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): October 19, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENWP-OD-G, Hillsboro Airport - TEK Property (Port of Portland), NWP-2016-268

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Oregon County/parish/borough: Washington City: Hillsboro
Center coordinates of site (lat/long in degree decimal format): Lat. 45.548° **N**, Long. 122.942° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Glencoe Swale
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Tualatin River
Name of watershed or Hydrologic Unit Code (HUC): Lower McKay Creek. The southern portion of the site falls into the Lower Rock Creek HUC; however, site topography directs all water draining from the site into the Lower McKay Creek HUC. Therefore, all the wetlands in this jurisdictional determination are evaluated within the Lower McKay Creek HUC (170900100307).

☒ 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:
☒ Field Determination. Date(s): 28 June 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** "*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 waters[2] (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 **Wetlands A, B, C, D, G**
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: 2.454 acres.

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: **Wetlands E, F, H, I, J, K, L, M, N, O, P. See end of document.**

[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).
[3] Supporting documentation is presented in Section III.F.

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[4] 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:
Drainage area:
Average annual rainfall:
Average annual snowfall:

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
.

[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.

Tributary stream order, if known: .

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

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: The stormwater feature collects surface waters from surrounding lands which include impervious surfaces, wetlands and uplands.
.

Subsurface flow: **Pick List.** Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (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.[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:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Unknown.
Identify specific pollutants, if known:

[6]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.
[7]Ibid.

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

☐ 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 – Wetlands A, B, C, D, G

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: 2.994 total acres (Wetland A, B, C, D, and G). Size of the offsite forested wetland is unknown.

Wetland type. Explain: Wetland A (Cowardin PFO), Wetland B (Cowardin PF0/PEM), Wetland C (Cowardin PFO), Wetland D (Cowardin PFO), Wetland G (Cowardin PEM[farmed]),

Wetland quality. Explain: Wetlands A, B, C, and D are high. These wetlands are connected to an offsite forested oak wetlands that is separated by from the project site by the site area boundary. Wetland G is poor quality. This wetland has been plowed repeatedly for crop production.

Project wetlands cross or serve as state boundaries. Explain: No

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittant** Explain: Wetlands A, B, C, D vegetation is composed of trees and shrubs which indicates the presence of groundwater. Tree canopy includes Oregon white Oak (*Quercus garryana*, FACU), Black Cottonwood (*Populus trichocarpa*, FAC) and Scouler's willow *(Salix scouleriana*, FAC). The shrub layer is dominated by clustered wild rose (R*osa pisocarpa*, FAC). Surface water in Wetlands A, B, C, D drain into the offsite forested wetland that directly abuts the study area boundary. The offsite forested wetland drains into the offsite stormwater feature. Applicant stated during site visit that the off-site forested wetland drains into the stormwater system. The offsite stormwater feature then leads into Glencoe Swale, to McKay Creek, and then the Tualatin River.

Flow is: **Intermittent** Explain: Wetlands G is located in a shallow depression adjacent to the stormwater system. Wetland would collect surface water before overtopping into the stormwater system, which leads into Glencoe Swale, to McKay Creek, and then the Tualatin River

Surface flow is**: Overland Sheetflow**

Characteristics: Wetland A, B, C, D would flow into the offsite forested wetland which flows into the offsite stormwater feature which leads into Glencoe Swale. Wetland G would overflow into offsite stormwater feature, which leads in Glencoe Swale.

Subsurface flow:**Unknown**. 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: Wetlands A, B, C, D are physically connected to the off-site forested wetland but are separated from the offsite forested wetland by the study area boundary. The offsite forested wetland, a forested area dominated by *Quercus garryana* (Oregon white oak) is adjacent to the northwest boundaries of the study area. Corps staff did not have access to this area. During site visit, the applicant confirmed that the forested area is wetland and drains into the offsite stormwater management feature. The purpose of the evaluation of offsite forested wetland is not to determine jurisdiction but rather to determine the existence of a significant nexus for Wetlands A, B, C, and D. Wetlands A, B, C, D are extensions of the offsite forested wetland.

