle nest located in a tree near the eastern Brown Slough flood dike, we are coordinating with the United States Fish and Wildlife Service on whether or not the project requires a Bald Eagle Take Permit. Should a Bald Eagle Take Permit be necessary, it would be due to the disturbance from the restoration construction activities occurring within 660 feet of an active bald eagle nest. The project does not propose to remove, damage, or destroy the nest or physically handle any bald eagles. Additionally, the relocation of the existing access road would occur after August 15, when the bald eagle breading season ends.

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

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

Start date: **January 2015** End date: **June 2017** ☐ See JARPA Attachment D

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

$15,000,000

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

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

☒ Yes ☐ No ☐ Don't know

National Oceanographic and Atmospheric Administration, United State Fish and Wildlife Service

Part 7–Wetlands: Impacts and Mitigation

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

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

☐ Not applicable

The Fir Island Farm Estuary Restoration Project along Skagit Bay will result in some unavoidable wetland impacts (e.g., wetland fill and wetland conversion). However, the project will restore the natural tidal process of Skagit Bay to 127.5 acres. The result of the project will be a larger estuarine wetland system.

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 and answer 7g.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

☐ Yes ☐ No ☒ Not applicable

The Fir Island Farm Estuary Restoration Project along Skagit Bay will restore the natural tidal process of Skagit Bay to 127.5 acres. The result of the project will be a larger estuarine wetland system. The project will result in 2.1 acres of permanent wetland loss as summarized in 7g and 7h. The project will result in an additional 90.5 acres of wetland and a total wetland acreage of 127.5 acres.

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

The project is an estuarine restoration project. The project is expected to have 2.1 acres of permanent wetland fill, 34.9 acres of permanent wetland conversion, and 8.2 acres of temporary wetland impacts (excavation and fill). The project is estimated to result in 127.5 acres of estuarine wetlands, a net gain of 90.5 acres of wetland, which offsets the temporary and permanent wetlands impacts (Figure 5).

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

Activity (fill, drain, excavate, flood, etc.)	Wetland Name[1]	Wetland type and rating category[2]	Impact area (sq. ft. or Acres)	Duration of impact[3]	Proposed mitigation type[4]	Wetland mitigation area (sq. ft. or acres)
Fill associated with new setback dike (including two tide gates in No Name Slough)	Estuarine intertidal	N/A	1.8 acres	Permanent	C	N/A
	Palustrine emergent					
	Palustrine scrub-shrub					
	Farmed potential wetland					
Fill associated with new spur dike extension	Estuarine intertidal wetlands (Skagit Bay and Brown Slough)	N/A	0.3 acres	Permanent	C	N/A
Dry Slough tide gate installation	Dry Slough wetland complex	N/A	No net impact	Permanent	N/A	N/A
Wetland conversion (palustrine to estuarine)	Estuarine intertidal	N/A	34.9 acres	Permanent	N/A	N/A
	Palustrine emergent					
	Palustrine scrub-shrub					
	Farmed potential wetland					
Bayfront excavation/fill associated with dike removal	Estuarine intertidal	N/A	8.2 acres	Temporary	N/A	N/A
	Estuarine subtidal					

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

Page number(s) for similar information in the mitigation plan, if available: Figure 5

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

Fill associated with new setback dike (including two tide gates in No Name Slough)
Prior to removing the existing dike, a new 5,600 lf dike will be constructed landward of the existing dike on the Fir Island Farm project site. The dike will be constructed with approximately 150,000 cy of imported fill. Two new 100-foot-long by 48-inch-diameter side-hinge flapgate tide gates will be installed in No Name Slough within the footprint of the new setback dike. A log-boom structure will be installed at the downstream end of the tide gates to prevent driftwood from damaging the new tide gates.

Fill associated with new spur dike extension
Prior to removing the existing dike, a 200 lf extension off the existing dike along the east shore of Brown Slough will be constructed. Hydrodynamic modeling of the post-construction conditions illustrates that significant tidal velocities would result at this location in Brown Slough if the dike was fully removed. To protect the Brown Slough drainage and wetland complex, approximately 500 lf of existing dike at the southwest corner of the site will be retained and an additional 200 lf of new dike constructed to create a spur dike off the southwest corner of the site.

The 200 lf of new spur dike will be comprised of approximately 500 cy of fill imported to the site. It will be constructed during the approved in-water work windows in Year 2 with equipment (e.g., dozers, haulers, and graders) operating along and from the existing dike.

Dry Slough tide gate installation
Due to the slight increase in expected seepage into Dry Slough during post-construction conditions, the project will install a new 100-foot-long by 48-inch-diameter side-hinge tide gate within the existing dike east of the site. This new tide gate will be located next to the two existing top-hinge tide gates within the existing dike.

The new tide gate will be installed during the approved in-water fish window during Year 1 or 2 with equipment operating off of the existing dike. Temporary shoring may be required for slope stabilization and worker safety. Additionally, if the tide gate cannot be installed during a single tidal cycle, temporary isolation of the work site from Dry Slough and Skagit Bay will be installed by the contractor. Once the new tide gate is installed, the dike will be rebuilt to its existing foot print profile and no net permanent impacts are expected.

