

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

**SECTION I: BACKGROUND INFORMATION**

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14 Dec 2007.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District, Rader Farms, Inc, NWS-2006-553-CR (JD Form 1 of 2).  
Name of water being evaluated on this JD form: on-site land cleared wetland and ditches

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Washington County: Whatcom City: \_\_\_\_\_

Center coordinates of site (lat/long in degree decimal format): Lat: 48-59-19 N, Long: 122-21-26 W

Universal Transverse Mercator:

Name of nearest waterbody: \_\_\_\_\_

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Sumas River.

Name of watershed or Hydrologic Unit Code (HUC): 17110001.

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. List other JDs: NWS-2006-553-CR (JD Form 2 of 2 for Sumas River).

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

Office (Desk) Determination. Date: \_\_\_\_\_.

Field Determination. Date(s): 9 May 2006 and 15 June 2007.

**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):<sup>1</sup>

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (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

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

Non-wetland waters: 2,145 linear feet 4 width (ft) and/or \_\_\_\_\_ acres.

Wetlands: Approx. 10 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual and Established by OHWM.

Elevation of established OHWM (if known): \_\_\_\_\_.

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

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

Explain: \_\_\_\_\_.

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

<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

**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):**

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. If the waterbody<sup>4</sup> 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: \_\_\_\_\_ **Pick List**

Drainage area: \_\_\_\_\_ **Pick List**

Average annual rainfall: \_\_\_\_\_ inches

Average annual snowfall: \_\_\_\_\_ inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

Project waters are **Pick List** 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 TNW<sup>5</sup>: \_\_\_\_\_.

Tributary stream order, if known: \_\_\_\_\_.

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

**Tributary is:**  Natural

Artificial (man-made). Explain: \_\_\_\_\_.

Manipulated (man-altered). Explain: \_\_\_\_\_.

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

Average width: \_\_\_\_\_ feet

Average depth: \_\_\_\_\_ feet

Average side slopes: **Pick List**.

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

<sup>5</sup> 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 type="checkbox"/> Silts                  | <input type="checkbox"/> Sands                           | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                | <input type="checkbox"/> Gravel                          | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                | <input type="checkbox"/> Vegetation. Type/% cover: _____ |                                   |
| <input type="checkbox"/> Other. Explain: _____. |  |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: \_\_\_\_\_.

Presence of run/riffle/pool complexes. Explain: \_\_\_\_\_.

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): \_\_\_\_\_ %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: \_\_\_\_\_.

Other information on duration and volume: \_\_\_\_\_.

Surface flow is: **Pick List**. Characteristics: \_\_\_\_\_.

Subsurface flow: **Pick List**. Explain findings: \_\_\_\_\_.

Dye (or other) test performed: \_\_\_\_\_.

Tributary has (check all that apply):

- |   |   |
|---|---|
| <input type="checkbox"/> Bed and banks  |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input 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 type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving   | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                 | <input type="checkbox"/> scour                                      |
| <input 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. <sup>7</sup> 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: \_\_\_\_\_.

Identify specific pollutants, if known: \_\_\_\_\_.

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

- Riparian corridor. Characteristics (type, average width): \_\_\_\_\_.
- Wetland fringe. Characteristics: \_\_\_\_\_.
- Habitat for:
  - Federally Listed species. Explain findings: \_\_\_\_\_.
  - Fish/spawn areas. Explain findings: \_\_\_\_\_.
  - Other environmentally-sensitive species. Explain findings: \_\_\_\_\_.
  - Aquatic/wildlife diversity. Explain findings: \_\_\_\_\_.

<sup>6</sup>A 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.

<sup>7</sup>Ibid.

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: \_\_\_\_\_ acres

Wetland type. Explain: \_\_\_\_\_.

Wetland quality. Explain: \_\_\_\_\_.

Project wetlands cross or serve as state boundaries. Explain: \_\_\_\_\_.

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: \_\_\_\_\_.

Surface flow is: **Pick List**

Characteristics: \_\_\_\_\_.

