

WASHINGTON STATE
Joint Aquatic Resources Permit
Application (JARPA)

KALAMA LATERAL PROJECT
Cowlitz County, Washington

Submitted by Northwest Pipeline LLC
October 31, 2014

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Joint Aquatic Resources Permit Application

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WASHINGTON STATE

Joint Aquatic Resources Permit Application (JARPA) Form^{1,2}

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.



US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received: _____

Agency reference #: _____

Tax Parcel #(s): _____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith’s Dock or Seabrook Lane Development) [help]
Kalama Lateral Project

Part 2–Applicant

The person and/or organization responsible for the project. [\[help\]](#)

2a. Name (Last, First, Middle)			
Komatar, Lenore C.			
2b. Organization (If applicable)			
Northwest Pipeline LLC			
2c. Mailing Address (Street or PO Box)			
295 Chipeta Way			
2d. City, State, Zip			
Salt Lake City, Utah 84108			
2e. Phone (1)	2f. Phone (2)	2g. Fax	2h. E-mail
(801) 584-6259	()	(801) 584-6518	Lori.C.Komatar@Williams.com

¹Additional forms may be required for the following permits:

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at <http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx>.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

²To access an online JARPA form with [\[help\]](#) screens, go to http://www.epermitting.wa.gov/site/alias_resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor’s Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@ora.wa.gov.

Part 3—Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [\[help\]](#)

3a. Name (Last, First, Middle)			
Thorne, Kris			
3b. Organization (If applicable)			
Northwest Pipeline LLC			
3c. Mailing Address (Street or PO Box)			
295 Chipeta Way			
3d. City, State, Zip			
Salt Lake City, UT 84108			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
(801) 584-6474	()	(801) 584-6518	Kris.Thorne@Williams.com

Part 4—Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [\[help\]](#)

- Same as applicant. (Skip to Part 5.)
- Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)
- There are multiple upland property owners. Complete the section below and fill out [JARPA Attachment A](#) for each additional property owner.
- Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete [JARPA Attachment E](#) to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
Northwest Pipeline LLC (Northwest) is required to obtain an easement to construct and operate the pipeline. Acquisition of the easement will result in obtaining landowner permission. See Attachment A for the list of landowners.			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4d. City, State, Zip			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail

()	()	()	
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Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [\[help\]](#)

- There are multiple project locations (e.g. linear projects). Complete the section below and use [JARPA Attachment B](#) for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]			
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Publicly owned (state, county, city, special districts like schools, ports, etc.) <input type="checkbox"/> Tribal <input type="checkbox"/> Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)			
5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]			
N/A- See 5p			
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Kalama, WA 98625			
5d. County [help]			
Cowlitz County			
5e. Provide the section, township, and range for the project location. [help]			
¼ Section	Section	Township	Range
SW ¼ of Section 28, SE ¼ of Section 29, NE and NW ¼ of Sections 31, 32 and 33; NE and SE ¼ of Section 36	28, 29, 31, 32, 33; 36	7 North; 7 North	1 West; 2 West
5f. Provide the latitude and longitude of the project location. [help]			
<ul style="list-style-type: none"> Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83) 			
Start: 46.053155 N lat / -122.812895 W long. End: 46.047724 N lat / -122.866394 W long.			
5g. List the tax parcel number(s) for the project location. [help]			
<ul style="list-style-type: none"> The local county assessor's office can provide this information. 			
The following tax parcels contain wetlands and/or waterbodies that will be crossed by the Kalama Lateral Project:			
WD2904023	6081807		
WD2904021	60838		
WD3202001	6330103		
60815	63303		
608000304	63302		
6080003			
See Alignment Sheets showing property ownership and wetland and waterbody figures behind the Figures Tab.			
5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]			

Name	Mailing Address	Tax Parcel # (if known)
See Attachment C-1 and Attachment C-2		

5i. List all wetlands on or adjacent to the project location. [\[help\]](#)

Table 1 in Appendix A is a complete list of wetlands that will be crossed by the Project. The table provides the crossing length in each wetland, and the area of temporary impact from the construction right-of-way (ROW) and temporary extra work areas (TEWAs). No excavation is required at wetlands W-2A1, W-2A4 or W-2A8. The volume of excavation necessary at W-2A2 and W-2A5 is listed in Appendix A. Less than 0.01 acre of permanent impacts due to operation of the Project will occur.

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [\[help\]](#)

Table 2 in Appendix A is a complete list of waterbodies that will be crossed by the Project. The table provides a stream identifier, crossing length, milepost (MP) at crossing, and the flow regime. The Washington Department of Natural Resources stream type is also provided. No excavation is required at waterbodies S-2A6 and S-2A7 as these features will be crossed using the HDD method. The volume of excavation at each of the five remaining stream crossings is 44.8 cubic yards, for a total volume of 224 cubic yards. A small portion of the Project is adjacent to the Columbia River and associated wetlands, however no impacts will occur to the Columbia or the associated wetlands.

5k. Is any part of the project area within a 100-year floodplain? [\[help\]](#)

Yes No Don't know

The pipeline will pass through approximately 0.5 mile of the Columbia River 100-year floodplain, Zone A, between MPs 2.4 to 2.9 (See Figures Tab Figure 3). One aboveground facility at MP 3.07 would occur inside the proposed Methanol Plant property at the Port of Kalama. This area has already been filled and is not within the 100-year floodplain.

5l. Briefly describe the vegetation and habitat conditions on the property. [\[help\]](#)

The property crossed by the Project is primarily forest land (2.0 miles of Project length). The Project will also cross developed (0.57 mile), agricultural (0.39 mile), and residential (0.12 mile) lands.

The habitat types associated with these vegetation categories include: Herbaceous Wetlands; Urban and Mixed Environs; Westside Oak and Dry Douglas-fir Forest and Woodlands; Westside Lowlands Conifer-Hardwood Forest and Westside Riparian-Wetlands.

5m. Describe how the property is currently used. [\[help\]](#)

Land ownership on the property crossed by the Project is almost entirely private, other than the Port of Kalama properties. The Project route begins near MP 1254.14 of Northwest's existing Ignacio to Sumas mainline system.

The majority of the Project alignment consists of large residential lots or private timberlands, accessed by existing private, state and county roads.

From MPs 1.4 to 1.8, the Project crosses the permitted mining footprint of the Kalama Quarry (but the actual current mine disturbance footprint is approximately 440 feet south of MP 1.7).

Between MPs 2.4 and 2.8, the Project crosses Port of Kalama property currently being leased for farming.
Between MPs 2.8 and 3.0, the Project crosses major transportation corridors (Interstate 5 [I-5] and BNSF Railroad).
Between MPs 3.0 and 3.1 the Project crosses Port of Kalama Property currently used for industrial uses.

5n. Describe how the adjacent properties are currently used. [\[help\]](#)

Adjacent land use is generally the same as the Project area with the addition of proposed workspace between MPs 1.1 and 1.2 near the Mt. Pleasant Cemetery.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [\[help\]](#)

The Project will tie into Northwest's existing Ignacio/Sumas 30-inch mainline pipeline including a new tap and valve assembly in Section 33, Township 7 North, Range 1 West. At the point where the proposed Project will connect with it, Northwest's existing pipeline has a minimum depth of cover of 30 inches. One additional existing products pipeline facility, the Olympic Pipeline, will be crossed near MP 2.1 of the Project.

Above-ground facilities crossed by the pipeline consist of existing roads, Bonneville Power Administration (BPA) power line (MP 2.4) and the BNSF railroad. In addition to the roads mentioned above, the Project will cross the following asphalt roads which provide access to local residents: Old Pacific Highway 99 between MP 2.3 and 2.4; Raven Ridge Road from MP 1.2 to 1.3; Raven Ridge Road East from MP 1.1 to 1.2. The following roads that provide access to Northwest Innovation Works' (NWIW) proposed Methanol Plant will be crossed: Tradewinds Road between MP 2.9 and 3.0 and Eastwind Road between MP 3.0 and 3.1. Additionally, one unnamed, unpaved timber road will be crossed by the pipeline between MP 0.8 and 0.9.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [\[help\]](#)

The Project can be accessed from I-5 at Kalama River Road (Exit 32). From there, the Project can be accessed at MP 0.0 by traveling east on Kalama River Road for approximately 2.5 miles. Turn left and continue northeast uphill on an unnamed gravel timber road for approximately 1.2 miles. From I-5 Exit 32, the Project can be accessed at MP 3.1 by traveling west on Kalama River Road for approximately 0.3 mile to Tradewinds Road. Travel north on Tradewinds Road for approximately 0.5 miles where NWIW's proposed Methanol Plant will be located.

Part 6–Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [\[help\]](#)

Northwest Pipeline LLC, a wholly owned subsidiary of Williams Partners L.P., proposes to construct and operate approximately 3.1 miles of 24-inch diameter natural gas pipeline and related facilities extending from Northwest's mainline to NWIW's proposed methanol production facility located within the north industrial area of the Port of Kalama, in Cowlitz County, Washington (Methanol Plant). to provide 320,000 Dekatherms per day (Dth/d) of natural gas transportation service to NWIW's proposed Methanol Plant.

The Project will begin at the interconnection of Northwest's existing Ignacio/Sumas 30-inch mainline at approximate MP 1254.14 in Section 33, T. 7 N., R. 1W. in Cowlitz County, Washington and will be located within a new permanent 50-foot-wide pipeline right-of-way (ROW), and a temporary 100-foot construction ROW that will require vegetation clearing. The pipeline will be installed using horizontal directional drilling (HDD) and conventional trenching methods.

The Project will require new appurtenances including a new tap and valve assembly to tie the proposed 24-inch diameter lateral pipeline into the existing 30-inch mainline pipeline. Additionally, pigging facilities will be installed at the beginning of the Project (MP 0.0) and at the new delivery meter station (NWIW Meter Station) (MP 3.07) to be constructed within the boundary of the Methanol Plant. The NWIW Meter Station will include standard appurtenances, piping, and buildings within an approximate 150 feet by 200 feet fenced area.

A general location map of the Project area is included as Figure 1 (see Figures tab) and a detailed Project description is provided in Appendix B. Appendix A provides details on wetlands and waterbodies crossed by the Kalama Lateral Project.

6b. Describe the purpose of the project and why you want or need to perform it. [\[help\]](#)

Northwest is proposing to construct and operate a 3.1-mile, 24-inch-diameter natural gas pipeline to provide 320,000 Dth/d of natural gas transportation service to NWIW's proposed Methanol Plant.