Wetland conversion (Palustrine to Estuarine)
There are three general types of wetlands on and immediately adjacent to the site: estuarine, palustrine, and farmed potential wetlands. With the removal of the existing dike, these onsite wetlands will be affected. The palustrine and farmed potential wetlands will convert to estuarine wetlands. The project is expected to result in a net gain of 90.5 acres of wetlands (92.6 acres of wetland gain minus 2.1 acres of wetland loss) with 34.9 acres permanent wetland conversion and 8.2 acres of temporary wetland impacts occurring.

Bayfront excavation/fill associated with dike removal
Removal of the existing dike will result in approximately 60,000 cy of cut that will be used to fill existing manmade borrow ditches and existing manmade drainage ditches and to elevate selected areas of the farmland to support high marsh habitat. Temporary impacts to the bayfront estuarine wetlands and channels will be held to a minimum during the removal of the existing dike and reconnection of the tidal channels. Excavation activities are described below in 7j.

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

Excavation/dredging associated with the project includes:

- 15,000 cy of excavation to prepare the bed below the new setback dike,
- 70,000 cy of excavation to construct the new interior drainage pond,
- 11,000 cy of excavation in existing sloughs and farm fields to create pilot channels, and
- 60,000 cy of excavation to remove the existing dike and reconnect the tidal channels.

All excavation in farm fields and wetlands landward of the existing dike will occur in during Year 1, prior to the removal of the dike. All excavation in inundated areas will occur during the approved in-water work window (July 16 through February 15) during low tide cycles following defishing where appropriate in accordance with the protocols described in Appendix D of the PBA. Expected equipment includes excavators, loaders, haulers, backhoes, and compactors.

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

See response to 7a.

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

☒ Yes ☐ No

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

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

☐ Yes ☐ No ☒ Not applicable

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

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

See response to 7g.

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

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name[1]	Impact location[2]	Duration of impact[3]	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
See response to7h.					

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

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

See response to 7i.

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

See response to 7j.

Part 9–Additional Information

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

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

Agency Name	Contact Name	Phone	Most Recent Date of Contact
Skagit County	Betsy Stevenson	(360) 336-9410	September 11, 2013
Federal Emergency Management Agency	John Graves	(425) 487-4737	September 10, 2013
U.S. Army Corps of Engineers	Erin Legge	(206) 764-6985	August 8, 2013

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

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

☒ Yes ☐ No

Brown Slough and associated estuary: bacteria.

Skagit Bay: bacteria.

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: Lower Skagit/Samish

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.

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

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

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

☐ Yes ☒ No N/A

Name of manual: N/A

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

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

☐ Yes ☒ No

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

The Fir Island Farm was historically part of the Skagit River delta prior to construction of the Fir Island dike system. Since that time, it is understood that the site has been used for agriculture.

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

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

☒ Yes ☐ No

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

The following ESA-listed species are listed in Skagit County or Puget Sound.

- Puget Sound Chinook
- Puget Sound steelhead
- Puget Sound bull trout (Unit 2)
- Southern Resident Killer Whales
- Marbled murrelet
- Northern spotted owl
- Canada lynx
- Gray wolf
- Grizzly bear

The following are those species proposed under the federal ESA that may be located in the vicinity of the site.

- Yellow-billed cuckoo
- Oregon spotted frog
- Dolly varden
- North American wolverine

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

The following WDFW PHS may be in the project vicinity and affected by the project:

- Pileated woodpecker
- Snowy owl
- Bald eagle
- Purple martin
- Chinook salmon
- Coho salmon
- Bull trout
- Sockeye
- Steelhead trout
- Wetlands (Estuarine intertidal and palustrine)
- Waterfowl concentrations
- Biodiversity areas and corridors
- Shorebird concentrations

Part 10–SEPA Compliance and Permits

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

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

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

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

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

☒ A SEPA determination is pending with **WDFW** (lead agency). The expected decision date is **April 2014**.

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

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

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

☐ SEPA is pre-empted by federal law.

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

LOCAL GOVERNMENT

Local Government Shoreline permits:

☒ Substantial Development ☐ Conditional Use ☐ Variance

☐ Shoreline Exemption Type (explain): _____

Other City/County permits:

☒ Floodplain Development Permit ☒ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

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

Effective July 10, 2012, you must submit a check for $150 to Washington Department of Fish and Wildlife, unless your project qualifies for an exemption or alternative payment method below. **Do not send cash.**

Check the appropriate boxes:

☒ $150 check enclosed. Check #86583
Attach check made payable to Washington Department of Fish and Wildlife.

☐ Charge to billing account under agreement with WDFW. Agreement #_____

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

Washington Department of Natural Resources:

☒ Aquatic Use Authorization

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

Washington Department of Ecology:

☒ Section 401 Water Quality Certification

FEDERAL GOVERNMENT

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

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

United States Coast Guard permits:

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

Part 11–Authorizing Signatures

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

11a. Applicant Signature (required) [help]

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

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

Brian Williams	Brian Williams	1/3/2014
Applicant Printed Name **Mr. Brian Williams**	Applicant Signature	Date

11b. Authorized Agent Signature [help]

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

Per Johnson		1-24-13
Authorized Agent Printed Name **Mr. Per Johnson**	Authorized Agent Signature	Date

11c. Property Owner Signature (if not applicant) [help]
Not required if project is on existing rights-of-way or easements.

