

Exhibit L Protected Areas

Boardman to Hemingway Transmission Line Project



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Amended Preliminary Application for Site Certificate

June 2017

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ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
Amended Project Order	First Amended Project Order, Regarding Statutes, Administrative Rules and Other Requirements Applicable to the Proposed Boardman to Hemingway Transmission Line (December 22, 2014)
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
DE	Dead end
GIS	geographic information system
I-84	Interstate 84
IPC	Idaho Power Company
KOP	Key Observation Point
kV	kilovolt
MP	milepost
NF	National Forest
NHOTIC	National Historic Oregon Trail Interpretive Center
NWR	National Wildlife Refuge
OAR	Oregon Administrative Rules
ODFW	Oregon Department of Fish and Wildlife
OPRD	Oregon Parks and Recreation Department
OR	Oregon (State) Highway
ORV	Outstanding Remarkable Values
Project	Boardman to Hemingway Transmission Line Project
psig	pounds per square inch gauge
RMP	Resource Management Plan
RNA	research natural area
ROW	right-of-way
SEORMP	Southeastern Oregon Resource Management Plan
SNHA	State Natural Heritage Area
SRA	State Recreation Area
USFS	U.S. Forest Service
V/C	volume to capacity
VRM	Visual Resource Management
WA	Wildlife Area
WSR	Wild and Scenic Rivers

1 Exhibit L

2 Protected Areas

3 1.0 INTRODUCTION

4 Exhibit L provides an analysis of potential impacts of the Boardman to Hemingway
5 Transmission Line Project (Project) on protected areas. Specifically, Exhibit L demonstrates the
6 Project will avoid all protected areas with two exceptions: the Blue Mountain Forest State Scenic
7 Corridor and the Ladd Marsh Wildlife Area (WA)/State Natural Heritage Area (SNHA). With
8 respect to the Blue Mountain Forest State Scenic Corridor, Idaho Power Company (IPC)
9 demonstrates it analyzed alternatives to crossing the state park as required by Oregon
10 Administrative Rule (OAR) 345-022-0040(2), and provides evidence that crossing the Blue
11 Mountain Forest State Scenic Corridor will not result in significant impacts and further explains
12 why the alternative routes would result in greater impacts. Regarding the Ladd Marsh Wildlife
13 Area/State Natural Heritage Area, the Project crossing is located within 500 feet of an existing
14 utility right-of-way that meets the specifications of OAR 345-022-0040(3). As a result, the
15 crossing in Ladd Marsh WA/SNHA is not subject to the provisions of OAR 345-022-0040(1).
16 Exhibit L demonstrates that the Project, taking into account mitigation, is not likely to result in
17 significant adverse impacts to the protected areas within the analysis area.

18 2.0 APPLICABLE RULES AND STATUTES

19 2.1 General Standards for Siting Facilities

20 The Protected Area Standard at OAR 345-022-0040 provides:

21 *(1) Except as provided in sections (2) and (3), the Council shall not issue a site*
22 *certificate for a proposed facility located in the areas listed below. To issue a site*
23 *certificate for a proposed facility located outside the areas listed below, the Council must*
24 *find that, taking into account mitigation, the design, construction and operation of the*
25 *facility are not likely to result in significant adverse impacts to the areas listed below.*
26 *References in this rule to protected areas designated under federal or state statutes or*
27 *regulations are to the designations in effect as of May 11, 2007:*

28 *(a) National parks, including but not limited to Crater Lake National Park and Fort*
29 *Clatsop National Memorial;*

30 *(b) National monuments, including but not limited to John Day Fossil Bed*
31 *National Monument, Newberry National Volcanic Monument and Oregon Caves*
32 *National Monument;*

33 *(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C.*
34 *1131 et seq. and areas recommended for designation as wilderness areas*
35 *pursuant to 43 U.S.C. 1782;*

36 *(d) National and state wildlife refuges, including but not limited to Ankeny,*
37 *Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer*
38 *Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark,*
39 *Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch*
40 *Rocks, Umatilla, Upper Klamath, and William L. Finley;*

1 (e) National coordination areas, including but not limited to Government Island,
2 Ochoco and Summer Lake;

3 (f) National and state fish hatcheries, including but not limited to Eagle Creek and
4 Warm Springs;

5 (g) National recreation and scenic areas, including but not limited to Oregon
6 Dunes National Recreation Area, Hell's Canyon National Recreation Area, and
7 the Oregon Cascades Recreation Area, and Columbia River Gorge National
8 Scenic Area;

9 (h) State parks and waysides as listed by the Oregon Department of Parks and
10 Recreation and the Willamette River Greenway;

11 (i) State natural heritage areas listed in the Oregon Register of Natural Heritage
12 Areas pursuant to ORS 273.581;

13 (j) State estuarine sanctuaries, including but not limited to South Slough
14 Estuarine Sanctuary, OAR Chapter 142;

15 (k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers
16 designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers
17 listed as potentials for designation;

18 (L) Experimental areas established by the Rangeland Resources Program,
19 College of Agriculture, Oregon State University: the Prineville site, the Burns
20 (Squaw Butte) site, the Starkey site and the Union site;

21 (m) Agricultural experimental stations established by the College of Agriculture,
22 Oregon State University, including but not limited to:

23 Coastal Oregon Marine Experiment Station, Astoria
24 Mid-Columbia Agriculture Research and Extension Center, Hood River
25 Agriculture Research and Extension Center, Hermiston
26 Columbia Basin Agriculture Research Center, Pendleton
27 Columbia Basin Agriculture Research Center, Moro
28 North Willamette Research and Extension Center, Aurora
29 East Oregon Agriculture Research Center, Union
30 Malheur Experiment Station, Ontario
31 Eastern Oregon Agriculture Research Center, Burns
32 Eastern Oregon Agriculture Research Center, Squaw Butte
33 Central Oregon Experiment Station, Madras
34 Central Oregon Experiment Station, Powell Butte
35 Central Oregon Experiment Station, Redmond
36 Central Station, Corvallis
37 Coastal Oregon Marine Experiment Station, Newport
38 Southern Oregon Experiment Station, Medford
39 Klamath Experiment Station, Klamath Falls;

40 (n) Research forests established by the College of Forestry, Oregon State
41 University, including but not limited to McDonald Forest, Paul M. Dunn Forest,
42 the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak
43 area and the Marchel Tract;

1 (o) Bureau of Land Management areas of critical environmental concern,
2 outstanding natural areas and research natural areas;

3 (p) State wildlife areas and management areas identified in OAR chapter 635,
4 Division 8.

5 (2) Notwithstanding section (1), the Council may issue a site certificate for a
6 transmission line . . . located in a protected area identified in section (1), if other
7 alternative routes or sites have been studied and determined by the Council to have
8 greater impacts. . . .

9 (3) The provisions of section (1) do not apply to transmission lines or natural gas
10 pipelines routed within 500 feet of an existing utility right-of-way containing at least one
11 transmission line with a voltage rating of 115 kilovolts or higher or containing at least one
12 natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125
13 psig [pounds per square inch gauge].

14 **2.2 Site Certificate Application Requirements**

15 OAR 345-021-0010(1)(l) requires that Exhibit L include the following regarding protected areas:

16 (A) A list of the protected areas within the analysis area showing the distance and
17 direction from the proposed facility and the basis for protection by reference to a specific
18 subsection under OAR 345-022-0040(1).

19 (B) A map showing the location of the proposed facility in relation to the protected areas
20 listed in OAR 345-022-0040 located within the analysis area.

21 (C) A description of significant potential impacts of the proposed facility, if any, on the
22 protected areas including, but not limited to, potential impacts such as:

23 (i) Noise resulting from facility construction or operation;

24 (ii) Increased traffic resulting from facility construction or operation;

25 (iii) Water use during facility construction or operation;

26 (iv) Wastewater disposal resulting from facility construction or operation;

27 (v) Visual impacts of facility structures or plumes.

28 **2.3 Amended Project Order Provisions**

29 The Amended Project Order includes the following discussion regarding Exhibit L:

30 Note that OAR 345-022-0040(1) generally prohibits siting of transmission lines through
31 protected areas, which include state parks. However, under OAR 345-022-0040(2),
32 EFSC may approve a route that passes through a protected area if the council
33 determines that other routes outside the protected area would “have greater impacts.” If
34 the transmission line routing proposed by the applicant will pass through a protected
35 area, the applicant shall describe in detail the alternative routes it studied and provide
36 analysis in the application to support a finding that routing the transmission line through
37 the protected area would have less impacts than the alternatives.

38 Where OAR 345-022-0040(3) is applicable, ensure that the application provides
39 evidence that the proposed line is routed within 500 feet of an existing utility right of way
40 containing at least one transmission line with a voltage rating of 115 kV or higher.

41 Ensure that each potentially impacted state scenic waterway listed in ORS 390.826 is
42 addressed in Exhibit L and that the evidence to address the requirements of ORS

1 390.845 is also included. Provide an analysis of the evidence to support a finding by the
2 Council that the requirements of the Oregon Parks and Recreation Department related
3 to the siting of a utility facility in a scenic waterway have been met.

4 (Amended Project Order, Section III(I)).

5 **3.0 ANALYSIS**

6 **3.1 Analysis Area**

7 The analysis area for Exhibit L is the area within the Site Boundary and 20 miles from the Site
8 Boundary, including areas outside the state. The Site Boundary is defined as “the perimeter of
9 the site of a proposed energy facility, its related or supporting facilities, all temporary laydown
10 and staging areas, and all corridors and micrositing corridors proposed by the applicant” (OAR
11 345-001-0010(55)). The Site Boundary encompasses the following facilities in Oregon:

- 12 • The Proposed Route, consisting of 270.8 miles of new 500-kilovolt (kV) electric
13 transmission line, removal of 12 miles of existing 69-kV transmission line, rebuilding of
14 0.9 mile of a 230-kV transmission line, and rebuilding of 1.1 miles of an existing 138-kV
15 transmission line;
- 16 • Four alternatives that each could replace a portion of the Proposed Route, including the
17 West of Bombing Range Road Alternative 1 (3.7 miles), West of Bombing Range Road
18 Alternative 2 (3.7 miles), Morgan Lake Alternative (18.5 miles), and Double Mountain
19 Alternative (7.4 miles);
- 20 • One proposed 20-acre station (Longhorn Station);
- 21 • Ten communication station sites of less than ¼-acre each and two alternative
22 communication station sites;
- 23 • Permanent access roads for the Proposed Route, including 206.3 miles of new roads
24 and 223.2 miles of existing roads requiring substantial modification, and for the
25 Alternative Routes including 30.2 miles of new roads and 22.7 miles of existing roads
26 requiring substantial modification; and
- 27 • Thirty-one temporary multi-use areas and 299 pulling and tensioning sites of which four
28 will have light-duty fly yards within the pulling and tensioning sites.

29 The Project features are fully described in Exhibit B and the Site Boundary for each Project
30 feature is described in Exhibit C, Table C-24. The location of the Project features and the Site
31 Boundary is outlined in Exhibit C.

32 **3.2 Methods**

33 The initial step in assessing the potential impacts of the Project on protected areas was to
34 identify the protected areas occurring within the analysis area. The protected areas were
35 identified using existing geographic information system (GIS) data, maps, reports, and other
36 information on the 16 categories of protected areas listed in OAR 345-022-0040(1). Table L-1-1
37 in Attachment L-1 provides a list of all the protected areas within the analysis area with their
38 distance and direction to the Proposed Route, West of Bombing Range Road Alternative 1 and
39 2, Morgan Lake Alternative, or Double Mountain Alternative. Once the protected areas were
40 identified, the next step was to evaluate and describe “significant potential impacts of the

1 proposed facility, if any, on the protected areas including, but not limited to, potential impacts
2 such as:

- 3 (i) *Noise resulting from facility construction or operation;*
- 4 (ii) *Increased traffic resulting from facility construction or operation;*
- 5 (iii) *Water use during facility construction or operation;*
- 6 (iv) *Wastewater disposal resulting from facility construction or operation;*
- 7 (v) *Visual impacts of facility structures or plumes; and*
- 8 (vi) *Visual impacts from air emissions resulting from facility construction or operation,*
9 *including, but not limited to, impacts on Class 1 Areas as described in OAR 340-*
10 *204-0050.”¹*

11 As discussed above, the analysis area for Exhibit L is the Site Boundary plus 20 miles. However,
12 IPC’s assessment for certain impacts was based on a narrower buffer as discussed below.

13 **3.2.1 Noise Impacts**

14 As discussed in detail in Exhibit X, IPC conducted an acoustic analysis of the Project that
15 included field monitoring, baseline sound modeling, and predictive noise analysis consistent
16 with the Noise Control Regulations. This analysis was used to support conclusions in this and
17 other Exhibits regarding noise-related impacts.