The Methanol Plant will produce methanol from natural gas. Methanol is a light and colorless liquid that is biodegradable and non-carcinogenic. The methanol produced at the Methanol Plant will be shipped to Asia, where it will be used to produce olefins, which are used in the manufacturing of common household items such as: plastics, paints, nylon carpet, particle board, cell phone cases, pharmaceuticals, etc.

Access to the vast growth in natural gas reserves in North America creates an opportunity to considerably reduce the typical environmental footprint of a methanol to olefins process. Replacing olefins derived from oil and coal with olefins derived from methane, the primary constituent of natural gas, will reduce the associated carbon emissions.

Strategically locating methanol plants in the Pacific Northwest also provides NWIW with access to a globally competitive delivered cost of natural gas and shorter shipping distances to Asian markets.

Expanding the methanol industry in the Pacific Northwest will provide significant economic growth to region. Once fully operational, the Methanol Plant will employ 200 full-time employees.

Northwest considered system alternatives, route alternatives and a no-action alternative to the Project.

System alternatives are alternatives that would make use of other existing, modified, or proposed pipeline systems to meet the objectives of the Project. Facilities operated by Northwest Natural or by Cascade Natural Gas Corporation could provide system alternatives to the Project. However, it is Northwest's understanding that Cascade has a franchise agreement in place in Cowlitz County that would preclude Northwest Natural from intruding into Cascade's service territory. In addition, Northwest Natural's facilities are located across the Columbia River in Oregon. Due to the existing Cascade franchise agreement and the substantial new pipeline and appurtenant facilities that would need to be constructed to meet the Project delivery volumes, the use of Northwest Natural's facilities as an alternative to the proposed action is not practicable or preferable.

Northwest identified alternate route possibilities through internal processes as well as in response to stakeholder and landowner suggestions. Northwest assessed thirteen route alternatives. Each identified alternative was mapped and subjected to a desktop analysis. The desktop review included a preliminary assessment by Northwest's ROW group to identify the landowners along the route; engineering group to evaluate the constructability, costs, slope and soil stability and operation and safety of the route; and environmental group to

evaluate factors related to environmental resources or impacts including length, collocation with other corridors, wetlands, waterbodies, the number of affected landowners and proximity to homes and businesses.

6c. Indicate the project category. (Check all that apply) [\[help\]](#)

- Commercial Residential Institutional Transportation Recreational
 Maintenance Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [\[help\]](#)

- | | | | |
|---|---|---|--|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Culvert | <input type="checkbox"/> Float | <input type="checkbox"/> Retaining Wall (upland) |
| <input type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Dam / Weir | <input type="checkbox"/> Floating Home | <input type="checkbox"/> Road |
| <input type="checkbox"/> Boat House | <input type="checkbox"/> Dike / Levee / Jetty | <input type="checkbox"/> Geotechnical Survey | <input type="checkbox"/> Scientific Measurement Device |
| <input type="checkbox"/> Boat Launch | <input checked="" type="checkbox"/> Ditch | <input checked="" type="checkbox"/> Land Clearing | <input type="checkbox"/> Stairs |
| <input type="checkbox"/> Boat Lift | <input type="checkbox"/> Dock / Pier | <input type="checkbox"/> Marina / Moorage | <input type="checkbox"/> Stormwater facility |
| <input type="checkbox"/> Bridge | <input type="checkbox"/> Dredging | <input type="checkbox"/> Mining | <input type="checkbox"/> Swimming Pool |
| <input type="checkbox"/> Bulkhead | <input type="checkbox"/> Fence | <input type="checkbox"/> Outfall Structure | <input type="checkbox"/> Utility Line |
| <input type="checkbox"/> Buoy | <input type="checkbox"/> Ferry Terminal | <input type="checkbox"/> Piling/Dolphin | |
| <input type="checkbox"/> Channel Modification | <input type="checkbox"/> Fishway | <input type="checkbox"/> Raft | |

Other:

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [\[help\]](#)

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

The Project will be designed, constructed, operated, and maintained in accordance with U.S. Department of Transportation regulations in 49 CFR Part 192, "*Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*," Federal Energy Regulatory Commission (FERC) regulations in 18 CFR Part 380.15, "*Guidelines to be Followed by Natural Gas Pipeline Companies in the Planning, Clearing, and Maintenance of Rights-of-Way and the Construction of Aboveground Facilities*," and other applicable federal, state, and local regulations. In addition to the federal requirements listed above, Northwest will construct and reclaim the pipeline and aboveground facilities in accordance with FERC's Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures) and FERC's Upland Erosion Control, Revegetation, and Maintenance Plan (FERC Upland Plan). The FERC Procedures and FERC Upland Plan are included in Appendix C. Where exceptions to the FERC Procedures and FERC Upland Plan have been identified, modifications have been requested.

Northwest plans to begin construction of the pipeline and related facilities in early summer 2017 to take advantage of the dry summer construction season and place the new facilities in service by November 2017. The proposed schedule will minimize potential landowner and environmental effects and facilitate construction progress.

To construct the proposed 24-inch pipeline and associated facilities, the construction sequence is as follows:

- Pre-construction biological surveys for rare plants and nesting birds;
- Clearing and grading;
- Installation of erosion control measures;
- Topsoil segregation;
- HDD drilling and trenching for pipeline installation;
- Hydrostatic testing; and
- Revegetation and restoration.

Each part of the construction sequence is detailed in the Erosion Control and Revegetation Plan (ECRP) (see Appendix C). A detailed Project Description is provided in Appendix B which includes typical construction drawings (1B1 through 1B4), showing the general type of equipment that will be used.

The pipeline will pass through approximately 0.5 mile of the Columbia River 100-year floodplain between MPs 2.4 to 2.9 (see Figure 3). At the terminus of the pipeline at MP 3.07, Northwest will construct the NWIW Meter Station. The NWIW Meter Station facility will include approximately 0.7 acre of permanent land disturbance within an approximate 150-foot by 200-foot fenced facility, to be located within the proposed Methanol Plant site. The meter station will be located outside the 100-year floodplain.

The Project will cross five wetland systems for a total of approximately 2,372 feet; however, 1,252 feet will be crossed using HDD methods. Of the seven waterbodies crossed, five are intermittent and expected to be dry at the time of construction. If water is present at the time of construction, the five intermittent waterbodies will be crossed using a dry open-cut ditch method – either fluming (see Appendix D) or dam and pump (see Appendix E), during the Washington Department of Fish and Wildlife (WDFW) recommended in-water work window. The two perennial waterbodies will be crossed using HDD methods and are expected to occur during the recommended in-water work window for Columbia River tributaries. Of the seven streams, four intermittent streams drain to the Kalama River and three streams (one intermittent and two perennial) drain to the Columbia River (see Appendix A Table 2). The recommended in-water work window for Kalama River tributaries is August 1-August 15 and the recommended in-water work window for Columbia River tributaries within the Project area is August 1-March 31.

Crossing methods for both wetlands and waterbodies are detailed in sections 7a and 8a, respectively, which follow in this application form.

The construction procedures that will be used to cross the waterbodies are described in Appendices B, C, D, E and F. These construction procedures incorporate the FERC Procedures and the FERC Upland Plan (see

Appendix C). The intent of the FERC Upland Plan and the FERC Procedures is to minimize the extent and duration of project-related disturbance to wetlands and waterbodies.

Appendix C provides Northwest's ECRP that will be utilized to control surface runoff and minimize erosion and potential sedimentation effects. The ECRP incorporates the procedures outlined in the FERC Upland Plan as well as the recommendations of the Natural Resources Conservation Service to enhance revegetation success. The ECRP will serve as a template for the Storm Water Pollution Prevention Plan that Northwest will submit to the Washington State Department of Ecology (DOE) for stormwater control requirements under Section 402 of the Clean Water Act and Washington's Water Pollution Control Act.

To minimize the extent of Project-related disturbance, Northwest will verify and clearly mark (with flagging or comparable) the construction limits and boundaries of all sensitive areas (including waterbodies and wetlands) prior to clearing for construction. Marked boundaries will be maintained during construction. Northwest will ensure that all construction activities are confined to the certificated work limits authorized for construction.

Temporary Extra Work Areas (TEWA) have been located a minimum of 50 feet from the edge of wetlands and waterbodies, where possible, to minimize impacts to wetland buffers and riparian zones as required by the FERC Procedures. There are a few situations where Northwest has requested modifications from FERC's Procedures (see Appendix B Table B-5) based on topographic or other site-specific construction feasibility issues which prevent locating a TEWA 50 feet from the wetland or waterbody boundary.

During construction, Northwest will have an Environmental Inspector (EI) present during all phases of construction within wetlands and waterbodies to ensure compliance with the FERC Upland Plan and the FERC Procedures as well as other Project permit stipulations/requirements. Section II A. and B. of the FERC Upland Plan (see Appendix C) outlines the responsibility of the EI.

To minimize potential for spills and any impact from such spills, a Spill Plan has been developed and will be implemented during construction (see Appendix F). Fueling and storage of hazardous materials will be conducted in accordance with Northwest's Spill Plan and the FERC Procedures.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [\[help\]](#)

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start date: early summer 2017 End date: November 2017 See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

\$22 million dollars

6h. Will any portion of the project receive federal funding? [\[help\]](#)

- If **yes**, list each agency providing funds.

Yes No Don't know

Part 7–Wetlands: Impacts and Mitigation

Check here if there are wetlands or wetland buffers on or adjacent to the project area.

(If there are none, skip to Part 8.) [\[help\]](#)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [\[help\]](#)

Not applicable

Table 1 in Appendix A lists the wetlands crossed by the Project. The Project was routed to minimize impacts on wetlands to the maximum extent practicable. In addition, some wetlands will be crossed using the HDD method to further avoid and minimize wetland impacts. The proposed construction ROW, which is typically 100 feet wide in uplands, is necked down to 75 feet in most wetlands to further minimize impacts.

The pipeline will cross three wetlands, the largest of which (Wetland W-2A5) is an emergent wetland dominated by herbaceous vegetation that is located on previously-disturbed land owned by the Port of Kalama (Port). The Port currently leases this area for agricultural production. As such it provides limited wetland habitat or function. The other two smaller wetlands are scrub-shrub consisting of young alder trees (W-2A2), and forested (W-2A8) bounded by I-5 on the east and the BNSF Railway ROW on the west. The Project crosses a large portion of wetland W-2A5 and all of wetland W-2A8 using the HDD method. This completely avoids impacts to Wetland W-2A8 and limits impacts to Wetland W-2A5 to an area of the construction ROW about 1,095 feet long, which is planned for an open cut to excavate the pipeline trench. Additional area within wetland W-2A2 will be used for workspace to support the HDD crossing. Wetland W-2A2, located adjacent to Stream S-2A3, is unavoidable and will be crossed by the construction ROW for about 25 feet. A fourth, isolated emergent wetland (W-2A1) is located within the Project area, and would be temporarily impacted by a TEWA.

