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# MEMO

**To:** Dave Jepsen, P.E., Anderson Perry & Associates, Inc. (AP)  
**From:** Brad Power, Natural Resources Specialist, AP *BCP*  
**Re:** City of White Salmon Communication Improvements -  
Environmental Record Addendum  
**Date:** February 25, 2022  
**Job/File No.:** 250-11-115, w/attach

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## Project Description

This Environmental Record Addendum addresses proposed Communication Improvements to be added to the Transmission Main Replacement Phase I project. An Environmental Record for the Transmission Main Replacement Phase I project analyzed the direct, indirect, and cumulative effects on the natural resources within the City of White Salmon (City) in relation to the project. This Environmental Record Addendum addresses the potential effects that the proposed Communication Improvements may have on the surrounding natural resources as an additional component to the original Transmission Main Replacement Phase I project. Construction funding for the Transmission Main Replacement Phase I project is being provided by United States Department of Agriculture, Rural Development (RD).

The proposed Communication Improvements are to provide supervisory control and data acquisition (SCADA) functionality at the City's Nathan Wellman Memorial Buck Creek Slow Sand Filter (Buck Creek water treatment plant [WTP]). The City currently has no communications linked to the Buck Creek WTP. To determine existing conditions or change operational setpoints at the Buck Creek WTP, City staff are required to drive to the site, which takes about 25 minutes from the City's shop during suitable driving conditions. In winter the travel time to the Buck Creek WTP is usually longer depending on the amount of snow and snow removal required on Buck Creek Road.

The proposed Communication Improvements include using existing 2-inch diameter conduit installed in a previous project and installing new 2-inch diameter conduit as a communication pathway from the Buck Creek WTP to the Buck Creek Monitoring Station. Fiber optic cable would then be installed, providing the communication link to the Buck Creek WTP. For pulling/installation of the fiber optic cable, communication vaults would need to be periodically installed. The City currently has DSL service to the Buck Creek Monitoring Station and is looking to upgrade this communication to fiber optic cable as well.

The proposed Communication Improvements within the original area of potential effect (APE) would include the installation of approximately 12,500 linear feet (LF) of 2-inch conduit and 17 communication vaults. The proposed improvements would connect the City's Buck Creek WTP to the Buck Creek Monitoring Station (see Figure 1). New 2-inch conduit would be installed in the same trench as the new water transmission main from the main connection point at the Buck Creek WTP to the connection point at the existing 16-inch water main. The addition of this conduit in the trench widens the trench width by 8 inches. The communication vaults have nominal dimensions of 3.5 feet by 3.5 feet by 5 feet and are planned to be installed underground with a few inches of cover over the top. The vaults would be located off the road on the hill side of the road ditch. Retaining wall structures for the communication vaults may be needed at some locations. The retaining wall structures would be less than 4 feet in height and 10 feet in length.

There are two parts of the Communication Improvements that are outside the original Transmission Main Replacement Phase I APE: Areas A and B (see Figure 2). Area A is located adjacent to the City's Buck Creek WTP. The proposed improvement in Area A consists of the installation of approximately 382 LF of 2-inch conduit from the entrance to the Buck Creek WTP site north along Buck Creek Road and an additional 44 feet into the WTP control building. This conduit was originally planned to be installed inside the City's Buck Creek WTP facilities but, due to conflict with existing utilities, was changed to the road alignment. The conduit trench is anticipated be two feet wide and 3.5 feet deep. One communication vault is anticipated with this improvement, located at the point where the conduit alignment turns toward the Buck Creek WTP control room. The City is in the process of acquiring an additional easement from the Washington State Department of Natural Resources (DNR) for this conduit alignment. Project Area A is in Section 16, TS 4 North, Range 10 East.

Area B includes the area from the end of the new 16-inch diameter transmission main installation to approximately 30 feet past the City's Buck Creek Monitoring Station adjacent to Buck Creek Road. The total linear distance of Area B along Buck Creek Road is approximately 1,480 feet. The proposed Communications Improvements in this area include the installation of four new communication vaults to replace previously installed telephone pedestals. The existing 2-inch diameter conduit that was installed in a previous project and the new communication vaults will be used to connect the conduit installed as part of the water transmission main with the Buck Creek Monitoring Station. The ground disturbing activity for this area includes the removal of the existing telephone pedestals and connecting conduit, and excavation and backfill for new communication vaults and connecting conduit. Project Area B is in Sections 34 and 35, TS 4 North, Range 10 East.

## **Historic Preservation**

The White Salmon Transmission Main Replacement Phase I project Environmental Record documented several cultural resource surveys and archaeological sites within the Transmission Main Replacement project vicinity. Additional historical preservation sites associated with the Communications Improvements are as follows. Site 45KL1305 (located within 1 mile of the project area/APE is a historic refuse scatter representing trash deposits from the late 1940s and early 1950s. Materials observed consisted of glass bottles and jars, ceramic vessels, metal cans, car parts, and bedsprings. Two additional cultural resources are located within 1 mile of the project APE, sites 45KL785/45KL786 and 45KL2088. Both sites occur on the banks of the White Salmon River. Site 45KL785/45KL786 represents two circular depressions from house pits. Site 45KL2088 consists of 51 basalt, obsidian, CCS, and petrified wood flakes, and 2 CCS stone tools.

Two historic properties have been identified within 1 mile of the APE. Property ID 112501, a pole barn built in 1963, was identified during a cultural resource survey for the Blue Bridge Pipeline Project. The barn "lacks distinguishing characteristics" and is currently unevaluated for inclusion in the National Register of Historic Places (NRHP) (Lloyd-Jones et al., 2010). Property ID 716025, recorded during a cultural resource survey for the White Salmon Irrigation District's Phase 1B Pipeline Improvements Project, includes infrastructure from 1923, which contains a diversion dam and intake box. The White Salmon Irrigation District has been determined as not eligible for listing in the NRHP (Gall and Smith, 2018).

No known sites overlap with the Communications Improvements project area/APE.

A cultural resource inventory was completed on February 25, 2021. It detailed the archaeological monitoring of 12 geotechnical test pits, an intensive pedestrian survey, and a subsurface investigation consisting of nine shovel test probes (STPs). The survey resulted in the identification of no cultural resources. The proposed Communications Improvements adds approximately 1,000 feet to the length of the project area/APE that was not included in the previously submitted cultural resource inventory.

Ground disturbing activities required to complete this project have the potential to impact cultural and historic resources. In the event of an unanticipated discovery of cultural resources, the property owner and construction contractor, as well as any subsequent tenant or owner, would be governed by the statutory provisions protecting cultural resources in Chapter 27.53 of the Revised Code of Washington. The Inadvertent Discovery Plan included in the White Salmon Transmission Main Replacement Phase I project Environmental Record would be followed (AP, 2020). Additionally, the cultural resource inventory may need to be revised to accommodate the expanded project area for the Communications Improvements, depending on the outcome of consultation.

## **Floodplain Management**

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) (see Figures 3A, Floodplain Map 1, and 3B, Floodplain Map 2), the Communication Improvements would not be located within the 100-year flood zone (FEMA, 1981). The communication line would be placed in rural forested land, outside of floodplain boundary. The communication line would be buried approximately 3.5 feet beneath ground surface and would not impact surficial runoff or flooding. It is not anticipated that there would be any environmental consequence to the floodplain as a result of the proposed Communication Improvements.

## **Wetland Protection**

The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) map (see Figure 4, NWI Map) indicates that there are no wetlands near the Communication Improvements. No environmental consequences are anticipated to occur to wetlands in association with the proposed communication line installation. Best management practices (BMPs) as outlined in the White Salmon Transmission Main Replacement Phase I project Environmental Record will be utilized during construction to minimize potential impacts (USFWS, n.d.).

## **Waterbodies and Stormwater**

The Communication Improvements are located within the hydrological unit code 170701050810 Buck Creek subbasin. The communication line would cross Buck Creek once installed, although no in-water work would occur. Some minor sediment, fuel, and other material may discharge as a result of project construction, however, BMPs such as silt fencing and appropriate buffering of waterways or catch basins would be utilized to prevent any permanent impacts. An Hydraulic Project Approval (HPA) and stormwater pollution prevention plan along with a spill prevention/cleanup plan will be developed as part of the White Salmon Transmission Main Replacement Phase I project that will incorporate the Communication Improvements.