18 **3.2.2 Traffic Impacts**

19 In order to evaluate potential impacts on protected areas from Project traffic, as required by
20 Exhibit L, IPC analyzed the Project description as set forth in Exhibit C and the description of
21 anticipated traffic impacts in Exhibit U. IPC defined impacts as follows:

- 22 • No Impact – No impact to traffic during construction or operation. Traffic will remain low
23 volume, free-flow operation, low density, and remain at desired speed.
- 24 • Negligible Impact – During operational phase, impact is so small it will not affect volume,
25 free-flow operation, density, or speed.
- 26 • Temporary Impact – During construction, temporary impact may result from increased
27 traffic volume, large trucks, entering/exiting multi-use area onto roadway, and road
28 closure during stringing operations across roadway. These impacts will be temporary
29 during construction and may increase volume and density, reducing speed and free-flow
30 operation. No or negligible impact during operation. Temporary traffic impacts are
31 considered to be impacts that would not persist longer than the construction period.

32 IPC determined that temporary traffic impacts would not constitute a significant impact as
33 defined by OAR 345-001-0010(53), because the magnitude and intensity of impacts will not
34 have an important consequence that precludes protected areas from providing the functions,
35 experiences, or opportunities for which they were designated. IPC analyzed potential traffic
36 impacts to protected areas to reach the conclusions set forth in the impacts analysis below in
37 Section 3.5.4.

¹ OAR 345-021-0010(1)(I)(C).

1 **3.2.3 Water Use, Wastewater, and Visual Impact from Plumes**

2 In order to evaluate potential impacts on protected areas from Project water, wastewater
3 disposal, and visual impacts from plumes, as required by Exhibit L, IPC analyzed the Project
4 description as set forth in Exhibit C, the description of anticipated traffic impacts in Exhibit U, the
5 discussion of anticipated water use in Exhibit O, and the discussion regarding the treatment of
6 wastewater in Exhibit V. Because the water use and wastewater impacts will have no impact to
7 protected areas, IPC did not develop a detailed methodology for analyzing impacts. Likewise,
8 due to the nature of the Project, plumes will not result from operation of the Project, and
9 therefore will not result in visual impacts.

10 IPC analyzed potential water and wastewater impacts to protected areas to reach the
11 conclusions set forth in the impacts analysis below.

12 **3.2.4 Visual Impacts**

13 Visual impacts to protected areas were evaluated using the methodology developed for
14 Exhibit R (Scenic Resources). The methodology considers the combined outcome of context of
15 the impact, impact intensity and the degree to which the possible impacts are caused by the
16 proposed action to determine whether impacts are potentially significant.² Attachment L-3
17 includes the complete visual impact assessment methodology developed for Exhibit R (and also
18 applied to the visual impact analysis for protected areas in Exhibit L and recreation sites in
19 Exhibit T). Photosimulations were developed from a subset of Key Observation Points (KOPs)
20 relevant to visual impacts analyzed in Exhibit L. These photosimulations were used to inform the
21 visual impact analysis and are included in Attachment L-4. The visual impact methodology was
22 implemented in a series of three parts, summarized below.

23 **Part 1: Baseline Conditions**

24 Information on existing scenic quality/attractiveness and landscape character was analyzed for
25 each protected area in order to establish consistent baseline data to support the impact
26 assessment. Sites were located in lands administered by multiple jurisdictions, including both
27 the Bureau of Land Management (BLM) and United States Forest Service (USFS). The BLM
28 and USFS have established baseline inventory and impact assessment procedures. The BLM
29 manages visual resources through the Visual Resource Management (VRM) System (BLM
30 1986a). Visual values are established through the visual resource inventory process, which
31 classifies scenery based on the assessment of three components: scenic quality, visual
32 sensitivity, and distance. Visual resources are then assigned to management classes with
33 established objectives:

- 34 • **Class I Objective:** To preserve the existing character of the landscape. The level of
35 change to the characteristic landscape should be very low and must not attract attention.
- 36 • **Class II Objective:** To retain the existing character of the landscape. The level of
37 change to the characteristic landscape should be low.
- 38 • **Class III Objective:** To partially retain the existing character of the landscape. The level
39 of change to the characteristic landscape should be moderate.
- 40 • **Class IV Objective:** To provide for management activities that require major
41 modification of the existing character of the landscape. The level of change to the
42 characteristic landscape can be high.

² OAR 345-001-0010(53).

1 Within the study area, the USFS manages scenic resources through the Visual Management
2 System established in The National Forest Management, Volume 2, Agricultural Handbook 462
3 (1974) to inventory, classify, and manage lands for visual resource values. Visual resources are
4 managed by visual quality objectives, which describe a degree of acceptable alteration of the
5 natural landscape:

- 6 • **Preservation:** Allows for ecological changes only. Management activities, except for
7 very low visual impact recreation facilities, are prohibited.
- 8 • **Retention:** Provides for management activities which are not visually evident.
- 9 • **Partial Retention:** Provides for management activities that remain subordinate to the
10 characteristic landscape.
- 11 • **Modification:** Allows for management activities that physically dominate the original
12 character.
- 13 • **Maximum Modification:** Allows for management activities of vegetation and landform
14 alteration that dominate the characteristic landscape; however, when viewed as
15 background, the visual characteristics must be those of natural occurrences within the
16 surrounding area or character type.

17 The BLM and USFS systems were adapted to this Project-level assessment to remain
18 consistent with these procedures within lands administered by either agency. Resources not
19 administered by either agency were assessed using one of the two procedures based on
20 whether the resource was located in forested or non-forested areas; resources located in non-
21 forested areas were analyzed using the BLM methodology, whereas those located in forested
22 areas were analyzed using the USFS methodology.

23 Baseline data collected for this analysis included measures of scenic quality/attractiveness,
24 landscape character, and information on viewer groups and characteristics. Baseline data
25 collection methods are summarized below:

26 **Scenic Quality / Attractiveness.** Scenic quality on BLM-administered lands was quantified
27 through the scoring of seven key factors: landform, vegetation, water, color, adjacent scenery,
28 scarcity, and cultural modifications. Ranking is relative to other similar features within the
29 physiographic province. Each key factor was scored based on guidelines and scoring criteria
30 described in detail in Attachment L-3. After the scenic quality evaluation was completed, scores
31 for each key factor were totaled to derive an overall Scenic Quality Classification for the
32 resource. Scenic quality was classified as Class A, B, or C, with Class A receiving a total score
33 of 19 or more, Class B receiving a score from 12 to 18, and Class C scoring 11 or less.
34 Landscapes ranked as Class A have the highest apparent scenic quality, while landscapes
35 ranked as Class C have the lowest (BLM 1986b).

36 Baseline conditions for resources located on USFS-administered lands were described in terms
37 of both "Scenic Attractiveness" and "Scenic Integrity." Scenic attractiveness pertains to the
38 "intrinsic scenic beauty of the project area," and is categorized as: Class A (Distinctive), B
39 (Typical), or C (Indistinctive). The combination of valued landscape elements, such as landform,
40 water characteristics, vegetation, and cultural features, are used in determining the measure of
41 Scenic Attractiveness. Scenic integrity refers to the degree to which a landscape is free from
42 visible disturbances that detract from the natural or socially valued appearance (i.e., valued
43 landscape character). Scenic integrity is evaluated by measuring degree of alteration in line,
44 form, color, texture from natural or naturally appearing landscape character by measuring
45 changes in scale, intensity, and pattern against the attributes of that landscape character and is
46 classified as very high, high, moderate, low, very low, and unacceptably low.

1 **Landscape Character.** Landscape character is a descriptive means to assess a landscape.
2 Attributes of landform, vegetation, waterform, wildlife, spatial character, and cultural or historic
3 features were described in terms of their relative dominance or prominence to the character and
4 influence on the “sense of place” (USFS 1995). Because the BLM does not have a classification
5 system for landscape character, landscape character for all resources was classified per the
6 USFS system (1995), regardless of jurisdiction or physiography of the resource. Landscape
7 character classes are described below:

- 8 • **Naturally Evolving:** Landscape character expresses the natural evolution of biophysical
9 features and processes, with very limited human intervention.
- 10 • **Natural Appearing:** Landscape character expresses predominantly natural evolution,
11 but also human intervention including cultural features and processes.
- 12 • **Cultural:** Landscape character expresses built structures and landscape features that
13 display the dominant attitudes and beliefs of specific human cultures.
- 14 • **Pastoral:** Landscape character expresses dominant human created pastures,
15 “meadows,” and associated structures, reflecting valued historic land uses and lifestyles.
- 16 • **Agricultural:** Landscape character expresses dominant human agricultural land uses
17 producing food crops and domestic products.
- 18 • **Historic:** Landscape character expresses valued historic features that represent events
19 and period of human activity in the landscape.
- 20 • **Urban:** Landscape character expresses concentrations of human activity, primarily in
21 the form of commercial, cultural, education, residential, transportation structures, and
22 supporting infrastructure.

23 **Viewer Groups and Characteristics.** Viewer groups associated with each resource were
24 evaluated to understand certain characteristics that inform the extent to which potential changes
25 in landscape character and quality would be perceived (perception of change). This assessment
26 focuses on understanding characteristics that describe the relationship of the observer to the
27 potential impact, and the landscape context of that relationship. Viewer characteristics assessed
28 included viewer location (distance), viewer geometry (superior, inferior, or at grade), and viewer
29 duration or exposure (BLM 1986a). The landscape context included consideration of landscape
30 type – i.e., focal or panoramic.

31 **Part 2: Impact Likelihood and Assessment**

32 **Likelihood of Impact.** Per the Council’s rule OAR 345-001-0010(53), an important
33 consequence is in part determined by the likelihood and magnitude of the impact. In Part 2 of
34 the analysis, IPC first identified the Project-related actions that could affect the resource, which
35 included construction and operation of Project facilities, including permanent features (and other
36 actions, such as revegetation or restoration that could be prolonged in time, but not permanent).
37 Next, IPC evaluated the likelihood of the impact and the magnitude of the impact, considering
38 such factors as the duration of the impact, visual contrast and scale dominance, and resource
39 change and viewer perception. IPC considered all identified impacts to be “likely” to occur.

40 **Magnitude of Impact – Duration.** The type of Project-related actions that could affect the
41 resource, and the expected duration of their potential impacts were determined. “Impact
42 duration” was categorized as temporary, short-term, or long-term based on whether an impact
43 will occur for up to 3 years (i.e., Project construction), for less than 10 years (i.e., restoration), or
44 for the life of the Project (i.e. transmission towers and roads). Only those actions identified as
45 long-term are considered potentially significant. Temporary and short-term impacts are

1 disclosed but are not considered potentially significant because they would not permanently
2 alter scenic quality or landscape character, or jeopardize the ability of the resource to provide
3 the scenic value for which it was designated or recognized in relevant land use plans.

4 **Magnitude of Impact – Visual Contrast and Scale Dominance.** The “magnitude” of impacts
5 was measured by assessing the level of visual contrast and scale dominance of Project
6 components relative to the existing landscape. Visual contrast was determined by implementing
7 the visual contrast rating to evaluate the extent to which basic elements of form, line, color, and
8 texture of the proposed Project contrast with the existing landscape (BLM 1986a). Magnitude of
9 impacts was classified as low, medium, or high. Medium and high magnitude impacts were
10 considered potentially significant. Low magnitude impacts are disclosed but are not considered
11 potentially significant. Impacts determined to be of weak visual contrast and subordinate to
12 existing landscape character would not have the potential to alter scenic quality or landscape
13 character or be perceived by viewers.

14 **Magnitude of Impact – Resource Change and Viewer Perception.** The determination of
15 magnitude was used to evaluate the level of change to scenic quality/attractiveness and
16 landscape character of the resource (“resource change”) and how that change will be perceived
17 by viewers (“viewer perception”). Resource change was classified as low, medium, or high
18 based upon the geographic extent of medium to high magnitude impacts and the extent to
19 which those impacts alter landscape quality/attractiveness and/or character of the landscape.
20 The effects of past and present actions were taken into account, and the Project’s overall
21 contribution to resource change was disclosed. Viewer perception was also considered low,
22 medium, or high based on the location of the viewer relative to the medium to high magnitude
23 impact (i.e., elevated, neutral, or inferior vantage point) and whether views are predominantly
24 peripheral or head-on and episodic, intermittent, or continuous.

25 **Part 3: Consideration of Intensity, Causation, and Context**

26 Per the Council’s rule OAR 345-001-0010(53), an important consequence also considers the
27 “context of the action or impact, its intensity, and the degree to which the degree to which the
28 possible impacts are caused by the proposed action.” Drawing from impact determinations
29 made in Part 2, significance criteria addressing each of these components was assessed as
30 described below.