The primary impact to wetlands from pipeline construction and operation is temporary. Construction will temporarily impact about 4.03 acres of wetland. There are no permanent impacts on herbaceous or forested wetlands and very minor impacts (about 0.006 acre) to a scrub-shrub wetland.

Herbaceous vegetation on the eastern edge of wetland W-2A5 will be cut to ground level within the construction ROW. Vegetation will be cut just above ground level, leaving existing root systems in place to allow resprouting/regeneration. Based on aerial photos, it is believed no woody vegetation will be removed. As described above, this wetland consists of a disturbed agricultural field. Herbaceous vegetation will regenerate quickly following construction and the wetland hydrology will not be altered. To ensure habitat restoration, appropriate revegetation measures will be applied based on the wetland habitat type.

Sediment barriers will be installed immediately after initial disturbance (clearing) of the wetland or adjacent upland, or where feasible prior to grading in areas where clearing activities will not disturb the BMPs and require their immediate reinstallation. Sediment barriers will be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Where necessary, sediment barriers will be installed across the entire construction ROW immediately upslope of the wetland boundary to prevent sediment flow into the wetland. Where wetlands are adjacent to the construction ROW, sediment barriers will be installed along the edge of the construction ROW, as necessary, to prevent sediment flow into the wetland. These sediment barriers will be removed after restoration is complete and revegetation has stabilized the disturbed areas. Hay bales, if used as sediment barriers, will be certified weed free.

Other measures that Northwest is proposing to minimize wetland impacts include but are not limited to:

- Limiting the clearing of vegetation between TEWAs and the edge of the wetland to the certificated construction ROW.
- Cutting vegetation just above ground level, leaving existing root systems in place, to facilitate reestablishment of vegetation from sprouting;
- Removing cleared vegetation from the wetland for disposal.
- Limiting tree stump removal and grading activities to directly over the trenchline in wetlands, and not grading or removing stumps or root systems from the rest of the construction ROW unless the Chief Inspector and Environmental Inspector determine that safety-related construction constraints require these activities from under the working side of the construction ROW.
- Segregating the top 12-inches of topsoil from the area disturbed by trenching, except in areas

where standing water is present or soils are saturated.

- Restoring segregated topsoil to its original location immediately after backfilling is complete.
- Using low-ground-weight construction equipment, or operating normal equipment in wetlands on prefabricated equipment mats or similar measures where standing water or saturated soils are present, or if construction equipment causes deep ruts or mixing of the topsoil and subsoil.

7b. Will the project impact wetlands? [\[help\]](#)

Yes No Don't know

7c. Will the project impact wetland buffers? [\[help\]](#)

Yes No Don't know

7d. Has a wetland delineation report been prepared? [\[help\]](#)

- **If Yes**, submit the report, including data sheets, with the JARPA package.

Yes No **See Appendix G**

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [\[help\]](#)

- **If Yes**, submit the wetland rating forms and figures with the JARPA package.

Yes No Don't know **See Appendix G**

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [\[help\]](#)

- **If Yes**, submit the plan with the JARPA package and answer 7g.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

Yes No Not applicable

A Wetland Waterbody and Critical Area Buffer Mitigation Plan is provided in Appendix H.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [\[help\]](#)

The Project will not permanently fill wetlands nor cause significant permanent conversion of wetland vegetation. Project wetland impacts will be mitigated according to federal, state and local regulations following a standard mitigation sequence. The sequence is as follows: (1) avoidance; (2) minimization; (3) mitigation of impacts; and (4) compensation.

Northwest proposes to provide compensatory mitigation by purchasing credits from the Columbia River Wetland Mitigation Bank. Northwest will purchase 0.01 credit from the Columbia River Wetland Mitigation Bank to compensate for the Project's permanent scrub-shrub wetland impacts. Northwest will also purchase an additional 0.52 credit from the Columbia River Wetland Mitigation Bank for temporary impacts to wetland and riparian buffers.

These mitigation credits were calculated using ratios provided by the Columbia River Wetland Mitigation Bank and based on Northwest's past project experience (see Appendix H).

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [\[help\]](#)

Activity (fill, drain, excavate, flood, etc.)	Wetland Name ¹	Wetland type and rating category ²	Impact area (sq. ft. or Acres)	Duration of impact ³	Proposed mitigation type ⁴	Wetland mitigation area (sq. ft. or acres)
See Appendix A Table 1 and Appendix H Table 1-1.						

¹ If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

² Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

³ Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

⁴ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [\[help\]](#)

The trench through all wetlands crossed by the pipeline will be backfilled with native material removed from the trench. No fill will be imported.

The estimated fill volume calculated for all wetlands crossed by the pipeline in Cowlitz County is 1,568 cubic yards. This is based on a trench depth of 6 feet and width of 3.3 feet with 2:1 side slopes and a total open-cut crossing length of 1,120 feet through the wetlands in Cowlitz County. An additional 694.4 cubic yards of excavation and fill will be required for the HDD entry point, bringing the total volume of wetland fill required for the Project to 2,262.4 cubic yards.

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [\[help\]](#)

Approximately 2,262.4 cubic yards of trench excavation will be required for installation of the pipeline through wetlands. A backhoe will be used to excavate and backfill the trench. Excavated native wetland material removed from the pipeline trench will be reused for backfill and to restore original contours after the pipe is installed and will not be disposed of.

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, “waterbodies” refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [\[help\]](#)

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment.

[\[help\]](#)

Not applicable

Table 2 in Appendix A lists the seven waterbodies crossed by the Project. The Project has been routed to avoid waterbodies to the maximum extent practicable. In addition, the pipeline will be installed at two waterbodies using the HDD method to avoid direct impacts on perennial waterbodies. Potential impacts on waterbodies include: alteration of the streambed profile, increased turbidity, sedimentation, streambed and stream bank erosion, release of chemical and nutrient pollutants from in-stream sediments and the introduction of chemical contaminants such as fuels and lubricating oils. HDD crossing methods also have the potential for inadvertent returns of drilling fluid to the land surface or into stream channels.

Northwest has developed detailed dry-open cut waterbody crossing techniques including fluming (see Appendix D) and dam and pump procedures (see Appendix E) to cross waterbodies when water is present in the streambeds at the time of construction. The dry open-cut crossing techniques eliminate almost all of the downstream turbidity and sedimentation caused by in-stream construction. If water is not present in the streambed at the time of construction, Northwest will complete the crossing using standard upland construction methods. If water is present at the time of construction, Northwest will cross the four intermittent tributary streams to the Kalama River during the WDFW-recommended in-water construction window of August 1 to August 15. If water is present at the time of construction, Northwest will cross the one intermittent tributary stream to the Columbia River during the WDFW-recommended in-water construction window of August 1 to March 31. Northwest would also utilize the Best Management Practices outlined in the FERC Upland Plan and FERC Procedures when crossing wetlands and waterbodies (see Appendix C). The intent of the FERC Procedures is to minimize the extent and duration of project-related disturbance to waterbodies.

Northwest will cross the two perennial waterbodies (S-2A6 and S-2A7) using HDD crossing methods. Risk of inadvertent returns of drilling fluid to these waterbodies is highest near the HDD drill entry and exit locations when the drill bit is working nearest the surface. The HDD entry and exit points have been located as far away from the perennial streams as possible and the drill path will be separated from the bottom of the channel by sufficiently dense sediments to limit the potential for inadvertent surface returns into either waterway. The Project has completed a Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations for the unlikely occurrence of an inadvertent return (see Appendix I).

Northwest will install temporary construction bridges to cross waterbodies, where necessary. Clearing equipment may be allowed one pass to cross waterbodies before installation of equipment bridges. All other construction equipment will only cross waterbodies using equipment bridges. Bridges will be designed and maintained according to Section V.B.5.B of the FERC Procedures to prevent soil from entering the waterbody. Soil will not be used to stabilize equipment bridges and each bridge will span the entire Ordinary High Water Mark of the waterbody so it can withstand and pass the highest flow expected to occur while the bridge is in place.

Sediment barriers will be installed immediately after initial disturbance of the waterbody or adjacent upland areas. Sediment barriers will be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or until restoration of adjacent upland areas is complete. If hay bales are used, they will be certified weed-free.

All waterbodies will be backfilled with native material removed from the trench consistent with Section V.C.1. of the FERC Procedures. Northwest will return stream bottoms and banks to preconstruction contours. Banks will be stabilized and temporary sediment barriers will be installed before returning the flow across the construction work area by removing the flumes and other temporary structures used to isolate the stream flow from the work area during installation of the pipeline.

Hazardous materials, chemicals, fuels, and lubricating oils will be stored in clearly marked areas at least 100 feet from waterbodies and wetlands in accordance with the FERC’s Procedures. Concrete coating, refueling and equipment maintenance activities will be conducted according to the FERC Procedures. Concrete trucks

will not be washed on the ROW. All hazardous materials will be handled in accordance with the Spill Plan (see Appendix F).

8b. Will your project impact a waterbody or the area around a waterbody? [\[help\]](#)

Yes No

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [\[help\]](#)

- If **Yes**, submit the plan with the JARPA package and answer 8d.
- If **No**, or **Not applicable**, explain below why a mitigation plan should not be required.

Yes No Not applicable

A Wetland Waterbody and Critical Area Buffer Mitigation Plan is provided in Appendix H.

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [\[help\]](#)

See response at 7g.

8e. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name ¹	Impact location ²	Duration of impact ³	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
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See Appendix A, Table 2

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¹ If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.

² Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

³ Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [\[help\]](#)

The trench through all waterbodies crossed by the pipeline will be backfilled with native material removed from the trench. No fill will be imported.

The estimated fill volume calculated for all waterbodies crossed by the pipeline via dry-open cut in Cowlitz County is 224 cubic yards. This is based on a trench depth of 8 feet and width of 3.3 feet with 2:1 side slopes, and a total open-cut crossing length of 40 feet through the waterbodies.

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

Approximately 224 cubic yards of trench excavation will be required for installation of the pipeline through waterbodies. A backhoe will be used to excavate and backfill the trench. Excavated native material removed from the pipeline trench will be reused for backfill and to restore original contours after the pipe is installed and will not be disposed of.

