

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): 11 December 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Portland District, Portland International Center Areas 1-7 (Port of Portland), NWP-2011-432-1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Oregon County/parish/borough: Multnomah City: Portland
Center coordinates of site (lat/long in degree decimal format): Lat. 45.573212° **N**, Long. 122.565458° **W**.
Universal Transverse Mercator:

Name of nearest waterbody: Columbia Slough

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

Name of watershed or Hydrologic Unit Code (HUC): Lower Columbia-Clatskanie

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: 08 August 2017

Field Determination. Date(s): 19 September 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

Waters subject to the ebb and flow of the tide.

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

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

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

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs **Water 3A, Water 4A, Water 4B, Water 4C, Ditch 1A and Ditch 4A.**

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs **Wetland 3A, Wetland 3B**

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

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).

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

Non-wetland waters: 5,647 linear feet, 6.08 acres.

Table 1: Waters of the US

Water	Size (acreage)	Width (ft)	Length (ft)
Water 3A	4.04	65	2,590
Water 4A	0.69	42	680
Water 4B	0.57	35	700
Water 4C	0.66	42	675
Ditch 1A	0.08	6	672
Ditch 4A	0.04	3	330

Wetlands: 4.48 acres.

Table 2: Wetlands (Waters of the US)

Wetland	Size (acres)
Wetland 3A	3.79
Wetland 3B	0.05

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

Elevation of established OHWM (if known): .

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

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Ditch 6A, Stormwater Pond, Wetland 4A, Wetland 6A, Wetland 6B. See end of document.**

Table 3: Non-regulated Waters

Water	Size (Acreage)	Width (ft)	Length (ft)
Ditch 6A	0.01	3	116
Stormwater Pond	0.04	n/a	n/a

Table 4: Non-regulated Wetlands

Wetland	Size (acreage)
Wetland 4A	0.30
Wetland 6A	0.25
Wetland 6B	0.09

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.

³ Supporting documentation is presented in Section III.F.

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: Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A

(i) General Area Conditions:

Watershed size: **32,700 acres**
Drainage area: **97 acres**
Average annual rainfall: **37 inches**
Average annual snowfall: **3 inches**

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **1** tributaries before entering TNW. **Water 3A,**
Tributary flows through **2** tributaries before entering TNW. **Water 4A, Water 4B, Water 4C**
Tributary flows through **3** tributaries before entering TNW. **Ditch 1A and Ditch 4A**

Project waters are **10-15** river miles from TNW.
Project waters are **1 (or less)** 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: **N/A.**

Identify flow route to TNW⁵: **The RPW's flow to the Columbia Slough to the Willamette River, see end of document.**

Tributary stream order, if known: .

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

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain: **Water 3A, Water 4A, Water 4B, Water 4C; Ditch 1A and Ditch 4A. These features are naturally formed sloughs located in historic floodplain that have been altered by development activity (grading and fill).**

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

Average width: **Ranges from 3 to 65 feet (Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A)**
Average depth: **unknown** feet
Average side slopes: **unknown**

Primary tributary substrate composition (check all that apply):

- Silts
- Sands
- Concrete
- Cobbles
- Gravel
- Muck
- Bedrock
- Vegetation. Type/% cover:
- Other. Explain: **Likely a combination of silts, sand.**

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Appear to be in stable condition.**

Presence of run/riffle/pool complexes. Explain: **none.**

Tributary geometry: **Water 3A, 4A, 4B, and 4C are meandering. Ditch 1A and Ditch 4A are linear features.**

Tributary gradient (approximate average slope): **variable** %

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

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

(c) Flow:

Tributary provides for: **seasonal flow (Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A)**

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

Describe flow regime: **multiple rain events in winter, infrequent rain events in summer.**

Other information on duration and volume: .

Surface flow is: **overland sheet flow.** Characteristics: **overland sheet flow from surrounding uplands drains into Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A.**

Subsurface flow: **yes.** Explain findings: **Observations from Port staff during previous construction activities in the study area and the reformation of wetlands in previously graded/filled areas indicated high ground water table in the study area.**

Dye (or other) test performed:

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):

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

Discontinuous OHWM.⁷ 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:

oil or scum line along shore objects

fine shell or debris deposits (foreshore)

physical markings/characteristics

tidal gauges

other (list):

Mean High Water Mark indicated by:

survey to available datum;

physical markings;

vegetation lines/changes in vegetation types.

(iii) **Chemical Characteristics:**

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

Explain: **Surface flows from the adjacent uplands flows into Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A.**

These waters connect to the larger Columbia Slough system.

Identify specific pollutants, if known: **Herbicides would be present if they are applied in the nearby uplands.**

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

Riparian corridor. Characteristics (type, average width): .