31 **Impact Intensity.** The “intensity” of impacts was determined by considering the level of
32 resource change, either alone or with consideration of how that level of resource change was
33 perceived by viewers. Impacts were considered to be of high intensity if the level of resource
34 change was ranked as high, despite whether that level of resource change is perceived by
35 viewers. Resource change ranked as medium was considered to be of high intensity where
36 viewer perception of this change was considered high. Impacts judged to be of low intensity
37 were not considered potentially significant and were not studied further because they would not
38 have the potential to alter scenic quality or landscape character or be perceived by viewers.

39 **Degree to Which the Possible Impacts are Caused by the Proposed Action.** The degree to
40 which the possible impacts are caused by the proposed action is disclosed for resources
41 determined to be adversely impacted by the Project. The contribution of the Project to adverse
42 impacts is based on the level of resource change, taking into account baseline conditions (past
43 or present actions) and direct and indirect impacts of the Project. Per the definition of
44 “significant” in OAR 345-001-0010(53), an “important consequence” may occur either alone or in
45 combination with other factors. Accordingly, the degree to which possible impacts may be
46 caused by the Project are analyzed; however, this aspect of the significance criteria was not

1 considered a discriminator of significance. Instead, it clarifies the potential role of the Project in
2 altering baseline conditions by re-stating metrics used to determine resource change.

3 **Context.** For those impacts judged to be long-term and medium to high intensity, a
4 determination of significance was made by considering the context of adverse impacts. The
5 context of the impact considered the role of scenery as a valued attribute of the resource and
6 the extent to which expected impacts would preclude the ability of the resource to provide the
7 scenic value for which it was recognized. The consistency of the impact with the standards and
8 guidelines of relevant land management objectives was considered in this assessment. As
9 follows, a conclusion of “less than significant” impact could be reached if the valued attributes of
10 the resource could persist despite a high intensity impact. If, because of medium or high
11 intensity impacts, the resource would no longer provide the valued scenic attribute(s) for which it
12 was deemed important, the impact was found to be “significant.”

13 **Potential Significance.** A conclusion of “less than significant” could be reached if the valued
14 scenic attributes of the resource could persist. If, because of its medium or high intensity
15 impacts, the protected area would no longer provide the valued scenic attribute(s) for which it
16 was deemed important, the impact was found to be “potentially significant.”

17 Analysis for Resources Located Between 0 and 10.0 Miles from the Proposed Route or
18 Alternative Routes

19 As illustrated in Figure L-1, potential visual effects of lattice 500-kV transmission towers at linear
20 distances of greater than 5 miles will not result in significant impacts due to limited visibility.
21 However, IPC recognizes that the Project ROW may be more visible than the towers in forested
22 areas due to the extent of vegetation clearing. As a result, the visual impact assessment was
23 completed for all protected areas within the 0 to 5.0-mile area around the Site Boundary for the
24 Proposed Route and Alternative Routes. Where the Proposed Route or Alternative Routes will
25 be sited in non-forested areas, protected areas beyond 5.0 miles of the Proposed Route were
26 not evaluated further due to the attenuation of visual impacts of the Project with distance.
27 Protected areas within 5.0 to 10.0 miles of the Proposed Route or Alternative Routes were
28 evaluated if they were located in or near areas where the Proposed Route will cross through
29 forested lands such that views of the cleared Project ROW could be experienced from a
30 protected area. The maps provided in Attachment L-2 show the locations of the protected areas
31 in the analysis area.

32 Table L-1-2 in Attachment L-1 provides a summary of the visual assessment results for
33 protected areas located within the analysis area. Attachment L-3 includes the complete detailed
34 visual impact assessment methodology.

35 **3.2.5 Other Potential Impacts**

36 In order to evaluate other potential impacts on protected areas from the Project, as required by
37 Exhibit L, IPC reviewed the Project description and other Exhibits to reach the impact
38 conclusions provided below.



1

2 **Figure L-1. Lattice Structure Potential Visibility Comparison**

3.3 List of Protected Areas

OAR 345-021-0010(1)(L)(A): A list of the protected areas within the analysis area showing the distance and direction from the proposed facility and the basis for protection by reference to a specific subsection under OAR 345-022-0040(1).

Within the analysis area, there are 80 protected areas. Attachment L-1, Table L-1-1 includes the distance and direction of each protected area from the Proposed Route and the basis for protection by reference to a specific subsection under OAR 345-022-0040(1). Protected areas are summarized by category in Table L-1, below.

Table L-1. Summary of Protected Areas by Category

Protected Area Categories	In Analysis Area	Crossed	Analyzed for Visual Impacts ¹
National Parks	0	0	0
National Monuments	0	0	0
Wilderness Areas	3	0	0
National and State Wildlife Refuges	5	0	2
National Coordination Areas	0	0	0
National and State Fish Hatcheries	2	0	0
National Recreation and Scenic Areas	0	0	0
State Parks and Waysides	13	1	6
State Natural Heritage Areas ²	2	0	1
State Estuarine Sanctuaries	0	0	0
Scenic Waterways, Wild and Scenic Rivers and Waterways, and Rivers Listed as Potential for Designation	12	0	2
Experimental Areas	1	0	0
Agricultural Experimental Stations	4	0	1
Research Forests	0	0	0
BLM ACECs, Outstanding Natural Areas and Research Natural Areas ³	28	1	10
State Wildlife Areas (WA) and Wildlife Management Areas ⁴	10	1	4
TOTAL	80	2	26

¹ Protected areas were analyzed for visual impacts if they are within 5.0 miles of the Proposed Route and/or Alternative Route centerlines or if they are within 10 miles of the Proposed Route or Morgan Lake Alternative centerlines where they occupy a forested setting.

² This category list included many protected areas that were already covered under other Protected Area Categories and were, therefore, not duplicated. This explains why there are only 2 areas listed in this category. For full list of State Natural Heritage Areas, see website: <http://orbic.pdx.edu/nap-register.html>

³ The BLM Oregon Trail Area of Critical Environmental Concern (ACEC) includes 7 parcels, each of which was individually named and therefore analyzed as a separate parcel within Exhibit L.

⁴ The Elkhorn Wildlife Area includes four tracts that were individually named and therefore analyzed as separate tracts within Exhibit L.

3.4 Map Showing Protected Area Locations

OAR 345-021-0010(1)(L)(B): A map showing the location of the proposed facility in relation to the protected areas listed in OAR 345-022-0040 located within the analysis area.

Attachment L-2 includes maps showing the location of the Proposed Route, West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, Morgan Lake Alternative, and Double Mountain Alternative relative to the protected areas within the analysis area for Exhibit L.

3.5 Description of the Significant Potential Impacts

OAR 345-021-0010(1)(I)(C): A description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to, potential impacts such as: (i) Noise resulting from facility construction or operation; (ii) Increased traffic resulting from facility construction or operation; (iii) Water use during facility construction or operation; (iv) Wastewater disposal resulting from facility construction or operation; (v) Visual impacts of facility structures or plumes. (vi) Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class 1 Areas as described in OAR 340-204-0050.

Within the analysis area there are 80 protected areas. Attachment L-1, Table L-1-1 summarizes the protected areas in the analysis area by category and their distance to the Proposed Route.

3.5.1 Protected Areas Crossed

OAR 345-022-0040(2) and OAR 345-022-0040(3) provide exceptions to allow the Council to issue a site certificate for a proposed facility that crosses a protected area provided "other alternative routes or sites have been studied and determined by the Council to have greater impacts," or if the "transmission line [is] routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kV or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig."

The Proposed Route crosses two protected areas: the Blue Mountain Forest State Scenic Corridor and the Ladd Marsh WA/SNHA, both in Union County. As described below, the Proposed Route conforms with the provisions of OAR 345-022-0040(2) where it crosses the Blue Mountain Forest State Scenic Corridor, and OAR 345-022-0040(3) where it crosses the Ladd Marsh WA/SNHA.

3.5.1.1 Blue Mountain Forest State Scenic Corridor

The Blue Mountain Forest State Scenic Corridor, which is included in the Oregon Parks and Recreation Department (OPRD) list of state parks, comprises six parcels along Interstate 84 (I-84) from the vicinity of Deadman Pass to Railroad Canyon in the Wallowa-Whitman National Forest (NF). The southernmost parcel of the Blue Mountain Forest State Scenic Corridor is crossed by the Proposed Route near project milepost (MP) 94.6 to 94.8 (Figure L-2a). It is a short crossing (about 1,000 feet) that occurs as the proposed transmission line proceeds through the only available designated utility corridor through the Wallowa-Whitman NF. There are many constraints in this utility corridor including other transmission lines, I-84, the Union Pacific Railroad, and cultural and recreation resources. The Proposed Route will span the parcel of the Blue Mountain Forest State Scenic Corridor and Old Emigrant Hill Scenic Frontage Road located within the state park, minimizing construction and maintenance impacts by

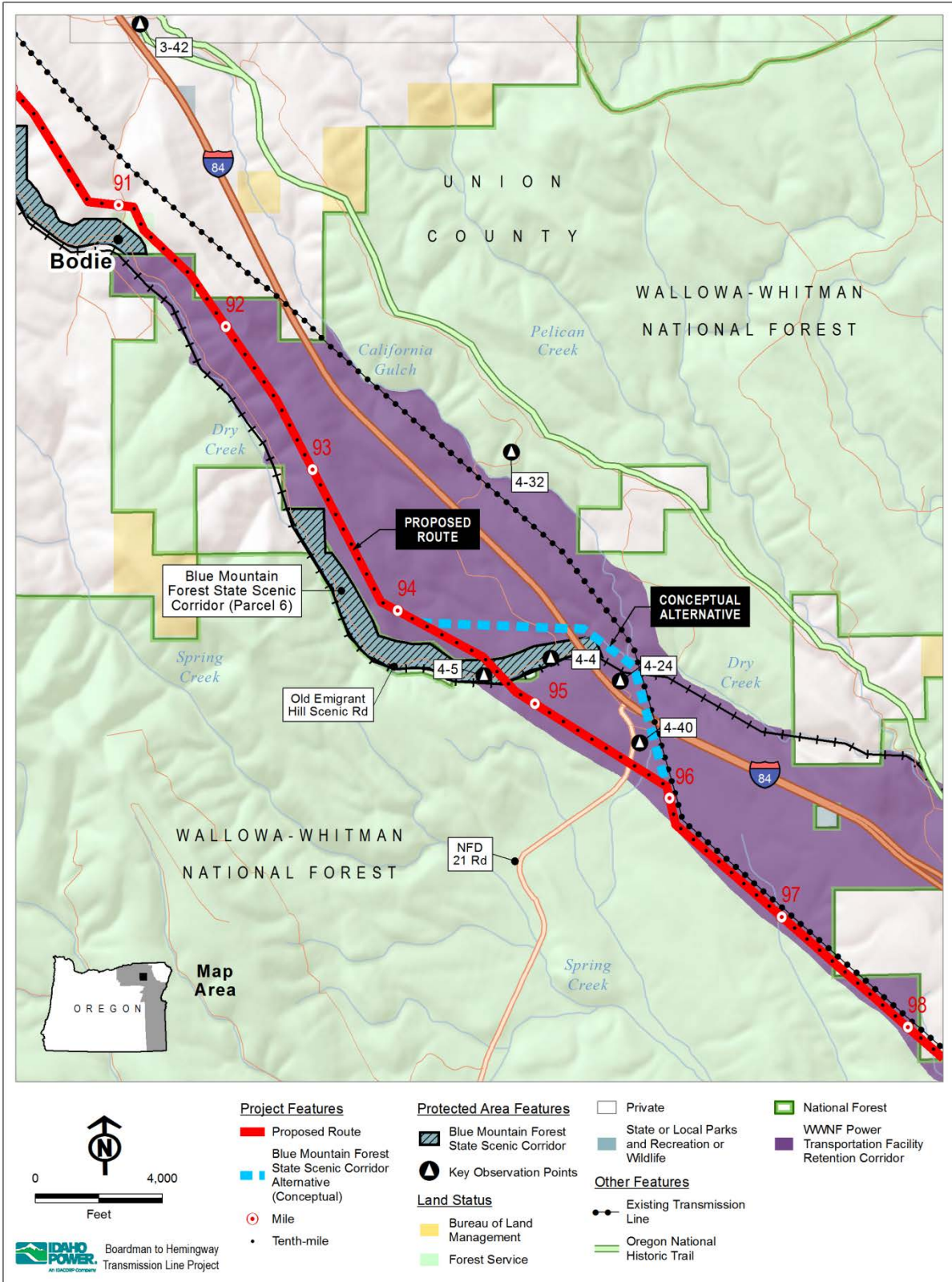
1 eliminating the need for access roads and tower pads on park lands. In addition, existing
2 vegetation will be maintained to screen many of the potential views from Old Emigrant Hill
3 Scenic Frontage Road. As motorists traveling on this road approach the transmission crossing,
4 they will view the conductors spanning the state park. Visual impacts on the Blue Mountain
5 Forest State Scenic Corridor will be low intensity and less than significant, as summarized in
6 Attachment L-1, Table L-1-2, and explained in detail in Attachment L-3. A photosimulation
7 depicting expected visual impacts is included in Attachment L-4.

