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): 4-24-2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENWP-ODG, NWP-2020-125, Gresham Golf Course

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Oregon County/parish/borough: Multnomah City: Gresham
Center coordinates of site (lat/long in degree decimal format): Lat. 45.509891° **N**, Long. 122.4075° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Burlingame Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Sandy River
Name of watershed or Hydrologic Unit Code (HUC): 170800010703 Beaver Creek-Sandy River
☒ 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: March 17, 2020
☐ Field Determination. Date(s):

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 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 waters[2] (RPWs) that flow directly or indirectly into TNWs (Kelly Creek, Burlingame Creek)
      ☒ Non-RPWs that flow directly or indirectly into TNWs (Ditch F9, Ditch T18)
      ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland T9/G8, G12)
      ☐ 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 F9)
      ☐ 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: Kelly Creek = 549 linear feet, Burlingame Creek = 3,002 linear feet, Ditch F9 = 579 linear feet : width (ft) and/or acres.
      Wetlands: 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 F10, T18, T11, F11, T2, T17, Pond, T13-1, T13-2**
   These wetlands are an artifact of poor drainage and grading on the site. The hydrology is driven by the irrigation system on the property and pools in the depressions. There are no surface drainage features connecting them to Burlingame

[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.

Creek. The land between the wetlands and creek is a maintained golf course. They do not flow to a Water of the US or have a connection to interstate commerce. They don't contain habitat or resources, or wildlife species that would attract travelers. They lack fish or shellfish, industrial purposes, and agriculture/silviculture use of which would be sold in interstate or foreign commerce. They were created in uplands pursuant to aerials sometime between 1961 and 1672. The Pond was constructed for the irrigation system. It is filled via groundwater pump. If the water is turned off, the water level lowers. See additional discussion in IV B.

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 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** (Burlingame Creek, Kelley Creek, Ditch F9, Ditch T18)

   (i) General Area Conditions:
   Watershed size: 22,911 **acres**
   Drainage area: 104.38 **acres**
   Average annual rainfall: 43.07 inches
   Average annual snowfall: inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☒ Tributary flows through **4** tributaries before entering TNW.

   Project waters are **2-5** river miles from TNW.

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

Project waters are **1 (or less)** river miles from RPW.
Project waters are **2-5** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Burlingame Creek to Kelly Creek to Beaver Creek to Sandy River to Columbia River.
Tributary stream order, if known:

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

Tributary is: ☒ Natural Explain: Kelly Creek exists in fairly natural state along the course, its path has not likely been altered.

☒ Artificial (man-made). Explain: Ditches were created to drain waters to Burlingame Creek.

☒ Manipulated (man-altered). Explain: Burlingame Creek was ditched and straightened prior to 1939.

Tributary properties with respect to top of bank (estimate):
Average width: Creeks: 10-20 feet, Ditches: 1-foot
Average depth: feet
Average side slopes: **2:1.**

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: Creek banks within 5 feet of water have vegetation but are straightened and erosive..
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **20 (or greater)**
Describe flow regime: Creeks flow year round. Ditches flow in response to precipitation events.
Other information on duration and volume: .

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Unknown**. 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;

[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.
[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.

☐ 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: The ditches and creeks would carry pollutants from the golf course, including pesticide and fertilizer.
Identify specific pollutants, if known: .

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

☒ Riparian corridor. Characteristics (type, average width): within 5 feet of the creeks is a small strip of plants which are not manicured for the golf course.
☐ 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: These waters serve as habitat for amphibians and fish within the creeks.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetland F9, T9/G8, G12)

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
Wetland size:0.1 + 0.21 + 0.28 acres
Wetland type. Explain: PEM and PFO
Wetland quality. Explain: Low quality due to human disturbance.
Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:
Flow is: **Perennial flow**. Explain: Wetlands flow into downstream ditches and creeks, providing water on a continual basis.

Surface flow is**: Discrete and confined**
Characteristics: Wetland F9 flows to Ditch F9 then to Burlingame Creek through a pipe. Wetlands T9/G8 flows through drain that flows to Burlingame Creek. Wetland G12 is connected to Burlingame Creek via narrow drainage depression.

