

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

Wetlands 4/F/1, 2 and Wetland 3

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 18 April 2018.

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Seattle District, Clark County Saddle Club, NWS-2017-743.  
Name of water being evaluated on this JD form: Wetlands 4/F/1, 2 and Wetland 3

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

State: Washington County: Clark City: Battle Ground

Center coordinates of site (lat/long in degree decimal format): Lat: 45.746821 N, Long: -122.555118 W

Universal Transverse Mercator: \_\_\_\_\_

Name of nearest waterbody: Salmon Creek.

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

Name of watershed or Hydrologic Unit Code (HUC): 17080002.

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: \_\_\_\_\_

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

Office (Desk) Determination. Date: 2 March 2018.

Field Determination. Date(s): 30 October 2017, 22 November 2017, and 1 March 2018.

**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: 0.713 acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, and Pick List**

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: Not Applicable**

**(i) General Area Conditions:**

Watershed size: HUC 1708002 (Salmon Creek Watershed) 89 square miles

Drainage area: 54 acres

Average annual rainfall: 52.6 inches

Average annual snowfall: 1.70 inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 1 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 5-10 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

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

Identify flow route to TNW<sup>5</sup>: The subject wetlands flow into a tributary that conveys surface water south, approximately 0.6 mile to a storm pond then through a natural channel and into Salmon Creek, a RPW. Salmon Creek flows westerly, approximately 11 miles and into Lake River, a TNW.

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

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

Tributary is:  Natural

Artificial (man-made). Explain: The tributary was constructed during the realignment 1994 realignment of SR-503. Prior to the realignment of SR-503, Wetland 2 drained east, approximately 0.25 mile, along the north side of the east-west access road and then south into Salmon Creek (see Aerial 1).

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

<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.

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

Average width: 4 feet  
Average depth: 0.5 feet  
Average side slopes: **2:1**.

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 checked="" type="checkbox"/> Vegetation. Type/% cover: <u>90</u> |                                   |

Other. Explain: loam (NRCS soil survey Clark County, Washington), the soil within the tributary was compacted during the 1994 construction of SR-503.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable banks along relative flat topography for approximately 0.3 mile, due to compaction during the 1994 construction of SR-503, then moderately eroding for approximately 0.2 mile where the tributary flows down an approximately 30% slope and into the storm ponds before entering Salmon Creek.

Presence of run/riffle/pool complexes. Explain: No riffle/pool complex due to relatively flat and steep slopes.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): <1% for approximately 0.3 mile then >30% for 0.2 mile to the storm pond and approximately 2% from the storm ponds to Salmon Creek. %

(c) **Flow:**

Tributary provides for: **Ephemeral flow**

Estimate average number of flow events in review area/year: **2-5**

Describe flow regime: Flow in the tributary occurs primarily between November and April with flow rates depending on precipitation levels and frequency of storms.

Other information on duration and volume: .

Surface flow is: **Confined**. Characteristics: well-defined, constructed channel adjacent to SR-503, then through a well defined channel and into Salmon Creek.

Subsurface flow: **Yes**. Explain findings: presumed based on relatively flat topography, close proximity of the wetlands to tributary, and moderately well-drained soils in areas abutting the wetlands and tributary.

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

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input checked="" type="checkbox"/> OHWM <sup>6</sup> (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 type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                           |
| <input checked="" 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: water color is clear with moderate organic debris; general water quality is fair; watershed has been extensively developed for agricultural and residential uses; downstream waters of Salmon Creek are on the WA State 303(d) list for turbidity and fecal coliform.

Identify specific pollutants, if known: pollutants from road runoff, pesticides and fertilizers from adjacent land use.

<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.

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

Riparian corridor. Characteristics (type, average width): The tributary is narrow, approximately 20 feet wide and dominated by grass species (predominantly reed canary grass), for approximately 0.42 mile as it flows parallel to SR-503 then, the riparian corridor widens to approximately 200 feet and becomes dominated by tree and and dense shrub species until the tributary reaches Salmon Creek.

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: 0.721 acres

Wetland type. Explain: All wetlands within the review area are depressional PEM wetlands.

Wetland quality. Explain: All wetlands within the review area are low quality (Category IV) based on WDOE Wetland Rating System using a scale of wetland categories of I to IV with Category I being the highest function.