## **Health**

The Communications Improvements would benefit the City by modernizing existing technology associated with the Buck Creek WTP. The Communication Improvements would provide improved efficiency and reliability for water customers in the City, with no significant impacts to human health as a result.

## **Coastal Zone Management**

According to the Washington State Coastal Zone Management Program (CZMP), (Figure 5, Coastal Zone Management Map) the proposed Communication Improvements are not located within the coastal zone (Ecology, n.d.). The Communications Improvements are anticipated to have no environmental consequences on coastal resources.

## **Sole Source Aquifers**

According to the Environmental Protection Agency (EPA), there are no sole source aquifers in the area (see Figure 6, Sole Source Aquifer Map). The closest sole source aquifer is in Troutdale, Oregon, approximately 40 miles west of the proposed project. It is not anticipated that the Communications Improvements will have any environmental impact on sole source aquifers.

## **Endangered Species**

As described in the White Salmon Transmission Main Replacement Phase I project Environmental Record, the proposed project vicinity hosts a variety of wildlife species. According to USFWS and the National Marine Fisheries Service (NMFS) websites and corresponding species lists, several federally listed species and critical habitats are found within Klickitat County, however no candidate species or critical habitats are within the proposed project area.

Construction for the Communication Improvements will occur in previously disturbed areas and is not anticipated to impact any animal habitat. No impacts to any threatened, endangered, or rare species or habitats area anticipated in the proposed project area.

## **Wild and Scenic Rivers, National Parks, and Wildlife Refuges**

The White Salmon River is designated as Wild and Scenic approximately 4 miles north of the proposed project area (Figure 7A, Wild and Scenic Rivers). The nearest National Park to the proposed project area is Mount Rainier National Park, approximately 125 miles north of the proposed project area (Figure 7B, National Parks). The Pierce National Wildlife Refuge and Conboy National Wildlife Refuge are the two



closest refuges to the proposed project area, both areas around 30 miles to the west and north, respectively (Figures 7C and 7D, National Wildlife Refuge Map). It is not anticipated that the Communications Improvements will have any environmental impact on Wild and Scenic Rivers, National Parks, and Wildlife Refuges.

## **Clean Air**

According to the Washington State Department of Ecology (Ecology) website, Klickitat County has not been identified by Ecology as a non-attainment area and does not have an air quality maintenance plan or program. The proposed project has the potential to temporarily affect air quality. Short-term impacts would include emissions from equipment operation and dust generated from construction activities. It is not anticipated that there would be substantial quantities of particulate matter emissions as a result of the Communications Improvements.

## **Dust and Erosion Control**

The proposed Communication Improvements project has the potential to temporarily affect air quality. Short-term impacts would include emissions from equipment operation and dust generated from construction activities. Construction associated with the proposed improvements has the potential to create dust and cause minimal erosion. No substantial particulate matter or detrimental emissions are expected to be released as a result of the Communications Improvements.

The contractor will use fugitive dust control measures in conjunction with the greater White Salmon Transmission Main Replacement Phase I project.

## **Noise Abatement and Control**

Noise associated with the proposed project would occur during daylight hours. Noise would be intermittent and extend for the duration of the construction for the proposed project. It is not anticipated that the Communication Improvements will generate environmental consequences associated with noise.

## **Farmland and Forest Land Protection**

The Communication Improvements project is not located within City limits and is outside of the Urban Growth Boundary. The soils throughout the proposed project area are generally designated ashy loam or gravelly ashy loam. The predominant type is McElroy gravelly ashy loam, with small amounts of Dystroxerepts and McElroy-Rock outcrop complex. These soils range from nearly level to steep slopes and are well drained. These soils are rated as nonhydric soils (NRCS, n.d.) (see Figure 8, Soils Map).

The proposed Communication Improvements would be located on a variety of soil types as shown on Figure 8. Some of these soils are rated Farmland of Statewide Importance; however, the improvements would occur within an existing gravel road, thus not impacting farmland. As the proposed project area is located on previously disturbed land, the Communications Improvements would have no impact on Prime Farmland or Prime Forestland.

## **Environmental Justice**

It is not anticipated that elderly or minority populations residing adjacent to the proposed project area would be disproportionately impacted. No business or residential relocations would be required as part of the proposed project. The proposed project would benefit the residents of White Salmon by providing a more efficient and reliable water service. A lack of system efficiency and reliability may eventually result in water shortage or temporary unavailability to residents and businesses serviced within the proposed project area if the proposed project (including the Communications Improvements) did not proceed.

## **Explosive and Flammable Operations**

There are no potential hazardous material sites identified within the proposed project area. According to the White Salmon Transmission Main Replacement Phase I project Environmental Report, one potential hazardous materials site was identified within 1 mile of the proposed project area on the Ecology What's In My Neighborhood database map (Ecology, n.d.; see Figure 9, Department of Ecology Cleanup Site Map). However, there are no further hazardous sites located near the Communication Improvements and it is therefore not anticipated that the Communication Improvements will be affected by any potential hazardous material sites.

## **Toxic Chemicals and Radioactive Materials**

The proposed Communication Improvements are not anticipated to disturb existing asbestos-cement pipes. There are no other known toxic chemicals or radioactive material within 1 mile of the proposed project area.

In coordination with the actions outlined in the White Salmon Transmission Main Replacement Phase I project Environmental Record, if toxic chemicals or radioactive materials are encountered during construction, work would cease and action would be performed in accordance with Washington State Department of Labor and Industries, EPA, and Ecology guidance.

## **Zoning**

The Communication Improvements project is located outside of the city limits of White Salmon on land zoned as Forest Resource and Resource Lands (Figure 10). The Communication Improvements would be installed in existing right-of-way, and there would be no changes in land use or zoning in association with the Communications Improvements.

## **Airport Clear/Accident Potential Zones and Transportation**

The Communication Improvements are not anticipated to cause any additional impacts to the airport clear or accidental potential zones as outlined in the White Salmon Transmission Main Replacement Phase I project Environmental Record. The Port Elsner airport is approximately 2 miles east of the proposed project area, the Skyline Hospital EMS is approximately 6 miles to the south of the proposed project area, and Spring Creek Ranch airfield is approximately 1.5 miles to the east. Air traffic at each of these locations is not anticipated to be impacted.

Buck Creek Road will require temporary traffic control of vehicles within the proposed project area while construction for the new communication line is occurring. Temporary impacts to traffic congestion could

occur during construction of the proposed project as more equipment would be using local roads during project construction due to materials delivery or hauling fill or import aggregate. Work along Buck Creek Road may require motorists to use alternate routes and encounter temporary delays. No permanent or long-term impacts to transportation are anticipated as a result of the Communications Improvements.

## **Conclusion**

Based on database review, the Communication Improvements are anticipated to have minimal impacts on any natural and cultural resources that have been previously determined as significant or protected.

## **Historic Preservation**

- Because there is a federal nexus, the City is obligated to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA).
- The Washington State Department of Archaeology and Historic Preservation (DAHP) and the Tribes should be consulted to identify any potential concerns or important resources.
- A cultural resource survey may be required for any ground disturbance within the alignment on land that has not been previously surveyed or disturbed.
- An additional cultural resource survey may need to be performed and the cultural resource inventory updated to accommodate new project areas (Communications Improvements) not previously surveyed or disturbed.
- Recommendations provided by DAHP and the Tribes, if any, should be followed. If cultural resources are discovered during construction, all work should halt and DAHP, RD, and the appropriate Tribes will be notified.

## **Floodplain Management**

- The Communication Improvements are not anticipated to include any work within floodplains.
- No mitigation is anticipated.

## **Wetland Protection**

- The Communication Improvements are not anticipated to include any work within wetlands.
- No mitigation is anticipated.

## **Waterways and Stormwater**

- The Communication Improvements are not anticipated to include any work within waterbodies or to have any permanent impacts to stormwater systems.
- BMPs such as silt fencing and appropriate buffering of wetlands, waterways, or catch basins would occur.
- A stormwater pollution prevention plan along with a spill prevention/cleanup plan will be developed as part of the White Salmon Transmission Main Replacement Phase I Project that will incorporate the Communication Improvements project.

## **Health**

- The Communication Improvements would provide improved efficiency and reliability for water customers in the City, with no significant impacts to human health as a result of this project.

## **Coastal Zone Management**

- The Communication Improvements would not impact any coastal management zones.
- No mitigation is anticipated.

## **Sole Source Aquifers**

- The Communication Improvements are not anticipated to impact any sole source aquifers.
- No mitigation is anticipated.

