

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 4 December 2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District – Seattle District – Ovenall Industrial Development,
NWS-2008-631-NO
Phase II & Lot A sites**

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: WA County/parish/borough: Skagit City: Mount Vernon
Center coordinates of site (lat/long in degree decimal format): Lat. 48.4549695907801°N, Long. -122.431666967889°W.
Universal Transverse Mercator: Zone 10 N E

Name of nearest waterbody: Indian Slough

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Padilla Bay

Name of watershed or Hydrologic Unit Code (HUC): Strait of Georgia, 17110002

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: 19 November 2008

Field Determination. Date(s): 21 May 2008 & 30 September 2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

See additional forms for other project wetlands/waters

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 9,720 linear feet: average width 2.5 ft.

Wetlands: 3.80 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):.

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: Strait of Georgia (HUC 17110002) 955 square miles

Drainage area: 235 acres

Average annual rainfall: 32 inches

Average annual snowfall: 16 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.

Project waters are Pick List river miles from RPW.

Project waters are 1-2 aerial (straight) miles from TNW.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Water from Ditches A through F flow into Indian Slough, a tributary of Padilla Bay, a tidal waterbody used for interstate and foreign commerce.

Tributary stream order, if known: 1

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural

Artificial (man-made). Explain: Ditch system is man made and replaced natural drainage features in the area..

Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: 3 feet

Average depth: 1.5 feet

Average side slopes: 3:1

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Primary tributary substrate composition (check all that apply):

- | | | |
|---|---|-----------------------------------|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input checked="" type="checkbox"/> Vegetation. Herbaceous (grasses) 20% cover: | |
| <input type="checkbox"/> Other. Explain: | . | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable and vegetated.

Presence of run/riffle/pool complexes. Explain: None.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 2%

(c) **Flow:**

Tributary provides for: Ditches E and F - seasonal flow; Ditches A through D – ephemeral flow

Estimate average number of flow events in review area/year: 5

Describe flow regime: Flow in response to rain events in Ditches A through D; Flow for greater than 3 months (November through March) in Ditches E and F.

Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: Flow contained in a well defined channel.

Subsurface flow: **Unknown**. Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

- | | |
|---|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input checked="" type="checkbox"/> destruction of terrestrial vegetation |
| <input checked="" type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> sediment sorting |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input checked="" type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | . |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water conveyed by ditch system is generally clear with moderate organic debris, general water quality is good over total length of ditch system, watershed has been extensively developed for agricultural and industrial uses; downstream waters of Indian Slough are listed on the WA State 303(d) list for temperature and fecal coliform.

Identify specific pollutants, if known: herbicides, fertilizers, road runoff.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- | |
|---|
| <input checked="" type="checkbox"/> Riparian corridor. Characteristics (type, average width): Primarily shrub and herbaceous cover 100' to 10 wide. |
| <input checked="" type="checkbox"/> Wetland fringe. Characteristics: Ditch A and B - PSS |
| <input type="checkbox"/> Habitat for: |
| <input type="checkbox"/> Federally Listed species. Explain findings:. |
| <input type="checkbox"/> Fish/spawn areas. Explain findings: |
| <input type="checkbox"/> Other environmentally-sensitive species. Explain findings: . |
| <input type="checkbox"/> Aquatic/wildlife diversity. Explain findings: |

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

Wetlands A, B, D, E, H, K, L M/P, N, O, and Q

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 2.79 acres total (12 wetlands)

Wetland type. Explain: PFO/PSS, depressionnal.

Wetland quality. Explain: Wetlands , L, M/P, and Q are Category III; Wetlands A, B, D, E, H, K, N, and O are Category IV. Per Washington State wetland rating System (based on a scale of I to IV, I being the highest functioning)

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: Surface flow into RPWs and non-RPWs during significant rain events.

Surface flow is: **Overland sheetflow**

Characteristics: Surface sheet flow through low ground into RPWs and non-RPWs during rain events

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain: Wetlands are upslope from, and in close enough proximity to, the on-site non-RPWs and offsite RPW to assume flow from wetlands into these drainages.

Separated by berm/barrier. Explain: Wetlands N and O are cut off from downslope drainages by pipeline and ROW easement area.

(d) Proximity (Relationship) to TNW

Project wetlands are **2-5** river miles from TNW.

Project waters are **1-2** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water flowing from wetlands is clear, general water quality is good, watershed has been moderately developed for agricultural and industrial uses, downstream waters of Indian Slough are on the WA State 303(d) list for temperature and fecal choliform.

Identify specific pollutants, if known: herbicides, fertilizers.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width): Forested/scrub-shrub, 10-60 feet.

