

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): March 23, 2018

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENWP-OD-GP, Noyes Development – Creekview Ridge Subdivision, NWP-2017-355

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Oregon County/parish/borough: Washington City: Portland
 Center coordinates of site (lat/long in degree decimal format): Lat. 45.552908° N Long. -122.797656°W.
 Universal Transverse Mercator:

Name of nearest waterbody: Tributaries to Ward Creek

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

Name of watershed or Hydrologic Unit Code (HUC): Rock Creek – Tualatin River (Beaverton Creek subwatershed)

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: 01 February 2018

Field Determination. Date(s): 01 February 2018

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **are not** “*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 and are not** “*waters of the U.S.*” within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

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

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs : **Stream 1-3**

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 : **Wetland A**

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

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

Aquatic Resource	Latitude	Longitude	Estimate amount of aquatic resource in review area	Type of aquatic resource
Stream 1	45.551922	-122.799705	18 linear feet, 3 feet wide	RPW
Stream 2	45.551650	-122.798246	550 linear feet, 6-15 feet wide	RPW
Stream 3	45.551459	-122.797244	190 linear feet, 4-15 feet wide	RPW

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

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

c. Limits (boundaries) of jurisdiction based on: Established by OHWM

Elevation of established OHWM (if known): **Unknown.**

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

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Wetland A does not have a significant nexus. Refer to Section III.F and IV for more information. Wetland A is located in a pasture approximately 300 feet away from Stream 1.**

Aquatic Resource	Latitude	Longitude	Estimate amount of aquatic resource in review area	Type of aquatic resource
Wetland A	45.552238	-122.800263	0.027 acre	Wetland, Isolated

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: .

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):

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

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

(i) General Area Conditions:

Watershed size: **Beaverton Creek (HUC12-170900100401) 24,155.78 acres**
Drainage area: **3,915.76 acres**
Average annual rainfall: **33.13 inches, 20 year annual average. Portland-Hillsboro WETS Station**
Average annual snowfall: **< 2 inches annual average**

³ Supporting documentation is presented in Section III.F.

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

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through **4** tributaries before entering TNW.

Project waters are **13.5** river miles from TNW.
Project waters are **0** river miles from RPW.
Project waters are **8.8** aerial (straight) miles from TNW.
Project waters are **0** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: **Not Applicable.**

Identify flow route to TNW⁵: Streams 1-3 (RPW) flow into Ward Creek (RPW), which flows into Bronson Creek (RPW) and Rock Creek (RPW), before discharging to the Tualatin River (TNW) and the Willamette River (TNW).
Tributary stream order, if known: **Unknown.**

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

Tributary is: **Natural. Explain: Stream 1**

Stream 1 is an intermittent stream located on the south end of TL 2300, in the southwest quadrant of the review area. Stream 1 hydrology is seasonal groundwater discharge from the steep hillside. Stream 1 flows north to south, downhill to the Ward Creek floodplain outside of the review area. Stream 1 is approximately 3 feet wide with 18 feet of the 50 foot long channel within the review area.

- Artificial (man-made). Explain: **Not Applicable.**
 Manipulated (man-altered). Explain: Stream 2 and 3

Stream 2 is a perennial stream that intersects the review area flowing north to south through TL 3300 and enters the Ward Creek floodplain immediately offsite, south of the review area. Stream 2 drainage basin begins offsite to the northeast on TL 2900 and collects surface water runoff from the sloped forested areas northwest of NW Laidlaw Road. The north segment of Stream 2 is relatively flat, approximately 6-15 feet wide and 3 feet deep for the first 90 feet within the review area. After 90 linear feet onsite, a 24-foot long, 12-inch culvert confines stream flows. Stream 2 is approximately 6 feet wide, downstream of the culvert with steep slopes dropping in elevation towards Ward Creek.

