Exhibit S

Historic, Cultural, and Archaeological Resources

Mist Resiliency Project March 2024

Prepared for NW Natural

Northwest Natural Gas

Prepared by



and





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List of Attachments

Attachment S-1. Cultural Resources Inventory and Evaluation Report (Confidential-provided under separate cover)

Acronyms and Abbreviations

HRA Historical Research Associates, Inc.

NWN Northwest Natural Gas

OAR Oregon Administrative Rules

Project Mist Resiliency Project

SHPO State Historic Preservation Office

1.0 Introduction

Exhibit S provides an analysis of potential significant adverse impacts of the Mist Resiliency Project (Project) to historic, cultural, and archaeological resources, as required to meet the submittal requirements in Oregon Administrative Rules (OAR) 345-021-0010(1)(s) paragraphs (A) through (E). This exhibit demonstrates that the Project can comply with the approval standard found in OAR 345-022-0090:

- (1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:
 - (a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;
 - (b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in 358.905(1)(c); and
 - (c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).
- (2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.
- (3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

As the certificate holder, Northwest Natural Gas (NWN) must describe the impacts of the proposed Project within the Analysis Area, which for cultural resources is the same as the Site Boundary. The Site Boundary is defined in the Project Description section of this Request for Amendment 13 that reflects the information pursuant to OAR 345-021-0010(1)(a) and (b).

2.0 Historic and Cultural Resources within the Analysis Area

OAR 345-021-0010(1)(s) Information about historic, cultural and archaeological resources. Information concerning the location of archaeological sites or objects may be exempt from public disclosure under ORS 192.345(11). The applicant must submit such information separately, clearly marked as "confidential," and shall request that the Department and the Council keep the information confidential to the extent permitted by law. The applicant must include information in Exhibit S or in confidential submissions providing evidence to support a finding by the Council as required by OAR 345-022-0090, including:

2.1 Listed or Potential Resources for the National Register of Historic Places – OAR 345-021-0010(1)(s)(A)

OAR 345-021-0010(1)(s)(A) Historic and cultural resources within the analysis area that have been listed, or would likely be eligible for listing, on the National Register of Historic Places;

There are no historic or cultural resources identified within the Analysis Area that are listed or likely eligible for listing on the National Register of Historic Places.

2.2 Archaeological Objects and Sites on Private Lands – OAR 345-021-0010(1)(s)(B)

 $OAR\ 345-021-0010(1)(s)(B)$ For private lands, archaeological objects, as defined in ORS 358.905(1)(a), and archaeological sites, as defined in ORS 358.905(1)(c), within the analysis area;

No archaeological sites or objects were identified within the Analysis Area.

2.3 Archaeological Objects and Sites on Public Lands – OAR 345-021-0010(1)(s)(C)

OAR 345-021-0010(1)(s)(C) For public lands, archaeological sites, as defined in ORS 358.905(1)(c), within the analysis area;

None of the Analysis Area is on public land.

3.0 Description of Cultural Resources Surveys Performed - OAR 345-021-0010(1)(s)(D)

OAR 345-021-0010(1)(s)(D) The significant potential impacts, if any, of the construction, operation and retirement of the proposed facility on the resources described in paragraphs (A), (B) and (C) and a plan for protection of those resources that includes at least the following:

3.1 Methods - OAR 345-021-0010(1)(s)(D)(i)

(i) A description of any discovery measures, such as surveys, inventories, and limited subsurface testing work, recommended by the State Historic Preservation Officer or the National Park Service of the U.S. Department of Interior for the purpose of locating, identifying and assessing the significance of resources listed in paragraphs (A), (B) and (C);

Historical Research Associates, Inc. (HRA), conducted a records review followed by field surveys. The records review included all areas within 1 mile of the Analysis Area for the Project. Field surveys were conducted within the Analysis Area where landowner access had been obtained. The

results of the surveys are summarized below. A more detailed description of the methods and results of HRA's cultural resource survey and recommendations can be found in confidential Attachment S-1.

