



Regulatory Program

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

This form should be completed by following the instructions provided in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

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A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): 13 December 2019

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): NWS-2018-481

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Washington County/parish/borough: King County

City: Maple Valley

Center coordinates of site (lat/long in degree decimal format): Lat. 47.446697, Long. -122.051349. Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: attached in report/map titled "20191201 CWR SS SN Figures" dated 01 December 2019 and "NWS-2018-481 Project Drawings" dated 12 April 2019.

Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1):

D. REVIEW PERFORMED FOR SITE EVALUATION:

- Office (Desk) Determination Only. Date: .
- Office (Desk) and Field Determination. Office/Desk Dates: December 2019 Field Date(s): 22 January 2019.

SECTION II: DATA SOURCES

Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: 12 April 2019.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - ☑ Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: 21 March 2019.

Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include information on revised data sheets/delineation report that this AJD form has relied upon:

Revised Title/Date:

- Data sheets prepared by the Corps. Title/Date:
- Corps navigable waters study. Title/Date:
- CorpsMap ORM map layers. Title/Date:
- USGS Hydrologic Atlas. Title/Date:
- USGS, NHD, or WBD data/maps. Title/Date:
- USGS 8, 10 and/or 12 digit HUC maps. HUC number:
- USGS maps. Scale & quad name and date:
- USDA NRCS Soil Survey. Citation: Soils Survey Report
- https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, 1 December 2019
- USFWS National Wetlands Inventory maps. Citation:
- State/Local wetland inventory maps. Citation:
- FEMA/FIRM maps. Citation:
- Photographs: Aerial. Citation: . or Other. Citation:
- LiDAR data/maps. Citation:
- Previous JDs. File no. and date of JD letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:

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Other information (please specify): CWR Tool Map

http://geoportal.nws.usace.army.mil/g3portal/apps/webappviewer/index.html?id=ccbd911728714c799f7059f83bdd886 a, dated 1 December 2019.

SECTION III: SUMMARY OF FINDINGS

Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Screen from ORM for All Waters and Features, Regardless of Jurisdictional Status – Required

A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION:

"*" "navigable waters of the U.S.*" within RHA jurisdiction (as defined by 33 CFR part 329) in the review area.

Complete Table 1 - Required

NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.

B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "waters of the U.S." within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. Check all that apply.

 (a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))

• Complete Table 1 - Required

This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.

 \square (a)(2): All interstate waters, including interstate wetlands.

Complete Table 2 - Required

 \square (a)(3): The territorial seas.

Complete Table 3 - Required

(a)(4): All impoundments of waters otherwise identified as waters of the U.S. under 33 CFR part 328.3.

• Complete Table 4 - Required

(a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• Complete Table 5 - Required

(a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

Complete Table 6 - Required

Bordering/Contiguous.

Neighboring:

- (c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.
- (c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water.
- (c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes.
- (a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
 - Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis. Required

Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

(a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(8) waters identified in the similarly situated analysis. - Required

Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

C. NON-WATERS OF THE U.S. FINDINGS:

Check all that apply.

The review area is comprised entirely of dry land.

Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(7) waters identified in the similarly situated analysis. - Required

Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

• Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis. - Required

Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):

Complete Table 10 - Required

- (b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.
- (b)(2): Prior converted cropland.
- (b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1)-(a)(3).
- (b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease.
- (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.
- (b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.¹
- (b)(4)(iv): Small ornamental waters created in dry land.¹
- (b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water.

(b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways.¹

- (b)(4)(vii): Puddles.¹
- (b)(5): Groundwater, including groundwater drained through subsurface drainage systems.1
- (b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.¹

(b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of (a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).

• Complete Table 11 - Required.