8 IPC analyzed a conceptual alternative route that would avoid the Blue Mountain Forest State
9 Scenic Corridor. The conceptual alternative route was 3.2 miles long and was located within the
10 Wallowa-Whitman NF utility corridor. The conceptual alternative route departed from the
11 Proposed Route at approximately MP 94.1 and proceeded easterly, crossing I-84 before angling
12 southeasterly to pass along the eastern edge of the southernmost parcel of the scenic corridor.
13 The alternative route then angled farther to the south, crossed back over I-84, and rejoined with
14 the Proposed Corridor at approximately MP 96.0. The transmission line ROW would have been
15 250 feet wide in this area and crossed through approximately 141 acres of forest, 16 more acres
16 than the Proposed Route. The alternative route would have resulted in two crossings of I-84
17 (north and south of the Glover Interchange) within approximately a 1-mile stretch along the
18 interstate. Under the alternative route, at least one structure and a set of conductors would have
19 been visible from viewpoints within the parcel of the Blue Mountain Forest State Scenic
20 Corridor. Additionally, the alternative route would have high intensity long-term visual impacts
21 and potentially significant visual impacts to the Sensitivity Level 1 travel routes within the
22 Wallowa-Whitman NF – I-84 travel corridor. As described in more detail in Attachment L-3, high
23 intensity visual impacts would not be consistent with the USFS management standard of
24 “Retention” Visual Quality Objective for this area.

25 The potential impacts of the conceptual alternative that would avoid the Blue Mountain State
26 Scenic Corridor were discussed with the OPRD. OPRD reported that a crossing accomplished
27 in a “discreet way is better than crossing the interstate twice from an aesthetic perspective.”³
28 Subsequently, OPRD reported that “all attempts should be made to ensure future generations
29 can continue to enjoy this unique area.”⁴ IPC has determined, based on the visual analysis
30 conducted and correspondence with the agency managing the resource, OPRD, that the
31 conceptual alternative that avoids the Blue Mountain Forest State Scenic Corridor would have
32 greater overall impacts than the discrete crossing of the parcel by the Proposed Route.

³ Jim Hutton, OPRD, personal communication, March 22, 2011.

⁴ Alice Beals, OPRD, comments on draft Exhibit R, October 8, 2012.



1

2 **Figure L-2a. Blue Mountain Forest State Scenic Corridor**

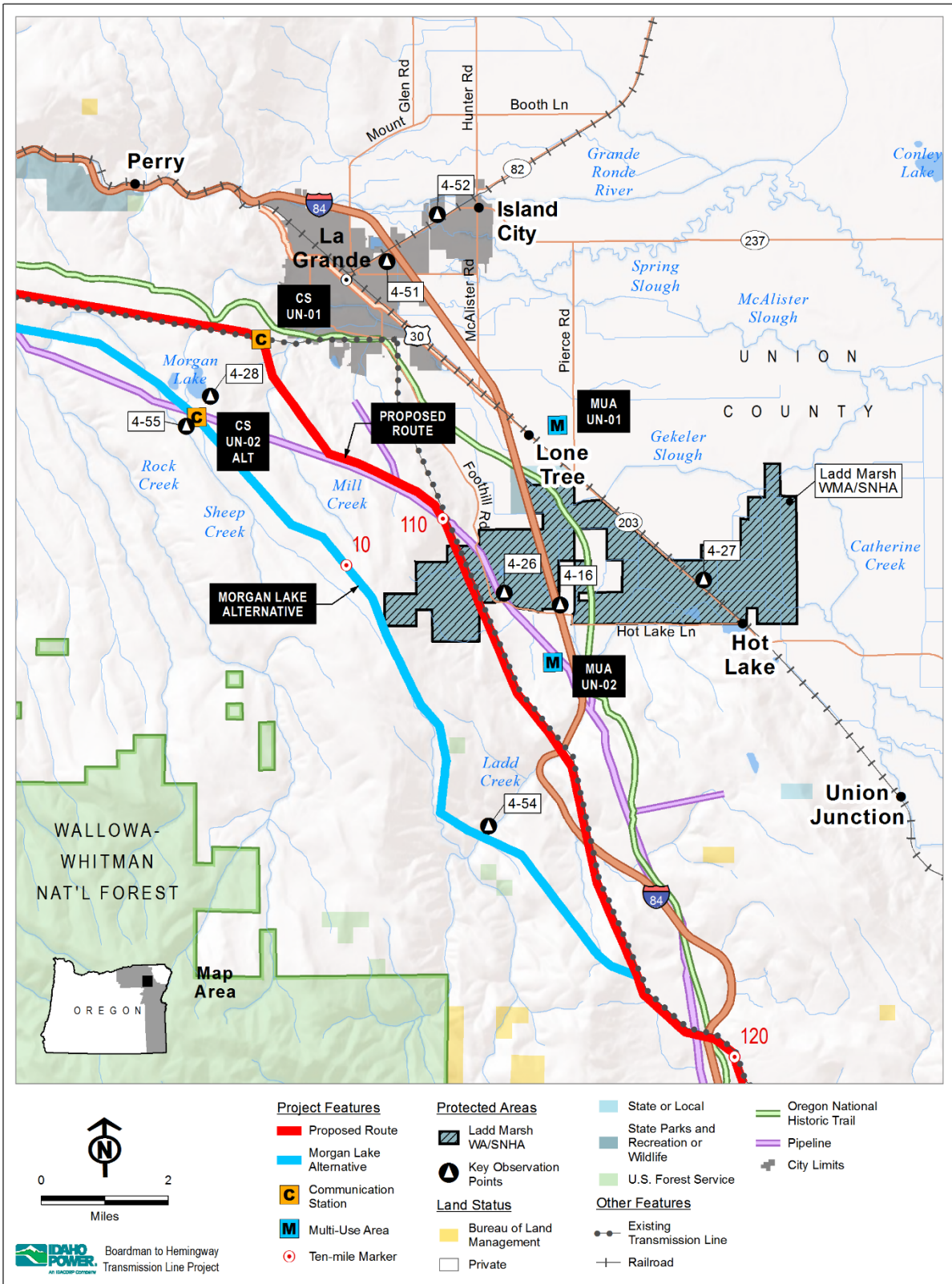
1 3.5.1.2 Ladd Marsh Wildlife Area/State Natural Heritage Area

2 The Ladd Marsh WA/SNHA is managed by the Oregon Department of Fish and Wildlife (ODFW)
3 and is located about 6 miles southeast of La Grande in southern Union County (Figure L-2b).
4 The Ladd Marsh WA/SNHA measures 6,019 acres comprising eight Habitat Management Units
5 and is divided into three large parcels by I-84 and State Highway 203. The purpose of the WA is
6 to protect wildlife and its habitat. No management standards or guidelines exist for the
7 protection of scenery.

8 The landscape includes numerous wetlands including seasonally and permanently flooded
9 meadows, marshes, and shallow lakes. In the western portion of the Ladd Marsh WA/SNHA,
10 upland areas occur that include mixed conifer at the higher elevations, upland shrub at mid
11 elevations, and agricultural areas and grasslands on the valley floor that create dense to patchy
12 patterns (ODFW 2008). Human development within the Ladd Marsh WA/SNHA include four
13 home sites, three host sites (trailer pads), City of La Grande treatment facility, two storage
14 areas, and several scattered buildings on the area from old farm sites. Some are scheduled to
15 be dismantled and the rest provide habitat for bats and barn owls. The Ladd Marsh WA/SNHA is
16 surrounded primarily by agricultural and rural residential land on the valley floor, timber land to
17 the west, and industrial land to the north. Three major transportation corridors (I-84, State
18 Highway 203, and a railroad) cross through the resource. Existing utility infrastructure include a
19 buried pipeline owned by the Northwest Pipeline Corp and a 230-kV transmission line owned
20 and operated by IPC. The landscape character is agricultural. Using the BLM's visual resource
21 inventory methods per manual H-8410-1 (BLM 1986b), the scenic quality of the Ladd Marsh
22 WA/SNHA is considered low (class C).

23 The Proposed Route will cross the Ladd Marsh WA/SNHA between project MP 110.4 and MP
24 111.5, approximately 0.5 mile east of Foothill Road. The route will parallel the existing 230-kV
25 transmission line and access road for the entire portion that crosses protected area. The
26 Proposed Route will be located within 500 feet of this existing transmission line and will
27 therefore meet the provisions of OAR 345-022-0040(3). The work area will introduce moderate
28 visual contrast from presence of materials and personnel during the construction period.
29 Existing roads will require moderate improvements, thereby resulting in weak visual contrast.

30 The transmission towers associated with the Proposed Route will introduce moderate to strong
31 visual contrast, depending on the location of the viewer within the WA/SHA. Visual contrast will
32 be minimized by the backdrop of the hillslopes to the west. Transmission structures will appear
33 co-dominant to surrounding natural landscape features and existing cultural modification.
34 Overall impacts will be long-term and medium magnitude. The visual contrast of transmission
35 structures would reduce the value for cultural modification to -4 and, likewise, reduce the
36 contribution of adjacent scenery to 1. Collectively, these changes would reduce the overall
37 scenic quality score to 9; however, scenic quality would remain Class C. As a result of the
38 change in value for cultural modification, resource change will be medium. Views of the Project
39 will be equally head on or peripheral and intermittent or continuous, depending on the type of
40 activity the viewer is participating in (viewing wildlife at a viewpoint, hiking, driving, hunting, or
41 fishing). Therefore, viewer perception is medium.



1

2 **Figure L-2b. Ladd Marsh Wildlife Area/State Natural Heritage Area**

1 The scenic quality of the resource under operational conditions will be the result of the
2 combined influence of the Project and other past or present actions including Ladd Marsh
3 WA/SNHA facilities, existing 230-kV transmission line, a buried pipeline, and major
4 transportation corridors. Medium intensity visual impacts will not preclude the ability of the Ladd
5 Marsh WA/SNHA to provide the wildlife-oriented recreational and educational opportunities
6 identified in the management plan. Therefore, visual impacts to the Ladd Marsh WA/SNHA will
7 be less than significant. The Proposed Route will be located within 500 feet of this existing
8 transmission line and will therefore meet the provisions of OAR 345-022-0040(3).

9 The Morgan Lake Alternative is located approximately 0.4 mile southwest of Ladd Marsh
10 WA/SNHA, where it traverses a higher elevation plateau in an east-west direction. The Morgan
11 Lake Alternative is outside of the protected area. Visual impacts to Ladd Marsh WA/SNHA from
12 the Morgan Lake Alternative are discussed in Section 3.5.1.2 and Attachment L-3.

13 **3.5.2 Other Areas Crossed**

14 The Proposed Route also crosses the Boardman Research Natural Area (RNA) at MP 10.0 to
15 MP 11.5, and the Double Mountain wilderness characteristic unit; however, these resources are
16 not considered protected areas under OAR 345-022-0040(1)(o), (k), or (c). A more detailed
17 discussion of why these resources are not considered protected areas under OAR 345-022-
18 0040(1)(o), (k) or (c) is provided below.

19 **3.5.2.1 Boardman Research Natural Area**

20 The Boardman RNA is located within the boundary of the Boardman Bombing Range on
21 property owned by the U.S. Department of Defense. The Proposed Route would cross the
22 eastern part of the Boardman RNA along the border with Bombing Range Road at MP 10.0 to
23 MP 11.5. In accordance with OAR 345-022-0040(1)(o), protected areas include "Bureau of Land
24 Management areas of critical environmental concern, outstanding natural areas and research
25 natural areas." The term "Bureau of Land Management" modifies or applies to each of the land-
26 designation types in that provision, including "research natural areas." Thus, RNAs designated
27 by the BLM are included as EFSC protected areas, but an RNA designated or managed by
28 another agency would not be an EFSC protected area. The Boardman RNA is owned by the
29 Department of Defense, and thus is not a protected area as defined by EFSC.

30 Even if the Boardman RNA were considered a protected area as defined by EFSC, the Project's
31 crossing of the Boardman RNA is exempt from OAR 345-022-0040(1). In accordance with
32 OAR 345-022-0040(3), "[t]he provisions of section (1) do not apply to transmission lines or
33 natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least
34 one transmission line with a voltage rating of 115 kV or higher or containing at least one natural
35 gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig." Here,
36 the Project will occupy the Bonneville Power Administration's (BPA) existing transmission line
37 ROW, and the BPA transmission line currently occupying the existing ROW is rated to
38 115-kV. Thus, regardless of whether the Boardman RNA is a protected area, the Proposed
39 Route will use an existing ROW for the entire crossing of the Boardman RNA, and accordingly,
40 OAR 345-022-0040(3) exempts this crossing from OAR 345-022-0040(1). Further, along the
41 relevant portion of the Boardman RNA, the Project will run within 500 feet of an existing 12-inch,
42 1,000 to 1,100 psig natural gas pipeline owned by TransCanada. For that reason too, the
43 Project is exempt from OAR 345-022-0040(1).