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.

Brian Williams	Brian Williams	1/3/2014
Property Owner Printed Name **Mr. Brian Williams**	Property Owner Signature	Date

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

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORIA publication number: ENV-019-09 rev. 08/2013

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

_____

TO BE COMPLETED BY APPLICANT [help]

Project Name: Fir Island Farm Restoration

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

Use this attachment only if you have more than one property owner. Complete one attachment for each additional property owner impacted by the project.

Signatures of property owners are not needed for repair or maintenance activities on existing rights-of-way or easements.

Use black or blue ink to enter answers in white spaces below.

1. Name (Last, First, Middle) and Organization (if applicable)

Robert Hayton Susan Hughes-Hayton Jessie Hayton Hayton Farms Washington

2. Mailing Address (Street or PO Box)

16498 Fir Island Road

3. City, State, Zip

Mount Vernon, WA 98273

4. Phone (1)	**5.** Phone (2)	**6.** Fax	**7.** E-mail
(360) 421-7065	(360) 708-6647	( )	Hughes-hayton@clearwire.net Hayton@hotmail.com

Address or tax parcel number of property you own:

16498 Fir Island Road, Mount Vernon, WA 98273

Signature of Property Owner

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.

Susan Hughes-Hayton
Printed Name

Susan Hughes-Hayton
Signature

If you require this document in another format, contact the Governor's Office of Regulatory Assistance (ORA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORA publication number: ENV-020-09 rev. 06-12

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

US Army Corps of Engineers · Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

_____

TO BE COMPLETED BY APPLICANT [help]

Project Name: _____

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

Use this attachment only if you have more than one property owner. Complete one attachment for each additional property owner impacted by the project.

Signatures of property owners are not needed for repair or maintenance activities on existing rights-of-way or easements.

Use black or blue ink to enter answers in white spaces below.

1. Name (Last, First, Middle) and Organization (if applicable)			
Bell, Douglas L (Hit & Miss Gun Club), INC. Treasurer			
2. Mailing Address (Street or PO Box)			
10830 Vernon Road			
3. City, State, Zip			
Lake Stevens WA 98258 -8540			
4. Phone (1) Home	**5.** Phone (2) Cell	**6.** Fax	**7.** E-mail
(425) ~~[redacted]~~ 334-8614	(425) 239-2356	( )	DLBELLHome@gmail.com
Address or tax parcel number of property you own:			
P16006			
Signature of Property Owner			
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.			
Hit-n-Miss Gun Club, Inc. by: Douglas L. Bell, its Treasurer			
Printed Name	Signature: Douglas L. Bell, its Treasurer		

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ENV-020-09 rev. 08/2013

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

TO BE COMPLETED BY APPLICANT [help]

Project Name: _____

Location Name (if applicable):_____

_____

Attachment C:
Contact information for adjoining property owners. [help]

Use this attachment only if you have more than four adjoining property owners.

Use black or blue ink to enter answers in white spaces below.

1. Contact information for all adjoining property owners. [help]

Name	Mailing Address	Tax Parcel # (if known)
Robert Hayton, Susan Hughes-Hayton, Jessie Hayton, Hayton Farms Washington	16498 Fir Island Road Mount Vernon WA 98273	P16029, P16032, P16001, P16033, P16494,
Tom and Amy Hughes	16419 Fir Island Road Mount Vernon WA 98273	P107948, P107948
Maynard Axelson	15929 Fir Island Road Mount Vernon WA 98273	P15909, P15913, P15911, P15993
Nelson Properties LLC	21590 Mann Road Mount Vernon WA 98273	P15877, P15994, P15995,
Dike District 22	1631 Dry Slough Road Mount Vernon WA 98273	P101531
Diane Eakin	7130 Pioneer Hwy Stanwood, WA 98292	P15990, P15989

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ENV-022-09 rev. 08/2013

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

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY
Date received:_____; ☐ Town
☐ Application Fee Received; ☐ Fee N/A
☐ New Application; ☐ Renewal Application
Type/Prefix #:_____; NaturE Use Code:_____
LM Initials & BP#:_____
RE Assets Finance BP#:_____
New Application Number:_____
Trust(s):_____; County:_____
AQR Plate #(s):_____
Gov Lot #(s): _____
Tax Parcel #(s):_____

Attachment E:
Aquatic Use Authorization on Department of Natural Resources (DNR)-managed aquatic lands [help]

Complete this attachment and submit it with the completed JARPA form only if you are applying for an Aquatic Use Authorization with DNR. Call (360) 902-1100 or visit www.bit.ly/dnr_aquatic_lease for more information.