## **Endangered Species**

- Consultation with the USFWS and NMFS is required because there is a federal nexus (federal permits, federal funding, and/or federal land). Consultation is anticipated to be completed through “no effect” documentation as described in this addendum.

## **Wild and Scenic Rivers, National Parks, and Wildlife Refuges**

- No impact or mitigation is anticipated.

## **Clean Air**

- The Communication Improvements have the potential to temporarily affect air quality.
- It is not anticipated that there will be substantial quantities of particulate matter emissions as a result of the Communications Improvements.

## **Dust and Erosion Control**

- The contractor will use fugitive dust control measures in conjunction with the greater White Salmon Transmission Main Replacement Phase I project

## **Noise Abatement and Control**

- Noise associated with the proposed project would occur during daylight hours.

## **Farmland and Forest Land Projection**

- No impact or mitigation is anticipated.

## **Environmental Justice**

- It is not anticipated that elderly or minority populations residing adjacent to the proposed project area would be disproportionately impacted. No business or residential relocations would be required as part of the Communication Improvements.

## Explosive and Flammable Operations

- BMPs should be applied to all construction activities.

## Toxic Chemicals and Radioactive Materials

- BMPs should be applied to all construction activities.

## Zoning

- The Communication Improvements project area is located on land zoned as Forest Resource and Resource Lands and is located on previously disturbed soil. An easement from DNR is being acquired by the City. No other permits are anticipated for this project.

## Airport Clear/Accident Potential Zones and Transportation

- No impact or mitigation is anticipated.

## References

Anderson Perry & Associates (AP). (2020). City of White Salmon Transmission Main Replacement, Phase 1 Environmental Record.

FEMA. (1981). *Klickitat County, Washington – 5300990200B and 5300990375B*. Department of Homeland Security.

Gall, Alexander, and Michael Smith. (2018). *Cultural Resources Survey of the White Salmon Irrigation District Phase 1B Pipeline Improvements Project, Klickitat County, Washington*. On file at Department of Archaeology and Historic Preservation, Olympia, Washington (NADB No. 1692106).

Lloyd-Jones, Jeff, Sara Davis, Jonathan Held, and Terry Ozbun. (2010). *Cultural Resource Survey of the Northwest Pipeline GP Blue Bridge Pipeline Project, Lewis, Clark, Skamania, Klickitat, and Benton Counties, Washington*. On file at Department of Archaeology and Historic Preservation, Olympia, Washington (NADB No. 1680108).

NRCS. (n.d.). Soil Map - Klickitat County Area, Washington. Retrieved October 14, 2020  
<<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>>

USFWS. (n.d.). *Klickitat County Wetlands*. Retrieved from National Wetlands Inventory. Retrieved October 2020: <https://www.fws.gov/wetlands/data/Mapper.html>

Washington State Department of Ecology (Ecology). (n.d.). Washington Coastal Zone Management. Retrieved October 2020: <https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Coastal-zone-management>

Washington State Department of Ecology (Ecology). (n.d.). What's in My Neighborhood. Retrieved Oct. 15, 2020. <https://apps.ecology.wa.gov/neighborhood/>

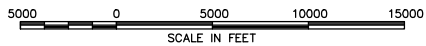
BP/ct



**PROJECT LOCATION**



**PROJECT BOUNDARIES**



**spanderson  
perry**  
& associates, inc.

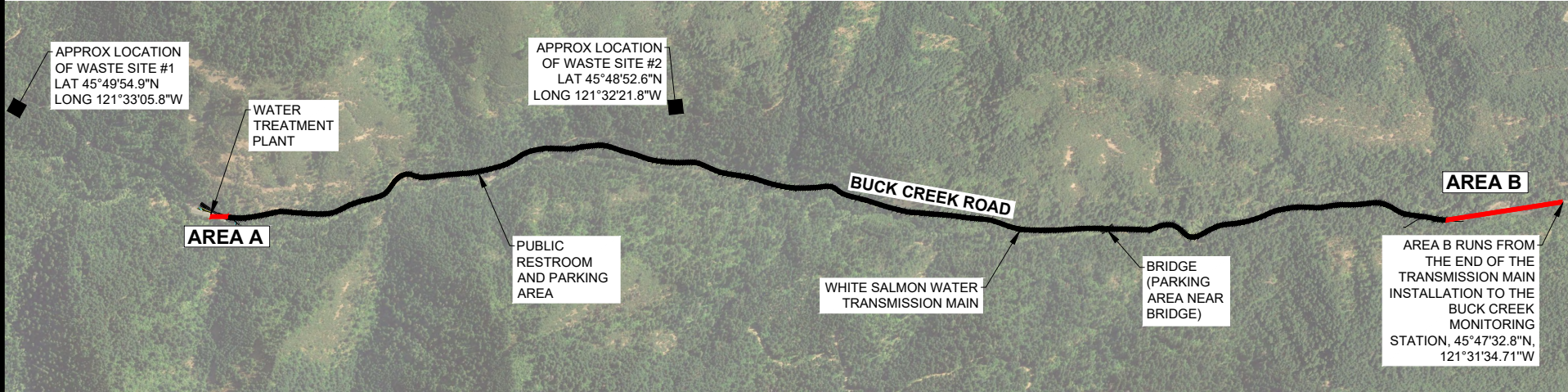
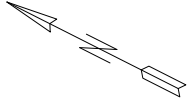
**CITY OF WHITE SALMON, WASHINGTON  
TRANSMISSION MAIN REPLACEMENT PHASE I  
2020**

**LOCATION AND VICINITY MAPS**

**FIGURE**

**1**

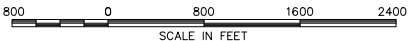




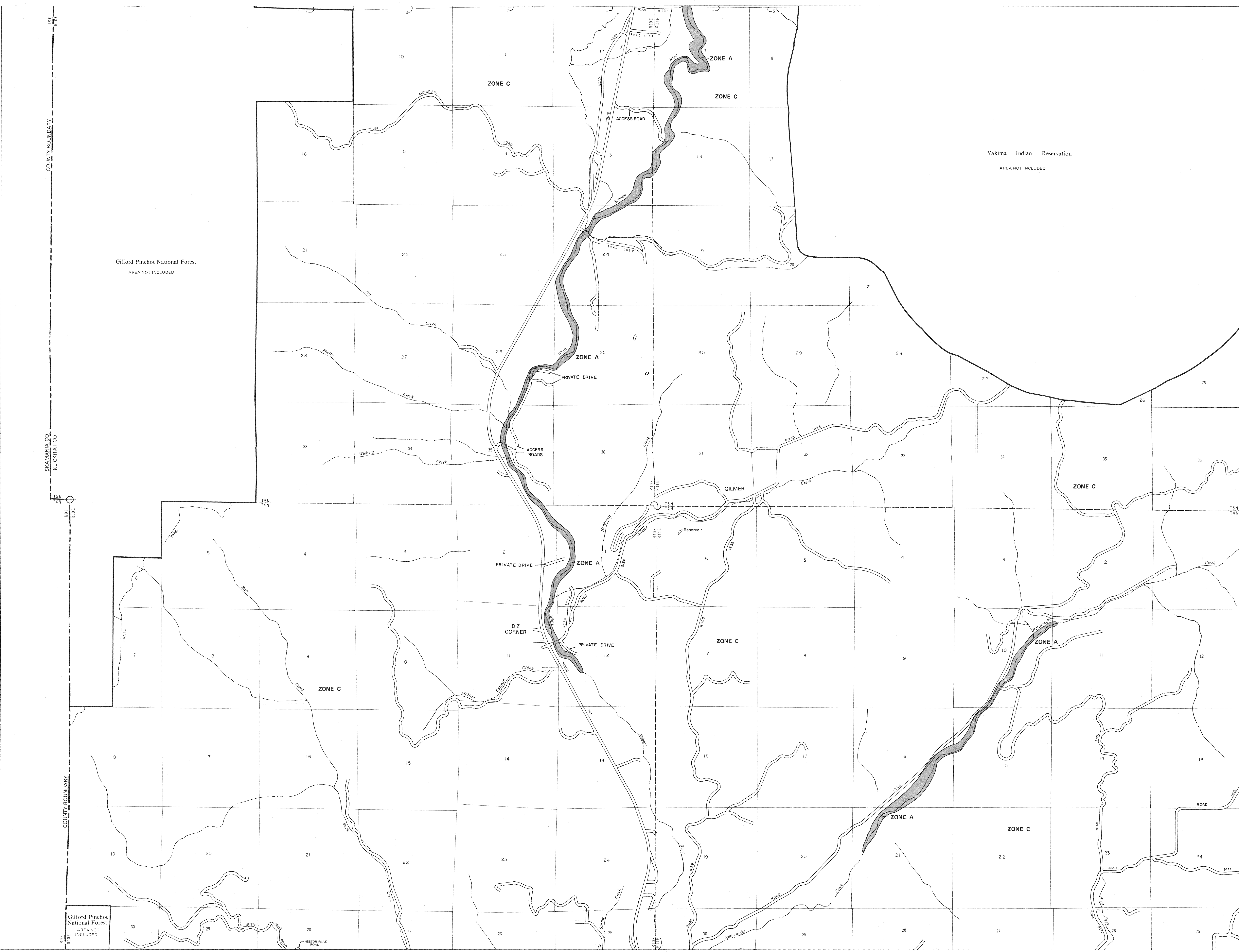
— PROJECT BOUNDARIES

AREA B RUNS FROM THE END OF THE TRANSMISSION MAIN INSTALLATION TO THE BUCK CREEK MONITORING STATION, 45°47'32.8"N, 121°31'34.71"W