44 Neither the West of Bombing Range Road Alternative 1 nor the West of Bombing Range Road
45 Alternative 2 will cross the Boardman RNA.

1 3.5.2.2 Double Mountain Wilderness Characteristic Unit

2 The Double Mountain Alternative crosses the Double Mountain wilderness characteristic unit,
 3 which has been identified by BLM to possess wilderness characteristics and outstanding
 4 opportunities for solitude or a primitive and unconfined type of recreation (BLM 2015). However,
 5 although the area has been identified by BLM to contain wilderness characteristics,⁵ it has not
 6 been established as a wilderness study area nor designated as a wilderness area, and is not
 7 equivalent to an area “recommended for designation as wilderness” under OAR 345-022-
 8 0040(1)(c). Therefore, the Double Mountain wilderness characteristic unit is not a protected
 9 area as defined by EFSC and is not discussed further in Exhibit L.

10 3.5.3 Noise Impacts

11 OAR 345-021-0010(1)(l)(C)(i): Noise resulting from facility construction or operation;

12 Construction activities will progress along the corridor, and therefore, no single area will be
 13 exposed to construction noise for the entire construction period. Calculated construction noise
 14 levels are set out in Exhibit X, Table X-2, and site-specific temporary construction-related
 15 impacts are summarized in Attachment L-1, Table L-1-1. The calculated construction noise
 16 values are likely conservative as IPC considered noise losses only resulting from geometric
 17 spreading (i.e., a 6 dBA reduction per doubling of distance) and did not consider additional
 18 attenuation from trees or vegetation, ground or atmospheric absorption nor potential intervening
 19 terrain which may lessen noise levels further. In any event, in no case will potential short-term
 20 (episodic) construction-related noise impacts preclude the ability of the protected areas to
 21 provide the value(s) for which they were designated. Therefore, construction noise will not result
 22 in any significant adverse impacts to the protected areas.

23 With respect to construction-related helicopter noise in particular, again, construction noise
 24 including helicopter noise will not result in any significant adverse impacts to the protected
 25 areas. Even so, in Exhibit X, IPC has proposed certain conditions to ensure helicopter impacts
 26 are adequately addressed throughout construction, which IPC incorporates here:

27 **Public Services Condition 2:** *Prior to construction, the site certificate holder*
 28 *shall submit to the department for its approval a Helicopter Use Plan, which*
 29 *identifies or provides:*

- 30 *a. The type of helicopters to be used;*
- 31 *b. The duration of helicopter use;*
- 32 *c. Roads or residences over which external loads will be carried;*
- 33 *d. Multi-use areas and light-duty fly yards containing helipads shall be located: (i)*
 34 *in areas free from tall agricultural crops and livestock; (ii) at least 500 feet from*
 35 *organic agricultural operations; and (iii) at least 500 feet from existing dwellings*
 36 *on adjacent properties; and*
- 37 *e. Flights shall occur only between sunrise and sunset.*

38 Typical operational sound levels within the ROW are low, not exceeding 30 dBA at the edge of
 39 the ROW. As explained in Exhibit X, during infrequent foul weather events, operational sound
 40 levels will temporarily increase but will also attenuate with increasing distance from the line.
 41 Given the low noise levels, operational noise will not preclude the ability of the protected areas

⁵ Wilderness recommendations are made by the President and become effective only upon an Act of Congress (see 43 U.S.C. 1782(b)).

1 to provide the value(s) for which they were designated and will not result in any significant
2 adverse impacts to the protected areas.

3 **3.5.4 Traffic Impacts**

4 OAR 345-021-0010(1)(l)(C)(i): . . . (ii) Increased traffic resulting from facility construction or
5 operation; . . .

6 Increased traffic due to the construction and operation of the Project will not result in significant
7 adverse impacts.

8 Potential traffic impacts are summarized for each protected area in Table L-1-1 in
9 Attachment L-1. These summaries are based on the locations of the respective protected area,
10 the Proposed Route, Alternative Routes, nearby multi-use areas, preliminary commuting routes
11 for workers lodging in nearby communities, and preliminary routes for hauling water to multi-use
12 areas as described in Exhibit U, Attachment U-2.

13 During Project construction, additional Project traffic consisting of construction trucks and
14 construction workers commuting to their work site may result in temporary traffic impacts to
15 certain protected areas as defined in Section 3.2.2. As explained in Exhibit U, traffic during
16 construction will be dispersed and not concentrated near any specific location for any long period
17 of time and will be less than significant. Existing roads that the Project will use have low volume-
18 to-capacity (V/C) ratios, or low levels of congestion. Factoring in the estimated short-term traffic
19 generated during construction activities, none of the potential Project hauling or commuting routes
20 exceeds a maximum V/C ratio established by the Oregon Department of Transportation (Exhibit
21 U, Attachment U-2, Table 8). Increased traffic due to the construction of the Project will not result
22 in significant adverse impacts to protected areas, and no mitigation is required to address
23 operation related traffic. Even so, in Exhibit U, IPC has proposed certain conditions to ensure
24 traffic is adequately addressed throughout construction, which IPC incorporates here:

25 **Public Services Condition 3:** *Prior to construction, the site certificate holder*
26 *shall finalize, and submit to the department for its approval, a final Transportation*
27 *and Traffic Plan. The protective measures as described in the draft*
28 *Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be*
29 *included and implemented as part of the final Transportation and Traffic Plan.*

30 **Public Services Condition 7:** *During construction, the site certificate holder*
31 *shall conduct all work in compliance with the final Transportation and Traffic Plan*
32 *referenced in Public Services Condition 3.*

33 During Project operation, as described in Exhibit U, Attachment U-2, no increased traffic
34 resulting from facility operation is anticipated because Project operations will not involve
35 significant vehicle traffic, and in most instances will be limited to approximately two vehicle trips
36 per year. Therefore, as defined in Section 3.2.2, there will be either no impacts or negligible
37 impacts to traffic during Project operations. Increased traffic due to the operation of the Project
38 will not result in significant adverse impacts to protected areas, and no mitigation is required to
39 address operation related traffic.

1 **3.5.5 Water Use and Wastewater Impacts**

2 OAR 345-021-0010(1)(I)(C): . . . (iii) Water use during facility construction or operation; (iv)
3 Wastewater disposal resulting from facility construction or operation; . . .

4 Increased water use and wastewater disposal will not result in significant impacts due to the
5 construction and operation of the Project.

6 **3.5.5.1 Water Use Impacts**

7 Exhibit O demonstrates that water use associated with the Project will be provided from
8 adequate municipal supplies, and accordingly will not impact water sources for protected areas
9 or water resources within protected areas. Water use will primarily be for dust control and
10 concrete mixing. Water will be transported to the Project via water trucks and used only as
11 needed. IPC will minimize water use by implementing appropriate best management practices
12 to reduce water use to the greatest extent feasible.

13 **3.5.5.2 Wastewater Impacts**

14 Exhibit V demonstrates that the Project will not impact wastewater facilities. Construction of the
15 Project will generate only minimal amounts of wastewater. Operation of the Project will not
16 generate any wastewater, and no on-site sewage treatment system will be needed for the
17 construction or operation of the Project.

18 **3.5.6 Visual Impacts**

19 OAR 345-021-0010(1)(I)(C): . . . (v) visual impacts of facility structures or plumes. (vi) Visual
20 impacts from air emissions resulting from facility construction or operation, including, but not
21 limited to, impacts on Class 1 Areas as described in OAR 340-204-0050.

22 **3.5.6.1 Visual Impacts of Plumes**

23 The Project will not generate any air emissions or plumes. During construction, fugitive dust
24 may be generated, but it will be localized, temporary, and easily mitigated by applying water to
25 areas of surface disturbance from construction or operations of the Project.

26 **3.5.6.2 Visual Impact of Facility Structures**

27 Protected areas were evaluated for potential visual impacts associated with the Project
28 according to the scenic resources impact methodology summarized above. The analysis
29 addressed potential visual impacts from the Proposed Route and Alternative Routes, where
30 Routes are located within 5 miles of a protected area. Protected areas located within 10 miles of
31 where the ROW crosses forested areas of the Proposed Route and the full extent of the Morgan
32 Lake Alternative were also analyzed for potential visual impacts from the cleared ROW.

33 Visual impacts were considered for the protected areas within 5.0 miles of the centerline, and
34 was extended to include protected areas within 10.0 miles of the Project where it crosses
35 forested settings. The Proposed Route is considered forested where it crosses the Wallowa-
36 Whitman NF. The Morgan Lake Alternative is considered to occupy a forested setting from MP 9
37 to MP 14.6; the remainder of the line is non-forested. The Double Mountain Alternative is
38 located in a non-forested setting, so visual impacts were only considered for protected areas
39 within 5.0 miles. There were no protected areas located within 5.0 miles of the Double
40 Mountain Alternative.

1 A total of 28 protected areas were evaluated for visual impacts (see Tables L-1 and L-2). Of the
 2 total number of protected areas, 2 are crossed by the Proposed Route, and 23 are within 5
 3 miles of the Proposed Route. Three are located greater than 5 miles from the Proposed Route
 4 or Morgan Lake Alternative Route, but were analyzed because they are located within 10 miles
 5 of where those routes cross a forested area.

6 There were five protected areas within 5.0 miles of the Morgan Lake Alternative. Three
 7 additional sites located between 5.0 and 10.0 miles from the Morgan Lake Alternative centerline
 8 were also analyzed for potential visual impacts from the ROW. Because of the proximity of West
 9 of Bombing Range Road Alternatives 1 and 2 to the Proposed Route, visual impacts were
 10 considered to be the same as those assessed for the adjacent segment of the Proposed Route.
 11 No separate analysis was prepared for these Alternative Routes.

12 Of the 28 protected areas evaluated for potential visual impacts, 12 were determined to have
 13 low intensity visual impacts and were not evaluated further (see Table L-2). Four protected
 14 areas were screened from the analysis because they were located outside of the modelled
 15 viewshed. Twelve protected areas were determined to have medium to high intensity visual
 16 impacts, and therefore were further analyzed to assess potential significance of visual impacts.
 17 Visual impacts to these 12 areas are summarized in the following subsections. Attachment L-1,
 18 Tables L-1-1 and L-1-2 provide a more comprehensive summary of the impact analysis
 19 performed and associated findings. Attachment L-3 provides a detailed visual impact analysis
 20 for all protected areas evaluated.