Part 9—Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [help]			
Agency Name	Contact Name	Phone	Most Recent Date of Contact
US Fish and Wildlife Service	Lindsay Wright	(360) 259-1151	September 17, 2014
Cowlitz County	Ron Melvin	(360) 577-3052, ext 6661	September 17, 2014
Washington State Department of Ecology	Kerry Carroll	(360) 407-7503	September 17, 2014
Washington Department of Fish and Wildlife	Steve West Brock Applegate	(360) 906-6720 (360) 466-4345, ext 244	September 17, 2014
National Marine Fisheries Service	Jeffery Fisher	(360) 534-9324	September 18, 2014
US Army Corps of Engineers	Olivia Romano	(206) 764-6960	August 15, 2014
9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [help] <ul style="list-style-type: none"> • If Yes, list the parameter(s) below. • If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: http://www.ecy.wa.gov/programs/wq/303d/. 			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help] <ul style="list-style-type: none"> • Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC. 			
17080003 – Lower Columbia-Clatskanie			
9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help] <ul style="list-style-type: none"> • Go to http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm to find the WRIA #. 			
WRIA 27 - Lewis			
9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help] <ul style="list-style-type: none"> • Go to http://www.ecy.wa.gov/programs/wq/swqs/criteria.html for the standards. 			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable			
9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help] <ul style="list-style-type: none"> • If you don't know, contact the local planning department. • For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html. 			
<input type="checkbox"/> Rural <input type="checkbox"/> Urban <input type="checkbox"/> Natural <input type="checkbox"/> Aquatic <input type="checkbox"/> Conservancy <input type="checkbox"/> Other			

9g. What is the Washington Department of Natural Resources Water Type? [\[help\]](#)

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

Shoreline Fish Non-Fish Perennial Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [\[help\]](#)

- **If No**, provide the name of the manual your project is designed to meet.

Yes No

The Project has been designed to meet the requirements of the 2012 Stormwater Management Manual for Western Washington. Northwest is aware this manual is under revision. When the new manual becomes effective in January 2015 Northwest will verify that project design elements still meet the new manual requirements and update any elements that do not meet the requirements of the revised manual.

9i. Does the project site have known contaminated sediment? [\[help\]](#)

- **If Yes**, please describe below.

Yes No

9j. If you know what the property was used for in the past, describe below. [\[help\]](#)

Properties in the Project vicinity consist of large residential lots or private timberlands and properties belonging to the Port of Kalama. The Port of Kalama has been in operation since 1920. The majority of the homes near the Project corridor were built in the 1990's.

The City of Kalama, located near the mouth of the river, is the only urban area in the subbasin, and residential development has increased in recent years. In the Kalama River subbasin most private timberland was logged in the 1970s and early 1980s, including riparian areas.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [\[help\]](#)

- **If Yes**, attach it to your JARPA package.

Yes No

Northwest has not included a copy of the cultural resource survey report with this application because the survey report contains sensitive information not suitable for public disclosure.

The SHPO concurred with Northwest's assessment of No Historic Properties Affected for 135 of the 173 acres of the Project on September 25, 2012, and requested a survey report for the remaining acres when available. Northwest submitted a revised report on November 1, 2012, and on November 15, 2012 further information was presented to the Washington Department of Archaeology and Historic Preservation (see Appendix J).

Northwest initiated coordination with the Confederated Tribes of the Chehalis and the Cowlitz Indian Tribe on October 1, 2014.

9I. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [\[help\]](#)

The U. S. Fish and Wildlife Service (FWS) *Information, Planning, and Conservation System* (IPaC) indicates that four federally listed and one proposed threatened terrestrial wildlife species may potentially occur in Cowlitz County, Washington. They include:

- Columbian white-tailed deer (*Odocoileus virginianus leucurus*)- LT;
- marbled murrelet (*Brachyramphus marmoratus*)- LT;
- northern spotted owl (*Strix occidentalis caurina*)-LT;
- streaked horned lark (*Eremophila alpestris strigata*)- LT; and
- yellow-billed cuckoo (*Coccyzus americanus*)- PT.

In addition, critical habitat for the marbled murrelet and northern spotted owl has been designated in Cowlitz County. Of the species listed above, only the streaked horned lark has been documented within the Project vicinity. Although Columbian white-tailed deer occur within Cowlitz County, the Project is not located within the range of the species. They have a highly limited distribution within Washington State, and suitable habitat for the species does not occur within the Project area. The nearest documented population of Columbia white-tailed deer is on Cottonwood Island in the Columbia River.

Suitable nesting and foraging habitat for the marbled murrelet is not present in the Project area. The Project is located more than 50 miles from the marine environment for murrelet foraging. Designated Critical Habitat (DCH) for the marbled murrelet is not present within the Project area; it is located more than 20 miles northwest of the Project.

The Project area does not provide nesting and roosting, foraging or dispersal habitat for the northern spotted owl. No mature or old growth, sub-mature, or young marginal conifer-dominated forests with adequate canopy closure, tree density and height, vertical density, snags, or dead and down wood exist in the Project area. DCH for the northern spotted owl is not present within the Project area; it is located more than 20 miles northeast of the Project.

The streaked horned lark has been documented as nesting on the Port of Kalama, at their upland dredge deposit site (FWS, 2013). Project activities are located approximately 0.25 mile south and east of the occupied site and are not expected to cause significant disturbance to the species. The Range-wide Streaked Horned Lark Assessment and Preliminary Conservation Strategy recommends that human activities are restricted within 30 meters of breeding larks (Pearson and Altman, 2005). Noise is expected to be the only potential disturbance to this species; however, the occupied site is located in an area of high disturbance and elevated noise levels and the distance from Project activities is expected to minimize or avoid noise impacts. The nearest DCH for the streaked horned lark occurs on Sandy Island in the Columbia River, in Columbia County, Oregon, approximately 3.5 miles south of the Project area. The Project will not impact DCH for the streaked horned lark.

Although potentially suitable habitat for the yellow-billed cuckoo is available in Cowlitz County, no positive detections of yellow-billed cuckoo were made during exploratory surveys in recent years. They have a strong preference for large continuous riparian zones with cottonwoods and willows, and are no longer believed to breed in Washington State.

Although the Oregon spotted frog (*Rana pretiosa*) was not included in the FWS list generated by IPaC, Project impacts to this species were also considered. The Oregon spotted frog is federally listed as threatened (final September 29, 2014) and is state-listed endangered in Washington. The Oregon spotted frog inhabits emergent wetland habitats in forested landscapes and requires perennial water for protecting all age classes (FWS, 2014b). Suitable habitat for the species does not occur within the Project area, and no critical habitat proposed for designation (proposed August 29, 2013) is in Cowlitz County.

The FWS IPaC List indicates that one federally listed plant species may occur in Cowlitz County: Nelson's checker-mallow (*Sidalcea nelsoniana*). However, only two populations of Nelson's checker-mallow exist in Washington, and the population in Cowlitz County is located more than 13 miles northwest of the Project area.

Based on WDFW fish distribution data, federally listed fish species may potentially occur within two of the waterbodies that will be crossed by the Project (S-2A6 and S-2A7). These species are coho salmon (*Oncorhynchus kisutch*) and steelhead (*Oncorhynchus mykiss*). However, due to their flow patterns and limited connection with the Columbia River, the waterbodies affected by this Project likely provide only limited refugia or potential foraging habitat for strays that wander into the area, or during extreme high flows in the Columbia, when backwater flows may occur.

The Project will not adversely impact federally listed threatened and endangered proposed or candidate species or DCH.

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [\[help\]](#)

Priority Species

Two WDFW priority species may potentially occur in the Project area: Bald eagle (*Haliaeetus leucocephalus*) and eastern wild turkey (*Meleagris gallopavo silvestris*).

Bald eagles have not been documented nesting within 0.5 mile of the Project. Nest sites are usually in large diameter trees near open water. Suitable nesting habitat may be present in the vicinity of Kress Lake, but due to the proximity of the Kalama and Columbia rivers, nesting is not considered likely to occur. There are two bald eagle nesting territories identified within two miles of the Project. These bald eagles may forage in the vicinity of the Project in Kress Lake or the Kalama and Columbia rivers, but breeding activities will not be directly impacted by Project activities.

A regular concentration of Eastern wild turkey was documented near Kress Lake in 1991 and in several other locations throughout the Kalama River Basin. Although documented sightings were more than 20 years ago, it is possible that wild turkey may occur in the Project area.

Priority Species Areas (considered a priority only within known limiting habitats)

Priority wildlife species areas located within the Project area include cavity nesting duck and Canada goose (*Branta canadensis*) breeding areas and elk (*Cervus elaphus*) regular concentration areas.

A large agricultural field near the western end of the Project area is identified as a priority breeding area for the Canada goose. The area will be impacted by the Project, but project activities in the area will not begin until after mid-July, when adult geese have completed nesting and brood rearing. The area will be restored shortly after the pipeline is installed and well before the next breeding season begins.

Cavity nesting ducks require nesting cavities within trees and snags, and have habitat within the Project area at Kress Lake and its associated woodlands and wetlands. A small portion of the Project is adjacent to documented breeding areas, but trees with cavities are not proposed to be removed and the Project will not have direct impacts on breeding areas.

The eastern end of the Project area is identified as a general winter range locality for Mt. St. Helen's and Mt. Rainier herds of Rocky Mountain and Roosevelt elk. While removal of trees may eliminate some winter range forage (bark, needles and lichens), these areas will be converted to grasses and forbs beneficial to elk. The Project will take place primarily in the summer and will be restored and revegetated with grasses following installation of the pipeline. Consequently, it will have no permanent impact to winter range elk.

Priority Habitats

Carrols Bluff Priority Oak Woodlands habitat may potentially be impacted by the Project between MPs 2.1 and 2.4. The area of impact is approximately 0.9 acre. Northwest anticipates conducting a survey in spring 2015 when conditions are appropriate to assess actual impacts and potential mitigation requirements.

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.ecy.wa.gov/opas/>.
- Governor’s Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@ora.wa.gov.
- For a list of addresses to send your JARPA to, click on [agency addresses for completed JARPA](#).

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [\[help\]](#)

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.

A copy of the SEPA determination or letter of exemption is included with this application.

The NWIW Methanol Plant will be reviewed in accordance with SEPA. The Port of Kalama and Cowlitz County will be co-lead agencies. The Port will be the nominal lead, responsible for complying with the SEPA lead agency duties for the SEPA review process.

