

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 7/20/2021

ORM Number: NWP-2020-301

Associated JDs: N/A

Review Area Location¹: State/Territory: Oregon City: Klamath Falls County/Parish/Borough: Klamath

Center Coordinates of Review Area: Latitude 42.23076204 Longitude -121.7992251

II. FINDINGS

- **A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.
 - The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A
 - ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
 - There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
 - □ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

| § 10 Name | § 10 Size | | § 10 Criteria | Rationale for § 10 Determination |
|-----------|-----------|-----|---------------|----------------------------------|
| N/A. | N/A. | N/A | N/A. | N/A. |

C. Clean Water Act Section 404

| Territorial Seas and Traditional Navigable Waters ((a)(1) waters):3 | | | | | | |
|---|-------------|------|-----------------|------------------------------------|--|--|
| (a)(1) Name | (a)(1) Size | | (a)(1) Criteria | Rationale for (a)(1) Determination | | |
| N/A. | N/A. | N/A. | N/A. | N/A. | | |

| Tributaries ((a | Tributaries ((a)(2) waters): | | | | | |
|-----------------|------------------------------|----------------|--|---|--|--|
| (a)(2) Name | (a)(2) Size | | (a)(2) Criteria | Rationale for (a)(2) Determination | | |
| Link River | 1,760 | linear feet | (a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | The one mile long perennial Link River gains its flows from Upper Agency Lake, which is fed by the Sprague and Williamson Rivers. The Link River flows into Lake Euwana near Klamath Falls, Oregon, continuing along the Klamath River before entering the Pacific Ocean near Requa, Del Norte County, California. The Link River Dam constructed in 1929 diverted flows from the Link River into a system of forebays and a flowline to generate electricity. When not generating power, all flow passed unabated through the system. Currently, flows within the Link | | |

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



| Tributaries ((a)(2) waters): | | | | | |
|------------------------------|-------------|--|-----------------|--|--|
| (a)(2) Name | (a)(2) Size | | (a)(2) Criteria | Rationale for (a)(2) Determination | |
| | | | | River are no longer regulated for the purpose of power generation or irrigation, however, flow management is maintained. | |

| Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters): | | | | | | |
|---|-------------|------|-----------------|------------------------------------|--|--|
| (a)(3) Name | (a)(3) Size | | (a)(3) Criteria | Rationale for (a)(3) Determination | | |
| N/A. | N/A. | N/A. | N/A. | N/A. | | |

| Adjacent wetlands ((a)(4) waters): | | | | | | |
|------------------------------------|-------------|---------|---|--|--|--|
| (a)(4) Name | (a)(4) Size | | (a)(4) Criteria | Rationale for (a)(4) Determination | | |
| Wetland B | 0.021 | acre(s) | (a)(4) Wetland abuts an (a)(1)- (a)(3) water. | Wetland B is palustrine emergent wetland found on the north part of the Review Area on the western side of the wood stave line adjacent to the Ordinary High Water Mark (OHWM) of the Link River. Hydrology is supplemented by flowline leakage, overland flow, direct precipitation, and the high water table abutting the Link River. Wetland B would be partially inundated during a typical year and is an (a)(4) water under the Navigable Waters Protection Rule (NWPR). | | |
| Wetland E | 0.17 | acre(s) | (a)(4) Wetland abuts an (a)(1)- (a)(3) water. | Wetland E is palustrine emergent wetland located in the central portion of the study area, on the western side of the wood stave flowline. Hydrology is generated by flowline leakage, precipitation. Part of the wetland occurs below the OHWM. Wetland E is partially inundated during a typical year and is an (a)(4) water under the NWPR. | | |

D. Excluded Waters or Features

| - Exolution Tratological States | | | | | | |
|---|-----------|---------|------------------------------|--|--|--|
| Excluded waters $((b)(1) - (b)(12))$:4 | | | | | | |
| Exclusion Name | Exclusion | Size | Exclusion ⁵ | Rationale for Exclusion Determination | | |
| Wetland A | 0.27 | acre(s) | (b)(1) Non-adjacent wetland. | Wetland A is a palustrine wetland which has formed on the east side of a wood stave flowline. The 3,053 linear foot flow line was constructed in 1924. The current 1,729 linear foot section of wood stave flowline remains following modifications made in 1942. The flow line currently is disconnected from Link River dam's water intake gates, however, due to leakage from the intake gate's bulkhead, a small amount of water continues to leak from what remains of the wood stave flowline. The wood stave flowline | | |

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1)

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



| Excluded waters (| (b)(1) - (b) |)(12)):4 | Excluded waters ((b)(1) – (b)(12)): ⁴ | | | | | | | |
|-------------------|--------------|----------|--|--|--|--|--|--|--|--|
| Exclusion Name | Exclusion | | Exclusion ⁵ | Rationale for Exclusion Determination | | | | | | |
| | | | | is a constructed feature and while some flows continue along its length, it does not meet the criteria of an (a)(2) water. The Link River, an (a)(2) water, lies to the west of the flowline. The source of hydrology to Wetland A includes direct precipitation and leakage from the flowline. Wetland A is not adjacent to the OHWM of the Link River to the west of the flowline. Wetland A would not be inundated during a typical year by the Link River. Thus, Wetland A is an excluded (b)(1) water under the NWPR. | | | | | | |
| Wetland C | 0.009 | acre(s) | (b)(1) Non- adjacent wetland. | Wetland C is a centrally located palustrine emergent wetland whose hydrology is provided entirely by direct precipitation and leakage from the flowline. Wetland C would not be inundated by the OHWM of the Link River (a)(2) in a typical year, nor would it be connected through inundation to Wetland B or Wetland E. Wetland C is recognized as an excluded (b)(1) water under the NWPR. | | | | | | |
| Wetland D | 0.006 | acre(s) | (b)(1) Non-adjacent wetland. | Wetland D is palustrine emergent wetland southeast of Wetland C located to the west of the flowline. Hydrology is sourced from flowline leakage, overland flow, and direct precipitation. Wetland D would not be inundated by the Link River (a)(2) during a typical year nor would it abut Wetland E during a typical year. Wetland D is recognized as an excluded (b)(1) water under the NWPR. | | | | | | |
| Wetland F | 0.403 | acre(s) | (b)(1) Non-adjacent wetland. | Wetland F is palustrine emergent wetland at the southern end of the Review Area. Wetland F occupies both the east and west side of the study area. Sources of hydrology are limited to flowline leakage and direct precipitation. Wetland F would not be inundated by during a typical year by an (a)(1) - (a)(3) water in a typical year. Wetland F is recognized as an excluded (b)(1) water under the NWPR. | | | | | | |