- DNR recommends you discuss your proposal with a DNR land manager before applying for regulatory permits. Contact your regional land manager for more information on potential permit and survey requirements. You can find your regional land manager by calling (360) 902-1100 or going to http://www.dnr.wa.gov/Publications/aqr_land_manager_map.pdf. [help]
- The applicant may not begin work on DNR-managed aquatic lands until DNR grants an Aquatic Use Authorization.
- Include a $25 non-refundable application processing fee, payable to the "Washington Department of Natural Resources." (Contact your Land Manager to determine if and when you are required to pay this fee.) [help]

DNR may reject the application at any time prior to issuing the applicant an Aquatic Use Authorization. [help]

1. Applicant Name (Last, First, Middle)

Williams, Brian (Washington State Department of Fish and Wildlife)

2. Phone Number and Email

(360) 466-4645 EXT: 250 | brian.williams@dfw.wa.gov

3. Which of the following applies to Applicant? Check one and, if applicable, attach the written authority – bylaws, power of attorney, etc. [help]

☐ Corporation	☐ Individual
☐ Limited Partnership	☐ Marital Community (Identify spouse):_____
☐ General Partnership	☒ Government Agency
☐ Limited Liability Company	☐ Other (Please Explain):
Home State of Registration: _____	

4. Washington UBI (Unified Business Identifier) number, if applicable: [help]

N/A

5. Are you aware of any existing or previously expired Aquatic Use Authorizations at the project location?

☐ Yes ☒ No ☐ Don't know

If Yes, Authorization number(s):_____

6. Do you intend to sublease the property to someone else?

☐ Yes ☒ No

If Yes, contact your Land Manager to discuss subleasing.

7. If fill material was used previously on DNR-managed aquatic lands, describe below the type of fill material and the purpose for using it. [help]

Not applicable.

To be completed by DNR and a copy returned to the applicant.

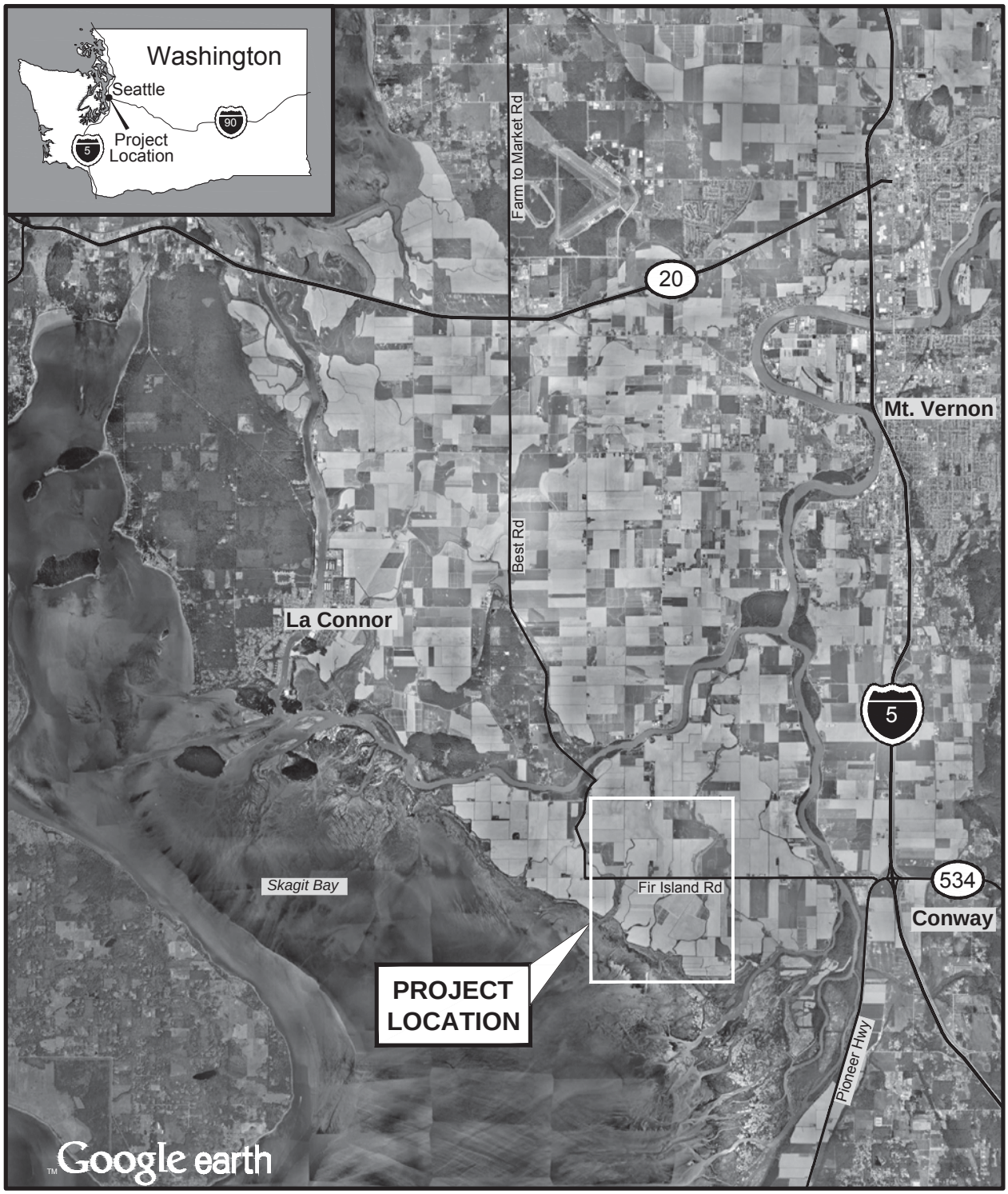
Signature for projects on DNR-managed aquatic lands:

Applicant must obtain the signature of DNR Aquatics District Manager OR Assistant Division Manager if the project is located on DNR-managed aquatic lands.