Subsurface flow: **Pick List**. 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: \_\_\_\_\_.

Separated by berm/barrier. Explain: \_\_\_\_\_.

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

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

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** 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: \_\_\_\_\_.

Identify specific pollutants, if known: \_\_\_\_\_.

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

Riparian buffer. Characteristics (type, average width): \_\_\_\_\_.

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) being considered in the cumulative analysis: **Pick List**

Approximately ( \_\_\_\_\_ ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: \_\_\_\_\_.

C. SIGNIFICANT NEXUS DETERMINATION

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: \_\_\_\_\_.

**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 rationale indicating that tributary flows perennial: The wetland site abuts ditches on three sides (east, west, and south). The ditch to the west has perennial flow (Rader, pers. comm., 15 June 2007), which flows into the ditch to the south. The ditches leave the review area to the southeast and flow into an unnamed stream that flows from Pangborn Lake. The unnamed stream from Pangborn Lake flows into Johnson Creek. Johnson Creek flows into the Sumas River, which is a traditional navigable water of the U.S.
- 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: \_\_\_\_\_.

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

- Tributary waters: 2,145 linear feet 4 width (ft).  
 Other non-wetland waters: \_\_\_\_\_ acres.  
 Identify type(s) of waters: \_\_\_\_\_.

3. **Non-RPWs<sup>8</sup> 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):

- Tributary waters: \_\_\_\_\_ linear 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: The RPW ditches abut the wetland in the review area on three sides. The ditches were previously excavated through wetlands and there is no separation or break between the wetlands and the ditches.
- 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: Approx. 10 acres.

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: \_\_\_\_\_ 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.

<sup>8</sup>See Footnote # 3.

Provide estimates for jurisdictional wetlands in the review area: \_\_\_\_\_ acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

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):<sup>10</sup>**

- 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):

- 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: Wetland Resources, Inc., 12 March 2007, Wetland Determination memo.
- 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.
- Data sheets prepared by the Corps: 9 May 2006 site visit.

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

<sup>10</sup> 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.

- 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: Sumas and Kendall, Washington USGS Quads, 1994
- USDA Natural Resources Conservation Service Soil Survey. Citation: Pangborn Muck soils, 1992.
- National wetlands inventory map(s). Cite name: Sumas, Washington 1981.
- State/Local wetland inventory map(s): Whatcom County, Washington critical area map.
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 1998  
or  Other (Name & Date): Department of Ecology photos: 7 April 2006; Corps site inspection photos 9 May 2006 and 15 June 2007.
- Previous determination(s). File no. and date of response letter: \_\_\_\_\_.
- Applicable/supporting case law: \_\_\_\_\_.
- Applicable/supporting scientific literature: \_\_\_\_\_.
- Other information (please specify): References:

Rader, Lyle. Rader Farms, Inc. Personal communication during site visit, June 15, 2007.

**B. ADDITIONAL COMMENTS TO SUPPORT JD: \_\_\_\_\_.**

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

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 14 Dec 2007.

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Seattle District, Rader Farms, Inc. NWS-2006-553-CR (JD Form 2 of 2).  
Name of water being evaluated on this JD form: Sumas River. This jurisdictional determination applies to the Sumas River from the confluence of Johnson Creek downstream to the U.S. - Canada border.

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: Washington County: Whatcom City: \_\_\_\_\_

Center coordinates of site (lat/long in degree decimal format): Lat: 48-59-46 N, Long: 122-14-56 W

Universal Transverse Mercator:

Name of nearest waterbody: \_\_\_\_\_

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Sumas River.

Name of watershed or Hydrologic Unit Code (HUC): 17110001.

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. List other JDs: NWS-2006-553-CR (JD Form 1 of 2) This JD form is for the Sumas River. The location specified above is the location of the confluence of Johnson Creek with the Sumas River.

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

Office (Desk) Determination. Date: \_\_\_\_\_

Field Determination. Date(s): 9 May 2006 and 15 June 2007.