R:\Clients\White Salmon\250-11 Transmission Main\060 Design Phase I\Figures\250-11-060 Fig 2 Project Area.dwg, 2/16/2022 1:41:38 PM



	<p align="center"><b>CITY OF WHITE SALMON, WASHINGTON</b>  <b>TRANSMISSION MAIN REPLACEMENT PROJECT PHASE I</b></p> <p align="center"><b>PROJECT AREA</b></p>	<p align="center"><b>FIGURE</b>  <b>2</b></p>
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**KEY TO MAP**

500-Year Flood Boundary	Zone B
100-Year Flood Boundary	Zone A1
Zone Designations* With Date of Identification e.g., 12/2/74	Zone A5
100-Year Flood Boundary	Zone B
500-Year Flood Boundary	Zone B

Base Flood Elevation Line With Elevation In Feet\*\* 513

Base Flood Elevation In Feet (EL 987)

Elevation Reference Mark RM7x

River Mile M1.5

\*\*Referenced to the National Geodetic Vertical Datum of 1929

**\*EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AD	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

**NOTES TO USER**

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:  
SEPTEMBER 6, 1974

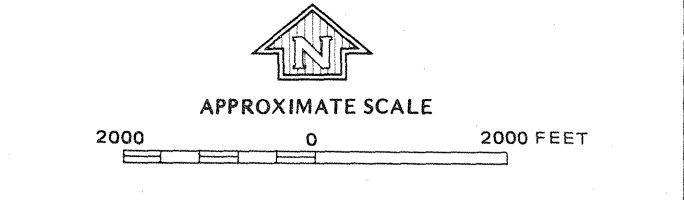
FLOOD HAZARD BOUNDARY MAP REVISIONS:  
OCTOBER 25, 1977

FLOOD INSURANCE RATE MAP EFFECTIVE:  
JULY 2, 1981

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actual rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620, or (800) 424-8872.



**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM FLOOD INSURANCE RATE MAP**

**Klickitat County, Washington (Unincorporated Areas)**

PANEL 200 OF 550 (SEE MAP INDEX FOR PANELS NOT PRINTED)

**FIGURE 3A**

COMMUNITY-PANEL NUMBER 530099 0200 B

EFFECTIVE DATE: JULY 2, 1981

federal emergency management agency  
federal insurance administration

Gifford Pinchot National Forest  
AREA NOT INCLUDED

Gifford Pinchot National Forest  
AREA NOT INCLUDED

Yakima Indian Reservation  
AREA NOT INCLUDED

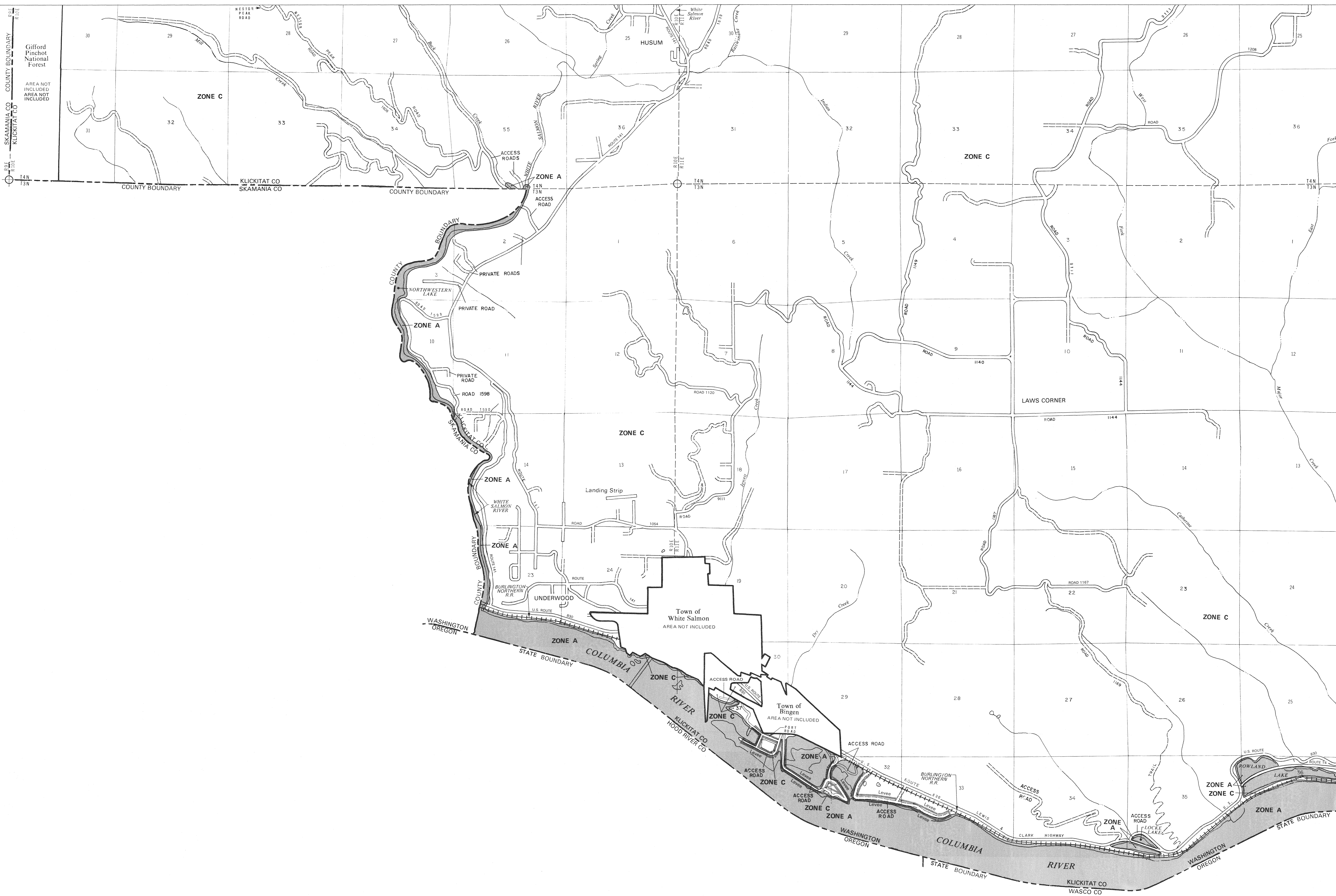
SEKAMANIA CO.  
Klickitat CO.

SEKAMANIA CO.  
Klickitat CO.

