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

JD FORM 4
Wetlands Directly Abutting Seasonal and Perennial RPW's

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 18 August 2015**.**

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District, Brookwater Advisors, LLC (Snoqualmie Mill), NWS-2012-1198.

Name of water being evaluated on this JD form: Wetlands 1, 2, 4, 7, 8, 9, 10, 11, 13, 14, 15, 18, 24, 28, 29, Ditches 2N, 3S, 7, 9N, 10, 17, 18, 19, 24, 26, 28, 29, 30, 33, 34, 35, 40, 41, Streams 3, 4, 5, 6

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Washington County: King City: Snoqualmie
Center coordinates of site (lat/long in degree decimal format): Lat: 47.539978º **N**, Long: -121.817131º **W**
Universal Transverse Mercator: 10.
Name of nearest waterbody: Mill Pond (off-site).
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Snoqualmie River.
Name of watershed or Hydrologic Unit Code (HUC): 17110010 (Snoqualmie Watershed).

☐ 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. List other JDs: Form 1 evaluates Wetlands 3, 5, 6, 20-21-22, 26, 27 (adjacent to RPW's); Form 2 evaluates Wetlands 19 and 25 (Isolated Waters); Form 3 evaulates Wetland 12 ditch complex; Streams 1, 2 (Perennial RPW's)

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date: _____.
☒ Field Determination. Date(s): 19 March 2013.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Pick List** "*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
      ☐ 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: 6,050 linear feet _____ width (ft) and/or _____ acres.
      Wetlands: 39.07 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.** and **1987 Delineation Manual.**
      Elevation of established OHWM (if known): _____.

[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).

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: _____.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs – NOT APPLICABLE

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

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

(i) General Area Conditions:
Watershed size: 700 **square miles**
Drainage area: 700 **square miles**
Average annual rainfall: 35 inches
Average annual snowfall: 371 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☒ Tributary flows directly into TNW.
☒ Tributary flows through **2** tributaries before entering TNW.

Project waters are **10-15** river miles from TNW.
Project waters are **1-2** river miles from RPW.
Project waters are **10-15** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW[4]: Through site then directly into the Snoqualmie River or into Mill Pond, through unnamed tributary and then the Snoqualmie River.
Tributary stream order, if known: _____.

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☒ Natural
☒ Artificial (man-made). Explain: Some ditches created on top of old fill.
☒ Manipulated (man-altered). Explain: Maintenance is on-going in some ditches.

Tributary properties with respect to top of bank (estimate):
Average width: 5 - 20 feet
Average depth: 1.5 - 5 feet
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

☒ Silts	☒ Sands	☒ Concrete
☐ Cobbles	☒ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover: _____	
☒ Other. Explain: old fill.		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: _____.
Presence of run/riffle/pool complexes. Explain: _____.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): 1 %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: varied.
Other information on duration and volume: 3.0 cfs/varied.

Surface flow is: **Overland sheetflow.** Characteristics: _____.

[3] Supporting documentation is presented in Section III.F.
[4] 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.

Subsurface flow: **Unknown**. Explain findings: _____.
☐ Dye (or other) test performed: No.

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[5] (check all indicators that apply):
- ☒ clear, natural line impressed on the bank
- ☐ changes in the character of soil
- ☐ shelving
- ☐ vegetation matted down, bent, or absent
- ☒ leaf litter disturbed or washed away
- ☒ sediment deposition
- ☒ water staining
- ☐ other (list): _____
- ☒ the presence of litter and debris
- ☒ destruction of terrestrial vegetation
- ☐ the presence of wrack line
- ☒ sediment sorting
- ☒ scour
- ☒ multiple observed or predicted flow events
- ☐ abrupt change in plant community

☒ Discontinuous OHWM.[6] Explain:varied.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by:
- ☐ oil or scum line along shore objects
- ☐ fine shell or debris deposits (foreshore)
- ☐ physical markings/characteristics
- ☐ tidal gauges
- ☐ other (list):