☒ Separated by berm/barrier. Wetland G is separated from the offsite stormwater feature by a berm; however, a depression in the berm allows for overtopping surface water from Wetland G to flow into the offsite stormwater feature.

(d) Proximity (Relationship) to TNW

Project wetlands are **2-5** river miles from TNW.
Project waters are **2-5** aerial (straight) miles from TNW.
Flow is from wetland to navigable waters
Estimate approximate location of wetland as within the **100-500yr** 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 A, B, C, and D.
Identify specific pollutants, if known: Herbicides would be present if they are applied in the nearby fields.

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

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

☒ Vegetation type/percent cover. Explain: Wetlands A, B, C, D contain plants such as *Rosa pisocarpa, Populus trichocarpa, Crataegus monogyna, Alopecurus pratensis, Salix scouleriana, and Cornus sericea*. Wetland G contains plants such as *Lolium perenne, Agrostis sp., and Epilobium ciliatum*

☐ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: Wildlife utilizes the wetland. Corps staff observed deer nests in the wetland C. Smaller wildlife such as rodents utilize Wetlands A, B, C, D and G.

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

All wetland(s) being considered in the cumulative analysis: **5**
Approximately (2.994) 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)
Wetland A (N)	0.06	Wetland B (N)	0.03
Wetland C (N)	1.07	Wetland D (N)	0.004
Wetland G (N)	1.29		

Summarize overall biological, chemical and physical functions being performed: Wetlands A, B, C , D, and G provide detritus export, groundwater filtering and recharge, and assist with surface flow runoff and attenuation before water enters the offsite stormwater feature and is transported to Glencoe Swale.

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 A, B, C , D, and G provide detritus export, groundwater filtering and recharge, and assist with surface flow runoff and attenuation before water enters the offsite stormwater feature and is transported to Glencoe Swale.
    - The nearest non-RPW is an offsite but adjacent stormwater management feature. This offsite stormwater management feature lies adjacent to the western boundary of the study area. The purpose of the evaluation of this stormwater management feature is not to determine jurisdiction of the stormwater feature but rather to determine the existence of a significant nexus for Wetlands A, B, C, D, and G. See end of document for evaluation of the offsite stormwater management feature.

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[8] 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 jurisidictional. 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.**

[8]See Footnote # 3.

☒ 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. **Wetlands A, B C, D, G**

Provide estimates for jurisdictional wetlands in the review area: acres. Wetland A (0.06 acres), Wetland B (0.03 acres), Wetland C (1.07 acres), Wetland D (0.004 acres), Wetland G (1.29 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.

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: **Wetlands E, F, H, I, J, K, L, M, N, O, P**

- **Wetland E (.84Ac)** No drainage patterns were observed onsite that indicates drainage to another waterway or wetland. The NW Evergreen Road berm adjacent to Wetland E's northern boundary and the slight concave contour of this portion of the site prevents drainage to another waterway or wetland.
- **Wetland F (.05 acres):** No drainage patterns were observed onsite that indicates drainage to another waterway or wetland. The slight concave contour of this portion of the site prevents drainage to another waterway or wetland.
- **Wetland H (.15 acres)** 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.
- **Wetland I (.11 acres):** No surface drainage patterns were observed onsite to indicating drainage to another waterway or wetland; however, Wetland I drains through the fill pile and contributes to the hydrology of wetlands H, K and L which are located at the base of the fill pile. Hydrology is surface flow from the uplands located on the top of the fill pile.
- **Wetland J (.37 acres)**: is an artificially graded -5ft depression located on top of a large fill pile that was created in 2011. The fill pile is approximately 15 ft tall. The fill material was imported from another site and contained *Salix sp*. seeds/root stock. Wetland is seasonally saturated. No surface drainage patterns were observed onsite to indicating drainage to another waterway or wetland; however, Wetland J is drains through the fill pile and contributes to the hydrology of wetlands L, M, N, O, which are located at the base of the fill pile. Hydrology is surface flow from the uplands located on the top of the fill pile.
- **Wetland K (.17 Acres)**: 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.
- **Wetland L (.15 acres):** 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.