3.1.1 Records Review

HRA conducted a records review using the Oregon State Historic Preservation Office's (SHPO's) Oregon Archaeological Records Remote Access (OARRA) GIS database and Oregon Historic Sites Database (OHSD), reviewing reports and forms associated with previous archaeological and historical studies to determine if buildings, structures, districts, objects, or archaeological resources had been previously recorded within the Analysis Area and its vicinity. The records review also included regional and local environmental histories, ethnographic studies, and documents pertaining to local history. The results of the records review, which are described in detail in Attachment S-1, are summarized here.

There have been four cultural resource surveys previously conducted within the Analysis Area. All of these surveys are associated with the previous iterations of the Project (Dames and Moore 1997, Davis et al. 2015, Hibbs and Ellis 1988a, Hibbs and Ellis 1988b). No cultural resources were identified within the Analysis Area during these previous surveys.

There have also been 12 cultural resource surveys conducted within 1 mile but outside of the Analysis Area. Nearly all of the previously conducted surveys were associated with Oregon Department of Transportation (ODOT) projects along Highway 30 or Highway 202.

No previously recorded historic, cultural, or archaeological resources have been recorded within the Analysis Area. There have been two sites and seven isolates previously recorded within 1 mile of the Analysis Area (Bland et al. 2009, Ruiz et al. 2012). These resources include a precontact lithic scatter, a precontact isolate, a historic-period refuse scatter, and six historic-period isolates.

3.1.2 Field Surveys

Following the records review, HRA conducted a pedestrian field survey of the Analysis Area. The fieldwork was conducted between June 19 and 21, 2023, and September 25 through 28, 2023. The methods included a pedestrian survey within the Analysis Area (not including already surveyed areas [25.8 acres], thus the area surveyed included 250.9 acres). Pedestrian transects were spaced between 10 and 20 meters apart, depending on the landform and previous disturbances. A subsurface sampling survey was also conducted and included the excavation of shovel probes in areas with a high probability for potential archaeological resources and were free from previous disturbances or fill.

Soil exposures were inspected for the presence of cultural materials and morphological consistency to soil profiles observed in shovel probes. Observations about topography, vegetation, surface visibility, and disturbances were recorded in the Project field notebook. Overview and close-up photographs were taken, and each photo was recorded on a standardized photo log.

Shovel probes were placed within the Analysis Area in locations with low ground surface visibility and high potential for buried archaeological deposits, as allowed by the surface geology, disturbance, and slope. This was entirely confined to the southern end of the Analysis Area along the road heading north to Miller Station and the laydown area along Highway 202. Shovel probes measured approximately 30 centimeters in diameter and were excavated to a minimum of 50 centimeters below surface, when possible. In areas with potential for deeply buried archaeological deposits, some shovel probes were extended with a 15-centimeter-diameter hand auger. Probes were excavated in 10-centimeter levels.

Although the Project disturbances will typically extend up to 8 feet below the surface, deeper disturbances may be needed in areas where horizontal directional drilling may be employed along the proposed powerline alignment near the stretch of the mainline road down near Highway 202. Laydown area disturbances are expected to be near surface and will consist mostly of vehicle traffic and equipment storage. A selection of shovel probes were extended with a with a 15-centimeter-diameter hand auger to test for potentially deeply buried deposits. Given the geologic history of the majority of the Analysis Area, there is not a high potential for buried cultural deposits.

Excavated soils were screened through ½-inch hardware mesh. Texture, color, and structure of soil horizons observed in each shovel probe were recorded on standardized field forms, and the probes were backfilled. The locations of shovel probes were marked on Project field maps and recorded using a GPS instrument with sub-meter accuracy.

3.2 Survey and Inventory Results - OAR 345-021-0010(1)(s)(D)(ii)

(ii) The results of the discovery measures described in subparagraph (i), together with an explanation by the applicant of any variations from the survey, inventory, or testing recommended:

Based on the background review, HRA determined that there was a low probability of encountering Indigenous or non-Indigenous archaeological sites throughout most of the Analysis Area. Most of the Analysis Area is within steep terrain far from water or historically mapped structures. Many areas also overlap or adjoin previous survey areas or are along established gravel roads and within developed areas associated with the Project. A notable exception to the overall low probability of the Analysis Area is the southernmost end of the Project along Highway 202 in the Nehalem River Valley and the northernmost Weyerhaeuser and Elliot Road laydown areas.