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

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Wetlands outflow into non-RPW tributary during and after rain events during the wet season, then into Salmon Creek, a RPW.

Surface flow is: **Overland sheetflow**

Characteristics: Water flows from Wetland 4 as overland sheet flow into Wetlands F and I, then through a culvert and into Wetland 2, then into the offsite tributary (roadside ditch) a non-RPW. Water in the tributary flows south approximately 0.6 mile and into Salmon Creek, a RPW, the westerly for approximately 11 miles and into Lake River, a TNW. Water in Wetland 3 flows southwesterly and into the offsite tributary that conveys water to Salmon Creek.

Surface flow is: **Discrete**

Characteristics: Water flows from Wetland 4/F/1 through a culvert and into Wetland 2 that contains a small discrete channel, approximately 6 inches wide by 2 inches deep that extends offsite and into the offsite ditch that conveys water to Salmon Creek.

Subsurface flow: **Yes**. Explain findings: presumed based on the relative flat topography and elevation of wetlands in relation to each reviewed wetland and proximity to the offsite roadside ditch.

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

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: Water from the wetlands flow within a narrow channel and into the roadside ditch.

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 **5-10** 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 partially developed for residential uses with remaining areas in agriculture use. Downstream waters of Salmon Creek are 303(d) listed for turbidity and fecal coliform are listed on the WA State 303(d) list. water color is clear with little organic debris; general water quality is fair; the watershed is being developed into residential and commercial uses with the project site and review area being retained as pasture.

Identify specific pollutants, if known: road runoff, pesticides, fertilizers, livestock contamination.

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

- Riparian buffer. Characteristics (type, average width): \_\_\_\_\_.
- Vegetation type/percent cover. Explain: herbaceous species comprise 100% of vegetation (ag land) within the review area.
- 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: **5**  
 Approximately ( 0.713 ) acres in total are being considered in the cumulative analysis.

Wetlands subject to this determination:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland 4/F/1 (Y)	0.46	Wetland 2 (Y)	0.079
Wetland 3 (Y)	0.174		

Wetlands subject *not* to this determination but adjacent and/or abutting the unnamed tributary

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland A (Y)	0.97	Wetland I (Y)	0.55

Summarize overall biological, chemical and physical functions being performed: see Section C below for summary.

**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:

The subject wetlands (Wetlands 4/F/1, 2, and 3) and the offsite tributary (roadside ditch) have a significant nexus to downstream traditional navigable water. The watershed was historically developed for agricultural uses and more recently for commercial and residential uses. Prior to the 1994 construction of SR-503, Wetlands 4/F/1, and 2 drained east for approximately 0.25 mile, along the north side of an east-west farm access road, then south and into Weaver Creek, a RPW and natural tributary to Salmon Creek (see Aerial 1). The connection of Wetland 2 to Salmon Creek was modified during the 1994 construction of SR-503 by directing surface flow southward, along the west side of SR-503. Drainage from Wetland 3 prior to the 1994 construction activities could not be determined but abuts the existing SR-503 tributary. Supplemental photographs were taken on 16 March 2018 to document offsite drainage from the wetlands and into the tributary along SR-503 that conveys surface water to Salmon Creek.

Essential Fish Habitat for Pacific Salmon (designated under the Magnuson-Stevens Fishery Conservation and Management Act) occurs in Salmon Creek. Fish species listed under the Endangered Species Act utilize the waters of Salmon Creek (lower Columbia coho, steelhead and chinook) and Lake River (lower Columbia coho, chinook, steelhead, and bull trout); designated critical habitat for lower Columbia coho occurs in Salmon Creek; lower Columbia chinook salmon and bull trout occurs in Lake River. The subject wetlands and unnamed tributary support EFH and ESA species and critical habitat.

Because of their combined and relatively small size (0.713 acre) and limited vegetative diversity (dominated by pasture grasses), the associated wetland functions are minimal for wildlife habitat and habitat diversity, minimal enhanced food web support, minimal floodwater storage/attenuation, and moderate sediment input reduction and toxin removal.