[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.*

- **Wetland M (.11 acres):** 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.
- **Wetland N (.02 acres):** 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.
- **Wetland O (.004 acres):** i 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.
- **Wetland P (.01 acres)**: No drainage patterns were observed onsite 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.

☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: **Wetlands E (0.84 acres), F (0.05 acres), H (0.15 acres), I (0.11 acres), J (0.37 acres), K (0.17 acres), L (0.15 acres), M (0.11 acres), N (0.02 acres), O (0.004 acres), P (0.01 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:
- Port of Portland TEK Site-Hillsboro, Oregon, Wetland Delineation, May 2016
- Vicinity Map Port of Portland – TEK Property, Hillsboro, Oregon (Figure 1)
- Tax Lot Map, Port of Portland – TEK Property, Hillsboro, Oregon (Figure 2)
- LWI Map, Port of Portland – TEK Property, Hillsboro, Oregon (Figure 3)

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report. Data sheets provided with 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: NRCS Soil Survey Map and Aerial Photo, Port of Portland – TEK Property, Hillsboro, Oregon. Source: Web Soil Survey, Washington County, Oregon available at: http://websoilsruvey.nrcs.usda.gov/app/. Accessed March 2015.
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Aerial photos provided with delineation report:
- "1974 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 7)
- "1973Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 8)
- "1990 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 9)
- "July 2001 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 10)
- "July 2004 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 11)
- "July 2009 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 12)
- "July 2011 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 13)",
- "July 2013 Aerial Photograph Port of Portland – TEK Property Hillsboro Airport (Figure 14)",

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): Site visit was conducted with applicant on June 28, 2016.

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

See Attachment 1: NWP-2016-268 Approved Jurisdictional Determination Map

Table 8. Summary of Wetlands

Wetland	Size	Cowardin	HGM Class	Substrate/Soil
A	2,683 SF (0.06 ac)	PFO	Flats	Native
B	1,193 SF (0.03 ac)	PFO/PEM	Flats	Native
C	46,572 SF (1.07 ac)	PFO	Flats	Native w/some fill
D	192 SF (0.004 ac)	PFO	Flats	Native
E	36,777 SF (0.84 ac)	PEM	Flats	Fill
F	2,120 SF (0.05 ac)	PEM	Flats	Fill
G	56,346 SF (1.29 ac)	PEM (farmed)	Flats	Native
H	6,330 SF (0.15 ac)	PEM	Flats	Native w/some fill
I	4,818 SF (0.11 ac)	PSS	Flats	Fill
J	31,991 SF (0.73 ac)	PEM/PSS	Depressional	Fill
K	7,296 SF (0.17 ac)	PEM (farmed)	Flats	Native
L	6,481 SF (0.15 ac)	PEM (farmed)	Flats	Native
M	4,669 SF (0.11 ac)	PEM (farmed)	Flats	Native
N	753 SF (0.017 ac)	PEM (farmed)	Flats	Native
O	155 SF (0.004 ac)	PEM (farmed)	Flats	Native
P	372 SF (0.009 ac)	PEM (farmed)	Flats	Native

Jurisdictional Wetlands:

- **Wetland A**: (0.06acres) Forested wetland located entirely within the study area. The majority of the vegetation is hydrophytic and dominant plants are *Rosa pisocarpa* (clustered rose, FAC), *Populus trichocarpa* (black cottonwood, FAC), and *Crataegus monogyna* (singleseed hawthorn, FAC). Hydric soil and wetland hydrology are present. Hydric soil indicators include redox dark surface. Wetland hydrology indicators include saturation and water-stained leaves. Wetland A is connected to the offsite forested wetland northwest of the site. Hydrology is overland flow from surrounding uplands.

-Wetland B: (0.03 acres) Forested wetland located entirely within the study area. No data points in this wetland. Similar to Wetland A. Wetland B is connected to the offsite forested wetland northwest of the site. Hydrology is overland flow from surrounding uplands.