I, a designated representative of the Dept. of Natural Resources, am aware that the project is being proposed on Dept. of Natural Resources-managed aquatic lands and agree that the applicant or his/her representative may pursue the necessary regulatory permits. My signature does not authorize the use of DNR-managed aquatic lands for this project.

Printed Name	**Signature**	
Dept. of Natural Resources District Manager or Assistant Division Manager	Dept. of Natural Resources District Manager or Assistant Division Manager	Date

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORIA Publication ENV-049-12 rev. 08/2013



0 2 4

Approximate Scale in Miles

NOTE

Map adapted from aerial imagery provided by Google Earth Pro, Image U.S. Geological Survey, Image Island County, reproduced by permission granted by Google Earth ™ Mapping Service.

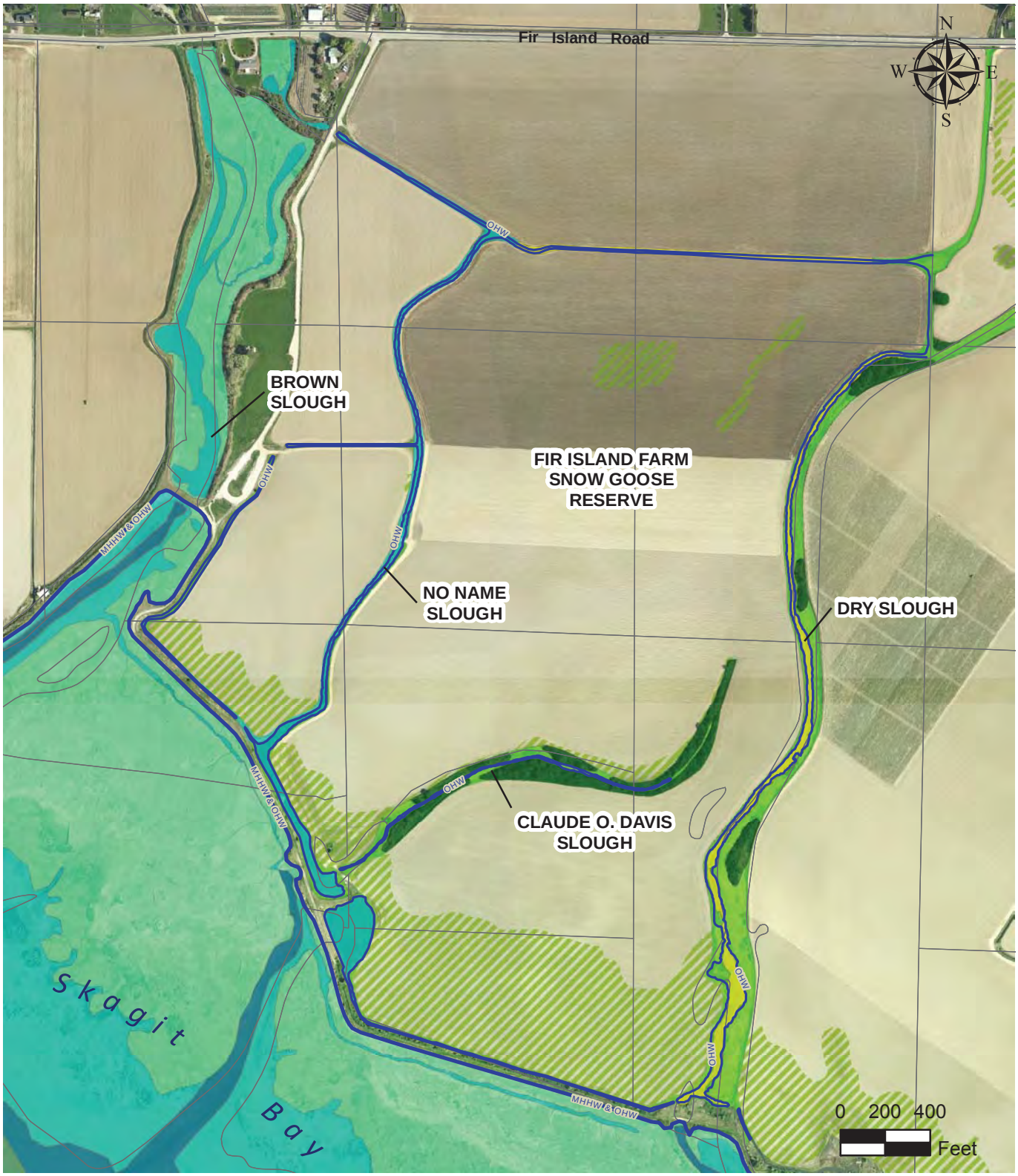
Reference Number:
Applicant: Washington St. Dept. of Fish & Wildlife
Proposed Project: Fir Island Farm Restoration Project
Location: 15802 Fir Island Road
Mount Vernon, WA 98273
Date: December 2013
S&W Project Number: 21-1-12318-226