Vegetation type/percent cover. Explain:

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) 3.80 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

	<u>Directly abuts? (Y/N)</u>	<u>Size (acres)</u>		<u>Directly abuts? (Y/N)</u>	<u>Size (acres)</u>
Wetland A	N	0.005	Wetland K	No	0.005
Wetland B	N	0.01	Wetland L	No	0.69
Wetland C	Y	0.03	Wetland M/P	No	1.67
Wetland D	N	0.06	Wetland N	No	0.10
Wetland E	N	0.04	Wetland O	No	0.06
Wetland F	Y	0.97	Wetland Q	No	0.05
Wetland H	N	0.11			

Summarize overall biological, chemical and physical functions being performed: See Section C.3.

C. SIGNIFICANT NEXUS DETERMINATION

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook.

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Subject wetlands A, B, C, D, E, F, H, K, L, M/P, N, O, and Q have a significant nexus to a downstream TNW.

Subject reach includes the on site tributaries (Ditches A through D), offsite ditches (E and F), and associated wetlands. Wetlands in the subject area are adjacent to and/or abutting these tributaries and drain into them during wet season overflow periods via overland sheet flow and flow through discernable microchannels. Ditch A flows into Ditch B, which flows into Ditch C. Ditch D flows into Ditch C. Ditch F flows west from McFarland Road for approximately 850 feet before joining Ditch E, which flows southward and connects with Ditch C before continuing south into Indian Slough. Indian Slough then flows 2.85 miles west before entering Padilla Bay.

The watershed has been extensively developed for agricultural and industrial uses. Essential Fish Habitat for Pacific Salmon (coho) designated under the Magnuson-Stevens Fishery Conservation and Management Act extends from the TNW (Padilla Bay) upstream through Indian Slough. Fish species listed under the Endangered Species Act utilize the waters of Indian Slough; designated critical habitat for chinook salmon and bull trout exists in Padilla Bay.

Wetland functions are moderate wildlife habitat and habitat diversity, moderate enhanced food web support, moderate floodwater storage/attenuation, and minimal sediment input reduction and toxin removal.

The wetlands create and transfer organic carbon which supports the downstream food web of the TNW. Wetlands improve downstream water quality in TNW through sediment and toxin interception. The lengthy vegetated tributary/wetland complexes have the capacity to capture pollutants (primarily agricultural herbicides/pesticides and sediments) to reduce the amount of pollutants, sediments or flood waters from reaching the TNW. Wetlands attenuates downstream flooding by reducing peak flow in the watershed during major storm events and attenuates erosion by detaining high flows during storms and reduce the duration of erosive flows, thus decreasing downstream erosion in streams. Wetlands and ditch system contribute significant support to habitat for ESA listed species and Essential Fisheries Habitat

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

- 1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), Or, acres.
 - Wetlands adjacent to TNWs: acres.
- 2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Ditches E and F have flows for greater than 3 months out of the year (December through March)

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **Ditches E and F - 4,280 linear feet: average 3’ width** (ft) or acres
- Other non-wetland waters:.

Identify type(s) of waters: .

- 3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**
 - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

⁸See Footnote # 3.

- Tributary waters: **Ditches A through D – 5,440 linear feet; average 2 feet width (ft).**
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area:

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **Wetlands L, M/P, and Q - 2.41 acres**

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: **Wetlands A, B, C, D, E, F, H, K, N, and O – 1.39 acres.**

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: project drawings, wetland delineation, and mitigation plan.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report. Wetland H and adjacent areas needs to be re-sampled and the boundary adjusted.
- Data sheets prepared by the Corps: .
- Corps navigable waters’ study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 7.5min, La Conner Quad.
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s):WA Dept. of Ecology, 2001.
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date):WA Dept of Ecology, 2005.
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:

NWS-2008-631-NO, Ovenall Industrial Development – **Phase II Site**
 21 May 2008, 10:30 – 14:30
 Weather – Clear, partly sunny, mild. Significant rainfall during preceding 2 days.
 Randel Perry, Tina Tong (Corps)
 Kerrie McArthur (consultants)
 Curt Adcock (Sierra Pacific)

Site Description: The Phase II subject site is located in the Indian Slough watershed and is divided into 6 lots – Lot 1 on the northeast side of the property and Lots 14 through 18 on the northwest side. The east and west lots are divided by an existing road. Topography in the vicinity general slopes from northeast to southwest. Lot 1 is bounded by undeveloped properties to the south and east and by roads to the north and west. Lots 14-18 are bounded by undeveloped property to the south and northeast, by a road to east, and by commercial developments to the west and northwest. The immediate vicinity around the site is extensively developed for industrial and agricultural uses. Sierra Pacific Industries has developed the property to the south of the subject sites as a log mill and wood treatment facility. The lots are forested with a mosaic pattern of wetlands occurring in topographical depressions. The area contains a number of drainage ditches constructed to replace natural drainages and facilitate historic agricultural activities and current industrial uses of the applicant’s property to the south. A maintained pipeline right of way exists along the southern boundary of the Phase II site.