As part of the SEPA process, a Determination of Significance will be issued by the co-lead agencies and an Environmental Impact Statement (EIS) will be issued under Revised Code of Washington 43.21C.030(2)(c). The EIS will consider the combined impacts from development and operation of the natural gas pipeline lateral, the methanol production plant and storage facilities, and the marine terminal. It should be noted that the pipeline portion of the overall project is regulated by the FERC who will authorize the construction of the pipeline by issuing a Certificate of Public Convenience and Necessity. The environmental resource document used to make FERC’s decision on the project will be provided to the SEPA lead for inclusion or reference in the SEPA determination.

I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [\[help\]](#)

This project is exempt (choose type of exemption below).

Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?

Other: _____

SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [\[help\]](#)

LOCAL GOVERNMENT

Local Government Shoreline permits:

- Substantial Development Conditional Use Variance
 Shoreline Exemption Type (explain): _____

Other City/County permits:

- Floodplain Development Permit Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

- Hydraulic Project Approval (HPA) Fish Habitat Enhancement Exemption – [Attach Exemption Form](#)

Effective July 10, 2012, you must submit a check for \$150 to Washington Department of Fish and Wildlife, unless your project qualifies for an exemption or alternative payment method below. **Do not send cash.**

Check the appropriate boxes:

- \$150 check enclosed. Check # 504651
Attach check made payable to Washington Department of Fish and Wildlife.
- My project is exempt from the application fee. (Check appropriate exemption) _____
- HPA processing is conducted by applicant-funded WDFW staff.
Agreement # _____
- Mineral prospecting and mining.
- Project occurs on farm and agricultural land.
(Attach a copy of current land use classification recorded with the county auditor, or other proof of current land use.)
- Project is a modification of an existing HPA originally applied for, prior to July 10, 2012.
HPA # _____

Washington Department of Natural Resources:

- Aquatic Use Authorization
Complete [JARPA Attachment E](#) and submit a check for \$25 payable to the Washington Department of Natural Resources.
Do not send cash.

Washington Department of Ecology:

- Section 401 Water Quality Certification

FEDERAL GOVERNMENT

United States Department of the Army permits (U.S. Army Corps of Engineers):

- Section 404 (discharges into waters of the U.S.) Section 10 (work in navigable waters)

United States Coast Guard permits:

- Private Aids to Navigation (for non-bridge projects)

Part 11—Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. LCK (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. _____ (initial)

<u> Lenore C. Komatar </u>	<u> Lenore C. Komatar </u>	<u> 10/31/2014 </u>
Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

_____	_____	_____
Authorized Agent Printed Name	Authorized Agent Signature	Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

Not required if project is on existing rights-of-way or easements.

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

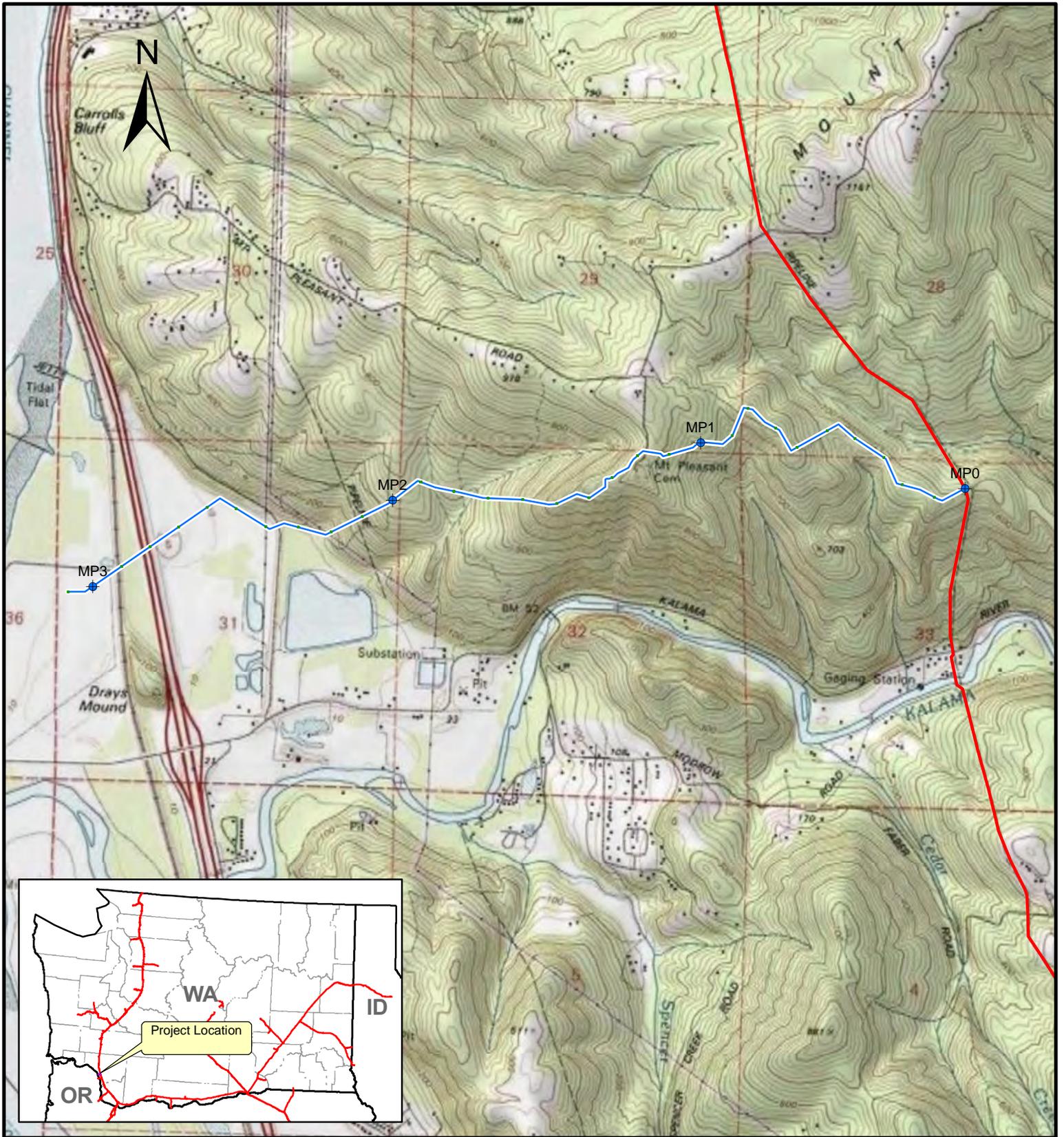
_____	_____	_____
Property Owner Printed Name	Property Owner Signature	Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ENV-019-09 rev. 08/2013
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KALAMA LATERAL PROJECT
Joint Aquatic Resources Permit Application
FIGURES

General Project Location Map



Legend

- Proposed Kalama Energy Pipeline
- NWP Ignacio to Sumas Mainline
- ◆ Mileposts



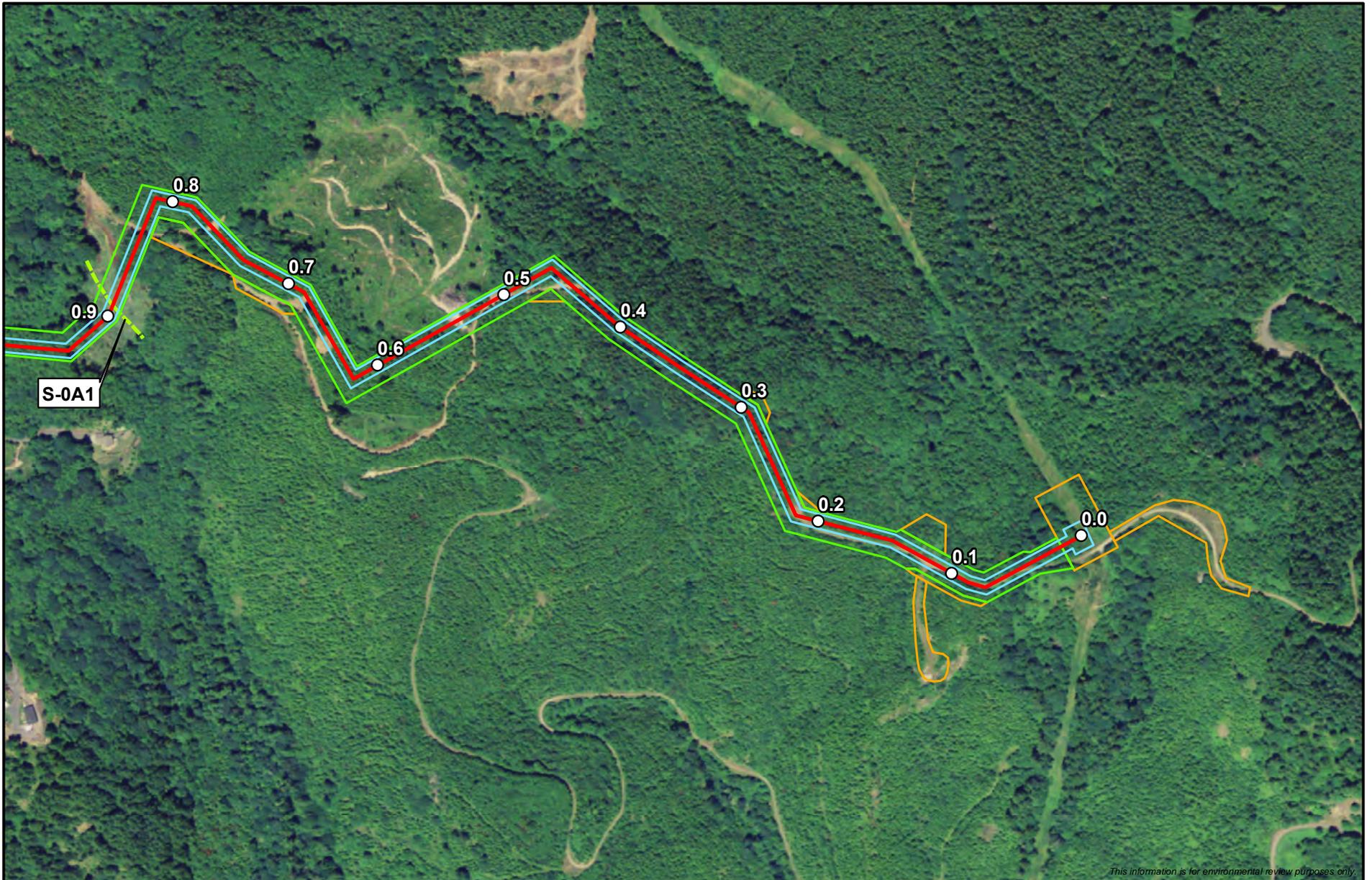
**Northwest Pipeline LLC
Kalama Lateral Project**