As a result of the records review and field surveys, no archaeological resources or historic-period buildings or structures were identified within the Analysis Area.

3.3 Measures Designed to Prevent the Destruction of Historic, Cultural, and Archaeological Resources – OAR 345-021-0010(1)(s)(D)(iii)

(iii) A list of measures to prevent destruction of the resources identified during surveys, inventories and subsurface testing referred to in subparagraph (i) or discovered during construction; and

No archaeological resources were encountered during the pedestrian or subsurface survey and there are no historic-period buildings or structures within the Analysis Area. No additional cultural resource studies are recommended for the project. Should unanticipated archaeological resources be encountered during the project construction, all ground-disturbing activity near the find will be halted, and SHPO should be promptly notified to ensure compliance with relevant state laws and regulations. If evidence of human burials is encountered, all ground-disturbing activity in the vicinity will be halted immediately, and SHPO, the Columbia County Sheriff's Office, and the appropriate Tribes will be notified.

3.4 Permit Application

No permit applications have been submitted at this time as none are needed. In the event that previously undiscovered archaeological sites are inadvertently disturbed during construction, construction work will cease and NWN will contact SHPO, which may lead to the need for the site archaeologist to apply for necessary archaeological excavation permits from SHPO.

4.0 Proposed Monitoring Plan – OAR 345-021-0010(1)(s)(E)

OAR 345-021-0010(1)(s)(E) The applicant's proposed monitoring program, if any, for impacts to historic, cultural and archaeological resources during construction and operation of the proposed facility.

No monitoring is proposed at this time. Monitoring of Project-associated ground-disturbing activity by archaeologists and/or Tribal representatives may be conducted if project plan change or if requested. Such monitoring would be undertaken within the framework of an Archaeological Monitoring Protocol, which would define the roles and responsibilities of the monitors and procedures to be followed in response to any inadvertent discoveries of archaeological materials or human remains or damage to known resources.

5.0 References

Bland, Richard L., Thomas J. Connolly, and Ward Tonsfeldt. 2009. Archaeological Subsurface Reconnaissance and Testing of Sites 35CO60 and 35CO61 at the Nehalem River (Banzer) Bridge #03140A on Oregon Highway 202, Columbia County. University of Oregon, Museum of Natural and Cultural History, Eugene. SHPO Report No. 22794.

Dames & Moore. 1997. Cultural Resources Technical Report Northwest Natural Gas Company
Pipeline Expansion Project Columbia County, Oregon. Dames and Moore, Portland Oregon.
Prepared for Northwest Natural Gas Company, Portland, Oregon. SHPO Report No. 158907

- Davis, Sara J., Natalie K. Perrin, and Bradley Bowden. 2015. Cultural Resources Investigations for the North Mist Expansion Project, Columbia County, Oregon. Historical Resource Associates, Inc., Portland, Oregon. SHPO Report No. 27339.
- Hibbs, Charles H., and David V. Ellis. 1988a. An Inventory of Cultural Resources and Evaluation of the Effects of the Proposed South Mist Feeder Gas Pipeline, Located between the Upper Nehalem River Valley and the Tualatin Valley in Northwestern Oregon. Charles Hibbs & Associates, Inc., Portland, Oregon. Prepared for Philip Gaddis, Portland, Oregon. SHPO Report No. 9261.
- Hibbs, Charles H., and David V. Ellis. 1988b. South Mist Feeder Pipeline Route Cultural Resources Evaluation Part II Effects and Mitigation. Charles Hibbs & Associates, Inc., Portland, Oregon. Prepared for Philip Gaddis, Portland, Oregon. SHPO Report No. 9262.
- Ruiz, Christopher, Richard L. Bland, Thomas J. Connolly, Jamie Dexter, and Julia A. Knowles. 2012. Archaeological Monitoring, and Recovery of a Features at Site 35CO61, during the Oregon Highway 202, Nehalem River (Banzer) Bridge Project, Columbia County (ODOT Key No. 14797). SHPO Report No. 25025.

Attachment S-1: Cultural Resources Inventory and Evaluation Report

(CONFIDENTIAL – PROVIDED UNDER SEPARATE COVER)