**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):<sup>1</sup>**

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters<sup>2</sup> (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

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

Non-wetland waters: \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft) and/or \_\_\_\_\_ acres.

Wetlands: \_\_\_\_\_ acres.

**c. Limits (boundaries) of jurisdiction based on: Pick List and Established by OHWM.**

Elevation of established OHWM (if known): \_\_\_\_\_

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

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

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

<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

##### 1. TNW

Identify TNW: Sumas River.

Summarize rationale supporting determination: The Sumas River is a traditional navigable water and has been used in the past for interstate or foreign commerce. The Sumas River watershed is approximately 143 square miles within Washington state. To the south, the Sumas River watershed is separated from the Nooksack River by a natural levee, but at flood stage the Nooksack River has gone over the levee sending flood waters into the Sumas River and north into Canada (Whatcom County Planning Commission, 1972). The Sumas River flows northerly from the US into Canada, through the now drained Sumas Lake, and into the Fraser River. Water was the only means of travel prior to the development of trails and roads in the region (City of Sumas, 2007) and water transport was the most dominant means of transport for early pioneers (Riggins and Walker, 1991) The Sumas River is a navigable water and was navigated in the past by canoe (Polk, et al., 1981). The Nooksack and Sumas Indians navigated the Sumas River, in particular the Sumas Indians who seasonally lived in piling supported homes in the middle of Sumas Lake (Cameron, 1997). The Kingston's operated a lumber and shingle mill on the Sumas River just south of Front Street (Rock Road) at the City of Sumas. Kingston used the Sumas River for a mill pond and to transport logs to the mill (Roy, 1958). Peter Gillies built a water powered girst mill and saw mill on the Sumas River near the town of Nooksack (Roy, 1958). Residents of Canada would go to the Gillies mill in Nooksack for supplies (Sumas Prairie and Area Historical Society, 1999) indicating the past use of the Sumas River in foreign commerce.

##### 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):

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. If the waterbody<sup>4</sup> 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: \_\_\_\_\_ **Pick List**

Drainage area: \_\_\_\_\_ **Pick List**

Average annual rainfall: \_\_\_\_\_ inches

Average annual snowfall: \_\_\_\_\_ inches

###### (ii) Physical Characteristics:

###### (a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

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

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

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

Project waters cross or serve as state boundaries. Explain: \_\_\_\_\_.

Identify flow route to TNW<sup>5</sup>: \_\_\_\_\_.

Tributary stream order, if known: \_\_\_\_\_.

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

Tributary is:  Natural  
 Artificial (man-made). Explain: \_\_\_\_\_.  
 Manipulated (man-altered). Explain: \_\_\_\_\_.

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

Average width: \_\_\_\_\_ feet

Average depth: \_\_\_\_\_ feet

Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: \_\_\_\_\_  
 Other. Explain: \_\_\_\_\_.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: \_\_\_\_\_.

Presence of run/riffle/pool complexes. Explain: \_\_\_\_\_.

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): \_\_\_\_\_ %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: \_\_\_\_\_.

Other information on duration and volume: \_\_\_\_\_.

Surface flow is: **Pick List**. Characteristics: \_\_\_\_\_.

Subsurface flow: **Pick List**. Explain findings: \_\_\_\_\_.

Dye (or other) test performed: \_\_\_\_\_.

Tributary has (check all that apply):

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

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

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): \_\_\_\_\_

(iii) **Chemical Characteristics:**

<sup>5</sup> 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.

<sup>6</sup> A 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.

<sup>7</sup> Ibid.

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

Explain: \_\_\_\_\_.

Identify specific pollutants, if known: \_\_\_\_\_.

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

- Riparian corridor. Characteristics (type, average width): \_\_\_\_\_.
- Wetland fringe. Characteristics: \_\_\_\_\_.
- Habitat for:
  - Federally Listed species. Explain findings: \_\_\_\_\_.
  - Fish/spawn areas. Explain findings: \_\_\_\_\_.
  - Other environmentally-sensitive species. Explain findings: \_\_\_\_\_.
  - Aquatic/wildlife diversity. Explain findings: \_\_\_\_\_.