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

(c) Wetland Adjacency Determination with Non-TNW:
☒ Directly abutting- G12, T9/G8
☒ Not directly abutting
☒ Discrete wetland hydrologic connection. Explain: Wetland F9 drains to Ditch F9 which empties directly into Burlingame Creek.
☐ Ecological connection. Explain: .
☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are **2-5** river miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from TNW.
Flow is from: **Wetland to navigable waters.**
Estimate approximate location of wetland as within the **50 - 100-year** 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: Wetlands would filter water from golf course runoff including pesticides and fertilizer.
Identify specific pollutants, if known: .

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

☐ Riparian buffer. Characteristics (type, average width): .
☒ Vegetation type/percent cover. Explain: Dominated by bluegrass and fescue grasses.
☒ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: Provides habitat for amphibians that may use Burlingame Creek.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**
   All wetland(s) being considered in the cumulative analysis: **3**
   Approximately (0.5) 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 F9 N	0.01 ac	Wetland G12 Y	0.28 ac
Wetland T9/G8 Y	0.21 ac		

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

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: **Ditch T18.** The ditch directly conveys water to Burlingame Creek, including all nutrients and pollutants from its drainage area. The ditch would provide a place for sediments to fall out of the water column during low flows.

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: **Ditch F9 and Wetland F9.** Onsite wetlands would hold and filter water containing golf course nutrients and pollutants. The wetlands support smaller invertebrate species as well as any smaller mammals, reptiles, and amphibians in the area for food. The wetlands provide sediment retention and nutrient cycling as they filter runoff water. The wetlands would contribute to downstream organic carbon export and would provide a seed source for downstream waters. The ditch would directly convey waters to Burlingame Creek.

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: **Burlingame Creek and Kelley 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: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   ☒ Tributary waters: **3,000 + 500** 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. **Ditch F9, Ditch T18**

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   ☒ Tributary waters: **1-5** linear feet width (ft). **0.01 + 0.01 acres**
   ☐ 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 T9/G8, G12. Wetlands are situated directly adjacent to Burlingame Creek and directly contribute hydrological flow.**

   ☐ 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: **0.21 + 0.28** 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.**
   ☒ 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. **Wetland F9**

   Provide estimates for jurisdictional wetlands in the review area: **0.01** 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).

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[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: .
☒ Other: (explain, if not covered above): **Wetland F10, T18, T11, F11, T2, T17, Pond, T13-1, T13-2 -**

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: 0.35 acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: Total – 0.69 acre

Wetland F10	0.02 acre		Wetland T17	0.25 acre
Wetland T18	0.17 acre		Wetland T13-1	0.03 acre
Wetland F11	0.04 acre		Wetland T13-2	0.02 acre
Wetland T11	0.12 acre		Wetland T2	0.04 acre

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: 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: In report specified below.
☒ 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: 3-30-2020 Corps EGIS.
☒ USGS NHD data.

[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.*

☒ 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: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☒ 100-year Floodplain Elevation is: 3-30-2020 Corps EGIS. (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Lidar provided by applicant 3-17-2020.
or ☒ Other (Name & Date):Photos in report specified below.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): Report titled "Gresham Golf Course Wetland/Waters Delineation Report, Gresham, Multnomah County, Oregon". Dated February 2020. Prepared by SWCA Environmental Consultants. ORM Cumulative Effects analysis for watershed acreage.

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

The study area encompasses the entire Gresham Golf Course property located at 2155 NE Division Street in Gresham, Multnomah County, Oregon. The study area is defined as Tax Lot 100 on Tax Map T1S R3E S02C and Tax Lot 3200 on Tax Map T1S R3E S02DB, Multnomah County, Willamette Meridian. The site is located between NE Hogan Road and NE Kane Drive, north of NE Division Street. The site is approximately 104.38 acres. The field work was conducted in spring 2019. The site is currently used as a golf course.