21 **Table L-2. Summary of Protected Areas Evaluated for Visual Impacts**

Protected Area Resource within Exhibit L Analysis Area ¹	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Visual Impact Intensity Level	Photosimulation included in Attachment L-4 (Yes/No)
Deer Flat National Wildlife Refuge (including Snake River Islands Unit)	0.4 mi E of Proposed Route	198.9	None	Low	No
	12.2 mi E of Double Mountain Alternative	7.39		Not Analyzed ³	
Umatilla National Wildlife Refuge	1.3 mi N of Proposed Route	0.0	None	Medium	No
	9.6 mi E of West Bombing Range Road Alternative 1	0.0		Not Analyzed ³	
	9.6 mi E of West Bombing Range Road Alternative 2	0.0		Not Analyzed ³	

Protected Area Resource within Exhibit L Analysis Area ¹	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Visual Impact Intensity Level	Photosimulation included in Attachment L-4 (Yes/No)
Blue Mountain Forest State Scenic Corridor	Crossed Proposed Route	94.7	4-5	Low	Yes
	3.7 mi NW of Morgan Lake Alternative	0.0		None ⁴	No
Emigrant Springs State Heritage Area	3.3 mi N of Proposed Route	82.8	3-14	Low	No
	16.5 mi NW of Morgan Lake Alternative	0.0		Not Analyzed ³	
Farewell Bend State Recreation Area	0.7 mi NE of Proposed Route	197.6	5-13	Medium	No
Hilgard Junction State Recreation Area	0.3 mi E of Proposed Route	99.1	4-19	Low	No
	0.4 mi N of Morgan Lake Alternative	0.0			
Red Bridge State Wayside	4.8 mi SW of Proposed Route	97.9	None	Low	No
	4.7 mi SW of Morgan Lake Alternative	0.6			
Succor Creek State Natural Area/SNA	3.4 mi SW of Proposed Route	269.1	8-37; 8-101	Low	No
Snake River Islands Wildlife Area	0.9 mi E of Proposed Route	200	None	Low	No

Protected Area Resource within Exhibit L Analysis Area ¹	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Visual Impact Intensity Level	Photosimulation included in Attachment L-4 (Yes/No)
Lindsay Prairie Preserve/ SNHA	1.6 mi SW of Proposed Route	18.1	2-16	Medium	No
	3.9 mi SW of West of Bombing Range Road Alternative 1	3.72			
	3.9 mi SW of West of Bombing Range Road Alternative 2	3.72			
Five Points Creek (Wild)	2.0 mi NE of Proposed Route	98.3	None	Low	No
	2.1 mi NE of Morgan Lake Alternative	0.0			
Powder River Wild and Scenic (Scenic)	1.4 mi E of Proposed Route	136	5-34; 5-35; 5-36	Medium	No
	14.8 mi SE of Morgan Lake Alternative	18.5		None ³	
Starkey Experimental Forest	8.0 mi S of Proposed Route	70.7	None	None ³	No
	12.8 mi W of Morgan Lake Alternative	0.0			
Eastern Oregon Ag Research Station	6.4 mi NE of Proposed Route	119.9	None	None ³	No
	7.0 mi E of Morgan Lake Alternative	18.5			
Oregon Trail ACEC – Birch Creek Parcel	0.2 mi SW of Proposed Route	199.2	8-3	Medium	Yes

Protected Area Resource within Exhibit L Analysis Area ¹	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Visual Impact Intensity Level	Photosimulation included in Attachment L-4 (Yes/No)
Oregon Trail ACEC – Blue Mountain Parcel	0.9 mi NE of Proposed Route	91.8	None	Low	No
	6.7 mi NW of Morgan Lake Alternative	0.0		None ⁴	
Oregon Trail ACEC – National Historic Oregon Trail Interpretive Center (NHOTIC) Parcel	123.4 ft NE of Proposed Route	146.3	5-25c; 5-25d; 5-25e	Medium	Yes
Oregon Trail ACEC – Powell Creek Parcel	1.2 mi E of Proposed Route	185.2	None	Medium	No
Oregon Trail ACEC – Straw Ranch 1 Parcel	0.1 mi SW of Proposed Route	163.6	None	Medium	No
Oregon Trail ACEC – Straw Ranch 2 Parcel	1.1 mi NE of Proposed Route	161.9	None	Low	No
Oregon Trail ACEC – Tub Mountain Parcel	0.5 mi W of Proposed Route	212.3	8-1; 8-24	High	No
	17.2 mi N of Double Mountain Alternative	0.0		None ⁴	
Oregon Trail ACEC – White Swan Parcel	2.9 mi E of Proposed Route	158.7	None	None ⁴	No
Owyhee River Below the Dam ACEC	249 ft SW of Proposed Route	254	8-52	Medium	Yes
	7.6 mi SE of Double Mountain Alternative	7.39		None ⁴	

Protected Area Resource within Exhibit L Analysis Area ¹	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Visual Impact Intensity Level	Photosimulation included in Attachment L-4 (Yes/No)
Powder River Canyon ACEC	1.4 mi E of Proposed Route	136.1	5-34; 5-35	Medium	No
	16.3 mi SE of Morgan Lake Alternative	18.5			
South Alkali Sand Hills ACEC	2.1 mi E of Proposed Route	211.8	None	Low	No
	12.6 mi N of Double Mountain Alternative	7.39			
Columbia Basin – Coyote Springs WA	0.5 mi W of Proposed Route	0.6	None	Low	No
	8.9 mi N of West of Bombing Range Road Alternative 1	0.0			
	8.9 mi N of West of Bombing Range Road Alternative 2	0.0			
Elkhorn – North Powder WA Tract	7.5 mi W of Proposed Route	120.4	None	None ⁴	No
	7.8 mi S of Morgan Lake Alternative	18.1			

Protected Area Resource within Exhibit L Analysis Area ¹	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Visual Impact Intensity Level	Photosimulation included in Attachment L-4 (Yes/No)
Ladd Marsh WA/SNHA	Crossed Proposed Route	110.6	4-16; 4-26; 4-27	Medium	No
	208.3 ft E of Morgan Lake Alternative	11.1			

¹ The analysis area for Exhibit L, as defined in the Amended Project Order is “the area within the site boundary and 20 miles from the site boundary, including areas outside the state.”

² Location of each protected area is relative to each route segment's centerline, not the Site Boundary. There may be values greater than 20 miles listed because temporary Project features (multi-use areas, pulling and tensioning sites) are located several miles away from route centerlines. The Amended Project Order describes the analysis area as the “area within the site boundary and 20 miles from the site boundary, including areas outside the state” and therefore these features beyond 20 miles from centerline are still analyzed in Exhibit L.

³ Resource is greater than 5 miles from the Proposed Route and/or Alternative Route centerline and outside of the modeled cleared right-of-way viewshed so there will be no visual impacts to the resource.

⁴ Resource is completely outside of the modeled bare-earth viewshed so there will be no visual impacts to the resource.

ft – feet; mi – miles

1 **Umatilla National Wildlife Refuge**

2 The Umatilla National Wildlife Refuge (NWR), part of the Mid-Columbia River NWR complex,
3 comprises six units; two are located in Oregon, three are in Washington, and one is in the
4 Columbia River. The Umatilla NWR is managed by the Umatilla NWR Comprehensive
5 Conservation Plan. The first priority of each refuge is to conserve, manage, and if needed,
6 restore fish and wildlife populations and habitats according to its purpose (FWS 2008).
7 Therefore, scenery is not considered a valued attribute for which the area was designated a
8 NWR. The Umatilla NWR is also evaluated as a recreation opportunity in Exhibit T. The analysis
9 presented in Exhibit T considers scenery as an important aspect of the overall recreation
10 experience at the NWR. This is because, according to Objective 9d of the Umatilla NWR
11 Comprehensive Conservation Plan (FWS 2008), the McCormack unit is the focal point for
12 Umatilla NWR wildlife viewing activities. This is interpreted to mean that scenery is considered
13 an important aspect of the overall recreation experience at the NWR.

14 The landscape of the NWR appears expansive and flat to gently rolling. Low-growing grasses
15 and agricultural vegetation cover the landscape. The wide, flat Columbia River is located along
16 the northern boundary of the Umatilla NWR. Existing 500- and 230-kV transmission lines run
17 north and south of the McCormack Unit, located in the southeast portion of the Umatilla NWR,
18 along with several major highways, including I-84 to the south, such that the existing landscape
19 character is considered a cultural landscape.

20 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
21 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
22 from this site and are therefore not considered in this visual impact analysis.

23 This protected area is also located more than 10 miles from forested portions of the Proposed
24 Route and the Morgan Lake Alternative; consequently, potential visual impacts of the cleared
25 ROW are also not considered further in this analysis.

1 Because West of Bombing Range Road Alternative 1, West of Bombing Range Road
2 Alternative 2, and the Double Mountain Alternative are not forested, they are not analyzed for
3 potential visual impacts resulting from a cleared ROW.

4 The analysis presented below pertains to the Proposed Route.

5 The Project will be approximately 1.3 miles from the NWR. The towers will be skylined (i.e.,
6 sited on or near a ridgeline so that they are silhouetted against the sky) but partially obstructed
7 by the two existing transmission lines that are located between the NWR and the Proposed
8 Route such that moderate to strong contrast may persist out to a distance of 3 miles. The
9 transmission towers associated with the Proposed Route will appear co-dominant with the
10 surrounding landscape due to their size against the landscape and other existing development.
11 Therefore, the magnitude of impacts will be medium. The towers will lower the quality of
12 adjacent scenery to the NWR; however, this change will only result in a small change to the
13 scenic quality scoring, and the overall scenic quality and landscape character will not change so
14 resource change will be medium. Views of the Proposed Route will be primarily peripheral and
15 intermittent such that viewer perception will be medium. Scenery is not considered a valued
16 attribute for which the NWR was designated. Therefore, impact intensity will be medium and
17 visual impacts to the Umatilla NWR will be less than significant.

18 **Farewell Bend State Recreation Area**

19 Farewell Bend State Recreation Area (SRA) is a designated unit of the Oregon state park
20 system and is administered by the OPRD. Farewell Bend SRA is located about 3 miles
21 southeast of Huntington in Baker County on the west shore of the Snake River's Brownlee
22 Reservoir. The mission of the OPRD is to "provide and protect outstanding natural, scenic,
23 cultural, historic and recreational sites for the enjoyment and education of present and future
24 generations" (OPRD 2016a). Although there is no management plan for the Farewell Bend
25 SRA, OPRD includes scenery as one of the park's attributes for visitor enjoyment (OPRD
26 2016b); therefore, visual resources are considered a valued attribute to this resource.

27 West of Bombing Range Road Alternative 1, Boardman Bombing Range Road Alternative 2,
28 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
29 from this site and are therefore not considered in this visual impact analysis.

30 This protected area is also located more than 10 miles from forested portions of the Proposed
31 Route and the Morgan Lake Alternative; consequently, potential visual impacts of the cleared
32 ROW are also not considered further in this analysis.

33 Because Boardman Bombing Range Road Alternative 1, Boardman Bombing Range Road
34 Alternative 2, and the Double Mountain Alternative are not forested, they are not analyzed for
35 potential visual impacts resulting from a cleared ROW.

36 The analysis presented below pertains to the Proposed Route.

37 The Proposed Route will have medium magnitude impacts from 500-kV towers placed up to 0.7
38 mile from the Farewell Bend SRA to the west and southwest. The structures will introduce
39 moderate visual contrast and appear co-dominant. H-Frame structures with heights of 65 to 100
40 feet will be used in the segment from MP 197.9 to MP 199.1 to reduce the scale of the
41 structures. The quality of the Farewell Bend SRA's adjacent scenery will be lowered; however,
42 the overall scenic quality and landscape character will remain the same such that the resource
43 change will be medium. Views of the Project will be head-on and peripheral, depending on
44 where the viewer is located within the Farewell Bend SRA, and will generally be experienced
45 from a neutral vantage point such that viewer perception will be medium. Views of the Brownlee

1 Reservoir from the Farewell Bend SRA, the primary scenic attribute, will not be affected. Long-
2 term visual impacts will be medium intensity and less than significant.

3 ***Lindsay Prairie Preserve / State Natural Heritage Area***

4 The Lindsay Prairie Preserve / SNHA is a small preserve owned and managed by The Nature
5 Conservancy. The Lindsay Prairie Preserve measures approximately 377 acres and is
6 dominated by bluebunch wheatgrass and Sandberg's bluegrass, a habitat type now extremely
7 rare in the Columbia Basin. The Preserve is not managed for scenery, and its purpose is
8 dedicated to preservation of rare grassland habitat (The Nature Conservancy 2015). Therefore,
9 scenery is not considered a valued attribute for which the area was designated.

10 The Lindsay Prairie Preserve is primarily situated within a small canyon but the landscape also
11 includes a small upland plateau above the canyon. Views within the small canyon are enclosed;
12 however views from the upland plateau are open and panoramic. Human development includes
13 roads, a gravel quarry, agricultural fields, an existing 69-kV transmission line along the western
14 border, and dispersed rural development. The area has a cultural landscape character. Scenic
15 quality was ranked as Class C (BLM 1986b).

16 The Lindsay Prairie Preserve is 3.9 miles from the West of Bombing Range Road Alternatives
17 (1 and 2). Because the Alternative Routes are adjacent to the Proposed Route, visual impacts
18 from these routes would be similar to the analogous segment of the Proposed Route.

19 Morgan Lake Alternative and the Double Mountain Alternative are located greater than 5 miles
20 from this site and are therefore not considered in this visual impact analysis. This protected area
21 is also located more than 10 miles from forested portions of the Proposed Route and the
22 Morgan Lake Alternative; consequently, potential visual impacts of the cleared ROW are also
23 not considered further in this analysis.

24 The analysis presented below focusses on visual impacts from the Proposed Route.

25 The transmission towers will introduce moderate visual contrast and appear co-dominant in the
26 landscape, resulting in medium magnitude impacts from towers located approximately 1.6 miles
27 from Lindsay Prairie Preserve. Towers associated with the Proposed Route will alter the
28 adjacent scenery, although there will be no change in scenic quality or landscape character,
29 such that the resource change will be medium. Views from the majority of Lindsay Prairie
30 Preserve will be experienced from within the canyon and will be primarily blocked and
31 intermittent such that viewer perception will be low. Scenery is not considered a valued attribute
32 for which the area was designated. Long-term visual impacts will be medium intensity and less
33 than significant.