☐ Mean High Water Mark indicated by:
- ☐ survey to available datum;
- ☐ physical markings;
- ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Most of the observed water is clear but water quality is poor. The property consists of the old Weyerhaeuser Snoqualmie Mill, lumber yards, and mill town which now sits idle, and is just north of the Weyerhaeuser mill pond. Today parts of the site are used for the DirtFish race track and for storing gravel and rock but most of it is considered abandoned and over the majority of the site only the foundations of previous structures remain. Over a hundred years of processing and storing lumber, various leakages from equipment, pollution from the former mill town and a fire in 1989 have all contributed to the degraded condition of the property. The site underwent a preliminary assessment in the Superfund data system (CERCLIS) in 1991, however it resulted in a "No Further Remedial Action Planned" designation. As such, cleanup activities came under the purview of the Department of the Department of Ecology. .
Identify specific pollutants, if known: hydrocarbons.

(iv) Biological Characteristics. Channel supports (check all that apply):
☒ Riparian corridor. Characteristics (type, average width): There is a narrow band of decidious forest along the southern perimeter of the site and deciduous forest encompasses a perennial stream that flows along northern perimeter. The west side contains a mosaic of shrub-lands and sparsely vegetated areas. A high percentage of bare ground is also present throughout the review area.
☐ Wetland fringe. Characteristics: _____.
☐ Habitat for:
☒ Federally Listed species. Explain findings: None mapped within site boundaries but present in the TNW .
☒ Fish/spawn areas. Explain findings: Present in pernnial waters, Mill Pond and the TNW. Limited distribution due in part to high temperature and fish blockages .
☒ Other environmentally-sensitive species. Explain findings: The polluted nature of the site may deter "environmentally-sensitive" species such as amphibians. The watershed supports wild runs of coho, chinook, pink, chum and steelhead.
☒ Aquatic/wildlife diversity. Explain findings: A regular concentration of elk (a State species of concern) use areas south, east and north of the property and extend into the eastern and southern portions of the site. Osprey and peregrine falcon nests are mapped near the site.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW – NOT APPLICABLE

3. Characteristics of all wetlands adjacent to the tributary (if any) – NOT APPLICABLE

C. SIGNIFICANT NEXUS DETERMINATION – NOT APPLICABLE

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

2. RPWs that flow directly or indirectly into TNWs.

[5]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.
[6]Ibid.

☒ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide rationale indicating that tributary flows 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: _____.

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: Hydrology data collected during multiple site visits, monitoring and review of hydric soil indicators.

☒ 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: Hydrology data collected during multiple site visits, monitoring and review of hydric soil indicators.

Provide acreage estimates for jurisdictional wetlands in the review area: **39.07 wetland** acres.

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 - NOT APPLICABLE

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS - NOT APPLICABLE

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: Raedeke Associates, Inc (consultant).
☒ 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: The waterbody is on the Section 10 Navigable Waterway List for Seattle District.
☒ 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: Web Soil Survey (2011).
☐ National wetlands inventory map(s). Cite name: _____.
☒ State/Local wetland inventory map(s): King County, WA (2012)
☐ FEMA/FIRM maps: _____.
☐ 100-year Floodplain Elevation is: _____ (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Google 2012
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): City of Snoqualmie Wetlands and Streams Map.

B. ADDITIONAL COMMENTS TO SUPPORT JD: Each wetland, stream and ditch is fully documented on individual Rapanos Tributary and Wetland Information Summaries located in the Jurisdictional Documents submitted by Raedeke Associates, Inc. on 16 April 2015. These sheets include the general area conditions, physical characteristics (including flow path and size), chemical characteristics (including known pollutants filtered on the site such as hydrocarbons), and the biological characteristics (including vegetation types) of each water/wetland evaluated so the responses provided in Section D of this document should be considered averages.