**Figure 1
General Location**

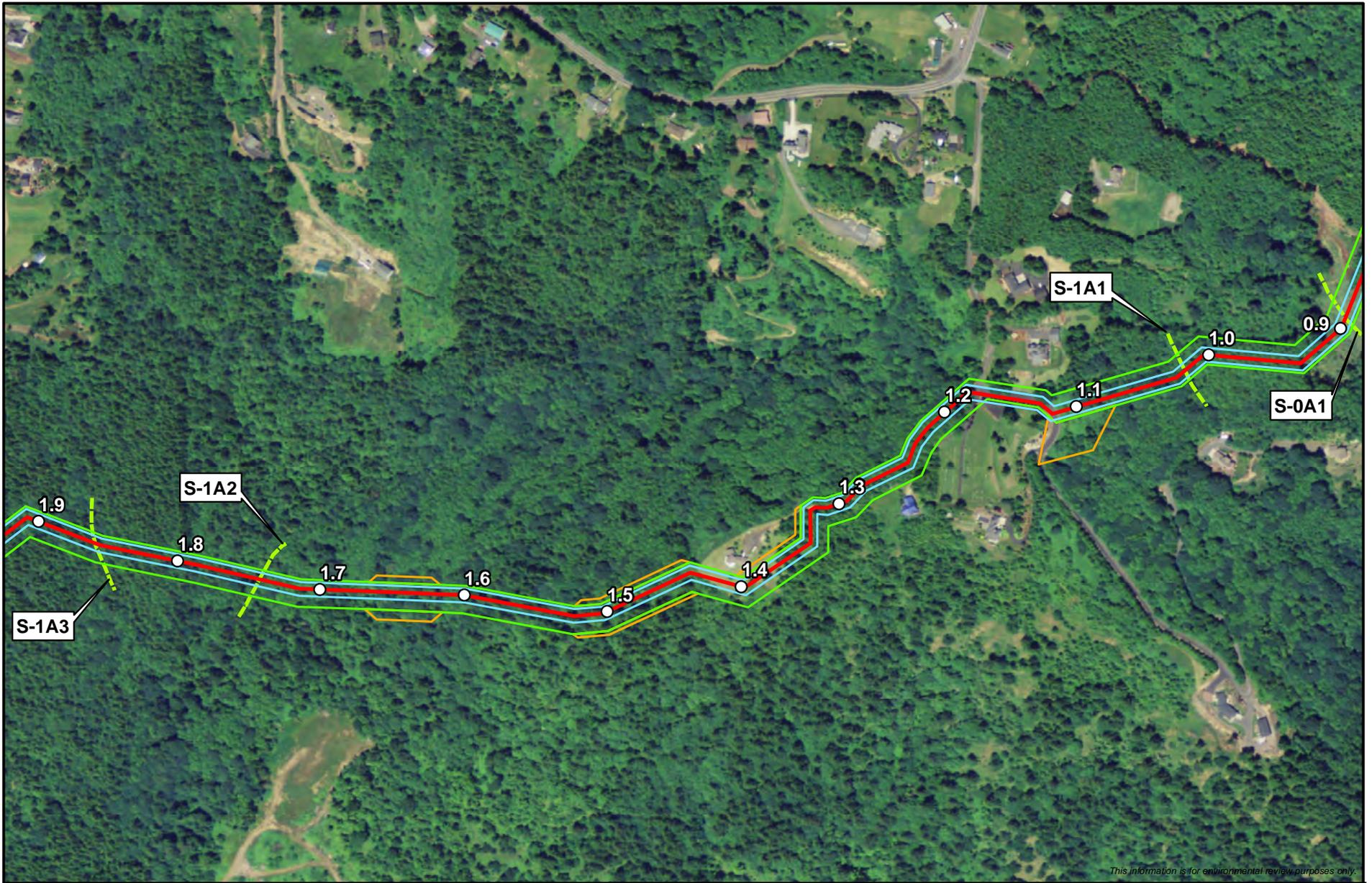
Cowlitz County, Washington

Field Delineated and NWI Wetlands and Waterbodies



This information is for environmental review purposes only.

<p>0 250 500 Feet</p> <p>Sheet 1 of 4 1:6,000</p> 	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA 	<ul style="list-style-type: none"> Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream 		<p style="text-align: center;">Figure 2A Kalama Lateral Project Northwest Pipeline LLC Field Delineated and NWI Wetlands and Waterbodies</p> <p style="text-align: right;">REVISD: 11/07/2012 DRAWN BY: JPBOENTJE</p> 
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This information is for environmental review purposes only.

<p>0 250 500 Feet</p> <p>Sheet 2 of 4 1:6,000</p> 	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA 	<ul style="list-style-type: none"> Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream 		<p style="text-align: center;">Figure 2A Kalama Lateral Project Northwest Pipeline LLC Field Delineated and NWI Wetlands and Waterbodies</p> <div style="text-align: right;">  </div>
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This information is for environmental review purposes only.

<p>0 250 500 Feet</p> <p>Sheet 3 of 4 1:6,000</p>	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA 	<ul style="list-style-type: none"> Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream 		<p style="text-align: center;">Figure 2A Kalama Lateral Project Northwest Pipeline LLC Field Delineated and NWI Wetlands and Waterbodies</p> <div style="text-align: right;"> </div> <p style="text-align: right;">REVISD: 11/07/2012 DRAWN BY: JPBOENTJE</p>
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This information is for environmental review purposes only.



Sheet 4 of 4 1:6,000

- Proposed Timber Rock Route
- Permanent ROW
- Construction ROW
- TEWA
- Delineated Wetland
- NWI Wetland
- Intermittent Stream
- Perennial Stream