<u>D. ADDITIONAL COMMENTS TO SUPPORT AJD:</u> Figures are provided in the "20191201 CWR SS SN Figures" dated 01 December 2019 and "NWS-2018-481 Project Drawings" dated 12 April 2019. The Corps visited the project site on 22 January 2019 in order to better understand the application materials for the permit review process. The Corps toured the project site to view the Main Infiltration Area, Tributary 316A, and the proposed area for rerouting Tributary 316A. There were several aquatic resources not identified in the application materials and so the Corps

¹ In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area. Page 3 of 7 Version: October 1, 2015

requested additional information including the delineation of any wetlands on site. Several aquatic resources were identified in the additional information provided. The applicant requested an AJD on all waters included on Sheet 4 of 24 in the "NWS-2018-481 Project Drawings" except for Queen City Farm Spring (QCF Spring), West Pond, East Pond, South Pond, and the Bioswale:

1. The applicant has not requested an AJD for the Queen City Farms Spring (QCF Spring), however the following information was collected during the review process in order to understand the hydrology of the site. The QCF Spring is a perennial spring that predates mining operations. The QCF Spring emanates from the hillside at about Elevation 385 feet (FT). Well data suggests that the Spring area has a low permeability layer and allows a portion of a shallow perched water zone to discharge to the surface at this location instead of flowing downward into Aquifer 2. The spring discharges flow via a stream with a bed and bank/OHWM, into a concrete tank, then into a channel before reaching a culvert that directs the discharge off-site into Wetland 31 south of Cedar Grove Road SE (See Sheet 4 of 24 in the "NWS-2018-481 Project Drawings"). There is a tributary that flows through Wetland 31, recieves discharge from Queen City Spring and eventually discharges into the Cedar River.

2. The West Pond, East Pond, South Pond, and Bioswale have not been constructed yet. They are proposed stormwater features that would be constructed as part of the refill project .

Jurisdictional Waters of the U.S.

Default field entry is "N/A". Delete "N/A" and fill out all fields in the table where applicable for waters/features present in the review area.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
N/A	Choose an item.	N/A

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation
N/A	N/A

Table 3. (a)(3) Territorial Seas

(a)(3) Waters Name	Rationale to Support (a)(3) Designation
N/A	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
N/A	N/A
N/A	N/A

Table 5. (a)(5)Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A

Table 6. (a)(6) Adjacent Waters

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
N/A	N/A	N/A

Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; discuss whether any similarly situated waters were present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A		N/A	N/A
N/A		N/A	N/A

<u>Table 8. (a)(8) Waters</u>

SPOE Name	(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; explain how 100-yr floodplain and/or the distance thre shold was determined; discuss whether waters were determined to be similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A		N/A	N/A

Non-Jurisdictional Waters

Default field entry is "N/A". Delete "N/A" and fill out all fields in the table where applicable for waters/features present in the review area.

Table 9. Non-Waters/No Significant Nexus

SPOE Name	Non- (a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the $(a)(1)$ - $(a)(3)$ Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance thre shold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the $(a)(1)$ - $(a)(3)$ water.
Cedar River Watershed	Wetland A	Cedar River	See Significant Nexus Determination MFR dated 1 December 2019.
Cedar River Watershed	Queen City Lake	Cedar River	See Significant Nexus Determination MFR dated 1 December 2019.
Cedar River Watershed	Wetland H	Cedar River	See Significant Nexus Determination MFR dated 1 December 2019.
Cedar River Watershed	Wetland I	Cedar River	See Significant Nexus Determination MFR dated 1 December 2019.
Cedar River Watershed	Wetland J	Cedar River	See Significant Nexus Determination MFR dated 1 December 2019.
Cedar River Watershed	Wetland K	Cedar River	See Significant Nexus Determination MFR dated 1 December 2019.

Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
Main Infiltration Area	 (b6) Stormwater control features constructed to convey, treat or store stormwater that are created in dryland (does not include transprotation ditches). The Main Infiltration Area (MIA), constructed during gravel mining operation and used to infiltrate runoff from mining operations, is a gravelly depression where water readily infiltrates into the subsurface. Although the MIA is located at least 200 FT east of Queen City Farm (QCF) Spring, where a shallow perched water zone discharges to the surface, well data suggests that the MIA infiltrates directly to Aquifer 2. The area was not reviewed for wetland characteristics because it was an artificial depression constructed in drylands, used to store and treat stormwater.
	Photo 1 & 2. Photo 1 was taken on the west side of the MIA facing east. Photo 2 was taken on the west side of the MIA facing north.
Main Gravel Pit Lake	 (b4ii) Water-filled depressions created in dryland incedental to mining or construction activity including pits excavated for obtaining fill, sand, or gravel that fill with water. The Main Gravel Pit Lake was formed due to gravel mining activities. Surface water runoff, an overflow pipe from Queen City Lake, and the East Airstrip Spring discharge at the Main Gravel Pit Lake then directly infiltrate into Aquifer 2. There is no outlet to the lake. According to well data the Main Gravel Pit Lake is also a surface expression of Aquifer 2.
Aquifer 1	(b5) Groundwater. Aquifer 1 is a small, highlly permeable aquifer that includes openwork gravel deposits. Recharge of Aquifer 1 is primarily from leakage from Queen City Lake and direct recharge of surface water runoff. Discharge from Aquifer 1 is through spring flow (primarily the East Airstrip Spring) and leakage through the Aquifer 1 aquitard into Aquifer 2.

	(b5) Groundwater.
Aquifer 2	Leakage from Aquifer 1, discharge from Main Gravel Pit Lake, infiltration of percipitation and vertical flow from wetlands offsite in the Cedar Grove Channel recharge Aquifer 2. Aquifer 2 ground water flows latterally to the north toward Mason Creek, south and west toward the Cedar River. Aquifer elevations at the location of the MIA fluctuate between 345 to 355 FT.

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
Tributary 316A	This stream does not meet the defenition of a tributary because it does not contribute flow to an (a)(1), (a)(2), or (a)(3) water. As a result of mining activities Tributary 316A was channelized and rerouted to direct stormwater and discharge at the Main Infiltration Area. The Main Infiltration area infiltrates as grouddwater into Aquifer 2. Tributary 316A currently flows intermittently (October through May/June) and the ordinary high water mark of the channel ranges from 10 to 12 FT wide. The substrate of the stream channel consists of quarry spall with patches of vegeatation interspersed (i.e. reed canary grass, trailing black berry, climbing nightshade, and saplings of red alder and black cottonwood). Prior to mining activities in the 1970's, Tributary 316A was an intermittent stream that entered the Queen City Farms property from the northwest and terminated in the nortwest corner of the property where it infiltrated into permeable sand and gravel soil and/or discharged to Queen City Lake
Watercourse B	This watercourse does not meet the defenition of a tributary because it does not contribute flow to an (a)(1), (a)(2), or (a)(3) water. Watercourse B directs stormwater from the Landfill Property (north of the project site) through a culvert into Wetland A and Queen City Lake that infiltrates into Aquifer 1.
Watercourse C	This watercourse does not meet the defenition of a tributary because it does not contribute flow to an (a)(1), (a)(2), or (a)(3) water. Watercourse C was constructed in 1991 to control seepage and erosion that began to form as gravel mining progressed. The watercourse directs stormwater into the Main Gravel Pit Lake that infiltrates into Aquifer 2.
Watercourse D	This watercourse does not meet the defenition of a tributary because it does not contribute flow to an (a)(1), (a)(2), or (a)(3) water. Watercourse D comes from seepage under a constructed berm from Tributary 316A and feeds Wetland I. The watercourse is seasonal and established incedental to construction of Tributary 316A. Wetland I does not have an outlet.
Watercourse E	This watercourse does not meet the defenition of a tributary because it does not contribute flow to an (a)(1), (a)(2), or (a)(3) water. The watercourse directs stormwater to Ttributary 316A which infiltrates into the Main Infiltration Area then into Aquifer 2.
Watercourse F	This watercourse does not meet the defenition of a tributary because it does not contribute flow to an (a)(1), (a)(2), or (a)(3) water. The watercourse directs stormwater from Wetland K to Ttributary 316A which infiltrates into the Main Infiltration Area then into Aquifer 2.