

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

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 1, 2017**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Portland Office, Interstate Solar Power, NWP-2016-312**

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

State: OR County/parish/borough: Marion City: Woodburn  
Center coordinates of site (lat/long in degree decimal format): Lat. 45.128788° N, Long. -122.897656° E.  
Universal Transverse Mercator: Zone 10 North

Name of nearest waterbody: Senecal Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A

Name of watershed or Hydrologic Unit Code (HUC): Senecal Creek (12<sup>th</sup> Field HUC 170900090501) and

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: 4/12/2017

Field Determination. Date(s): 06/10/2016

**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 no** "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: 0 linear feet: 0 width (ft) and/or 0 acres.

Wetlands: 0 acres.

**c. Limits (boundaries) of jurisdiction based on: Not Applicable.**

Elevation of established OHWM (if known):.

<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).

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: **East Ditch: non-water ditch**  
**West Ditch: non-water ditch**  
**North Ditch: non-water ditch**  
**Wetland A: Isolated wetland**

**SECTION III: CWA ANALYSIS**

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

The agencies will assert jurisdiction over 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: N/A.

Summarize rationale supporting determination: N/A.

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: N/A.

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

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

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 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: N/A**

Watershed size: **Pick List**  
Drainage area: **acres**  
Average annual rainfall: inches  
Average annual snowfall: inches

(ii) **Physical Characteristics: N/A**

(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.

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

<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 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>: N/A

Tributary stream order, if known: N/A.

(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.

<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.

- tidal gauges
- other (list):

**(iii) Chemical Characteristics: N/A**

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): N/A**

- 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: N/A**

**(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: N/A**

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): N/A**

- 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) N/A**

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

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

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 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:

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:            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.**

- 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).

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<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.

**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> N/A**

- 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: .

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). **Wetland A is not adjacent to a non-RPW or RPW. Wetland A has a surface connection to the North and West Ditch which are not waters of the U.S. (ditch jurisdiction is explained below). Significant Nexus analysis wouldn't be required for this type of isolated water.**
    - Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
  - Other: (explain, if not covered above):  
**East Ditch (Non-water of the U.S.): lacks wetland characteristics, OHWM, and a connection to downstream water. Flows are intermittent and not relatively permanent flows.**  
**West Ditch (Non-water of the U.S.): lacks wetland characteristics, OHWM, and a connection to downstream water. Flows are ephemeral and not relatively permanent flows.**  
**North Ditch (Non-water of the U.S.): lacks wetland characteristics, OHWM, and a connection to downstream water. Flows are intermittent and not relatively permanent flows.**

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): Wetland A

- 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: 12.28 acres.

Wetland A is a Palustrine Emergent, Seasonally Flooded or Saturated (PEME) wetland, with a Hydrogeomorphic Class (HGM) of Depressional that encompasses approximately 12.28 acres and extends offsite to the South. Prior to the wetland delineation nearly all of the vegetation in the review area was removed by discing. Remnant vegetation with the agricultural field consisted mainly of ryegrass (*Lolium spp.*, FAC). Vegetation at the margins of the field included Queen Anne's lace (*Daucus carota*, FACU), Prickly lettuce (*Lactuca serriola*, FACU), Cancerwort (*Keckisia elatine*, FAC), and Canadian horseweed (*Erigeron canadensis*, FACU).

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):
- 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: Pacific Habitat Services.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- Office concurs with data sheets/delineation report.

<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.

- Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas: eGIS Regulatory Database.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name . 7.5 Quad St. Paul, Oregon 1956, revised 1985.
- USDA Natural Resources Conservation Service Soil Survey. Citation: USDA, NRCS Soil Survey of Marion County, Oregon, Online, 2016.
- National wetlands inventory map(s). Cite name: Saint Paul.
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):1943 Historic Aerial.
  - or  Other (Name & Date): Ground level photos – taken September 8, 2016, January 16, 2017, and January 18, 2017.
- 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:** A wetland delineation was performed on September 8, 2016, by Pacific Habitat Services (PHS) on a 16.97-acre portion of tax lot 300, located west of Butteville Road NE near Woodburn, Oregon. Three roadside ditches and a wetland were visually examined onsite. The ditches lack vegetative, wetland indicators and evidence of ordinary high water marks, or surface connections to a Waters of the US. The ditches are populated by FACU or drier herbaceous vegetation including Queen Anne's lace (*Daucus carrota*, FACU), and oxeye daisy (*Leucanthemum vulgare*, FACU). No FAC, FACW, or OBL species were observed.

The review area includes a Palustrine Emergent, Seasonally Flooded or Saturated (PEME) Wetland A, with a Hydrogeomorphic Class (HGM) of Depressional that encompasses approximately 12.28 acres and extends offsite to the south. There are shallow (+/- 6 inches in depth) ditches at the north (North Ditch) and west (West Ditch) side of the study area that intercept portions of the Wetland A. A man-made roadside ditch, the East Ditch, is adjacent to the west shoulder of NE Butteville Road and is not contiguous with Wetland A. The East Ditch has a typical trapezoidal configuration, without an OHWM, or wetland vegetation. The intermittent East Ditch collects water from the center of NE Butteville Road and discharges north towards the I-5 and NE Butteville Road overpass. There is a shallow, ephemeral West Ditch approximately 40 feet west of the delineated Wetland A on the east shoulder of I-5 North. Wetland hydrology is likely rain event and agricultural driven.

The ditches were re-examined on January 16 and 18, 2017 by PHS. The East Ditch is trapezoidal in shape, approximately four feet wide at the top of bank, two feet deep, and 18 inches wide at the bottom. Approximately one inch of ice was observed at the bottom of the East Ditch during the site visit. A wetland plot (Plot #10) was taken within the East Ditch on August 11, 2016 where impacts are expected to occur to further document hydrology and any potential hydric soil field indicators. Sample plots were not taken at the North and West Ditches. The West Ditch may have occasional wetland areas dominated by reed canarygrass, rushes, and other grasses and forbes based on field observations of the vegetation community.

The East Ditch flow path travels north, joins the intermittent North Ditch before continuing northward, and converges with the West Ditch off-site. The West and East Ditches converge into a shallow grassy ditch in the vicinity of I-5 and the NE Butteville Road overpass. The ditch aligns with the east shoulder of I-5 North, approximately 1,400 linear feet north of the review area. The ditch alignment proceeds northward up to the Woodburn on/off ramps approximately 8,400 linear feet north of the review area. A series of outfalls and culverts are located by the Woodburn on/off ramps that transport flow from the east to the west side of I-5 and discharge into east Senecal Creek approximately 9,800 linear feet from the review area.

The three ditches in the review area are non-waters of the U.S. in their entirety, with surface water observed only during and immediately following periods of heavy rain events. Wetland A is isolated with a subsurface connection to the West and North Ditches that continue offsite. While the ditches show a direct path to East Senecal Creek, the duration, frequency, and flow flux within the review area makes it unlikely for onsite flows to travel 9,800 linear feet through a shallow low elevation grassy ditch with high hydrologic roughness and a series of culvert, 8,400 linear feet away from the review area to the nearest potentially jurisdictional water of the U.S (East Senecal Creek).

Senecal Creek is located west of I-5 and is a tributary to the Pudding River, Molalla River, and the Willamette River. The East Ditch conveys water from the review area and does not appear to have a surface or subsurface connection to Senecal Creek after the construction of I-5 in 1957. The roads and ditches were constructed concurrently with NE Butteville Road prior to 1940. Historic aerials from 1943 depict Senecal Creek to the northwest and an unnamed tributary to the north reaching the edge of the property. Due to the historic site modifications, it is difficult to determine if the ditches were excavated wholly in uplands; however, the three ditches are intermittent and ephemeral and are not relatively permanent waters.