Wetland fringe. Characteristics: .

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: **Vegetation within Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A, serve as habitat for birds, small mammals, amphibians and invertebrates. Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A convey detritus needed for aquatic organisms and wildlife.**

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW: Wetland 3A, Wetland 3B**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: **3.84 acres (Wetland 3A, Wetland 3B)**

Wetland type. Explain: **Cowardin PEM (Wetland 3A, Wetland 3B)**

Wetland quality. Explain: **Wetland 3A and 3B are medium quality wetlands. These wetlands are located on altered floodplain.**

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.

Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittant**. Explain: **Wetland 3A is connected to Water 3A by a culverted ditch, Water 3A then flows into the Columbia Slough and then the Willamette River. Wetland 3B is located within depression in former floodplain, adjacent to Water 3A, separately by a low berm. Wetland 3B is likely connected to Water 3A by subsurface flow or overland flow during high flow events. Water 3A then flows into the Columbia Slough and then the Willamette River.**

Surface flow is: **Wetland 3A, surface flow is confined. Wetland 3B, surface flow during high flow events.**

Characteristics: **Wetland 3A is connected to Water 3A by a culverted ditch, Water 3A then flows into the Columbia Slough and then the Willamette River. Wetland 3B is likely connected to Water 3A by subsurface flow or overland flow during high flow events. Water 3A then flows into the Columbia Slough and then the Willamette River.**

Subsurface flow: **Yes**. Explain findings: **Appear that Wetland 3B is likely connected to Water 3A by subsurface flow and that Wetland 3B likely overflows into Water 3A during high flow events.**

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting **Wetland 3A**

Not directly abutting

Discrete wetland hydrologic connection. Explain: .

Ecological connection. Explain: .

Separated by berm/barrier. Explain: **Wetland 3B is located within depression in former floodplain, adjacent to Water 3A, separately by a low berm..**

(d) Proximity (Relationship) to TNW

Project wetlands are **10-15** 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 **100-500 yr** 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: **Surface water from the adjacent uplands flows into Wetlands 3A and 3B.**

Identify specific pollutants, if known: **Herbicides would be present if they are applied in the nearby upland.**

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

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

Vegetation type/percent cover. Explain: **Wetland 3A vegetation includes *Populus trichocarpa*, *Alopecurus pratensis*, *Holcus lanatus*, *Carex densa* and *Phalaris arundinacea*. Wetland 3B vegetation includes *Phalaris arundinacea*, *Alopecurus pratensis*, *Juncus effuses*.**

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: **Vegetation within Wetland 3A and B serve as habitat for birds, small mammals, amphibians and invertebrates.**

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

All wetland(s) being considered in the cumulative analysis: **2**

Approximately **(3.84)** acres in total are being considered in the cumulative analysis.

2 For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland 3A (Y)	3.79
Wetland 3B (N)	0.05

Summarize overall biological, chemical and physical functions being performed: Wetlands 3A and 3B provide detritus export, groundwater filtering and recharge, and assist with surface flow runoff and attenuation before water enters the Columbia Slough.

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:
 - **Wetlands 3A and 3B reduce the amount of pollutants and floodwaters reaching the Willamette River. Wetlands 3A and 3B provide detritus export, groundwater filtering and recharge, and assist with surface flow runoff and attenuation before water enters Water 3A, flows to the Columbia Slough and then flows into the Willamette River.**

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: **Water 3A, 4A, 4B, and 4C; Ditch 1A and Ditch 4A. Visual observations from Port staff, and the high water table in this area indicate that these waters are 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: **5,647 linear feet, 6.08 acres**
 - Other non-wetland waters: 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.

⁸See Footnote # 3.

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: **Wetland 3A**
- 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: **3.79**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. **Wetland 3B**

Provide acreage estimates for jurisdictional wetlands in the review area: **0.05** 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
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

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

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

Identify water body and summarize rationale supporting determination: .

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

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

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.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): Wetland 4A, Wetland 6A, Wetland 6B, Ditch 6A, Stormwater Pond.