34 ***Powder River Wild and Scenic River (Scenic)***

35 The Powder River is designated as a scenic river for 11.7 miles, covering 2,385 acres, from the
36 Thief Valley Dam to Oregon Highway 203 within the BLM Vale District (BLM 1989; National Wild
37 and Scenic River System 2015). Scenery is identified as an Outstandingly Remarkable Value
38 (ORV). The Powder River flows through a rugged canyon with scenic geologic formations.
39 Recreation opportunities include boating in the spring, fishing, and hunting, although access is
40 limited (National Wild and Scenic River System 2015). The Wild and Scenic Rivers (WSR)
41 segment is located within the Powder River Canyon ACEC.

42 The Powder River Canyon ACEC and WSR is located outside of the 10-mile viewshed buffer of
43 the cleared ROW of both the Proposed Route and the Morgan Lake Alternative, and therefore
44 impacts from this Project feature are not discussed any further in this document.

1 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
2 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
3 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
4 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
5 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
6 impacts resulting from a cleared ROW.

7 The analysis presented below pertains to the Proposed Route.

8 The Proposed Route will have medium magnitude impacts associated with 500-kV towers at
9 distances of 1.6 miles or more. These medium magnitude impacts will be limited to the uplands
10 and not affect the scenery within the river canyon itself. The Proposed Route will lower the
11 quality of adjacent scenery in upland portions of the resource; however, the overall scenic
12 quality and landscape character will not change, and resource change will be medium. Viewers
13 will primarily be located near the bottom of the canyon where the project will not be visible, so
14 viewer perception will be low. Therefore, visual impacts of the ACEC will be medium intensity,
15 despite low intensity impacts to the river corridor.

16 The scenic quality of the resource under operational conditions will be the result of the
17 combined influence of the Project and other past or present actions, including the existing 230-
18 kV transmission line, which will appear subordinate to the natural appearing landscape
19 character.

20 The Powder River Canyon ACEC was designated to preserve scenic values of the Powder
21 River Canyon. Therefore, it is understood that if the scenic resources within the geographic
22 boundary of the Powder River Canyon ACEC are maintained, the resource values for which the
23 Powder River Canyon ACEC was designated to protect will persist. Additionally, recreation
24 activities will be focused near the bottom of the canyon where the Project will not be visible;
25 therefore, visual impacts will not disrupt recreation activities for which the Powder River Canyon
26 ACEC is also managed to protect. The Project will not preclude the scenic value (scenery ORV)
27 for which the Powder River Canyon ACEC was designated. Impacts to the Powder River
28 Canyon ACEC will be less than significant.

29 ***Oregon Trail ACEC – Birch Creek Parcel***

30 The Birch Creek Parcel includes 119 acres encompassing the Oregon National Historic Trail. It
31 is located approximately 2 miles south of Farewell Bend, an important landmark of the Oregon
32 National Historic Trail that was recognized by the emigrants due to its unique shape. This
33 segment of the trail was historically used as a camping area on approach to the Snake River at
34 Farewell Bend. Features at the site include a parking turnout, a wagon rut swale within a fenced
35 enclosure, a short trail adjacent to the ruts, and interpretive panels (BLM 2002). The area
36 around the Birch Creek Parcel is characterized by a mixture of privately owned rangeland and
37 federal lands managed by the BLM. The Birch Creek Parcel is located within the Unwooded
38 Alkaline Foothills portion of the Snake River Plain Ecoregion. The Birch Creek Parcel has a
39 historic landscape character because of the Oregon National Historic Trail and relative lack of
40 additional development. The overall scenic quality is considered low (class C), due to the
41 simplicity and uniformity of land form, colors and textures of the landscape. Viewers include
42 tourists and historic trail enthusiasts.

43 The Birch Creek ACEC is located outside of the 10-mile viewshed buffer of the cleared ROW of
44 both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
45 Project feature are not discussed any further in this document.

1 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
2 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
3 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
4 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
5 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
6 impacts resulting from a cleared ROW.

7 The analysis presented below pertains to the Proposed Route.

8 The transmission line associated with the Proposed Route will be located 0.2 mile northeast of
9 the Birch Creek Parcel. The route includes the rebuild of 1.1 miles of the existing Quarts to
10 Weiser 138-kV transmission line and the siting of the Project transmission line within the
11 existing ROW. Between MP 197.6 and MP 198.8, the Proposed Route will be located in the
12 existing IPC 138-kV transmission line ROW. The 138-kV transmission line will be rebuilt
13 approximately 0.3 mile to the southwest of the Proposed Route in a new ROW. In siting the
14 Project at this location, IPC located the Project line as far north as feasible without encroaching
15 on active agricultural areas, to reduce visibility from the ACEC parcel. Towers located between
16 MP 198 and MP 199 will use shorter stature H-frame structures ranging in height from 65 to 100
17 feet. This structure type, combined with constructing towers at lower elevations than the ACEC,
18 will maximize the proportion of the Project screened from view by existing topography. The
19 detailed mitigation considerations, evaluation, and precise mitigation language recommended
20 by IPC for inclusion in the site certificate are included below in Section 3.6.2.

21 Views of the towers will primarily be head-on and experienced by both stationary and transient
22 viewers. The structures will result in weak visual contrast and appear subordinate to the
23 landscape. Though visible, the transmission towers associated with the Proposed Route will not
24 substantially lower the quality of the adjacent scenery outside the Birch Creek Parcel. The
25 landscape character will remain historic due to the prominence of natural features in the
26 viewshed. The overall scenic quality of the landscape will remain low (class C). Because the
27 Project has been sited outside the Birch Creek Parcel, there will be no changes to the
28 landscape within the boundary of the Birch Creek Parcel. The magnitude of impact to both
29 resource change and viewer perception will be medium. As a result, the Project will result in
30 long-term, medium magnitude impacts from the operation of lower stature H-frame towers sited
31 in close proximity to the Birch Creek Parcel and associated viewer platforms. The Project will
32 conform to VRM Class II objectives within the Birch Creek Parcel, and is therefore consistent
33 with BLM's VRM direction to protect visual values within the Birch Creek Parcel. Visual impacts
34 to the Birch Creek ACEC will be less than significant.

35 ***Oregon Trail ACEC – NHOTIC Parcel***

36 The National Historic Oregon Trail Interpretive Center (NHOTIC) ACEC parcel is located on the
37 north side of Oregon State Highway (OR) 86, approximately 4 miles northeast of Baker City.
38 The NHOTIC is one of the largest of the Oregon Trail ACEC parcels, measuring 507 acres, and
39 is characterized by high recreational use (BLM 2011).

40 The landscape to the east and southeast of the NHOTIC parcel consists of the open terrain of
41 the Virtue Flat area, with flat to gently rolling terrain in the foreground that subtly transitions to
42 steeper terrain in the middleground. These areas have a relatively even cover of sagebrush and
43 grassy vegetation. The view to the southeast is dominated by Big Lookout Mountain and similar
44 mountainous terrain, which becomes the major focal point in the background of the view. Views
45 to the northeast from the NHOTIC parcel include the rolling terrain of a small valley that
46 transitions to a steeper, low-relief ridge in the middleground. Views to the west include the
47 Elkhorn Mountains, a major landform focal to the view, and the agricultural development within

1 the Baker Valley. Colors in the landscape primarily consist of varying shades of browns and
2 tans in the valley (based on the time of year), and the gray/blue hues of the distant mountains.
3 Modifications to the natural landscape character in the foreground include portions of the paved
4 NHOTIC trail system, several light fixtures in the parking area, and the Lode Mine building on
5 the NHOTIC property. OR 86 is evident beyond the NHOTIC property, particularly from the trail
6 system to the east. OR 86 is evident by its dark color and smooth texture relative to the
7 surrounding landscape, and also the consistent movement of automobiles. An existing 230-kV
8 transmission line is located to the west. This feature is increasingly visible as one approaches
9 the western boundary of the NHOTIC parcel. Agricultural and residential development within the
10 Baker Valley to the west is also visible from the NHOTIC parcel. The landscape character is
11 "cultural." The scenic quality of the existing landscape for Oregon Trail ACEC NHOTIC parcel is
12 considered medium (class B) (BLM 1989). Viewer groups include recreators and tourists visiting
13 the recreational facilities at the NHOTIC parcel.

14 In preliminary analyses conducted for the Flagstaff Alternative, IPC concluded that potentially
15 significant visual impacts from facility structures, as proposed, may result from that alignment
16 due to its proximity to the NHOTIC. Consequently, IPC analyzed three mitigation options aimed
17 at reducing adverse impact to less than significant: (1) applying a natina finish to the lattice
18 structure; (2) using an H-frame structure with galvanized finish; or (3) using an H-frame
19 structure with a natina finish. IPC incorporated Option 3 into its Project design. In the final
20 indicative design, IPC relocated the Proposed Route to the east of the Flagstaff Alternative,
21 outside of the active agriculture area but closer to the NHOTIC. To mitigate potential visual
22 impacts, IPC incorporated prior mitigation and design work emphasizing the use of H-frames,
23 but proposes using shorter stature H-frames structures ranging in height from 100 feet to 129
24 feet for towers located directly to the north and west of the NHOTIC. The proposed finish is
25 weathered steel (or an equivalent coating). The detailed mitigation considerations, evaluation,
26 and precise mitigation language recommended by IPC for inclusion in the site certificate are
27 included below in Section 3.6.1.

28 The NHOTIC Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW of
29 both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
30 Project feature are not discussed any further in this document.

31 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
32 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
33 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
34 these Alternative Routes are not forested, they are not analyzed for potential visual impacts
35 resulting from a cleared ROW.

36 The analysis presented below pertains to the Proposed Route.

37 The Proposed Route is located within a mile of the NHOTIC main building and within 130 feet of
38 the western boundary of the NHOTIC Parcel. The transmission towers associated with the
39 Proposed Route will be the primary source of visual contrast experienced from the NHOTIC
40 Parcel, primarily due to their scale and proximity. The Baker Valley and mountainous landscape
41 beyond will provide a backdrop for the Project and will appear co-dominant with the Proposed
42 Route and other past human developments, including the existing 230-kV H-frame transmission
43 structures.

44 The Project, as mitigated to include H-frame structures, will introduce low to medium magnitude
45 impacts depending on their location within the NHOTIC parcel. The highest magnitude impacts,
46 medium, will be experienced from the western portion of the parcel near Panorama Point and
47 level 2 and 3 trails. Impacts will slightly reduce the scenery adjacent to the NHOTIC parcel but

1 will not alter the overall scenic quality of the NHOTIC parcel such that resource change will be
2 medium. The Project will be one of several developments contributing to the overall landscape
3 character and quality. Views of the Project will be experienced from an elevated vantage point,
4 and will be predominantly peripheral or intermittent such that viewer perception will be up to
5 medium. The existing landscape character will be retained within the boundary of the ACEC and
6 resource change will be medium, and the Project will conform to VRM Class II objectives and
7 the resource values for which this Oregon Trail ACEC – NHOTIC parcel was designated to
8 protect will persist. Therefore, long-term visual impacts will be medium magnitude and less than
9 significant.

10 **Oregon Trail ACEC – Powell Creek Parcel**

11 The Powell Creek Parcel is one of the seven Oregon Trail ACEC parcels within the Baker
12 Resource Management Area and is located slightly east of I-84 about 0.6 mile southeast of
13 Dixie and 5 miles north of Lime. This parcel includes approximately 70 acres and has direct
14 access via Chimney Creek Road (BLM 2011).

15 The Powell Creek Parcel sits slightly above I-84 and the Burnt River, which are situated at the
16 bottom of a sinuous valley with moderate to steep sidewalls. Existing development includes I-84
17 and existing 69- and 138-kV transmission lines located approximately 0.3 mile to the west of the
18 Powell Creek Parcel, and existing gravel-surfaced roads that travel through the Powell Creek
19 Parcel and along the western boundary. This existing development competes for visual attention
20 with the natural features of the landscape and is co-dominant. The landscape has a cultural
21 landscape character and provides some evidence of the historic landscape of the Oregon Trail.
22 Lasting impressions of the landscape include both human development and natural features.
23 The scenic quality of the existing landscape for the Oregon Trail ACEC – Powell Creek Parcel is
24 considered low (class C) (BLM 1986b).

25 The Powell Creek Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
26 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
27 Project feature are not discussed any further in this document.

28 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
29 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
30 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
31 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
32 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
33 impacts resulting from a cleared ROW.

34 The analysis presented below pertains to the Proposed Route.

35 The Proposed Route will be located about 1.2 miles to the east of the Powell Creek Parcel. The
36 500-kV line will traverse the west side of the ridgeline; however, views of these towers will be
37 largely shielded by topography located between the ACEC parcel and the Proposed Route.
38 Moderate improvements will be made to an existing road located to the southwest of the parcel,
39 across I-84. The roadway will become more apparent on the landscape as a result of this
40 change, with horizontal and diagonal lines contrasting at a moderate level against the hillslope.
41 An approximately 735-acre work area will be located to the southwest along Rye Valley Road
42 and will introduce strong visual contrast during the temporary construction period. Under
43 operational conditions, three skylined towers will appear prominent on the ridgeline, as these
44 structures support the span of the conductor across Rye Valley Road.