Gifford Pinchot National Forest  
AREA NOT INCLUDED

Gifford Pinchot National Forest  
AREA NOT INCLUDED





**KEY TO MAP**

500-Year Flood Boundary ——— ZONE B  
 100-Year Flood Boundary ——— ZONE A1 DATE  
 Zone Designations\* With Date of Identification e.g., 12/2/74 ——— ZONE A5 DATE  
 100-Year Flood Boundary ——— ZONE B  
 500-Year Flood Boundary ——— ZONE B

Base Flood Elevation Line With Elevation In Feet\*\* ——— 513  
 Base Flood Elevation In Feet (EL 987) (EL 987)  
 Where Uniform Within Zone\*\*

Elevation Reference Mark RM7x  
 River Mile M1.5

\*\*Referenced to the National Geodetic Vertical Datum of 1929

- \*EXPLANATION OF ZONE DESIGNATIONS**
- | ZONE   | EXPLANATION  |
|--------|--|
| A      | Areas of 100-year flood; base flood elevations and flood hazard factors not determined.  |
| A0     | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.  |
| AH     | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.   |
| A1-A30 | Areas of 100-year flood; base flood elevations and flood hazard factors determined.  |
| A99    | Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.  |
| B      | Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading) |
| C      | Areas of minimal flooding. (No shading)  |
| D      | Areas of undetermined, but possible, flood hazards.  |
| V      | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.  |
| V1-V30 | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.  |

**NOTES TO USER**

Certain areas not in the special flood hazard areas (Zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

**INITIAL IDENTIFICATION:**  
 SEPTEMBER 6, 1974

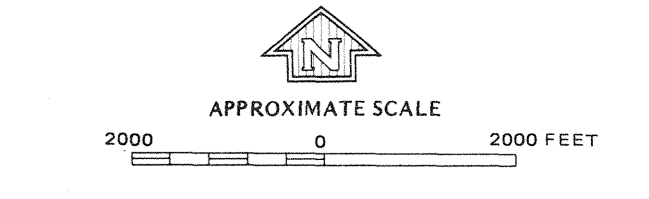
**FLOOD HAZARD BOUNDARY MAP REVISIONS:**  
 OCTOBER 26, 1977

**FLOOD INSURANCE RATE MAP EFFECTIVE:**  
 JULY 2, 1981

**FLOOD INSURANCE RATE MAP REVISIONS:**

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620, or (800) 424-8872.



**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM**  
**FLOOD INSURANCE RATE MAP**

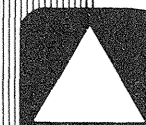
**KLICKITAT COUNTY, WASHINGTON**  
 (UNINCORPORATED AREAS)

PANEL 375 OF 550  
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

**FIGURE 3B**

COMMUNITY-PANEL NUMBER  
 530099 0375 B

EFFECTIVE DATE:  
 JULY 2, 1981

 federal emergency management agency  
 federal insurance administration




This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)  
 This page was produced by the NWI mapper



October 9, 2020

**Wetlands**

- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  |  Freshwater Pond                   |  Riverine |

CITY OF WHITE SALMON  
 TRANSMISSION MAIN REPLACEMENT PHASE 1

NWI MAP

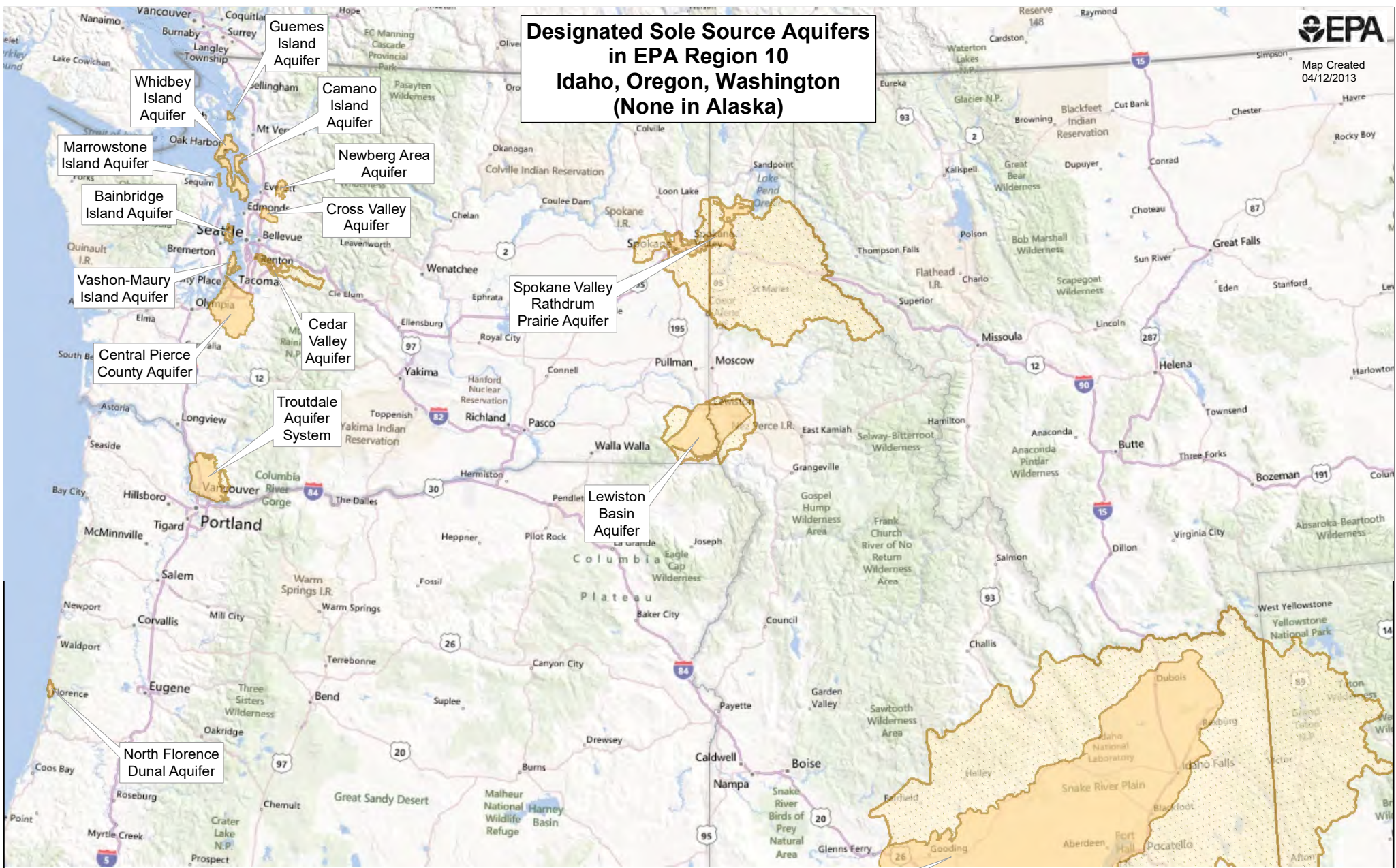
**FIGURE 4**



CITY OF WHITE SALMON  
Transmission Main Replacement Phase I - 2020  
COASTAL ZONE MANAGEMENT MAP  
FIGURE 5



# Designated Sole Source Aquifers in EPA Region 10 Idaho, Oregon, Washington (None in Alaska)



**Legend**

Project Review Areas

- Aquifer Area
- Source Area



Eastern Snake River Plain Aquifer

CITY OF WHITE SALMON  
Transmission Main Replacement Phase 1  
**SOLE SOURCE AQUIFER MAP**  
**FIGURE 6**