VICINITY MAP

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIG. 1

Filename: J:\21\12318-226\21-1-12318-226 Vicmap.dwg Date: 12-13-2013 Login: SAC



Cowardin Classifications

- Palustrine Unconsolidated Bottom (PUB)
- Palustrine Emergent (PEM)
- Palustrine Scrub-Shrub (PSS)
- Estuarine Subtidal Unconsolidated Shore (E1US)
- Estuarine Intertidal Unconsolidated Shore (E2US)
- Estuarine Intertidal Emergent (E2EM)
- Farmed Potential Wetland
- Mean Higher High Water (MHHW) and/or Ordinary High Water (OHW)

NOTE

Wetland boundaries are approximated through information gathered from an on-site field reconnaissance, aerial photograph interpolation, and light detection and ranging (LiDAR) elevation data. A formal wetland delineation is recommended to support permit documents.

Reference Number:

Applicant: Washington St. Dept. of Fish & Wildlife

Proposed Project: Fir Island Farm Restoration Project

Location: 15802 Fir Island Road
Mount Vernon, WA 98273

Date: December 2013

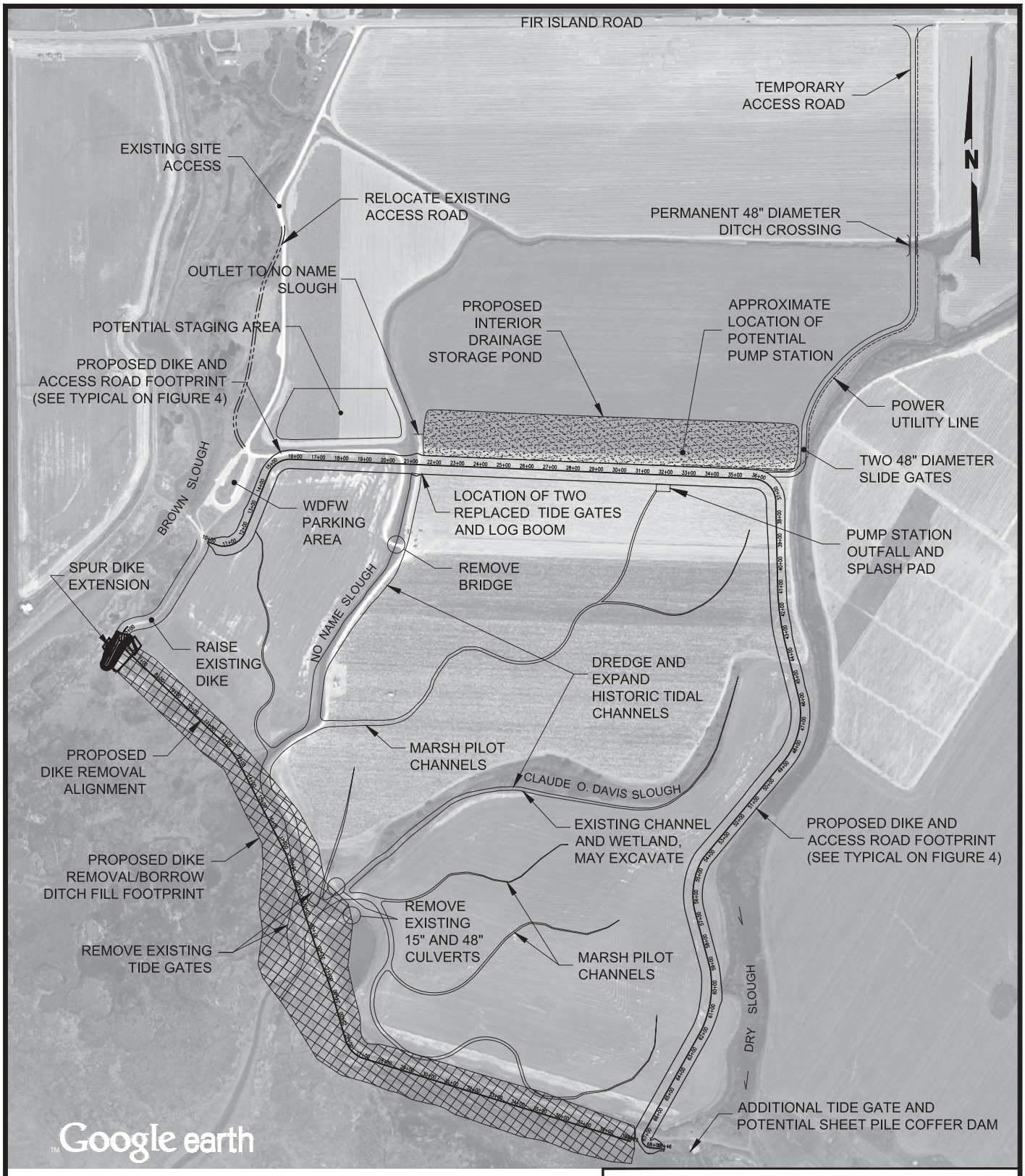
S&W Project Number: 21-1-12318-226

EXISTING CONDITIONS

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIG. 2

Filename: T:\Project\21-2\16470_Fir_Island\AV_mxd\Wetland_Delineation.mxd Date: 12/01/11 ADH



0 600 1200

Scale in Feet

NOTE

Map adapted from aerial imagery provided by Google Earth Pro, Image U.S. Geological Survey, Image Island County, reproduced by permission granted by Google Earth ™ Mapping Service.