Stream 3 is an intermittent stream approximately 190 linear feet, flowing north to south, located in the eastern end of TL 3200 within the review area. Stream 3 is approximately 4 feet wide and 3 feet deep, walking 70 feet north to south. An earthen dam impoundment manipulates the hydrology, between the 70 to 90 linear feet of Stream 3 in the review area. The 20 feet of unconfined hydrology widens to approximately 15 feet behind the earthen dam. The earthen dam is degraded and flows have eroded the soil around the small outlet pipe. Downstream of the earthen dam, the last 100 feet of stream channel within the review area is incised, approximately 2 feet wide and flows down a steep ravine. Offsite Stream 3 passes through a culvert under Old Laidlaw Road right-of-way and continues to Ward Creek floodplain to the south.

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

Stream 1

Average width: **3 feet**
Average depth: **>1 feet**
Average side slopes: **Vertical (1:1 or less)**

Stream 2

Average width: **3-15 feet**
Average depth: **3 feet**
Average side slopes: **Vertical (1:1 or less)**

Stream 3

Average width: **4-15 feet**
Average depth: **3 feet**
Average side slopes: **Vertical (1:1 or less)**

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--------------------------------------|-----------------------------------|
| <input checked="" 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. | |
| <input type="checkbox"/> Other. Explain: . | | |

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

Tributary condition/stability [e.g., highly eroding, sloughing banks].

Explain:

Stream 1 appears to be stable, the hydrology is seasonal groundwater discharge from a steep hillside flowing downhill, north to south, into Ward Creek floodplain immediately offsite.

Stream 2 north segment is relatively flat with a sloughing unconfined bank, varying between 6-15 feet wide and 3 feet deep for the first 90 feet into the review area. Stream 2 channel is confined by a 24-foot long, 12-inch culvert.

Downstream of the culvert, Stream 2 narrows to approximately 6 feet, and the channel drops in elevation towards Ward Creek.

Stream 3 appears stable for the first 70 linear feet within the review area, at 4 feet wide and 3 feet deep. Stream 3 widens to approximately 15 feet, due to an earthen dam impoundment manipulating the hydrology. The banks are unconfined and slough for 20 linear feet upstream of the earthen dam, destabilizing the natural bank formation, and causing a backwater affect. The earthen dam is degraded and flows have eroded the soil around the small pipe outlet destabilizing the downstream segment of Stream 3. Downstream of the earthen dam, the last 100 feet of the channel within the review area is incised, approximately 2 feet wide and flows down a steep ravine.

Presence of run/riffle/pool complexes. Explain: **Not Applicable.**

Tributary geometry: **Relatively Straight (Stream 1 and 2) and Impounded (Stream 3)**

Tributary gradient (approximate average slope):

Stream 1 is 18 linear feet with a 14-foot elevation drop to the south, average slope within the review area 77.78%.

Stream 2 is 550 linear feet with a 58-foot elevation drop to the south, average slope within the review area 10.55%.

Stream 3 is 190 linear feet with a 40-foot elevation drop to the south, average slope within the review area 21%.

(c) **Flow:**

Tributary provides for:

Stream 1 and 3: Intermittent flows

Stream 2: Perennial flows

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: **Stream 1** flow is seasonal groundwater discharge from a steep hillside flowing downstream to Old Laidlaw Road and the Ward Creek floodplain offsite. **Stream 2** flow is present year around with moderate to high flow patterns during rain events. A culvert restricts the channel in the north segment, causing backwatering flow directly upstream. **Stream 3** flow is impounded by an earthen dam, impeding natural flow pattern, and causing backwater affect or ponding upstream of the impoundment.

Surface flow: **Stream 1** is similar to a colluvial or Cascade alluvial confined channel characterized as a seasonal groundwater hillside seep for the 18 linear feet within the review area and is continuous with Ward Creek offsite.