City of White Salmon

Transmission Main Replacement Phase 1

### Wild and Scenic Rivers Map

### Figure 7A

**Project Location**

Legend

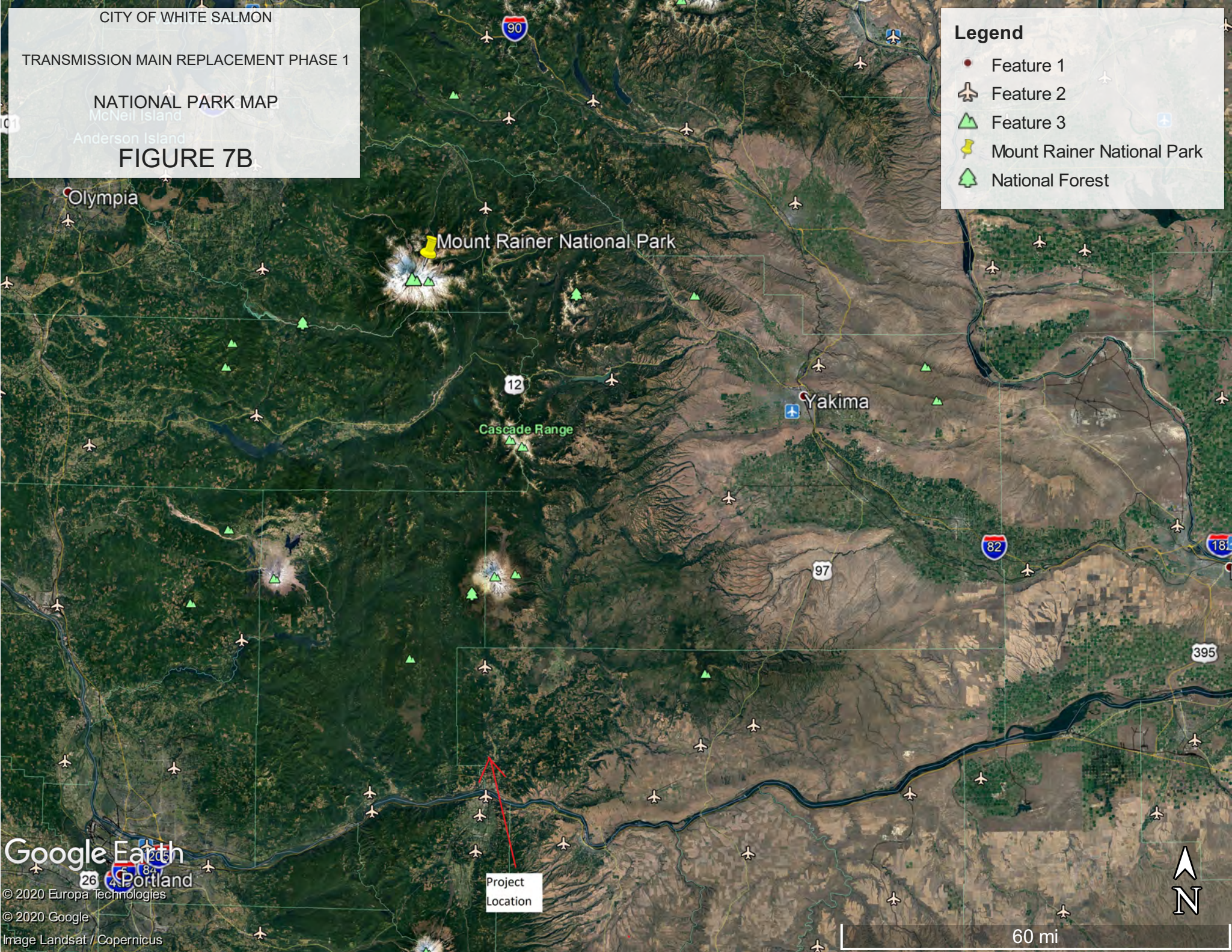




CITY OF WHITE SALMON  
TRANSMISSION MAIN REPLACEMENT PHASE 1  
NATIONAL PARK MAP  
McNeil Island  
Anderson Island  
**FIGURE 7B**

**Legend**

- Feature 1
- ✈ Feature 2
- ▲ Feature 3
- 📍 Mount Rainer National Park
- 🌲 National Forest