The wetlands create and transfer organic carbon which supports the downstream food web of the TNW. The wetlands improve downstream water quality in the TNW through sediment and toxin interception. The lengthy vegetated unnamed tributary and down slope storm pond have the capacity to capture pollutants (road runoff petrochemicals, herbicides, pesticides and sediments) to reduce the amount of pollutants and sediments from reaching the TNW. Because of their small size and location within the watershed, the reviewed wetlands have a minor ability to attenuate 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.

- 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 seasonally:  
 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: Tributaries identified as having continuous flow for 3-6 months. See additional information for details.

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: .

**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:  
 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.  
 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: .

**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: 0.713 acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup> NOT APPLICABLE**

**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> NOT APPLICABLE**

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): NOT APPLICABLE**

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

<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: Clark County Saddle Club, Wetland and Waters Delineation and Critical Areas Report (AKS Engineering & Forestry, LLC, 2017).
- 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: 22 November 2017 (Wetlands 3 and 4 and the Upland Swale).
- 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: \_\_\_\_\_
- USDA Natural Resources Conservation Service Soil Survey. Citation: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
- National wetlands inventory map(s). Cite name: <https://www.fws.gov/wetlands/data/Mapper.html>.
- State/Local wetland inventory map(s): <http://gis.clark.wa.gov/mapsonline/>
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): \_\_\_\_\_  
or  Other (Name & Date): Photographs by Jim Carsner (Corps), taken 16 March 2018.
- 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:**

Site Visits

23 August 2017, 22 November 2017, and 1 March 2018

Jim Carsner (Corps)

Taya MacLean (wetland consultant)

**Site Visits:** The site was visited three times. The 23 August 2017 site visit occurred following an extended dry period and the Corps disagreed with the delineation, requesting additional data be collected and another site visit scheduled. Following submittal of supplemental documents, the Corps revisited the site on 22 November 2018 and confirmed the wetland boundaries. A disagreement regarding the connection between Wetland 1 and Wetland 2 necessitated a third site visit on 1 March 2018; at which time the Corps exposed the culvert under the access road connecting these two wetlands and the offsite tributary along SR-503.

**Site Description:** The roughly 58-acre site is bounded on the east by State Route (SR) 503, on the north by residential properties, on the west by undeveloped land, and on the south by single family-residences and agricultural land. Property is roughly rectangular in shape and generally slopes to the southwest and southeast.

The existing site is undeveloped with relatively flat topography and actively used as a pasture and mown for hay with a slightly elevated and unimproved access road extending south from the southern terminus of Northeast 120<sup>th</sup> Avenue. The dominant vegetation is pasture grasses with some scattered stands of deciduous and coniferous trees. Several swales are present on the property that exhibit wetland conditions and provide drainage to an offsite roadside ditch that serves as a tributary to Salmon Creek. By request of the consultant, approximately 3.0 acres that would be used to construct a new access for the riding club of the approximately 58.28-acre site was considered the review area. Wetlands are discussed as numbered from north to south. Water from Wetland 4 flows into Wetland F and 1, forming a single wetland unit (Wetland 4/F/1), then through a culvert and into Wetland 2 providing a direct surface connection between these wetlands. Surface water from Wetland 2 flows easterly in a narrow channel, approximately 6-inch wide by 2 inches deep, and into an offsite roadside ditch that forms an unnamed non-RPW tributary that drains southward through a constructed storm pond and into Salmon Creek, a RPW. The unnamed tributary is approximately 4 feet wide with an OHW of approximately 0.5 feet deep. Water from wetland 3 flows south then east and into the unnamed tributary. Water in Salmon Creek flows westerly approximately 11 miles and into Lake River, a TNW. Surface water from Wetland 3, the southern-most wetland in the review area, drains offsite into the unnamed roadside tributary and then into Salmon Creek and Lake River.

**Delineation:** A wetland delineation was conducted by AKS Engineering & Forestry in August of 2016 and May of 2009. Two separate wetlands were identified by the consultant – wetlands A and B (see Form 2 of 2 for Wetland B). An additional wetland (C) was identified offsite to the west of the southern end of the project site.

**Soils:** Mapped soils are:  
Dollar loam, 0-5% slope (non-hydric)  
Hillsboro loam, 0-3% slopes (non-hydric)  
Hockinson loam, 0-8% slopes (hydric) – Note, incorrectly labeled as non-hydric by the consultant on the submitted soils map.