- 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 4A: No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland which prevents the contribution of nutrient, floodwater, and/or detritus flows from this wetland to the Willamette River.**
 - **Wetland 6A: No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland which prevents the contribution of nutrient, floodwater, and/or detritus flows from this wetland to the Willamette River.**
 - **Wetland 6B: No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland which prevents the contribution of nutrient, floodwater, and/or detritus flows from this wetland to the Willamette River.**
- Other: (explain, if not covered above):

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

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

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

- Non-wetland waters (i.e., rivers, streams): **116** linear feet, **3** width (ft). **Ditch 6A. This feature does connect to the stormwater system which flows into the Columbia Slough. Feature has a rocky bottom, is formed in uplands and is likely formed in association with the construction of the MAX line; therefore is considered a Non-Waters of the U.S.**
- Lakes/ponds: **0.04** acres. **Stormwater Pond: Pond constructed in uplands.**
- 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:

20170921 2017 Delineated Wetlands vs. Previously Filled Wetlands NWP-2011-432-1
 20170801 Portland International Center Wetland Delineation NWP-2011-431-1
 20171017 Portland International Airport Basin 8 Stormwater System NWP-2011-432-1
 20171011 Portland International Airport Detail Maps NWP-2011-432-1

- 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 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: Port of Portland, PIC Areas 1-7 Wetland Delineation, Portland, Multnomah County, Oregon, Soil Survey Geographic (SSURGO) Database for Multnomah County, OR, <http://soildatamart.nrcs.usgs.gov>, September 2015.
- National wetlands inventory map(s). Cite name: Port of Portland, PIC Areas 1-7 Wetland Delineation, Portland, Multnomah County, Oregon, National Wetland Inventory, U.S. Fish and Wildlife Service National Wetlands Inventory, OR, 2016.

- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Port of Portland, PIC Areas 1-7 Wetland Delineation (aerial photos of wetlands delineated in 2017, wetlands delineated in 2011, and wetlands filled under NWP-2011-432.
or Other (Name & Date):
- Previous determination(s). File no. and date of response letter: NWP-2011-432, 20120725
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): Site visit was conducted with applicant on 20170919.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

See attachment 1: NWP-2011-432-1 Approved Jurisdictional Determination Review Area, 20171109, Map

Waters of the U.S.; Wetlands:

-Wetland 3A (3.79 acres): Wetland located within a depression in former floodplain that is mostly separated from Water 3A by a levee. Hydric vegetation include *Populus trichocarpa*, *Alopecurus pratensis* (FAC), *Holcus lanatus* (FAC), *Carex densa* (OBL) and *Phalaris arundinacea* (FACW). Hydric soil and wetland hydrology are present. Hydric soil indicators include depleted matrix. Wetland hydrology indicators include oxidized rhizospheres along living roots. Wetland 3A is connected to Water 3A by a culverted ditch. Hydrology is overland flow from surrounding uplands and high ground water table.

-Wetland 3B (0.05 acres): Wetland located within depression in former floodplain, adjacent to Water 3A, separately by a low berm. Hydric vegetation includes *Phalaris arundinacea* (FACW), *Alopecurus pratensis* (FAC), *Juncus effuses* (FACW). Hydric soil and wetland hydrology are present. Hydric soil indicator includes depleted matrix. Wetland hydrology indicators include oxidized rhizospheres along living roots. Wetland 3B is likely connected to Water 3A by subsurface flow or overland flow during high flow events. Hydrology is overland flow from surrounding uplands and high ground water table.

Waters of the U.S.:

-Water 3A (4.04 acres, 65 ft wide, 2,590 ft long): Open channel that flows into the ditch system of Stormwater Basin 8 (review area is within Stormwater Basin 8) and flows south where it enters a pipe at NE Alderwood Road. The pipe flows under the road and under the business park on the south side of NE Alderwood Road where it then outfalls into the Columbia Slough, into the Willamette River. Hydrology from flows from Ditch 1A, Water 4A, and Water 4 B; surface flow from surrounding uplands during storm events; and high ground water table.

-Water 4A (0.69 acres, 42 ft wide, 680 ft long): Open channel that flows into Water 3A, that flows into the ditch system of Stormwater Basin 8 (review area is within Stormwater Basin 8) and flows south where it enters a pipe at NE Alderwood Road. The pipe flows under the road and under the business park on the south side of NE Alderwood Road where it then outfalls into the Columbia Slough, into the Willamette River. Hydrology from flows from Ditch 1A; surface flow from surrounding uplands during storm events; and high ground water table.

-Water 4B (0.57 acres, 35 ft wide, 700 ft long): Open channel that flows into Water 3A, that flows into the ditch system of Stormwater Basin 8 (review area is within Stormwater Basin 8) and flows south where it enters a pipe at NE Alderwood Road. The pipe flows under the road and under the business park on the south side of NE Alderwood Road where it then outfalls into the Columbia Slough, into the Willamette River. Hydrology from flows from surface flow from surrounding uplands during storm events; and high ground water table.

-Water 4C (0.66 acres, 42 ft wide, 675 ft long): Open channel that flows into Water 3A, into the Columbia Slough, into the Willamette River. Hydrology from Ditch 1A; flows from surface flow from surrounding uplands during storm events; and high ground water table.