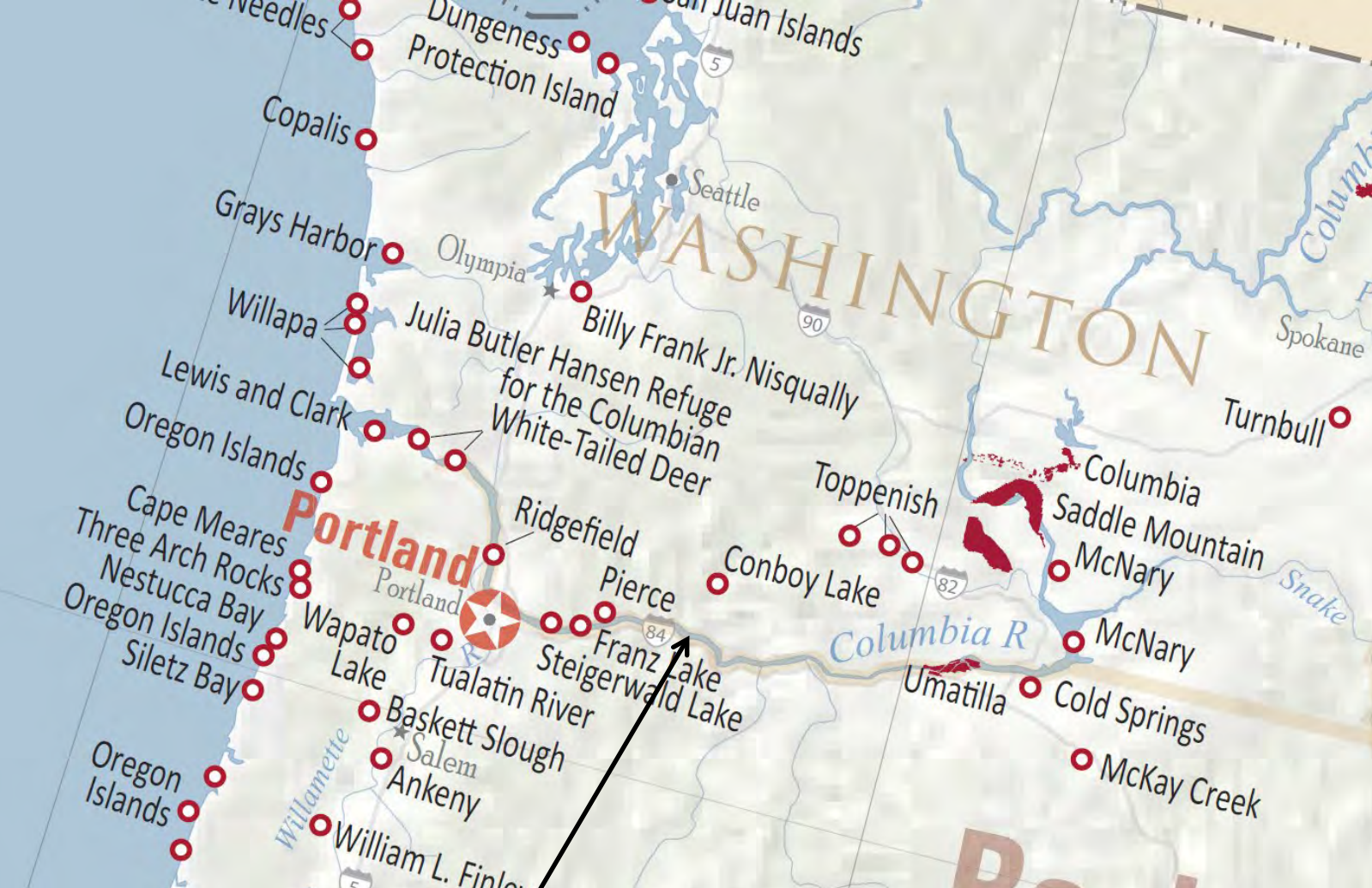
Project  
Location

60 mi







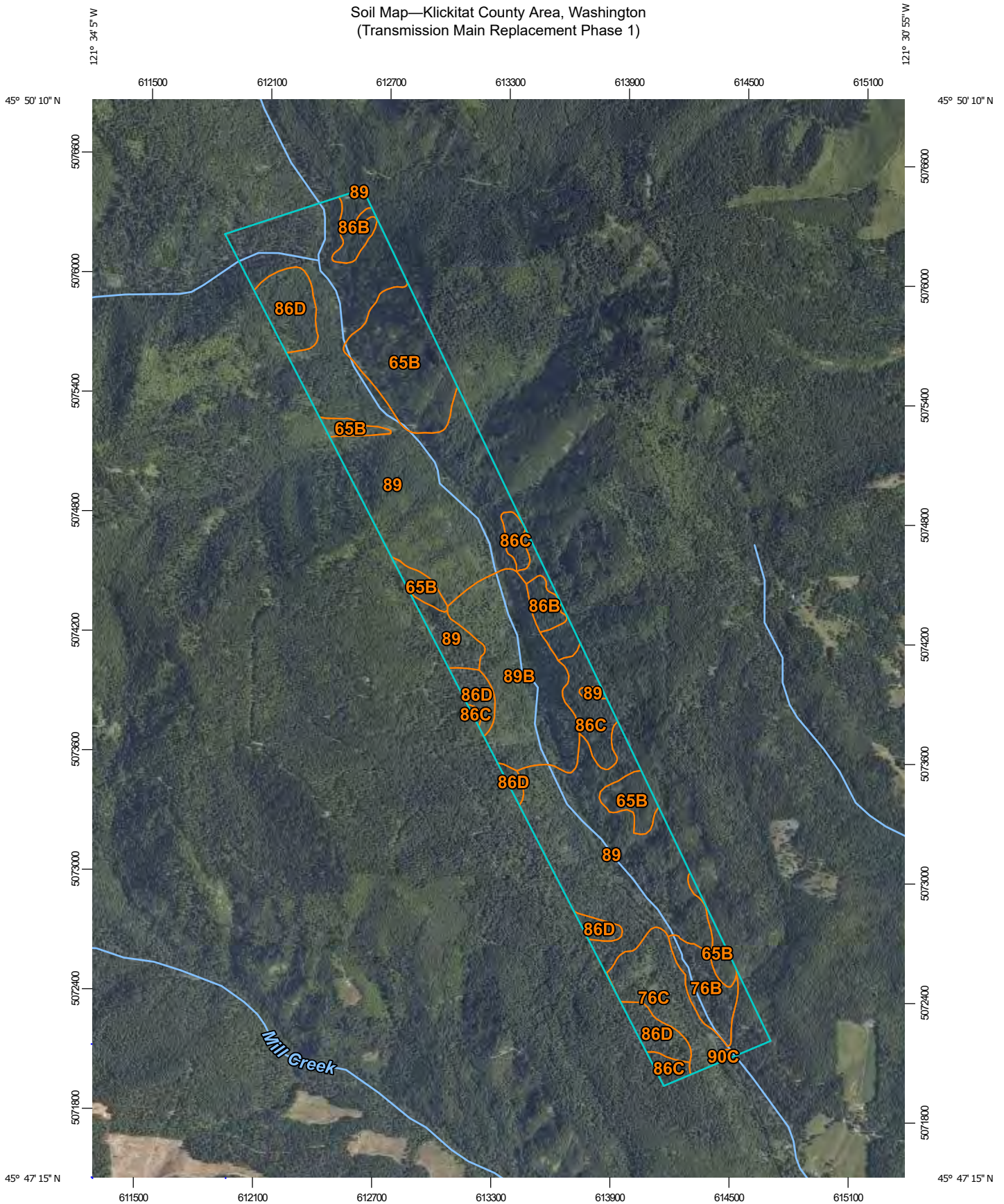


**Project Location**

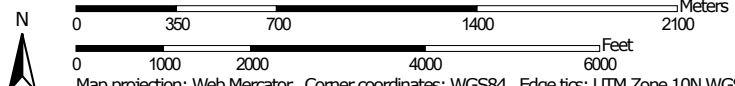
CITY OF WHITE SALMON  
Transmission Main Replacement Phase 1  
NATIONAL WILDLIFE REFUGE MAP  
FIGURE 7D



Soil Map—Klickitat County Area, Washington  
(Transmission Main Replacement Phase 1)



Map Scale: 1:26,400 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

CITY OF WHITE SALMON  
TRANSMISSION MAIN REPLACEMENT PHASE 1

SOILS MAP



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

FIGURE 8

10/14/2020  
Page 1 of 3

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Klickitat County Area, Washington

Survey Area Data: Version 15, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

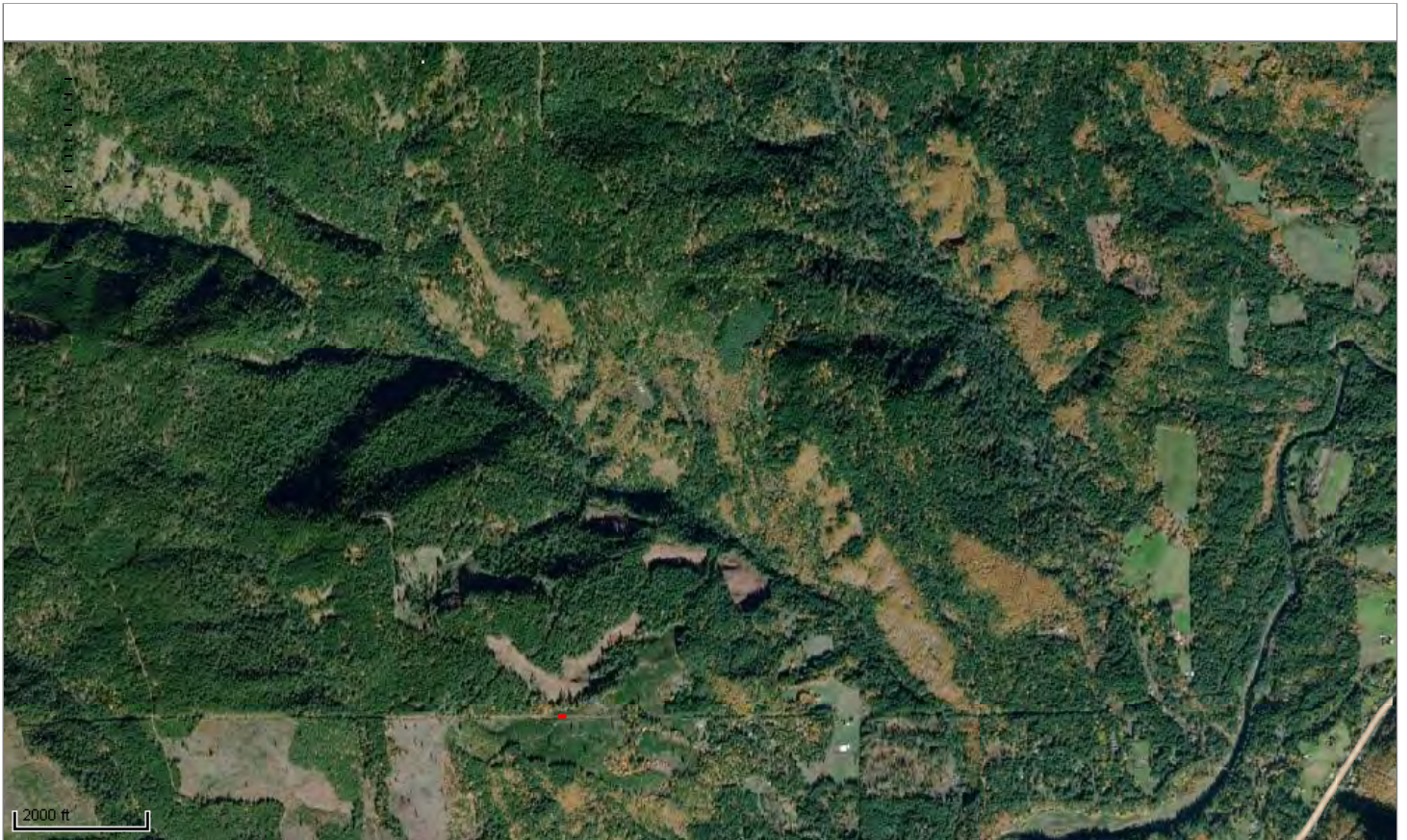
Date(s) aerial images were photographed: May 28, 2020—May 29, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
65B	Dystroxerepts, 30 to 75 percent slopes	93.6	12.1%
76B	Underwood ashy loam, 15 to 30 percent slopes	21.7	2.8%
76C	Underwood gravelly ashy loam, 30 to 50 percent slopes	51.2	6.6%
86B	Chemawa ashy loam, 8 to 15 percent slopes	19.7	2.5%
86C	Chemawa ashy loam, 15 to 30 percent slopes	33.1	4.3%
86D	Chemawa gravelly ashy loam, 30 to 45 percent slopes	53.2	6.9%
89	McElroy gravelly ashy loam, 30 to 65 percent slopes	406.2	52.6%
89B	McElroy-Rock outcrop complex, 50 to 90 percent slopes	92.7	12.0%
90C	Hood loam, 30 to 65 percent slopes	1.3	0.2%
<b>Totals for Area of Interest</b>		<b>772.7</b>	<b>100.0%</b>