- **Wetland C:** (1.07 acres w/in study area), Forested wetland that extends outside of study area. The majority of the vegetation is hydrophilic and dominant plants are *Alopecurus pratensis* (meadow foxtail, FAC) and *Salix scouleriana* (scouler's willow, FAC) and *Cornus serice*a (red twig dogwood, FACW). Hydric soil indicators include redox dark surface. Wetland hydrology indicators include surface water, high water table and saturation. Wetland C is connected to the offsite forested wetland northwest of the site. Hydrology is overland flow from surrounding uplands.

-Wetland D: (0.004 acres w/in study area), Forested wetland that extends outside of study area. Vegetation of this wetland is dominated by *Spiraea douglasii* (hardhack, FACW), *Rosa pisocarpa* (clustered rose, FAC), and *Carex leptopoda* (sedge, FAC). Hydric soil indicators include redox dark surfaces. Wetland hydrology indicators include water-stained leaves. Is connected to the forested wetland northwest of the site. Hydrology is surface flow from surrounding uplands.

- **Wetland G:** (1.29) Wetland located within an agricultural field. Area of fill is located within Wetland G. Vegetation of this site is dominated by *Lolium perenne* (perennial ryegrass, FAC), *Agrostis sp.* (Colonial and Highland bentgrass, FAC), and *Epilobium ciliatum* (fringed willowherb, FACW). Hydric soil indicators include redox dark surface. Wetland hydrology indicators include surface water, high water table and saturation. This wetland is located in a shallow depression that is <-1ft. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. This wetland is adjacent to the offsite stormwater management feature that runs along the property line; a depression in the small berm along the property line allows Wetland G to drain directly into the stormwater feature. Hydrology is surface flow from surrounding uplands.

Non-jurisdictional Wetlands:

- **Wetland E (.84Ac)** is an artificially graded depression on poorly drained fill material. The depression is on average approx. -2ft. This wetland is seasonally saturated due to surface flow from surrounding uplands during storm events. Vegetation of this wetland is dominated by *Alopecurus pratensis* (meadow foxtail, FAC). Soils are mapped as Amity silt loam. Hydric soil indicators include redox dark surface. No drainage patterns were observed onsite that indicates drainage to another waterway or wetland. The NW Evergreen Road berm adjacent to Wetland E's northern boundary and the slight concave contour of this portion of the site prevents drainage to another waterway or wetland.