Stream 2 is a relatively flat 6-15 foot wide and 3 feet deep, unconfined channel for 90 linear feet into the review area flowing north to south. Stream 2 becomes confined and discrete for 24 linear feet within a 12-inch culvert. The stream channel narrow to approximately 6 feet downstream of the culvert and slopes steeply where Stream 2 becomes continuous with Ward Creek offsite. **Stream 3** is confined to a 4-foot wide and 3 foot deep channel for 70 linear feet before widening to a 15 foot wide unconfined channel for 20 linear. The unconfined segment is due an earthen dam impounding the natural surface hydrology of Stream 3. The earthen dam is degraded with eroded soils around a small pipe outlet. Downstream of the earthen dam, the last 100 feet of the channel is confined to approximately 2 feet wide steep ravine where Stream 3 becomes continuous with Ward Creek offsite.

Subsurface flow **Yes and Unknown** Explain findings:

Stream 1 flow is seasonal groundwater discharge from a steep hillside flowing down gradient to Old Laidlaw Road and the Ward Creek floodplain offsite.

Stream 2 and 3 likely has a combination of groundwater and stormwater inputs.

Tributary has (check all that apply):

Bed and banks

OHWM⁶ (check all indicators that apply):

clear, natural line impressed on the bank

changes in the character of soil

shelving

vegetation matted down, bent, or absent

leaf litter disturbed or washed away

sediment deposition

water staining

other (list):

Discontinuous OHWM.⁷ Explain: **Not Applicable.**

the presence of litter and debris

destruction of terrestrial vegetation

the presence of wrack line

sediment sorting

scour

multiple observed or predicted flow events

abrupt change in plant community

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

⁷Ibid.

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: The site is located on the edge of Washington and Multnomah County lines. Moderate to low density residential communities and large estates have been encroaching from the south, east, and west, as Washington County and Cedar Mill has expanded. The north area surrounding the project area is relatively forested with large hillside properties.

Identify specific pollutants, if known: **Stream 2 and 3** likely receive untreated overland flow stormwater input from surrounding gravel and paved roads and driveways. Stream 1 is a seasonal hillside seep; water quality is likely good quality.

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

Riparian corridor. Characteristics (type, average width):

Stream 1-3 are within a forested riparian hillside habitat setting

Stream 1 has a dominate tree layer of big leaf maple (*Acer macrophyllum*, FACU), and red alder (*Alnus rubra*, FAC) with beaked hazelnut (*Corylus cornuta*, FACU), English holly (*Llex aquifolium*, FACU), and Himalyan blackberry (*Rubus armeniacus*, FAC) in the shrub layer. The herbaceous layer consists of wetstern swardfern (*Polystichum munitum*, FACU) with bare ground.

Stream 2 natural hydrology, channel morphology, and riparian habitat are fragmented by a culvert in the upper north segment of the review area. Stream 2 natural vegetation is disturbed by human activity, including lawn and tree canopy management activities. Stream 2 are dominated by Douglas fir (*Pseudotsuga menziesii*, FACU) and red alder (*Alnus rubra*, FAC) with a native shrub later of beaked hazelnut (*Corylus cornuta*, FACU.), big leaf maple saplings maple (*Acer macrophyllum*, FACU), vine maple (*Acer circinatum*, FAC), and oso-berry (*Oemleria cerasiformis*, FACU), and a herbaceous layer of Pineland sword fern (*Polystichum munitum*, FACU).

Stream 3 natural hydrology, channel morphology, and riparian habitat are fragmented by an earthen dam impoundment in the review area. Stream 3 is dominated by Douglas fir (*Pseudotsuga menziesii*, FACU) and red alder (*Alnus rubra*, FAC) with dispersed shrub stratum of Oregon grape (*Mahonia aquifolium*, FACU), black hawthorne (*Crataegus douglasii*, FAC), beaked hazelnut (*Corylus cornuta*, FACU.), vine maple (*Acer circinatum*, FAC), and red alder saplings (*Alnus rubra*, FAC). The herbaceous layer consists of Pineland sword fern (*Polystichum munitum*, FACU) and leaf litter. The last 50 feet of Stream 3 is overgrown with Himalyan blackberry (*Rubus armeniacus*, FAC).