III. SUPPORTING INFORMATION

- **A.** Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.
 - ☐ Information submitted by, or on behalf of, the applicant/consultant: Wetland Delineation Report, Eastside Flowline Removal, Klamath County, Oregon prepared by WSP and dated May 2020.

This information is sufficient for purposes of this AJD.

Rationale: Data for this report was developed using the Corps of Engineers Wetland Delineation Manual Arid West Regional Supplement, version 2.0 dated September 2008.



| | Data sheets prepared by the Corps: N/A |
|-------------|--|
| \boxtimes | Photographs: Aerial: Google Earth photos dated August 23, 2019, June 2, 2016 and August 28, 2011 |
| | Corps site visit(s) conducted on: N/A |
| | Previous Jurisdictional Determinations (AJDs or PJDs): N/A |
| \boxtimes | Antecedent Precipitation Tool: provide detailed discussion in Section III.B. |
| | USDA NRCS Soil Survey: N/A |
| | USFWS NWI maps: N/A |
| \boxtimes | USGS topographic maps: Klamath Falls, OR 7.5' quadrangle 1:24000 |

Other data sources used to aid in this determination:

| Data Source (select) | Name and/or date and other relevant information |
|----------------------------|---|
| USGS Sources | National Water Information System (NWIS) |
| USDA Sources | N/A. |
| NOAA Sources | N/A. |
| USACE Sources | USACE Corps of Engineers Regulatory e-GIS accessed June 23, 2021 |
| State/Local/Tribal Sources | N/A. |
| Other Sources | "A Field Guide to the Identification oof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States" prepared by Cold Region Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center dated August 2008. |

B. Typical year assessment(s): The Corps utilized the Antecedent Precipitation Tool (APT) to evaluate the study area via a single point method for the period of time data was taken and at three additional timeperiods prior to and following the rupture of the flowline to determine if there were significant differences in OHWM between April through August on a highly regulated river.

The APT analysis determines if the date-specific observations fall within the normal periodic range for the geographic area based on a rolling thirty-year period. A single point method using latitude and longitude coordinates identified in Section (1) above was utilized since the single point method adequately represents the data sources available via the APT to conduct an analysis of climatic conditions within the study area. The APT is available at (https://github.com/jDeters-USACE/Antecedent-Precipitation-Tool).

- 1) The delineation was completed on April 2, 2020. The APT indicated the April 2, 2020 data was collected during the dry season under normal conditions during a period of drought. Aerial imagery on this date was unavailable for the date of the delineation and assessment of the OHWM was made in the field using physical indicators.
- 2) August 23, 2019: Google Earth imagery did not have multiple years of aerial imagery during the wet season of the Review Area. The APT data using the August 23, 2019 date indicated normal conditions were present during the dry season during a period of mild wetness.
- 3) June 2, 2016: Google Earth imagery speaks to the amount of leakage which was occurring at the site of the flow line. APT data for his date shows that drier than normal conditions during the dry season during a period of moderate drought.
- 4) August 28, 2011 Google Earth imagery provides additional information on the extent of the flow line



leakage and relative OHWM. The photo corresponds with dry conditions during a drier than normal conditions, duirng the dry season during a non-drought period.

C. Additional comments to support AJD: The Link River is a one-mile highly manipulated river found on USGS topo maps as early as 1889. Link River Dam was constructed in 1920 and is currently owned by PacifiCorp. Water from Upper Klamath Lake flows over the dam or is diverted into a 602 linear foot forebay before entering 1,324 linear feet (LF) of steel pipe. Another 1,729 LF of wood stave pipe remains of the original 3,053 LF of pipe originating at the forebay and discharging into Lake Euwana, which is an empounment of the Klamath River. Following the collapse of the wood stave pipe between 2016 and 2019, the diversion gates were closed and the steel pipe bulkheaded. The gates and bulhead continue to contribute some flow to the flowline in its ruptured condition. Upper Klamath Lake was designated as a Traditional Navigable Water (TNW) on 11 April 2008. The upstream limit of the TNW is the dam at Link River (43.2339, -121.8020) within the Portland District Corps of Engineers. Therefore, the project is within a TNW through another 39 miles of the Klamath River flowing from Oregon into California and from there, to the Pacific Ocean.

River stage (height) during the period delineation data was collected taken from the US Geological Service's National Water Information Service identified, for the period between 1 February 2020 and 4 June 2020 was in the 900 cfs to 1,100 cfs range, well below the maximum river stage for the Hydrologic Year 2019-2020. For the similar period between 1998 through 2018, the river stage was regulargy well above 1,000 cfs. The high water mark observed on 2 April 2020 was slightly greater than 1,000 cfs. The recorded high water mark in April during the delineation is representative of the average stage.