- **Wetland F (.05 acres):** is an artificially graded depression on poorly drained fill material. The depression is on average approx. -1ft. This wetland is seasonally saturated due to surface flow from surrounding uplands during storm events. Vegetation of this wetland is dominated by *Alopecurus pratensis* (meadow foxtail, FAC). Soils are mapped as Amity silt loam. Hydric soil indicators include redox dark surface. No drainage patterns were observed onsite that indicates drainage to another waterway or wetland. The slight concave contour of this portion of the site prevents drainage to another waterway or wetland.
- **Wetland H (.15 acres)** is an artificially graded depression located at the toe of a large fill pile. Surface runoff from uplands north of the fill pile and seepage from Wetland I (see below) are the primary contributors to wetland hydrology. Wetland is seasonally saturated. Vegetation of this site is dominated by *Lolium sp*. (FAC). Soils are mapped as Dayton silt loam. Hydric soil indicators are thick dark surface. 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.
- **Wetland I (.11 acres):** is an artificially graded -5ft depression located on top of a large fill pile that was created in 2011. The fill pile is approximately 15 ft tall. Vegetation of this site is dominated by *Salix sp*. (willow, FAC-FACW). The fill material was imported from another site and contained *Salix sp*. seeds/root stock. Wetland is seasonally saturated. No surface drainage patterns were observed onsite to indicating drainage to another waterway or wetland; however, Wetland I drains through the fill pile and contributes to the hydrology of wetlands H, K, and L which are located at the base of the fill pile. Hydrology is surface flow from the uplands located on the top of the fill pile.
- **Wetland J (.37 acres)**: is an artificially graded -5ft depression located on top of a large fill pile that was created in 2011. The fill pile is approximately 15 ft tall. Vegetation of this site is dominated by *Salix sp*. (willow, FAC-FACW). The fill material was imported from another site and contained *Salix sp*. seeds/root stock. Wetland is seasonally saturated. No surface drainage patterns were observed onsite to indicating drainage to another waterway or wetland; however, Wetland J is drains through the fill pile and contributes to the hydrology of wetlands O, N, M, L, and K which are located at the base of the fill pile. Hydrology is surface flow from the uplands located on the top of the fill pile.
- **Wetland K (.17 Acres)**: is an artificially graded depression located at the toe of the large fill pile in a recently plowed agricultural field. Hydric soil indicator is redox dark surface. Wetland is seasonally saturated. No drainage patterns or indicators were observed onsite. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. Hydrology is surface flow from surrounding uplands and seepage from Wetland I and J. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland.
- **Wetland L (.15 acres):** is an artificially graded depression located at the toe of the large fill pile in a recently plowed agricultural field. Hydric soil indicator is redox dark surface. Wetland is seasonally saturated. No drainage patterns or indicators were observed onsite. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. Hydrology is surface flow from surrounding uplands and seepage from Wetland I and J. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland.
- **Wetland M (.11 acres):** is an artificially graded depression located at the toe of the large fill pile in a recently plowed agricultural field. Dominant vegetation is *Festuca sp* (crop, FAC). Wetland is seasonally saturated. No drainage patterns or indicators were observed onsite. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. Hydrology is surface flow from surrounding uplands and seepage from Wetland I and J. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland.
- **Wetland N (.02 acres):** is an artificially graded depression located at the toe of the large fill pile in a recently plowed agricultural field. Dominant vegetation is *Festuca sp* (crop, FAC) and *Poa species* (FAC). Wetland is seasonally saturated. No drainage patterns or indicators were observed onsite. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. Hydrology is surface flow from surrounding uplands and possibly seepage from Wetland I and J. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland.
- **Wetland O (.004 acres):** is an artificially graded depression located at the toe of the large fill pile in a recently plowed agricultural field. Wetland is seasonally saturated. No drainage patterns or indicators were observed onsite. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. Hydrology is surface flow from surrounding uplands and possibly seepage from Wetland I and J. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland.
- **Wetland P (.01 acres)**: is an artificially graded depression located at the toe of the large fill pile in a recently plowed agricultural field. Wetland is seasonally saturated. No drainage patterns or indicators were observed onsite. No drainage patterns were observed onsite to indicating drainage to another waterway or wetland. Hydrology is surface flow from surrounding uplands and possibly seepage from Wetland I and J. The concave contour of the wetland and its location at the base of the fill pile prevents drainage to another waterway or wetland.

Nearest non-RPW (offsite, not within the study area)

- **Offsite Stormwater Feature**: An offsite stormwater management feature that lies adjacent to the western boundary of the study area was utilized to establish a significant nexus for Wetland A, B, C, D, and G. Corps staff did not have access to this feature during the site visit. The offsite stormwater management feature is a non-RPW that is an artificial man-made feature. The offsite stormwater management feature flows through 4 tributaries before entering a TNW. The offsite stormwater management feature drains into the Glencoe Swale (perennial), which drains into McKay Creek (perennial), which drains into Dairy Creek (perennial), which then drains into the Tualatin River (TNW). The stormwater management feature is 2-5 aerial (straight) miles from the Tualatin River, and 1 or less aerial (straight) miles from the Glencoe Swale. The stormwater management feature does not cross or serve as a state boundary. The offsite stormwater management feature has intermittent flow (per USGS NHD data). The dominant plant in the offsite stormwater management feature is reed canary grass (*Phalaris arundinacea*, FACW). The plant growth

obstructed the view into the channel. Pollutants transported via the offsite stormwater management feature include motor oil and road debris from NW Evergreen road, feeder roads and parking lots.

Coordination with EPA Regional Office: On August 08, 2016, Corps sent an email to Tracie Nadeau (EPA), requesting review of this jurisdictional determination. Corps did not receive any comments from EPA. This jurisdictional determination was finalized on October 19, 2016.