Wetland fringe. Characteristics: **Not Applicable.**

Habitat for:

Federally Listed species. Explain findings: Habitat conditions within Stream 1-3 may be suitable during high flow event; however, fish barriers, such as culverts, road drainages, and other causes of habitat fragmentation may impede species access to the review area.

Fish/spawn areas. Explain findings: Upper Willamette steelhead (*Oncorhynchus mykiss*) winter run are associated with the Upper and Lower Rock Creek and Beaverton Creek reaches. The area is classified as rearing and spawning habitat according to Oregon Department of Fish and Wildlife (ODFW); however, habitat fragmentation and low flows may impede species access to the review area.

Other environmentally-sensitive species. Explain findings: Three other species are state listed as "sensitive vulnerable" (SV), "species of concern" (SC), and/or federally as "species of concern" (SOC). The Painted turtle (*Chrysemys picta*, SC), Pacific lamprey (*Entosphenus tridentatus*, SV and SOC), North red-legged frog (*Rana aurora*, SV and SOC). Habitat for the species listed above are not present within the review area. Bronson Creek located approximately 0.43 miles from the review area has Pacific lamprey present.

Aquatic/wildlife diversity. Explain findings: The riparian corridors of Stream 1-3 provides wildlife habitat and refuge for resident and migratory species, such as amphibians, fish, beavers and deer.

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Wetland A is located between TL 2200 and 2300 just west of the driveway of an existing home on TL 2300.

Properties:

Wetland size: 0.027 acres

Wetland type. Explain: Wetland A is a depressional, partially excavated, Palustrine Emergent (PEM) wetland, approximately 0.027-acre size. Stormwater collects in the deepest portion of the depressional feature and transitions to the lowest point within a grass pasture on the southwest end of the wetland boundary. Sloped upland topography surrounds Wetland A within the grassy pasture. The upland grassy areas continue to slope up and transition to forested areas. Within the forested area to the south of Wetland A, a steep hillside slopes down to the south, approximately 90 feet from the south boundary of Wetland A. Hillside seeps were not observed on the slopes south of Wetland A. Wetland A surface hydrology is without a significant nexus and does not reemerge to the south where hillside topography is present.

Wetland quality. Explain: Wetland A is vegetation is primarily a grass managed community with minimal shrub and tree cover such as velvet grass (*Holcus lanatus*, FAC) and bluegrass species (*Poa sp.*, FAC). Wetland A is distinguishable by dark soils and redox within the upper 12 inches. Five percent 10YR $\frac{3}{4}$ was present from 3-11 inches, increasing to 10 percent from 11 inches down. Hydrologic indicators were strong within the wetland with surface water (A1), high water table (A2), and saturation (A3) all present at the surface.

Project wetlands cross or serve as state boundaries. Explain: **Not Applicable.**

(b) General Flow Relationship with Non-TNW:

Flow is: No Flow Explain: Wetland A hydrology saturates the soil and ponds within the depressional topography.

Surface flow is: Wetland A hydrology is confined to the depressional topography
Characteristics: **Not Applicable.**

Subsurface flow: Yes Explain findings: Wetland A has a high water table with soil saturation ranging from a 1-3 inches within the soil profile and water ponding ranging from 1 inch in the southwest pasture area up to a foot in the northeast excavated area of the wetland. .

Dye (or other) test performed: **Not Applicable.**

(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: Wetland A is in a depressional topographic setting with gradual slopes into upland areas surrounding the wetland. A continuous or overland sheet flow hydrologic connection between Wetland A and Streams 1-3 were not observed or identified through topography or lidar.

(d) Proximity (Relationship) to TNW

Project wetlands are **14** river miles from TNW.

Project waters are **8.8** aerial (straight) miles from TNW.

Flow is from: **No Flow, hydrology confined within Wetland A.**

Estimate approximate location of wetland as within the **100-500** 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: Standing waters was observed during a Corps field visit 01 February 2018, the water was <1 inch high with no overland sheetflow observed. The hydrology appeared perched in the pasture and low excavated area to the northeast. Soil saturation and ponding occurs after rain events.