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

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

Properties:

Wetland size: \_\_\_\_\_ acres

Wetland type. Explain: \_\_\_\_\_.

Wetland quality. Explain: \_\_\_\_\_.

Project wetlands cross or serve as state boundaries. Explain: \_\_\_\_\_.

**(b) General Flow Relationship with Non-TNW:**

Flow is: **Pick List**. Explain: \_\_\_\_\_.

Surface flow is: **Pick List**

Characteristics: \_\_\_\_\_.

Subsurface flow: **Pick List**. 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: \_\_\_\_\_.

Separated by berm/barrier. Explain: \_\_\_\_\_.

**(d) Proximity (Relationship) to TNW**

Project wetlands are **Pick List** river miles from TNW.

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

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** 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: \_\_\_\_\_.

Identify specific pollutants, if known: \_\_\_\_\_.

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

- Riparian buffer. Characteristics (type, average width): \_\_\_\_\_.
- 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) being considered in the cumulative analysis: **Pick List**

Approximately ( \_\_\_\_\_ ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: \_\_\_\_\_.

**C. SIGNIFICANT NEXUS DETERMINATION**

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: \_\_\_\_\_.

**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 rationale indicating that tributary flows 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: \_\_\_\_\_.

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

Tributary waters: \_\_\_\_\_ linear feet 4 width (ft).

Other non-wetland waters: \_\_\_\_\_ acres.

Identify type(s) of waters: \_\_\_\_\_.

3. **Non-RPWs<sup>8</sup> 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):

Tributary waters: \_\_\_\_\_ linear 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: \_\_\_\_\_ acres.

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

<sup>8</sup>See Footnote # 3.

- 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: \_\_\_\_\_ 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: \_\_\_\_\_ acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

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):<sup>10</sup>**

- 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):

- 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.

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

<sup>10</sup> 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.

**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: Wetland Resources, Inc., 12 March 2007, Wetland Determination memo.
- 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.
- Data sheets prepared by the Corps: 9 May 2006 site visit.
- 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: Sumas and Kendall, Washington USGS Quads, 1994
- USDA Natural Resources Conservation Service Soil Survey. Citation: Pangborn Muck soils, 1992.
- National wetlands inventory map(s). Cite name: Sumas, Washington 1981.
- State/Local wetland inventory map(s): Whatcom County, Washington critical area map.
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 1998  
or  Other (Name & Date): Department of Ecology photos: 7 April 2006; Corps site inspection photos 9 May 2006 and 15 June 2007.
- Previous determination(s). File no. and date of response letter: \_\_\_\_\_.
- Applicable/supporting case law: \_\_\_\_\_.
- Applicable/supporting scientific literature: \_\_\_\_\_.
- Other information (please specify): References:

Cameron, Laura. Openings, A Meditation on History, Method, and Sumas Lake. McGill-Queen's University Pres, 1997

Jones, Roy Franklin. Boundary Town, Early Days In A Northwest Boundary Town. Vancouver, WA: Fleet Prinitng Co., 1959.

Polk, Michael R., et al. A Cultural Resources Investigation of the Johnson Creek Watershed, Whatcom County, Washington. Environment Consultants, Inc., 1981.

Riggins, Loretta R., and Len Walker. The Heart of the Fraser Vally, Memories of an Era Past. Abbotsford, B.C.: Matsqui/Abbotsford Community Services. 1991.

Sumas, City of. Sumas - Land Without Trees. History Page. November 30, 2007 <<http://cityofsumas.homestead.com/history.html>

Sumas Prairie & Area Historical Society. One Foot On the Border. Deroche, B.C.: Sumas Prairie and Area Historical Society, 1999.

Whatcom County Planning Commission. Shorelines of Whatcom County, Washington State. 1972.

**B. ADDITIONAL COMMENTS TO SUPPORT JD: \_\_\_\_\_.**