Prior to the construction of the Gresham Golf Course in 1965, the site was dominated by berry farms surrounded by agriculture and rural residences. The site has not been noticeably altered since 1990, except for small additions. No earth moving groundwork has taken place since 1990. A dense network of drain tile is present throughout the site that drains into Burlingame and Kelly Creeks. A constructed pond is located west of the maintenance buildings and was built when the golf course was initially constructed. The entire site, except for areas within 5 feet of the creeks and the wooded area directly east of the maintenance building consist of highly manicured non-native grasses and planted trees. Burlingame Creek was ditched and straightened in a 1939 photograph.

The 100-year floodplain encompasses approximately 25-acre of the study area as well as the pond, and Wetlands G12, T2, T9/G8, and T13-2.

Water of the US.

Burlingame Creek (RPW) – measures 1.25 acres, is a fresh water, lower perennial stream (R2) which enters the study area on the western boundary, flows east-northeast for approximately 3,000 feet beneath seven golf cart bridges before its confluence with Kelly Creek. The banks are incised, with a well-defined top of bank, and channel sinuosity is low. Riparian vegetation is dominated by reed canary grass, Himalayan blackberry, Douglas' meadowsweet, taper-fruit short-scale sedge, hawthorn, Pacific willow, Oregon ash, and Douglas-fir.

Kelly Creek (RPW) – measures 0.27 acre, is a freshwater, lower perennial stream (R2) which enters the study area on the southern boundary near the east end of the site, flows north for approximately 200 feet to where Burlingame Creek flows into it. Then it flows northeast for approximately 300 feet before leaving the study area. Kelly Creek flows into Beaver Creek and then the Sandy River downstream of the study area. Kelly Creek flows beneath two golf cart bridges. The banks are incised and supported with concrete in small stretches and the channel sinuosity is generally low with moderate complexity, with some cascades and riffles and some overhanging vegetation. Riparian vegetation included Pacific Willow, Oregon ash, grand fir, red alder, Himalayan blackberry, Nootka rose, Douglas' meadowsweet, English ivy, and reed canary grass.

Ditch F9 (non-RPW) – measures 0.01 acre and is a drain-tile fed drainage ditch located near the southwestern part of the site, west of the driving range. Ditch F9 is connected to Wetland F9 to the south, immediately north of which two drain tile pipes outlet into the ditch; water then flows north toward Burlingame Creek, is piped underground, and outlets to the creek. Ditch F9 has an average Ordinary High Water Line width of 1 foot. Riparian vegetation is dominated by Lombardy poplar, black locust, English holly, sycamore, and Douglas-fir.

Ditch T18 (non-RPW)– measures 0.001 acre and is a very short segment of open drain tile located near the center of the study area east of Wetland 11 bordering the property line. The drain tile discharges to Burlingame Creek to the north. The ordinary high water line of the ditch is 1 foot wide on average and riparian vegetation is dominated by English ivy, English holly, and Douglas-fir.

Wetland F9 (Wetland adjacent to Non-RPW) – measures 0.1 acre and is classified as PEM, flats. The wetland is located near the southwestern corner of the site, immediately south of Ditch F9. The wetland is connected to Ditch F9 on the northern edge with topography sloping slightly toward the ditch. Vegetation is dominated by bluegrass and fescue. Hydrology was identified by a high water table and saturation.

Wetland T9/G8 (Wetland adjacent to RPW)– measures 0.21 acre and is classified as a PEM flats wetland. It is located near the center of the study area abutting Burlingame Creek. It is located near the west end of Burlingame Creek. The wetland is dominated by bluegrass and fescue. Soil displayed the hydric soil field indicator Redox Dark Surface. Hydrology was identified by saturation. Hydrology appears to be

driven by surface water runoff. A failed drain tile sink hole was observed in Wetland T9/G8 and the wetland is in line with the drain tile Ditch F9 to the south. Wetland T9/G8 drains to an open drain that discharges to Burlingame Creek.