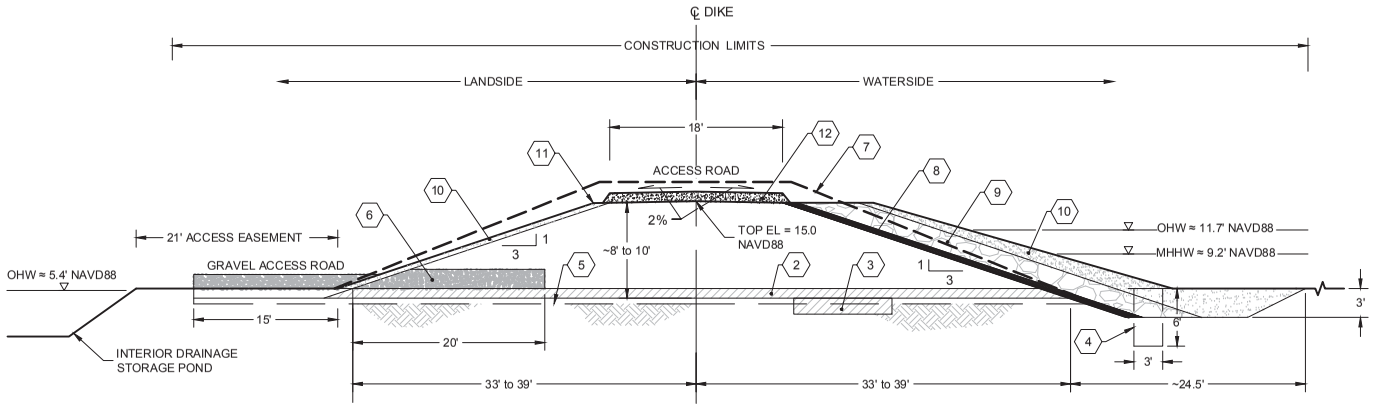
Reference Number:
Applicant: Washington St. Dept. of Fish & Wildlife
Proposed Project: Fir Island Farm Restoration Project
Location: 15802 Fir Island Road
Mount Vernon, WA 98273
Date: January 2014
S&W Project Number: 21-1-12318-226

PROJECT SITE PLAN

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIG. 3

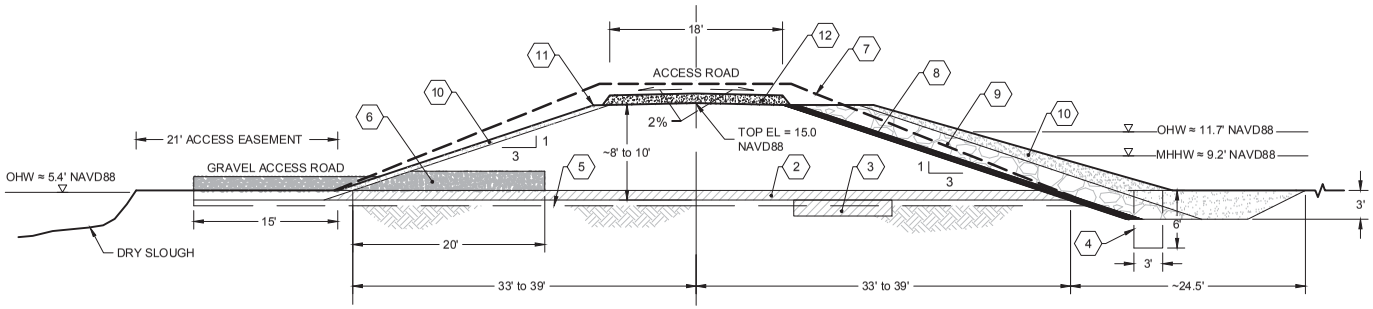
Filename: J:\211\12318-226\21-1-12318-226 Project Site Plan.dwg Date: 01-22-2014 Login: bac



TYPICAL DIKE SECTION DETAIL - NORTH SETBACK

0 20 40

Scale in Feet



TYPICAL DIKE SECTION DETAIL - EAST SETBACK

0 20 40

Scale in Feet

LEGEND

1. Construction Limits (30' from Dike Toe)
2. Strip Below Dike Prism (Approx. 10 inches)
3. Subsurface Repair at Locations Selected by Engineer (TBD)
4. Inspection Trenches
5. Basal Reinforcement Geosynthetic (See Note)
6. Horizontal Drainage Layer (2' Thick and Stripping Depth)
7. Pre-Settlement Dike Fill
8. Riprap Bedding/Filter Material
9. Riprap Erosion Protection (~3' Thick)
10. Topsoil (0.5'-1.0' Thick)
11. Dike Fill Final Grade
12. Top of Dike Road Surfacing

Reference Number:
Applicant: Washington St. Dept. of Fish & Wildlife
Proposed Project: Fir Island Farm Restoration Project
Location: 15802 Fir Island Road
Mount Vernon, WA 98273
Date: December 2013
S&W Project Number: 21-1-12318-226