Delineation: A wetland delineation was conducted by Geomatrix in April of 2008. 7 separate wetlands were identified by the consultants.

Soils: Mapped soils are – Bow gravelly loam 0% - 3% slopes (listed as hydric)
 Observed soil colors are:

Wetlands –7.5Y 2/1 clay loam overlying 2.5Y 5/3 with mottles.

Uplands – 7.5YR 3/2 clay loam and 2.5Y 5/3 gravelly loam (no mottles).

Vegetation:

Wetland Red alder (*Alnus rubra*) FAC

Forest Creeping buttercup (*Ranunculus repens*) FACW
 Slough sedge (*Carex obnupta*) OBL
 Black cottonwood (*Populus balsamifera*)
 Western red cedar (*Thuja plicata*) FAC
 Piggyback plant (*Tolmiea menziesii*) FAC
 Salmonberry (*Rubus spectabilis*) FAC+
 Trailing blackberry (*Rubus ursinus*) FACU

Upland Stinging nettle (*Urtica dioica*) FAC+
Forest Trailing blackberry (*Rubus ursinus*) FACU
 Red alder (*Alnus rubra*) FAC
 Sword fern (*Polystichum munitum*) FACU
 Piggyback plant (*Tolmiea menziesii*) FAC
 Salmonberry (*Rubus spectabilis*) FAC+
 Bitter cherry (*Prunus emarginata*) FACU
 Snowberry (*Symphoricarpos albus*) FACU
 Indian plum (*Oemleria cerasiformis*) FACU

Wetland acreage identified: 3.65 acres

Wetland acreage to be filled: Unknown

Observations/Discussion: Corps personnel walked around the perimeter of all wetlands as identified by the consultants at the time of the visit with the exception of wetlands L and Q. Most wetland boundaries were identified by changes in topography and noticeable transitions in vegetation communities. Wetlands appear to be a braided system that winds through forested area with numerous “arms” and channels. Some of the smaller wetlands (K, O, and Q) may have developed in depressions on the landscape likely created during historic logging operations. Standing water and slough sedge were noted in an area around test pit 11 (an upland plot) southeast of wetland H; consultant will be asked to re-evaluate this area. The east boundary of wetland H near test pit 15 needs to be revised to include a depressional area with slough sedge and signs of standing water. Wetland H may extend to and connect with Wetland F. Water from wetland H appears to flow east into wetland F.

Water drains from Wetland F into the ditch along the eastern edge of Lot 1. This ditch flows south and appears to connect to additional ditches and stormwater facilities constructed on the mill site. These facilities constitute a surface water connection with, and flow into, Indian Slough, which flows into Padilla Bay.

Wetlands N and O are located on the southern boundary of Lot 18. Water from these wetlands flow south onto a maintained pipeline right of way and then disperses across an upland field in the general direction of Ditches D and C. Wetlands N and O are considered adjacent to Ditch D but for the presence of fill placed for the pipeline.

Wetland K is a small feature formed in a depression surrounded by upland soils and vegetation. Wetland K is considered as “neighboring” Ditch F.

Wetlands L and Q are adjacent to a ditch along the north side of Lots 15 – 17 that conveys water west into a ditch along the western edge of Lots 14 and 15, which then flows south, then west into a drainage facility (stormwater pond ditches) that convey water to Little Indian Slough, a tributary of Padilla Bay. In addition, portions of Wetland L drain into Wetland M/N via a natural channel (Channel A).

Wetlands M and P are a single complex spread across Lots 14 through 17. The eastern edge of wetland M is separated from a wetland mitigation area at the east edge of Lot 17 by upland soils and vegetation. Water from the eastern end of wetland M likely flows south into Wetland N. Water in the western end of the wetland M/P complex appears to flow into a ditch along the western edge of Lots 14 and 15, which then flows west into a drainage facility (ditches) that convey water to Little Indian Slough, a tributary of Samish Bay.

Jurisdictional determination: Wetland F abuts a seasonally flowing tributary (Ditch A) of Little Indian Slough, which flows into Padilla Bay, a tidal waterbody used for interstate and foreign commerce. Water from Wetland H flows into Wetland F.

Wetlands K, M/P, L, N, O, and Q are adjacent to a seasonally flowing tributary of Indian Slough, which flows into Padilla Bay, a tidal waterbody used for interstate and foreign commerce.

Based on a significant nexus evaluation, all wetlands on the Phase II site are jurisdictional waters of the U. S.

NWS-2008-631-NO, Ovenall Industrial Development – **Lot A Site**

30 September 2008

16:00 – 17:30

Weather – Clear, partly sunny, warm.