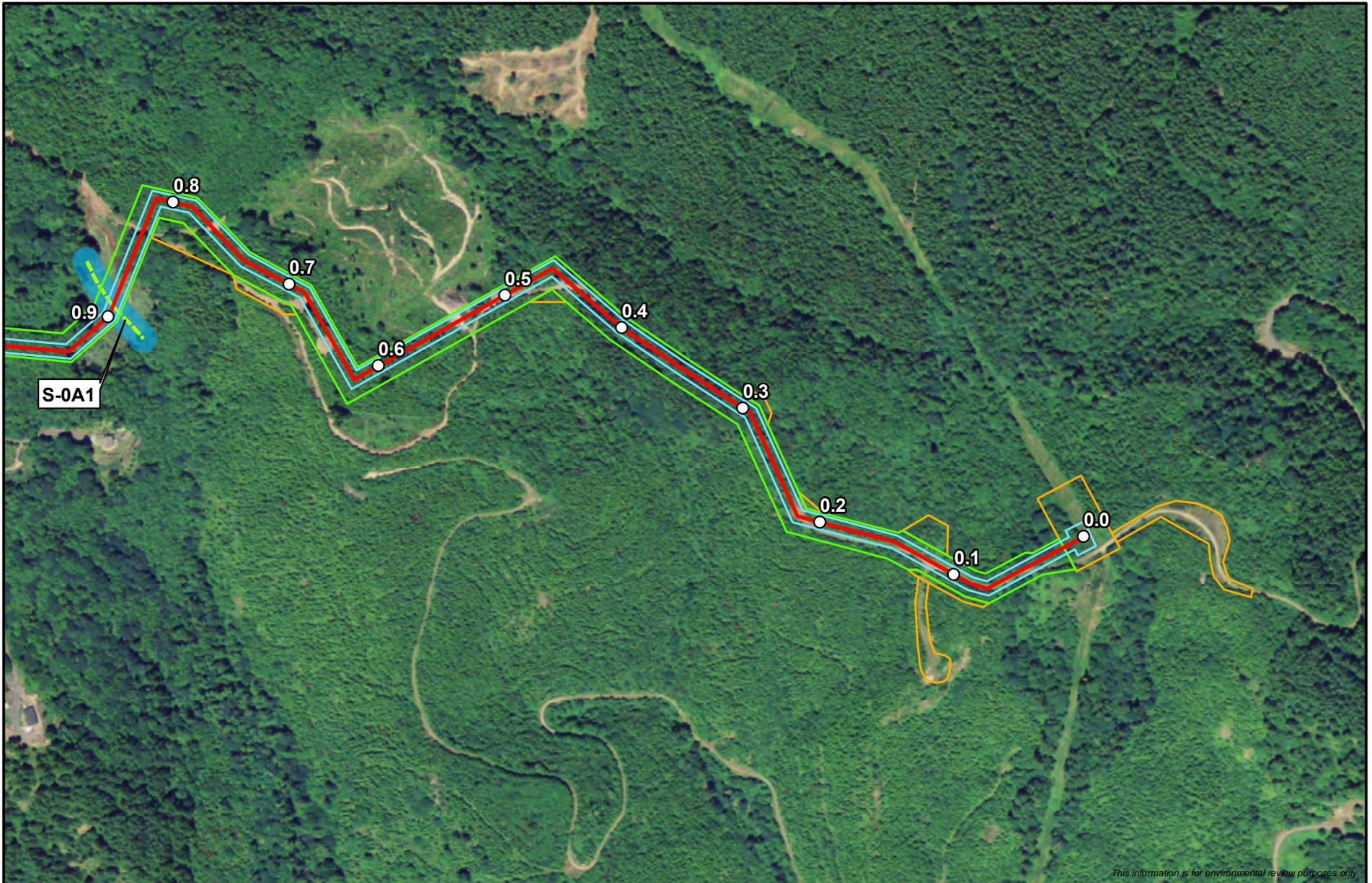


Figure 2A Kalama Lateral Project Northwest Pipeline LLC

Field Delineated and NWI Wetlands and Waterbodies

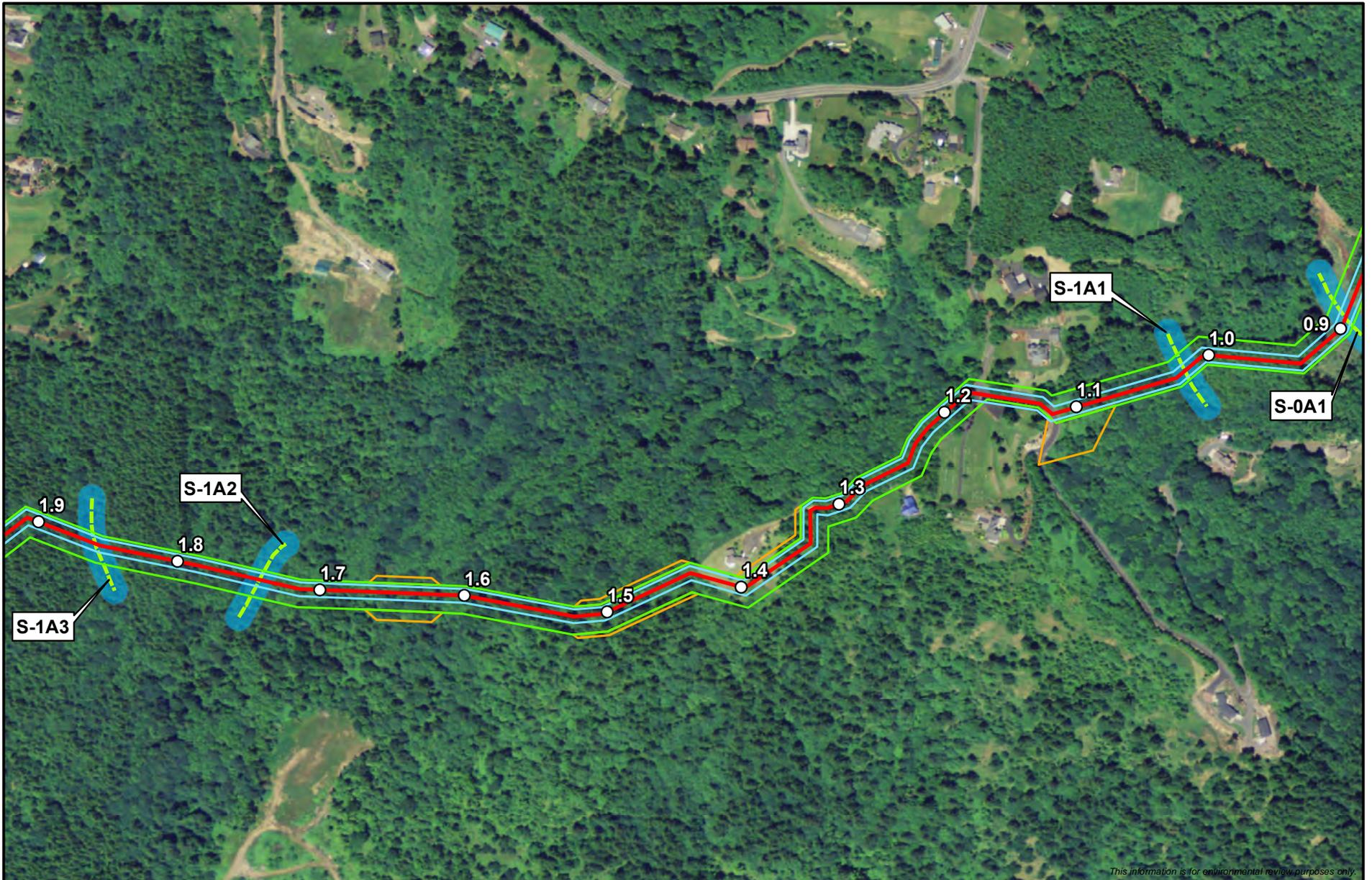


Wetland and Riparian Buffers



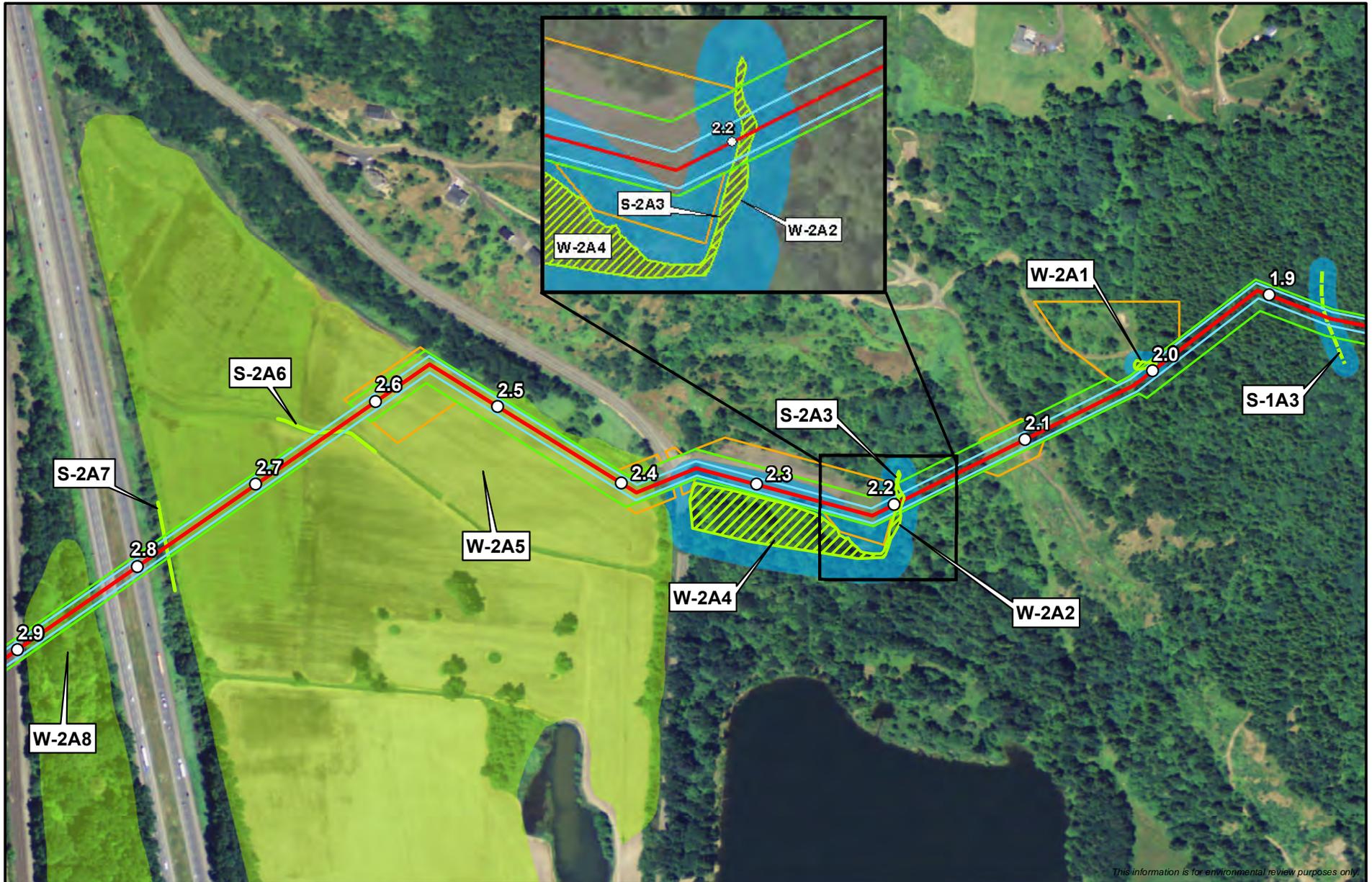
This information is for environmental review purposes only.

<p>0 250 500 Feet</p> <p>Sheet 1 of 4 1:6,000</p> 	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA 	<ul style="list-style-type: none"> Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream Buffer 		<p style="text-align: center;">Figure 2B Kalama Lateral Project Northwest Pipeline LLC Wetland and Riparian Buffers</p> <div style="text-align: right;">  </div>
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This information is for environmental review purposes only.

<p>0 250 500 Feet</p> <p>Sheet 2 of 4 1:6,000</p>	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA 	<ul style="list-style-type: none"> Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream Buffer 		<p>Figure 2B Kalama Lateral Project Northwest Pipeline LLC Wetland and Riparian Buffers</p>	
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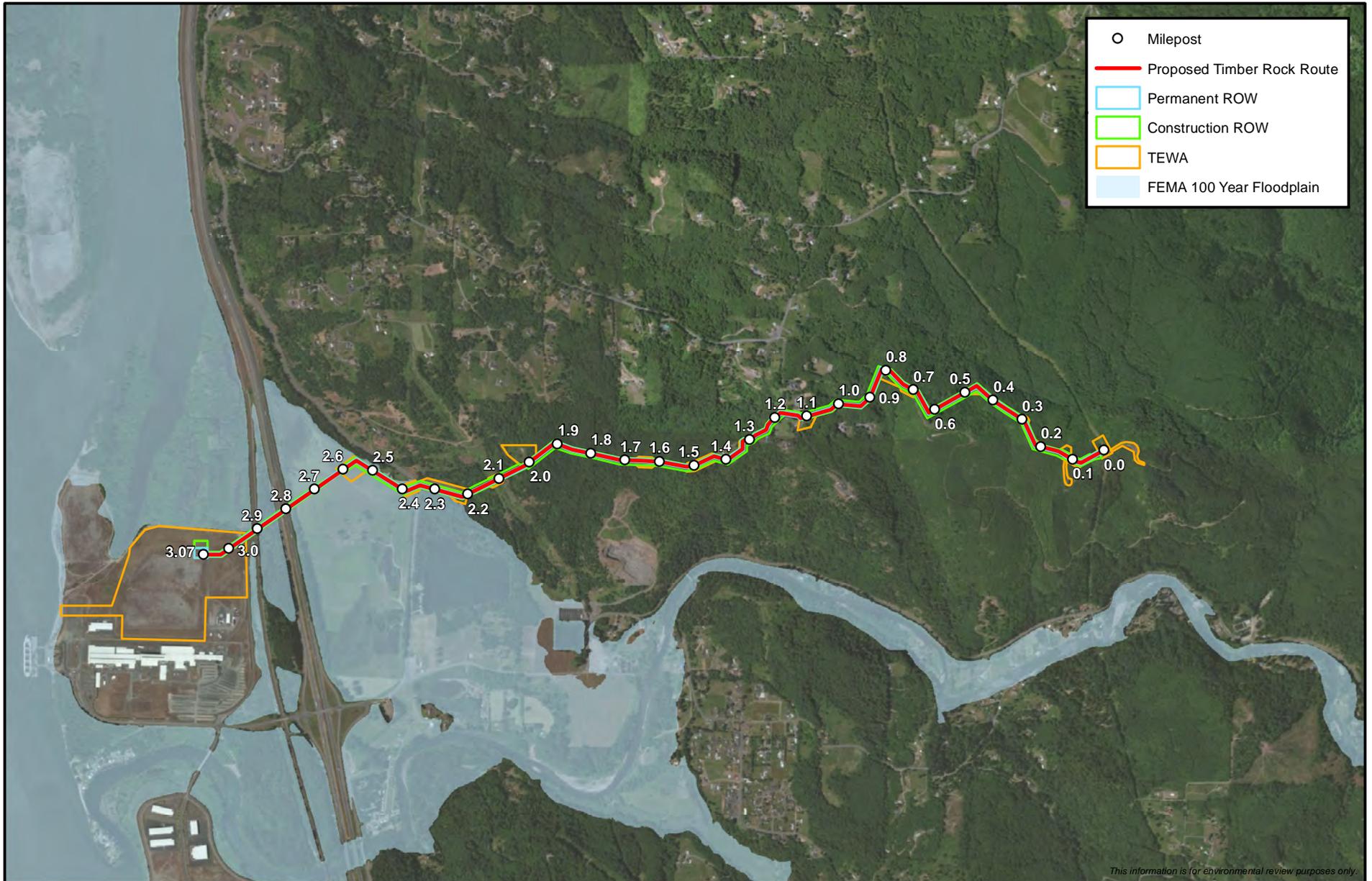
This information is for environmental review purposes only.