TYPICAL DIKE SECTIONS

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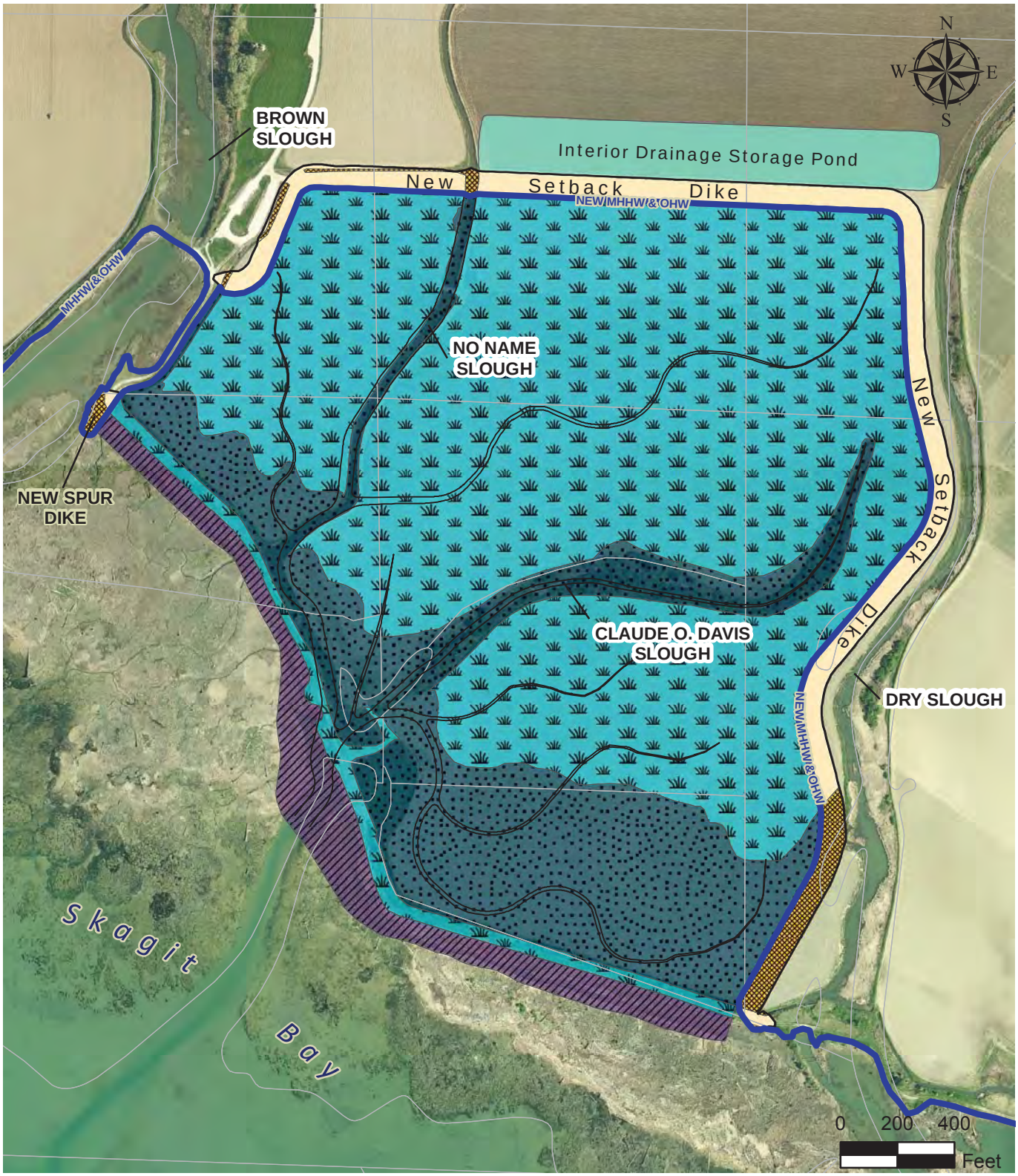
FIG. 4

FIG. 4



Wetland Effects

- Permanent Wetland Loss Approximately 2.1 Acres
- Permanent Estuarine Wetland Gain Approximately 92.6 Acres
- Permanent Wetland Alteration (Freshwater to Estuarine) Approximately 34.9 Acres
- Temporary Estuarine Wetland Impacts Approximately 8.2 Acres
- New Mean Higher High Water (MHHW) and Ordinary High Water (OHW)

NOTE

Wetland boundaries are approximated through information gathered from an on-site field reconnaissance, aerial photograph interpolation, and light detection and ranging (LiDAR) elevation data. A formal wetland delineation is recommended to support permit documents.

Reference Number:

Applicant: Washington St. Dept. of Fish & Wildlife

Proposed Project: Fir Island Farm Restoration Project

Location: 15802 Fir Island Road
Mount Vernon, WA 98273

Date: December 2013

S&W Project Number: 21-1-12318-226

PROJECT IMPACTS

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

FIG. 5

Filename: T:\Project\21-2\16470_Fir_Island\AV_mxd\Wetland_Delineation.mxd Date: 12/01/11 ADH