

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

Form 2 of 2

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 28 March 2022.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District, NCS Lands, NWS-2021-572.

Name of water being evaluated on this JD form: Stream S7, Stream S8

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Washington County: Klickitat City: Goldendale

Center coordinates of site (lat/long in degree decimal format): Lat: 45.746526 N, Long: -120.733405 W

Universal Transverse Mercator: _____

Name of nearest waterbody: Swlae Creek.

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

Name of watershed or Hydrologic Unit Code (HUC): 170701050406.

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: _____

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

Office (Desk) Determination. Date: 18 March 2022.

Field Determination. Date(s): 22 July 2021.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

Waters subject to the ebb and flow of the tide.

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

Explain: _____

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

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

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

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: S7 - 1,000 lf; S8 - 1,000 lf linear feet S7-1.5'; S8-1.5' width (ft) and/or _____ acres.

Wetlands: _____ acres.

c. Limits (boundaries) of jurisdiction based on: **Established by OHWM.** and **Not applicable.**

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: _____

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 – 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: 147 acres
Drainage area: 147 acres
Average annual rainfall: 10.02 inches
Average annual snowfall: 4.5 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through 2 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.
Project waters are 2-5 river miles from RPW.
Project waters are 5-10 aerial (straight) miles from TNW.
Project waters are 2-5 aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: _____.

Identify flow route to TNW⁴: S7 and S8 flow north, roughly 2.1 miles, to Swale Creek, then east roughly 21 miles to the Klickitat River, then south south roughly 15 miles to the Columbia River, a TNW.
Tributary stream order, if known: 1.

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

Tributary is: Natural
 Artificial (man-made). Explain: _____.
 Manipulated (man-altered). Explain: _____.

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

Average width: 1.5 feet
Average depth: 0.3 feet
Average side slopes: Vertical (1:1 or less).

Primary tributary substrate composition (check all that apply):

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input checked="" type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: _____ | |
| <input type="checkbox"/> Other. Explain: _____. | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable drainage features.
Presence of run/riffle/pool complexes. Explain: None.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): S7-9.4%; S8-18 %

(c) Flow:

Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: 2-5

Describe flow regime: The site is situated in an arid location and would have continuous flows through the wet season, typically December - March, then during long-term rain events. Support for seasonal (intermediate) flow is provided in "Attachment C: SDAM Data Sheets and Photos", dated 1 June 2021.

Other information on duration and volume: _____.

Surface flow is: **Confined**. Characteristics: Incised and defined channel.

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

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.
Version 2-8-08 Seasonal RPW and Abutting Only 2 of 5

Tributary has (check all that apply):

- Bed and banks
- OHWM⁵ (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): Algal mats
- Discontinuous OHWM.⁶ Explain: _____.
- 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

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: Water conveyed by the S7 and S8 is generally clear with moderate organic debris; general water quality is good over total length of each tributary; watershed has been developed as a wind farm and retains its use for grazing; downstream waters of Swale Creek and the Klickitat River are not listed on the WA State 303(d) list.

Identify specific pollutants, if known: _____.

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

- Riparian corridor. Characteristics (type, average width): herbaceous cover extending from edge of channel through the relatively undisturbed grassland with scattered willow and pine.
- 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 – 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.

- 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: The SDAM report, where data were collected on 24 March 2021 and during the wet season, include photos taken the same date show both drainages having flows into late March. The ADP data shows precipitation at the time of the SDAM study was drier than normal for the month of sampling with overall normal precipitation for the two months prior. The presence of flowing water in S7 and S8 in late March during a month of below normal precipitation and the presence of macroinvertebrates supports the conclusion these streams have seasonal flows for at least 3 consecutive months during a typical year.

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

- Tributary waters: **S7 1,000; Stream S8 1,000** linear feet **S7-1.5'; S8-1.5'** width (ft).

⁵A 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.

⁶Ibid.

- 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.