<p>0 250 500 Feet</p> <p>Sheet 3 of 4 1:6,000</p> 	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA 	<ul style="list-style-type: none"> Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream Buffer 		<p>Figure 2B Kalama Lateral Project Northwest Pipeline LLC Wetland and Riparian Buffers</p>	
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<p>0 250 500 Feet</p> <p>Sheet 4 of 4 1:6,000</p>	<ul style="list-style-type: none"> — Proposed Timber Rock Route Permanent ROW Construction ROW TEWA Delineated Wetland NWI Wetland Intermittent Stream Perennial Stream Buffer 		<p>Figure 2B Kalama Lateral Project Northwest Pipeline LLC Wetland and Riparian Buffers</p> <div style="text-align: right;"> </div>
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FEMA 100-Year Floodplain Map



- Milepost
- Proposed Timber Rock Route
- Permanent ROW
- Construction ROW
- TEWA
- FEMA 100 Year Floodplain

0 0.5 1 Miles

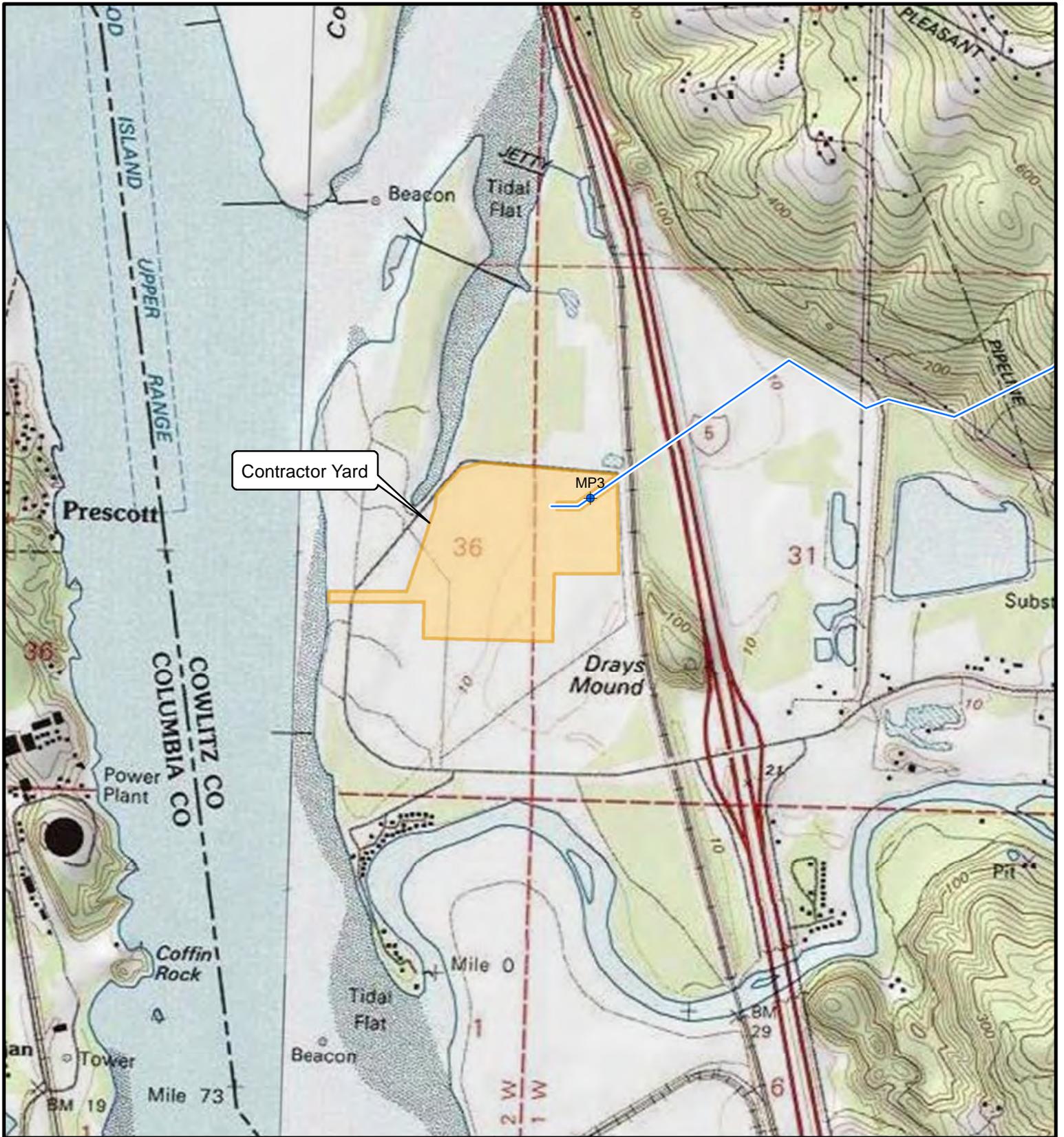
1:25,000



Figure 3
Kalama Lateral Project
Northwest Pipeline LLC
 FEMA 100 Year Floodplain



Contractor Yard



Contractor Yard

MP3

36

31

Drays Mound

Power Plant

COWLITZ CO
COLUMBIA CO

Coffin Rock

Mile 0

Mile 73

Legend

-  Proposed Kalama Energy Pipeline
-  Contractor Yard
-  Mileposts



Northwest Pipeline LLC
Kalama Lateral Project

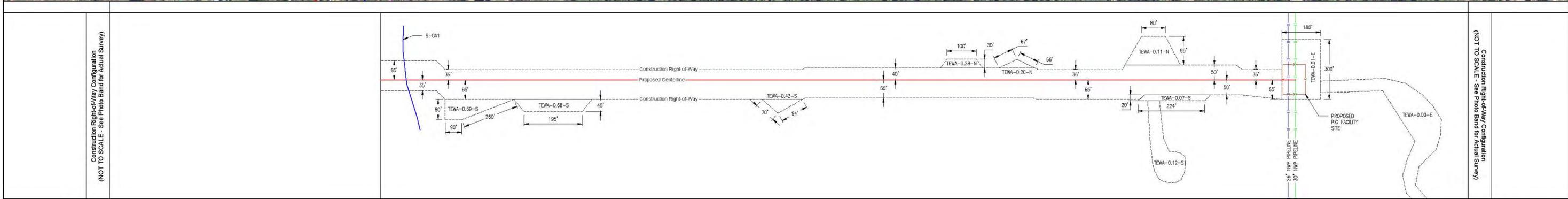
Figure 4



Contractor Yard
Cowlitz County, Washington

Alignment Sheets

Legal Location	SEC 29, T-7-N, R-1-W	SEC 28, T-7-N, R-1-W	SEC 33, T-7-N, R-1-W	Legal Location	
Ownership	LINNELL DARYL W/TINA M WD2904021	IVANOFF WALTER R/JANET A TRUST WD2904023	IVANOFF WALTER R/JANET A TRUST WD2812001	IVANOFF WALTER R/JANET A TRUST WD2813001	LONGVIEW TIMBERLANDS LLC WD3302001
Slope Category					
Stationing					
Crossing Method					
Seasonal Construction Timing Constraint					
Hydrostatic Test Discharge Location					
Woody Debris Disposal					
Special Considerations					



Construction Right-of-Way Configuration (NOT TO SCALE - See Photo Band for Actual Survey)				Construction Right-of-Way Configuration (NOT TO SCALE - See Photo Band for Actual Survey)
Depth of Cover				Depth of Cover
Pipeline Survey & Schematic (NOT TO SCALE - See Photo Band for Actual Survey)				Pipeline Survey & Schematic (NOT TO SCALE - See Photo Band for Actual Survey)

- NOTES:**
- Topsoil will be salvaged from the trench line and spoil storage areas, unless directed otherwise by landowner.
 - If streams proposed to be open cut are flowing at the time of construction, they will be flumed. If streams proposed to be flumed are not flowing at the time of construction, they will be open cut.
 - Field verify environmental mapping and stationing to match actual construction conditions.
 - An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same interval, but slightly uphill, of permanent slope breakers. In addition, trench breakers will be installed at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a drainage that contains water at the time of construction, and at other points identified during project engineering.

LEGEND

24" Proposed Kalama Lateral Pipeline	Access Road Work Area
Construction ROW (White)	Temporary Extra Work Area
30" Existing NWP Pipeline	Milepost
26" Existing NWP Pipeline	
Access Road	
Property Line	
Silt Fence	
Stream Centerline	
Wetland Boundary	
Access Road Number	

SUMMARY OF MATERIAL

PIPE MATERIAL			
KEY	O.D.	W.T.	MANUFACTURER
EXTERNAL COATING			
KEY	TYPE		

SLOPE CATEGORIES

SLOPE BREAKER SPACING

REVISIONS

NO.	DATE	BY	DESCRIPTION	W.O. NO.	CHK	APP

200 0 200 400 600 FEET

NORTHWEST PIPELINE LLC
24" KALAMA LATERAL PROJECT
ALIGNMENT SHEET
M.P. 0.00 TO 0.97
COWLITZ COUNTY, WASHINGTON

DRAWN BY: KLL DATE: 9-02-2014 ISSUED FOR BID: 24X36 SCALE: 1" = 200'

CHECKED BY: DATE: ISSUED FOR CONSTRUCTION: 11X17 SCALE: 1" = 450'

APPROVED BY: DATE: DRAWING NUMBER: 2504.22-001 SHEET OF

