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
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A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 1, 2022
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: NWP-2022-140; Kylix Vineyards LLC
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Oregon County/parish/borough: Douglas City: Brockway Center coordinates of site (lat/long in degree decimal format): Lat. 43.108112° N, Long. 123.50976° W. Universal Transverse Mercator: Name of nearest waterbody: Ollala/Lookingglass Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Umpqua River Name of watershed or Hydrologic Unit Code (HUC): 171003021206 Lookingglass Creek 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
D.	different JD form. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2022 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew 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:
В. (CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere 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. [R

[Required]

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1	Waters	of the	
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a.	Indica	te 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
	\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
	\boxtimes	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: linear feet: width (ft) and/or 0.662 acres. Wetlands: 5.315 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:** See Section III F for more information.

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

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 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

(i) General Area Conditions: Watershed size: 17,828 acres Drainage area: 0.065 square miles Average annual rainfall: 46.4 inches Average annual snowfall: 0.5 inches

(ii) P

Phy	sical Characteristics:
a)	Relationship with TNW:
	☐ Tributary flows directly into TNW.
	Tributary flows through 1 tributary before entering TNW.
	Project waters are 10-15 river miles from TNW.
	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:

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

Identify flow route to TNW⁵: W14-R is a tributary that flows through a culvert under Olalla Road, then west/southwest to the pond within W3, through the pond, then offsite to Lookingglass Creek. Lookingglass Creek flows north to the Umpqua River (TNW).

Tributary stream order, if known: W14-R is a 1st order tributary. The offsite Lookingglass Creek is a 5th order tributary.

(b)	General Tributary Characteristics (check all that apply): Tributary is: ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.25 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:
upper slopes.	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Highly eroding due to carrying runoff from Presence of run/riffle/pool complexes. Explain: Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 25%
. ,	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Flow is present during rainy season of the year, November through June as calculated by Geological Survey (USGS) StreamStats. Flow was observed during the initial delineation in January of 2022 and again in
	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 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): Discontinuous OHWM. Texplain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:

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. ⁶A 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. ⁷Ibid.

(iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear and drainage area is dominated by forested vegetation. Identify specific pollutants, if known:	
(iv)	Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): Average of 40 feet based on aerial images. ☐ 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: Seasonality of flow supports wildlife over winter/rainy months.
2. Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 5.98 acres Wetland type. Explain: Paulstrine Eemergent wetlands influenced by the surrounding pastureland. Wetland quality. Explain: Wetlands are of low quality as described in the Oregon Rapid Wetland Assessment (ORWAP) report generated on September 27, 2022.
	Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Perennial flow. Explain:
	Surface flow is: Discrete and confined and overland sheetflow. Characteristics:
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
remaining wet end of the Rev	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting: W3, W7, W8, W9, W10, W11B, and W13C are directly abutting Lookingglass Creek. W3 ite to the northwest and abuts Lookingclass Creek just outside of the review area through a severly incised channel. The lands are contigous with an offsite wetland that follows along Oregon Highway 42 and abut Lookingglass Creek on the north iew Area. Surface flows within each of these wetland resources are concentrated in small channels that are visible on LiDAR ever do not have a continous OHWM. Not directly abutting: W1 Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain: W1 flows over small berm during snow melt and large rain events into the
roadside	ditch along the south side of Hwy 42 and continues northwest to Lookingglass Creek.
	(d) Proximity (Relationship) to TNW Project wetlands are 10-15 river miles from TNW. Project waters are 2-5 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 100 - 500-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 are generally located along the lower swales of the pasture property and provide filtering of agriculture runoff and roadway runoff before surface flow would leave the review area and enter Lookingglass Creek. Identify specific pollutants, if known:
	Biological Characteristics. Wetland supports (check all that apply): ☐ Riparian buffer. Characteristics (type, average width): ☐ Vegetation type/percent cover. Explain: Vegetation within wetlands is dominated by Lolium perenne (FAC), Juncus (ACW), Cynosurus echinatus and Agrostis species. ☐ Habitat for: ☐ Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings: .
Other environmentally-sensitive species. Explain findings:
☑ Aquatic/wildlife diversity. Explain findings: Wetlands are providing intermediate quality habitat for amphibians
reptiles, and songbirds/raptors/mammals per the ORWAP report.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 11

Approximately (5.98) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)		Size (in acres)	Directly a	buts? (Y/N)	Size (in acres)
W1	N	0.268	W11B	Y	0.056
W3	Y	2.992	W13C	Y	0.392
W7	Y	0.057			
W8	Y	1.419			
W9	Y	0.125			
W10	Y	0.006			

Summarize overall biological, chemical, and physical functions being performed: These wetlands help to filter contaminants from surface runoff from the adjacent Olalla Road before stormwater would enter Lookingglass Creek. These wetlands also help to capture sediment from the high energy drainages to prevent excess sediment loading within Lookingglass Creek.