Identify specific pollutants, if known: Wetland A likely receives untreated runoff from the adjacent paved driveway.

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

Riparian buffer. Characteristics (type, average width): **No buffer.**

Vegetation type/percent cover. Explain: Wetland A vegetation is primarily a grass managed community with minimal shrub and tree cover such as velvet grass (*Holcus lanatus*, FAC) and bluegrass species (*Poa sp.*, FAC).

Habitat for:

Federally Listed species. Explain findings: **Not Applicable.**

Fish/spawn areas. Explain findings: **Not Applicable.**

Other environmentally-sensitive species. Explain findings: **Not Applicable.**

Aquatic/wildlife diversity. Explain findings: **Grass Managed Pasture.**

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

All wetland(s) being considered in the cumulative analysis: **0**

Approximately (**0**) 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:

Not applicable, the three streams are RPW's and do not require a significant nexus. Wetland A does not have a significant nexus. Refer to Section III.B.2 and F and IV for more information. Wetland A is located in a pasture approximately 300 feet away from Stream 1.

- 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: **Stream 2 flows year-around with a distinct bed and bank and flow connection to Ward Creek.**
 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: **Stream 1 and 3 have intermittent, flowing during and after rain events, more than one season a year due to regional weather patterns (i.e., precipitation events 6-9 months annually).**

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

- Tributary waters:**
Stream 1: 18 linear feet; 3 feet width

Stream 2: 550 linear feet; 3-15 width

Stream 3 190 linear feet; 4-15 width

Other non-wetland waters: **0** acres.

Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

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

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

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.⁹

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

Demonstrate that impoundment was created from "waters of the U.S.," or **Stream 3 is continuous with Ward Creek**

Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

Demonstrate that water is isolated with a nexus to commerce (see E below).

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

which are or could be used by interstate or foreign travelers for recreational or other purposes.

from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

which are or could be used for industrial purposes by industries in interstate commerce.

Interstate isolated waters. Explain: .

Other factors. Explain: .

Identify water body and summarize rationale supporting determination: Not applicable.

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

⁸See Footnote # 3.

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

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

- 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: **Wetland A is approximately 300 feet away from Stream 1, the closest aquatic resources identified. A hydrologic connection between Wetland A and Stream 3 was not observed. Topography and lidar indicate Wetland A is not hydrology connected.**
- 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): **Not Applicable.**

- 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: Wetland A 0.027 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: **Environmental Science and Assessment, LLC dated 27 April 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: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: **USGS NHD website and eGIS Regulatory tool.**
 - 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. **Map on File**
Citation: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
- National wetlands inventory map(s). **Map on File**
Cite name: <https://www.fws.gov/wetlands/Data/Mapper.html>.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **2016, 2006, and 1990 On File.**
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): **Lidar Imagery on file**
Citation: <https://gis.dogami.oregon.gov/lidarviewer/>.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Site Description: Topography slopes down moderately from the northeast corner towards the southwest and south. Just north of the southern site boundary the topography drops down steeply towards the off-site wetlands to the south within the floodplain Ward Creek.

Soils: soil survey mapping indicates that all soils on-site are non-hydric. The majority of the site is mapped as Cascade silt loam, 8 to 15 percent slopes. A swath along the steeper slopes and floodplain area to the south is mapped as Cascade silt loam, 15 to 60 percent slopes.

Site Alterations: Historical aerials were reviewed and the oldest records are dated at July 1990. There has been no significant changes on-site. The surrounding area has transitioned from forest and timberland to residential development. Most of these areas are located to the west, downstream of Ward Creek. Oregon Department of Geology and Mineral Industries (DOGAMI) Lidar imagery was reviewed and was consistent with observations in the field. The three streams onsite were visible cutting through the study area; however, the wetland found on-site (Wetland A) was not an obvious depressional area as observed in the field.