-Ditch 1A (0.08 acres, 6 feet wide, 672 ft long): Ditch that flows into Water 4C, into Water 3A, into the Columbia Slough, into the Willamette River. Hydrology from surface flow from surrounding uplands during storm events and high ground water table. Ditch appears to be constructed in uplands and does not serve as a connection between two waters of the U.S.; however, the ditch appears to function as a relatively permanent water. Therefore, this feature is considered a Water of the U.S.

-Ditch 4A (0.04 acre, 42 ft wide, 680 ft long): Open channel that flows into Water 4A, Water 3A, into the Columbia Slough, into the Willamette River. Hydrology from flows from surface flow from surrounding uplands during storm events; and high ground water table. Ditch appears to be constructed in uplands and does not serve as a connection between two waters of the U.S.; however, the ditch appears to function as a relatively permanent water. Therefore, this feature is considered a Water of the U.S.

Non-Waters of the U.S.; Wetlands:

-Wetland 4A (0.3 acres): Wetland located a depression adjacent to the base of raised area of fill on the eastern corner of Area 4. Hydric vegetation includes *Alopecurus geniculatus* (OBL), *Equisetum arvense* (FAC), *Phalaris arundinacea* (FACW), *Juncus effuses* (FACW), *Alopecurus pratensis* (FAC). Hydric soil and wetland hydrology are present. Hydric soil indicator includes depleted matrix. Wetland hydrology indicators include oxidized rhizospheres along living roots. Hydrology from surface flow from surrounding uplands during storm events and high ground water table. This wetland is located in Area 4 of the Portland International Center (PIC). In 2003, the Port of Portland received permits to fill wetlands in Area 4 and the site was prepared for development. The development did not occur and the site remained vacant and wetlands reformed on the site. Three wetlands reformed on the site. In 2013, these three wetlands were filled and mitigated for (NWP-2011-432). Between the 2014 and the present, Wetland 4A formed. This wetland appears to have formed due to impoundment by the raised area of fill and offsite development along the eastern edge of Area 4. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. The concave contour of the wetland and its location at the base of the fill pile prevents

drainage to another waterway or wetland. Due to the previous fill activities in Area 4 and Wetland 4A does not appear to drain into any surrounding waters or wetlands, Wetland 4A is considered a Non-Waters of the U.S.

-Wetland 6A (0.25 acres): Wetland 6A located within a depression following the form of a previously delineated and filled wetland. Hydric vegetation includes *Alopecurus pratensis* (FAC), *Agrostis stolonifera* (FAC), *Alopecurus geniculatus* (OBL), *Eleocharis palustris* (OBL), *Rumex crispus* (FAC), *Hordeum murinum* (FAC). Hydric soil indicator includes redox dark surface. Wetland hydrology indicators include geomorphic position and FAC-neutral test. Hydrology from surface flow from surrounding uplands during storm events; and high ground water table. Wetland 6A is located in Area 6 of the PIC. This area and surrounding properties have been significantly modified by grading and construction activities. Area 6 was filled and graded in 2000. Since then 2000, Wetland 6A has formed atop fill along the form of a previously filled wetland. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland. Due to the previous fill activities in Area 6 and Wetland 6A does not appear to drain into any surrounding waters or wetlands, Wetland 6A is considered Non-Waters of the U.S.

-Wetland 6B (0.09 acres): Wetland 6B is located along a silt fence at the base of a slope at the western end of Area 6 where the site slopes downward. Hydric vegetation includes *Equisetum arvense* (FAC), *Alopecurus pratensis* (FAC), *Pericaria amphibia* (OBL), *Poa palustris* (FAC), *Rumex crispus* (FAC). Hydric soil indicators include depleted matrix. Hydrology indicators include algal mat or crust. Hydrology from surface flow from surrounding uplands during storm events and high ground water table. Area 6 was filled and graded in 2000. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland. Since then 2000, Wetland 6B has formed likely due to inadequate grading of the site. Due to the previous fill activities in Area 6 and Wetland 6B does not appear to drain into any surrounding waters or wetlands, Wetland 6B is considered a Non-Waters of the U.S.

Non-Waters of the U.S.:

- Ditch 6A: (0.01 acres, 3 ft wide and 116ft long) This feature lies along the MAX train line. Feature does connect to the stormwater system which flows into the Columbia Slough. Feature has a rocky bottom, is formed in uplands and is likely formed in association with the construction of the MAX line; therefore is considered a Non-Waters of the U.S..

- Stormwater Pond (0.04 acres) This feature was constructed after July 2000 and prior to July 2001. The feature is lined with rock and is directly connected to the stormwater system which flows into the Columbia Slough. This feature is constructed in uplands; therefore is considered a Non-Waters of the U.S.