Randel Perry, Matt Bennett (Corps)

Kerrie McArthur, Michael McDowell (consultants)

Curt Adcock (Sierra Pacific)

Site Description: The 5.29 acre Lot A subject site is located in the Indian Slough watershed south and east of the Phase II property and north of the developed mill site. Topography on the site general slopes from northwest to southeast. Lot A is bounded by undeveloped properties to the north and east, by a road to the west, and by developed property to the south. A drainage ditch (Ditch A) runs along the eastern edge of the south, conveying water south. The immediate vicinity around the site is extensively developed for industrial and agricultural uses. Sierra Pacific Industries has developed the property to the south of the subject sites as a log mill and wood treatment facility. The lot was forested with wetlands scattered in the north central and southeastern; the applicant cleared and graded the lot in September of 2008. The area contains a number of drainage ditches constructed to replace natural drainages and facilitate historic agricultural activities and current industrial uses of the applicant’s property to the south. A maintained pipeline right of way exists along the southern boundary of the Phase II site.

NOTE: During a site visit on May 21, 2008, the applicant discussed the potential fill of wetlands A, B, C, D, and E on Lot A. Applicant stated that this area is targeted for clearing and development. Corps informed applicant at that time that the wetlands on Lot A may be jurisdictional and that an additional site visit would be required after submission of a delineation for this area to make a jurisdictional determination.

Delineation: A wetland delineation was conducted by Geomatrix in March of 2008. 5 separate wetlands were identified by the consultants.

Soils: Mapped soils are – Bow gravelly loam 0% - 3% slopes (listed as hydric)

Observed soil colors are:

Wetlands – 10YR 4/2 silt loam with 5YR 4/6 mottles (common, distinct).

10YR 2/1 silt loam

Uplands – 7.5YR 3/2 silt loam and 2.5Y 5/3 clay loam (no mottles).

Vegetation:

Wetland	Red alder (<i>Alnus rubra</i>) FAC
Forest	Creeping buttercup (<i>Ranunculus repens</i>) FACW
(before	Slough sedge (<i>Carex obnupta</i>) OBL
clearing)	Black cottonwood (<i>Populus balsamifera</i>) FAC
	Western red cedar (<i>Thuja plicata</i>) FAC
	Twinberry (<i>Lonicera involucrata</i>) FAC+
	Hardhack (<i>Spiraea douglasii</i>) FACW
	Nootka rose (<i>Rosa nutkana</i>) FAC
	Vine maple (<i>Acer circinayum</i>) FAC-
	Salmonberry (<i>Rubus spectabilis</i>) FAC+
	Trailing blackberry (<i>Rubus ursinus</i>) FACU
Upland	Stinging nettle (<i>Urtica dioica</i>) FAC+
Forest	Himalayan blackberry (<i>Rubus discolor</i>) FACU
(before	Red alder (<i>Alnus rubra</i>) FAC
clearing)	Sword fern (<i>Polystichum munitum</i>) FACU
	Piggyback plant (<i>Tolmiea menziesii</i>) FAC
	Salmonberry (<i>Rubus spectabilis</i>) FAC+
	Snowberry (<i>Symphoricarpos albus</i>) FACU
	Swordfern (<i>Polystichum munitum</i>) FACU

Red huckleberry (*Vaccinium parvifolium*) FACU
Reed canary grass (*Phalaris arundinacea*) FACW

Wetland acreage identified: 0.15 acres
Wetland acreage to be filled: 0.15 acres

Observations/Discussion: Corps personnel inspected the site after grading and clearing had occurred. Grading was surficial and did not appear to affect significant topographic features. Corps personnel walked around the perimeter of all wetlands as identified by the consultants at the time of the visit. Boundaries for wetlands D and E were identified by changes in topography and noticeable transitions in soil colors and composition. These wetlands appear to have developed in depressions on the landscape. Wetland C abuts Ditch A while wetlands A and B are adjacent to Ditch A in the southeast corner of the lot.

Wetlands D and E are small features formed in a depression surrounded by upland soils. Given their position on the landscape, upslope of Ditch A and proximity to Ditch A, it can reasonably be presumed that seasonal surface overflow from the wetlands flows east and southeast into Ditch A. These wetlands would be considered adjacent to Ditch A.

Water drains from Wetlands A, B, and C into Ditch A along the eastern edge of Lot A. This ditch flows south and connect to additional ditches (Ditches B and C) and culverts installed on the mill site. These facilities constitute a surface water connection with, and flow into, Indian Slough, which flows into Samish Bay.

Jurisdictional determination: Wetland C abuts a seasonally flowing tributary (Ditch A/B/C) of Indian Slough, which flows into Padilla Bay, a tidal waterbody used for interstate and foreign commerce.

Wetlands A, B, D, and E are adjacent to a seasonally flowing tributary of Indian Slough, which flows into Padilla Bay, a tidal waterbody used for interstate and foreign commerce.

Based on a significant nexus evaluation, all wetlands on the Lot A site are jurisdictional waters of the U. S.