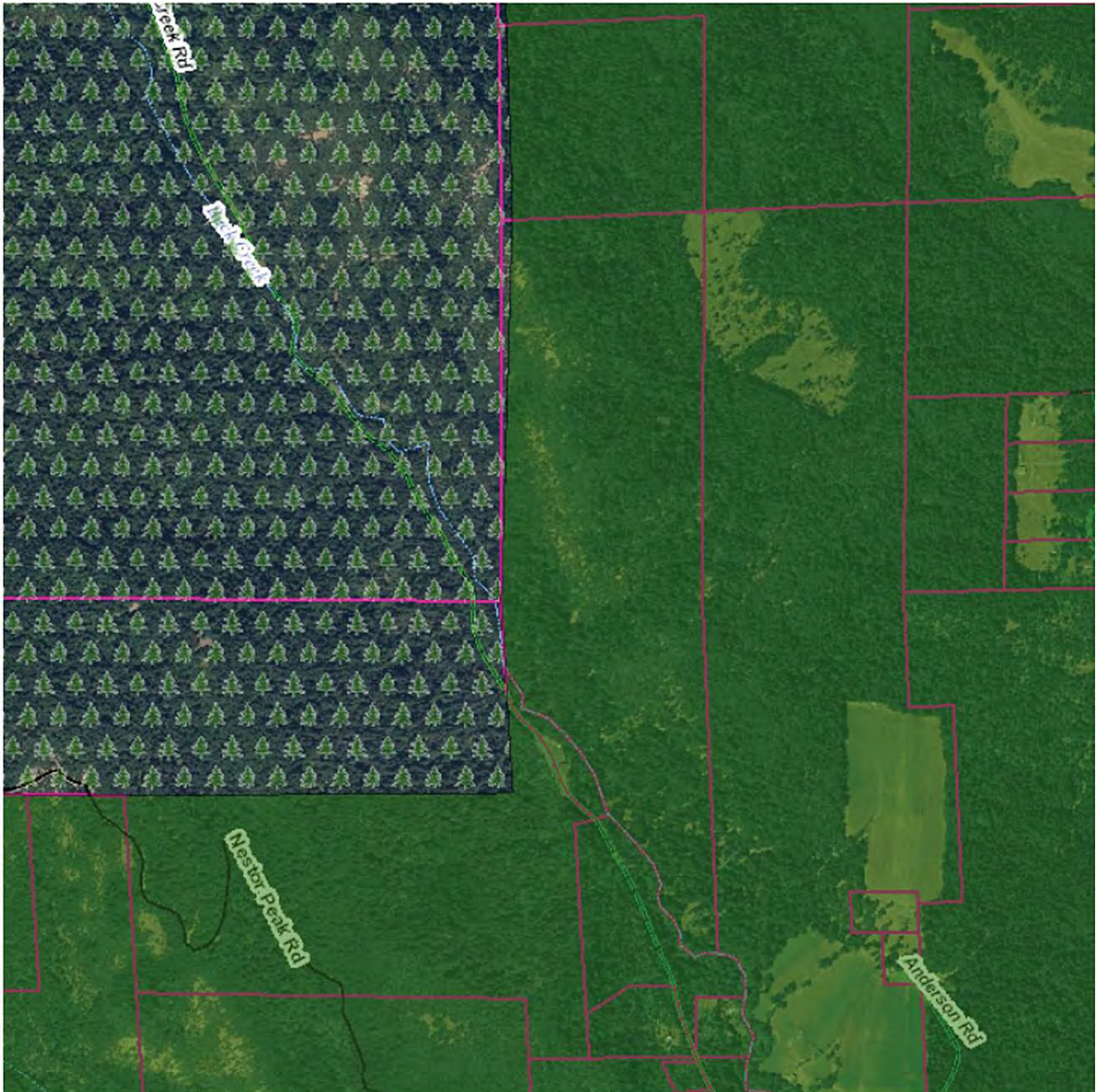
CITY OF WHITE SALMON  
TRANSMISSION MAIN REPLACEMENT PHASE 1  
DEPARTMENT OF ECOLOGY CLEANUP SITE MAP

FIGURE 9



# KLICKITAT COUNTY ZONING MAP

## WHITE SALMON TRANSMISSION MAIN PHASE 1



City of White Salmon  
Transmission Main Replacement Phase 1



























Figure 10



Created by Klickitat County. Klickitat County provides no warranty, expressed or implied, as to the accuracy, reliability or completeness of this data.

# Legend

## Zoning

-  Aggregate Overlay Zone
-  Airport Development
-  Extensive Agriculture
-  Extensive Agriculture- Cluster
-  Forest Resource
-  Forest Resource-Cluster
-  General Commercial
-  General Industrial
-  General Rural
-  General Rural- Cluster
-  Industrial Park
-  Open Space
-  Open Space- Cluster
-  Public
-  R3- Cluster
-  Residential
-  Residential 1
-  Residential 3
-  Resource Lands
-  Rural
-  Rural Center
-  Rural Residential 1
-  Rural Residential 2
-  Single Family Residential R1
-  Suburban Residential
-  Tourist Commercial

## Waterways

-  Creek
-  River

## County Boundary

- 

## Towns (Points)

- 

## City Limits

- 

## Roads

-  City
-  County
-  Other Govt
-  Private
-  State



## Parcels

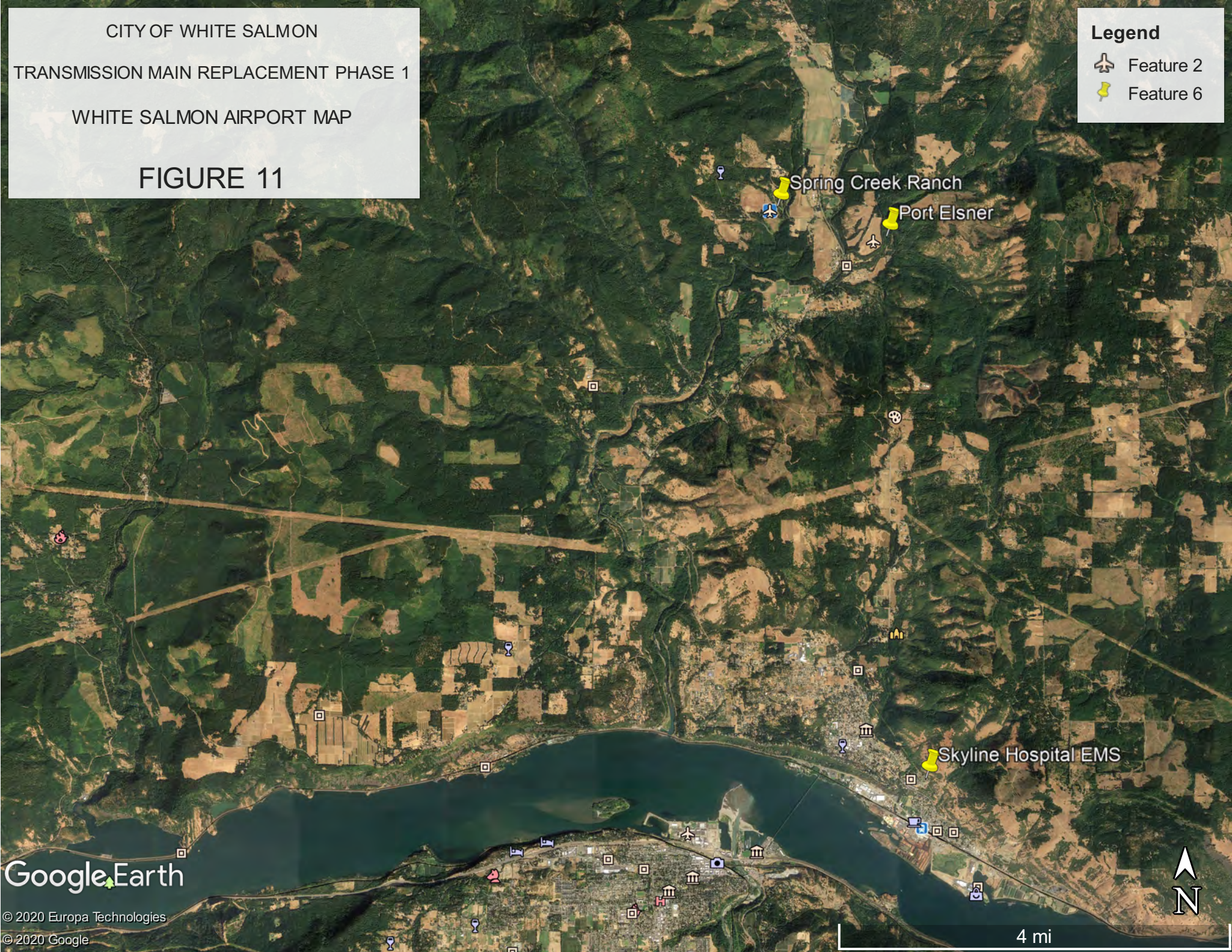
- 



CITY OF WHITE SALMON  
TRANSMISSION MAIN REPLACEMENT PHASE 1  
WHITE SALMON AIRPORT MAP  
  
FIGURE 11

**Legend**

-  Feature 2
-  Feature 6



Google Earth

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4 mi