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:
- 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:
- 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: W1 is a small wetland swale separated by small berm from and drains north into the roadside ditch of Oregon Highway 42 during seasonal snow melt and large storm events. Water then flows north/northeast along the ditch and drains to Lookingglass Creek. Lookingglass Creek, the offsite tributary, has a direct, downstream connection to the Umpqua River which is a TNW. W1 has a physical and biological connection to Umpqua River via Lookingglass Creek through surface water flows.

ТН	AT 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: □ 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: W11A-R, W13A-R, W13B-R, and W14-R: USGS StreamStats supports flow present during rainy season from November to June, and flow was observed during January 2022 delineation and May 2022 site photos.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: 0.662 acres. Identify type(s) of waters: Riverine Intermittent.
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.
	Provide estimates for jurisdictional waters within 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:
	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: W3, W7, W8, W9, W10, W11B, and W13C have a direct, and confined surface connection with the perennial offsite RPW, Lookingglass Creek. There are small, incised swales within these features that are present in LiDAR and site imagery that drain directly to Lookingglass Creek.
	Provide acreage estimates for jurisdictional wetlands in the review area: 5.047 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: 0.268 acres (W1).
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.
	Provide estimates for jurisdictional wetlands in the review area: 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

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

⁸See Footnote # 3.

 $^{^{9}}$ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	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).
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): .
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: 6.87 acres. The Corps determined wetlands W2, W4, W5, W6A, W6B, W12, W15, W16, W17, W18, W19, and W20 are non-jurisdictional. W2 is an isolated pond with no outlet or surface water connection with Lookingglass Creek. W6A drains under Olalla Road into W6B W4 drains towards Lookingglass Creek but does not directly abut the tributary. W5 and W12 are isolated wetland depressions with no surface drainage along to or along Olalla Road. Soils between W5 and W7 are classified as well drained or moderately well drained and upland vegetation is present between the features. W15 and W16 drain into the roadside ditch along Olalla Road which then flows north/northeast along the roadway and into a pond on the southside of Olalla Road across from W3. There is a culvert under Olalla Road near W16; however, it is installed 1.5-2 feet above the ditch elevation (see photo point 7 in delineation report) within the roadbed and does not carry seasonal flow which is evident by the lack of channelization or wetlands along the northern roadway right-of-way. W17, W18, W19, and W20 are all wetland swales that have formed from the adjacent draining slopes and do not have confined or wetland surface connections to offsite Perron Creek or Lookingglass Creek. These wetland swales sheet flow across existing pastureland in soils that have been classified as moderately to well drained by the U.S. Department of Agriculture's WebSoil Survey records.
	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):

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*.

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Delineation report titled "Kylix Vineyards Oregon"
LLC, Douglas County, OR" prepared by Wetlands and Wildlife LLC dated February 25, 2022.
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:
☑ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
U.S. Geological Survey map(s). Cite scale & quad name: USGS The National Map Viewer: Tenmile 2020; Tenmile 24000, 1990.
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey accessed September 20, 2022.
☐ National wetlands inventory map(s). Cite name: .
State/Local wetland inventory map(s): Oregon Wetlands Geodatabase. FEMA/FIRM maps: Panel 41019C2100F effective date February 17, 2010.
FEMA/FIRM maps: Panel 41019C2100F effective date February 17, 2010.
100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
Photographs: Aerial (Name & Date): Google Earth Pro v7.3.3.7786 (64-bit), 1995, 2000, 2005, 2011, 2019.
or ☑ Other (Name & Date): Submitted by consultant dated May 3, 2022, and April 12, 2022.
Previous determination(s). File no. and date of response letter: .
Applicable/supporting case law:
Applicable/supporting scientific literature:
Other information (please specify): Oregon Department of Geology and Mineral Industries LiDAR accessed September 30, 2022;
USGS StreamStats accessed October 4, 2022.

B. ADDITIONAL COMMENTS TO SUPPORT JD: On November 22, 2022, we coordinated this JD with EPA Region 10 and Corps HQ. On November 28, 2022, the EPA concurred with our findings. Corps HQ responded December 1, 2022 and did not provide any additional comments.