Observed soil colors are:

Wetlands:

Wetland 4; 10YR 3/2 silt loam from 0”- 10” with 7% 5YR 4/6 redox features (prominent); 10YR 3/2 from 10” – 15” with 7% 7.5YR 4/6 redox features (prominent), meeting F6 hydric soil criteria.

Wetlands F; 10YR 3/2 silt loam from 0” – 4””; 10YR 3/2 silt loam from 4” – 12” with 10% 7.5YR 4/5 redox features (prominent), meeting F6 hydric soil criteria.

Wetlands 1; 10YR 3/2 silt loam from 0” – 4””; 10YR 3/2 silt loam from 4” – 12” with 10% 7.5YR 4/6 redox features (prominent), meeting F6 hydric soil criteria.

Wetlands 2; 10YR 3/2 silt loam from 0” – 6””; 10YR 3/2 silt loam from 6” – 12” with 10% 7.5YR 4/5 redox features (prominent), meeting F6 hydric soil criteria.

Wetland 3; 10YR 3/2 silt loam from 0”- 6””; 10YR 3/2 silt loam from 5” – 12” with 10% 7.5YR 4/5 redox features (prominent), meeting F6 hydric soil criteria.

Uplands:

Soils adjacent to the wetland boundaries were found to be a 7.5YR 3/3 to 10+ inches.

**Hydrology:** Wetland is supported by shallow groundwater seepage and precipitation.

**Vegetation:**

Wetland 4            Tall fescue (*Schedonorus arundinaceus*), FAC  
PEM                Colonial bentgrass (*Agrostis capillaris*), FAC

Wetland F/1        Tall fescue (*Schedonorus arundinaceus*), FAC  
PEM                Colonial bentgrass (*Agrostis capillaris*), FAC  
                      Narrowleaf plantain (*Plantago lanceolata*), FACU  
                      Queen Anne’s lace (*Daucus carota*), FACU

Wetland 2            Tall fescue (*Schedonorus arundinaceus*), FAC  
PEM                Colonial bentgrass (*Agrostis capillaris*), FAC

Wetland 3            Tall fescue (*Schedonorus arundinaceus*), FAC  
PEM                Colonial bentgrass (*Agrostis capillaris*), FAC  
                      Perennial ryegrass (*Lolium perenne*), FAC  
                      Curly dock (*Rumex crispus*), FAC

Uplands             Canada thistle (*Cirsium arvense*) FACU  
                      English plantain (*Plantago lanceolata*), FACU+  
                      Reed canarygrass (*Phalaris arundinacea*), FACW  
                      Himalayan blackberry (*Rubus discolor*) FACU  
                      Red alder (*Alnus rubra*) FAC

Wetland acreage identified for this determination: 0.713 acres

Wetland acreage to be filled: <0.01 (portions of Wetland 1 and 2 for road widening and culvert placement)

**Observations/Discussion:**

Corps personnel walked around the identified boundaries of all wetlands and followed the apparent flow paths offsite. All wetlands within the review area and other onsite wetlands have been disturbed by previous vegetation management through mowing and grazing. The flagged wetland boundaries appeared to accurately delineate the wetland edges.

Wetland 4 is contiguous with Wetland F with surface and sub-surface (presumed) water flows southward into Wetland F. Wetland F abuts Wetland 1, separated by a slight topographic rise but having similar hydrologic regimes. Wetland 1 flows through a culvert under the access road and into Wetland 2 with flows continuing eastward in a narrow channel and into the road side ditch that flows south for approximately 0.55 miles into Salmon Creek, which flows approximately 11 miles into Lake River, a designated Section 10 navigable waterway.

Additional wetlands occur on the site that were not part of this review.

**Jurisdictional Determination:**

Wetlands 4, F, 1, 2, and 3 are considered adjacent, per the definition found at 33 CFR 328.3(c), to non-relatively permanent waters that flow into Salmon Creek, a RPW, then into Lake River, a Section 10 navigable waterbody used for interstate and foreign commerce. These wetlands have a significant nexus to downstream traditional navigable waters and are jurisdictional water of the U. S.

On 18 April 2018, the Environmental Protection Agency concurred with Corps decision that Wetlands 4/F/1, 2, and 3 are jurisdictional under the CWA and considered waters of the U.S.