Wetland G12 (Wetland adjacent to RPW)– measures 0.28 acre and is classified as a PEM/PFO flats wetland. Wetland G12 is located near the central-eastern extent of Burlingame Creek. The wetland is dominated by bluegrass and fescue. Soil displayed the hydric soil field indicator Redox Dark Surface. Hydrology was identified by saturation. Hydrology appears to be driven by surface water runoff. Wetland G12 is connected to Burlingame Creek via a narrow drainage depression.

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Wetland F10 – measures 0.02 acre and classified as PEM flats wetland in the southwest portion of the study area. Dominated by bluegrass and fescue. Soils displayed the hydric soil field indicator Redox Dark Surface. Hydrology was identified by saturation starting at 10 inches below ground surface.

Wetland T18 – measures 0.17 acre and classified as PEM flats wetland in the southwest portion of the study area. Dominated by bluegrass and fescue as well as white clover and common dandelion in the northwest corner. Soils displayed the Redox Dark Surface hydric soil indicator. Hydrology was identified by surface water, high water table, and saturation.

Wetland F11 – measures 0.04 acre, classified as PFO slope wetlands in the central portion of the study area at the northern toe of a slope. Dominated by blue grass and fescue, English daisy, Oregon ash, and black cottonwood. Soils displayed the hydric soil field indicator Redox Dark Surface. Hydrology is indicated by surface water, saturation, and high water table. Hydrology is driven by seeps at the toe of the slope and surface water runoff.

Wetland T11 - measures 0.12 acre, classified as PFO slope wetlands in the central portion of the study area at the northern toe of a slope. Dominated by blue grass and fescue, English daisy, Oregon ash, and black cottonwood. Soils displayed the hydric soil field indicator Redox Dark Surface. Hydrology is indicated by surface water and saturation. Hydrology is driven by seeps at the toe of the slope and surface water runoff.

Wetland T2 – measures 0.04 acre, classified as PEM flats. Located on the west side of the site, to the north of Burlingame Creek. Vegetation is dominated by bluegrass, fescue, and creeping buttercup. Soils displayed the hydric soil field indicator Depleted Dark Surface. Hydrology identified by a high water table and saturation. Hydrology is presumed to be driven by surface water runoff and poor drainage.

Wetland T17 – measures 0.25 acre, classified as PEM flats. It is located in the southern tip of the narrow central extension of the study area. The wetland is located at a low point in the topography backing up to adjacent properties. Vegetation is dominated by bluegrass and fescue. Soils displayed the hydric soil field indicator Redox Dark Surface. Hydrology identified by surface water without a high water table and only surface saturation in the first 0 to 4 inches. Hydrology is presumed to be driven by surface water runoff and poor drainage.

Wetland T13-1 – measures 0.03 acre and is classified as a PEM flats wetland. It is located east of the center of the site, north of Burlingame Creek. The wetland is dominated by bluegrass, fescue, and English daisy. Soils displayed the hydric soil field indicator Depleted Dark Surface. Hydrology identified by a high water table and saturation. Hydrology is presumed to be driven by surface water runoff and poor drainage.

Wetland T13-2– measures 0.02 acre and is classified as a PEM flats wetland. It is located east of the center of the site, north of Burlingame Creek. The wetland is dominated by bluegrass, fescue, and English daisy. Soils displayed the hydric soil field indicator Depleted Dark Surface. Hydrology identified by a high water table and saturation. Hydrology is presumed to be driven by surface water runoff and poor drainage.

Pond 0.35 acre– measures 0.35 acre and is classified as palustrine unconsolidated bottom. The pond was delineated using the ordinary high water line of the pond. The pond does not appear to have any natural inlets or outlets, but there is an overflow pipe which outlets excess water into Burlingame Creek and a pump station with a 200-foot deep well which pumps water into the pond. Hydrology is presumed to be provided primarily by the pump station and secondarily by surface water runoff and precipitation. If the pump were turned off, the hydrology would drop. It is drawn down during the non-irrigation season, and refilled during months when the irrigation is on. It's a man-made reservoir for the irrigation system. Riparian vegetation surrounding the pond is dominated by reed canary grass and slough sedge. The pond is not present in 1961 aerials and was dug in soils mapped as hydric.