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: "Goldendale Energy Storage Hydroelectric Project, Federal Energy Regulatory Commission Project No. 14861", dated June 2020, and "Attachment C: SDAM Data Sheets and Photos", dated 1 June 2021.
- 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: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
- National wetlands inventory map(s). Cite name: <https://www.fws.gov/wetlands/data/mapper.html>.
- State/Local wetland inventory map(s): _____
- FEMA/FIRM maps: _____.
- 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): _____
or Other (Name & Date): Agent Photos, 24 March 2021; Corps photos, Jim Carsner, 22 July 2021.
- Previous determination(s). File no. and date of response letter: _____.
- Applicable/supporting case law: _____.
- Applicable/supporting scientific literature: _____.
- Other information (please specify): _____.

B. ADDITIONAL COMMENTS TO SUPPORT JD: The SDAM report, dated 1 June 2021, incorrectly identifies the upper reach of S7 (S7-Reach 1) as ephemeral but should be intermittent as there are microinvertebrates listed at this sampling point.

Site Description: The roughly 117-acre irregularly shaped review area is situated on the northern portion of the roughly 900-acre project property near John Day Dam, north of the Columbia River (Figure 1). The review area is situated on rolling hills that is bounded on the north, south, east, and west by rangeland used as a wind farm (Figure 2). Two draws, one on the east and one on the west portion of the review area. These draws provide surface drainage corridors through the review area with an east draw and west draw drainage feature being identified as Stream 7 (S7) and Stream 8 (S8), respectively. The upper extent of the channels were determined where the channel erosion began. Water drains northward in these draws through incised channels, across the Review Area, into Swale Creek, located roughly 2.1 miles north of the review area. The water then flows west, roughly 25 miles into the Klickitat River, then south, roughly 15 miles into the Columbia River, a TNW. A constructed cattle watering pond, Pond "2" is located near the southeast boundary of the review area (see Form 1 of 2). Several unimproved gravel and dirt access/farm roads cross the review area.

Vegetation:

The review area is dominated with herbaceous vegetation, including bulbous bluegrass (Poa bulbosa - FACU), cheatgrass (Bromus tectorum - NL-UPL), smallflower woodland-star (Lithophragma parviflorum - NL-UPL), barestem biscuitroot (Lomatium nudicaule - UPL).

common yarrow (Achillea millefolium -FACU), and arrowleaf buckwheat (Eriogonum compositum – NL-UPL) with scattered willow and pine.

Soils:

NSCS Soil Survey identifies five soil series on the property (Figure 3): Rockly very gravelly loam (14B) with 2% to 30% slope; Rockly-Lorena complex (930A) with 2% to 15% slopes; Lorena-Rockly complex (951); Goldendale-Lorena-Rockly complex (990); and Lorena silt loam (994B) with 10% to 15% slopes. All listed soils are considered well-drained and non-hydric with no hydric soil inclusions. NRCS lists the restrictive layer for Lorena soil series to be between 20 inches and 40 inches; Goldendale soil series to be greater than 80 inches; and Rockly soil series to be between 5 inches and 12 inches. NRCS lists the capacity all five soil series to transmit water (Ksat) as moderately high to high (0.57 to 1.98 inches per hour).

Hydrology:

Hydrology for the drainages S7 and S8 is primarily from precipitation and surface sheet flow. The Washington Department of Fish and Wildlife streamnet website do not show these stream within the review area; however, these streams are mapped perennial waters downslope of the review area.

Jurisdictional Determination:

The jurisdictional limit for tributaries are as mapped, extending to the upper extent where a bed and bank is discernable. For S7, evidence of an OHWM included an incised bed and bank, sediment sorting and debris wracking. The substrate consists of small cobbles, gravels, and fines. For S8, evidence of an OHWM included an incised bed and bank, sediment sorting, and debris wracking. Substrate consists of small cobbles, gravels, and fines. The upper extents of drainageways S7 and S8 are at a point where these features were observed. Surface sheetflow, from the adjacent, moderate to steep, slopes and rainfall form the channels within each draw that provide seasonal flows to Swale Creek, an RPW (see Photo Pages). Water from Swale Creek drains to the Klickitat River, a RPW, and into the Columbia River, a TNW. Photos in the SDAM report show water flowing in drainages S7 and S8 during a drier than normal wet period and no flows observed during the 22 July 2021 site visit and the presence of macroinvertebrates confirm the drainages meet the seasonal flow criteria of an RPW and are jurisdictional.