45 The Project will result in medium magnitude visual impacts to the Powell Creek Parcel of the
46 Oregon Trail ACEC. However, the landscape in and around the Powell Creek Parcel has been

1 modified by previous actions that are visible throughout the entire ACEC. The extent to which
2 this human development is visible from the Powell Creek Parcel and its overall dominance in the
3 landscape will not increase and the landscape character and scenic quality of the Powell Creek
4 Parcel will not change, so resource change will be medium. Views of the Project will be equally
5 head-on and peripheral, depending on the viewer's location and viewing direction in the Powell
6 Creek Parcel, and will be experienced from a neutral or inferior vantage point such that viewer
7 perception will be medium. The Powell Creek Parcel was designated to preserve the unique
8 historic resource, the Oregon Trail, and visual qualities within this geographic area. Although the
9 Project will result in medium intensity impacts to visual resources within Powell Creek Parcel,
10 these impacts will not preclude its ability to provide the scenic value for which it was designated
11 in the BLM (1989) Baker Resource Management Plan (RMP). Visual impacts will be medium
12 intensity and less than significant.

13 ***Oregon Trail ACEC – Straw Ranch 1 Parcel***

14 The Straw Ranch Parcel 1 is one of the seven Oregon Trail ACEC parcels within the Baker
15 Resource Management Area and is located about 2.2 miles southeast of Pleasant Valley on the
16 north side of I-84. The parcel measures approximately 160 acres and has unimproved road
17 access to the south end of the parcel (BLM 2011). There are no recreation facilities within the
18 Straw Ranch Parcel 1.

19 The natural landscape is characterized by flat to rolling terrain with some rock outcroppings,
20 including some agricultural and grazing lands. The Blue Mountains are present to the west and
21 Wallowa Mountains to the east. Existing development visible from the Straw Ranch ACEC
22 Parcel 1 includes I-84 immediately to the south, a gravel quarry to the northwest, scattered
23 residential and ranching development, gravel surface roads, and existing 69-kV and 138-kV
24 transmission lines that cross through the southern half of the Straw Ranch Parcel 1 in an east to
25 west direction. The natural landscape features are co-dominant with the development, and
26 expansive views across the landscape in all directions exist providing some evidence of the
27 historic landscape of the Oregon Trail. The landscape has a cultural landscape character.
28 Scenic quality was ranked as low (class C) (BLM 1986b).

29 The Straw Ranch 1 Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
30 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
31 Project feature are not discussed any further in this document.

32 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
33 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
34 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
35 West of Bombing Range Road Alternative 1, west of Bombing Range Road Alternative 2, and
36 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
37 impacts resulting from a cleared ROW.

38 The analysis presented below pertains to the Proposed Route.

39 Due to considerable development that exists within and near Straw Ranch Parcel 1, the Project
40 will appear co-dominant and create moderate visual contrast to the cultural landscape such that
41 impact magnitude will be medium. The transmission towers associated with the Proposed Route
42 will lower the quality of Straw Ranch Parcel 1's adjacent scenery. However this change will only
43 result in a small reduction in scenic quality score. The scenic quality class will not change and
44 the cultural landscape character will be maintained due to past actions that have modified the
45 natural landscape such that resource change will be medium. Viewer perception will be
46 medium, as views of the Project will be equally head on and peripheral (depending on the

1 viewer's location and viewing direction within the Straw Ranch Parcel 1) and experienced
2 generally from a neutral vantage point. Long-term visual impacts will be of medium intensity.

3 Visual impacts to the Straw Ranch Parcel 1 will not preclude its ability to provide the scenic
4 value for which it was designated in the Baker RMP (BLM 1989) and therefore will be less than
5 significant.

6 **Oregon Trail ACEC – Tub Mountain Parcel**

7 The Oregon National Historic Trail ACEC – Tub Mountain Parcel is a long, narrow geographic
8 area located in northeastern Malheur County. The Tub Mountain Parcel includes approximately
9 5,900 acres of BLM-administered lands. The Tub Mountain Parcel includes one interpretive site
10 at Alkali Springs, which was the “nooning” spot for wagon trains leaving Vale (BLM 2002). The
11 Tub Mountain Parcel is remote and accessible only by local gravel roads. Scenery is considered
12 a valued attribute to the Tub Mountain Parcel as it is managed per the Southeastern Oregon
13 Resource Management Plan (SEORMP) (BLM 2002) to maintain the integrity of the historic
14 landscape. BLM manages this area according to VRM Class II objectives, meaning that the
15 change in landscape character should be low such that the existing landscape character is
16 retained within the VRM Class II boundary (BLM 1986b).

17 The Tub Mountain parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
18 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
19 Project feature are not discussed any further in this document.

20 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
21 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
22 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
23 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
24 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
25 impacts resulting from a cleared ROW.

26 The analysis presented below pertains to the Proposed Route.

27 The Proposed Route runs along the eastern and southern boundary of the Tub Mountain Parcel
28 at a distance of 0.5 mile at its closest point. The Proposed Route is approximately 1.5 miles east
29 of the Alkali Springs interpretive site. The transmission towers and conductors will be partially
30 screened from view by rolling terrain in the foreground. New and improved access roads will be
31 constructed along the Proposed Route. The transmission towers associated with the Proposed
32 Route will be the primary source of visual contrast experienced from the Tub Mountain Parcel,
33 primarily due to their size, form, and texture. The large, geometrical form and smooth texture will
34 contrast against the fine to medium rolling, rounded hills.

35 Viewers from Alkali Springs (KOP 8-1) will have views of the transmission towers associated
36 with the Proposed Route to the east, which will be partially blocked by vegetation such that the
37 Project will appear co-dominant with the landscape and produce moderate visual contrast.
38 While traveling along Old Oregon Trail Road or the Oregon Trail route, the Proposed Route will
39 be generally located to the east, and most towers will either not be visible or only the top
40 portions will be visible. Some towers will be skylined and some backdropped depending on
41 location within the Tub Mountain Parcel, which will introduce moderate to strong visual contrast.
42 Views of the Project will primarily be experienced from a neutral vantage point and will be
43 peripheral and intermittent due to topographic screening for viewers traveling along the along
44 Old Oregon Trail Road or the Oregon Trail route. As a result of the proposed 500-kV towers, the
45 landscape character in the western portion of the Tub Mountain Parcel will change from natural
46 appearing to a cultural landscape. The scenic quality of the landscape will not change.

1 Long-term impacts associated with operation of the 500-kV towers will be high intensity as a
2 result of medium magnitude, high resource change, and low viewer perception. Because the
3 Project has been sited outside the Tub Mountain Parcel, there will be no change to the
4 landscape within the boundary of the lands managed per VRM Class II (Tub Mountain Parcel).
5 Consequently the Project conforms with this management standard and is consistent with
6 BLM's management of the Tub Mountain Parcel's visual qualities. Therefore, impacts to scenic
7 resources and values of the Oregon Trail ACEC – Tub Mountain Parcel will be less than
8 significant.

9 ***Owyhee River Below the Dam ACEC***

10 The Owyhee River below the Dam ACEC encompasses 11,239 acres and includes public land
11 of the Owyhee River canyon and its associated viewshed located just north of the Owyhee
12 Dam. Dominant attributes of the Owyhee River below the Dam ACEC include the Owyhee
13 River, narrow canyon bottom, and rugged canyon slopes and walls, all of which contribute to the
14 high quality scenery of the area. A paved two-lane asphalt road runs through the Owyhee River
15 below the Dam ACEC, paralleling the river.

16 The relevant and important values of the Owyhee River below the Dam ACEC are identified as:
17 "high scenic values of diverse landscape elements in a substantially natural setting, a special
18 status plant species (Mulford's milkvetch), the rare presence of a black cottonwood gallery in a
19 riverine system, and the combined wildlife values of diverse habitat types supporting a large
20 number of wildlife species and an important migratory corridor for neotropical birds." The
21 Owyhee River below the Dam ACEC receives some of the highest recreational use within the
22 Southeastern Oregon planning area and is also designated as a SRMA. The area is managed
23 for visual resources per VRM Class II objectives per the SEORMP (BLM 2002).

24 In evaluating various alternatives for project siting, IPC concluded that potentially significant
25 visual impacts from facility structures in the vicinity of the Lower Owyhee River could result. To
26 address potential impacts, IPC analyzed two mitigation options aimed at reducing adverse
27 impacts to less than significant: (1) relocating the 175-foot tower to an alternate location (Option
28 1); and (2) reducing the height of the structure and moving it to an alternate location (Option 2).
29 In preparing the final indicative design for this document, IPC moved the Proposed Route to the
30 north to align with the existing utility corridor administered by the BLM (Exhibit R, Attachment R-
31 3, Figure R-3-18). Under this Project configuration, the need to mitigate potential impacts was
32 alleviated.

33 The Lower Owyhee River VRM Class II area is located outside of the 10-mile viewshed buffer of
34 the cleared ROW of both the Proposed Route and the Morgan Lake Alternative, and therefore
35 impacts from this Project feature are not discussed any further in this document.

36 Boardman Bombing Range Road Alternative 1, Boardman Bombing Range Road Alternative 2,
37 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
38 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
39 Boardman Bombing Range Road Alternative 1, Boardman Bombing Range Road Alternative 2,
40 and the Double Mountain Alternative are not forested, they are not analyzed for potential visual
41 impacts resulting from a cleared ROW. The analysis presented below pertains to the Proposed
42 Route.

43 In preparing the final indicative design, IPC moved the Proposed Route to the north, aligned
44 with the existing utility corridor administered by the BLM. Although two structures would be
45 visible from the Lower Owyhee Canyon Watchable WA interpretive site (KOP 8-52), these
46 structures would be sited approximately 0.75 to 1.0 mile from the interpretive site. The

1 geometrical form and smooth texture of the towers will introduce weak contrast against the
2 surrounding steep to rolling hills and valley walls, brown to red color, and rough texture of the
3 rock at this distance. Because of the steep canyon walls and enclosed landscape character at
4 the interpretive site, towers will appear subordinate. Further, viewers at the Lower Owyhee
5 Canyon Watchable WA interpretive site (KOP 8-52) will primarily be facing west, with the
6 Proposed Route behind them.

7 Considering the ACEC as a whole, viewers will primarily be within the background distance
8 zone, and the steep topography and winding river valley will block most views of the Project
9 from the middleground distance zone. The Snively Hot Springs recreation site is outside of the
10 modeled viewshed and will not be impacted.

11 The Proposed Route is visible in the northern part of the ACEC within a distance of 0.75 to 1.0
12 mile. The Project will be located outside of the ACEC, but will affect its adjacent scenery. Due to
13 the enclosed nature of the canyon, views outside of the ACEC and the visible towers will likely
14 be visible from less than 1 percent of the ACEC as visitors exit the resource. Additionally,
15 adjacent scenery has little to no contribution to the scenic quality of the Owyhee River below the
16 Dam ACEC; therefore, a reduction to adjacent scenery will not lower the scenic quality of the
17 ACEC. The scenic quality will remain high (Class A) and the landscape character will remain
18 natural appearing.

19 Views of the Project from Owyhee Lake Road will be primarily intermittent due to screening by
20 topography. When viewed from the interpretive site, project features will be primarily behind or
21 adjacent to the viewer, and therefore considered primarily peripheral. Viewer perception will be
22 low. The Project will result in long-term visual impacts to the Owyhee River below the Dam
23 ACEC, which will be medium intensity as measured by medium resource change, and low
24 viewer perception. The Owyhee River below the Dam ACEC will continue to provide the scenic
25 resource value and recreation opportunity identified as valued attributes of the Owyhee River
26 below the Dam ACEC, as Project features will not be visible from the majority of the canyon
27 where specific scenic features have been identified in the SEORMP (BLM 2002). VRM Class II
28 objectives will be achieved within the Owyhee River below the Dam ACEC, as the landscape
29 character and quality of the resource will not change. Visual impacts to the Owyhee River below
30 the Dam ACEC will be less than significant.

31 ***Powder River Canyon ACEC***

32 The Powder River Canyon ACEC is managed to protect raptor habitat, wildlife habitat, and
33 cultural resources and to maintain scenic qualities while allowing for compatible recreation uses
34 (BLM 1989). The Powder River is designated as a scenic river for 11.7 miles, covering 2,385
35 acres, from the Thief Valley Dam to Oregon Highway 203 within the BLM Vale District (BLM
36 1989; National Wild and Scenic River System 2015). Scenery is identified as an Outstandingly
37 Remarkable Value. The Powder River WSR (Scenic) segment is located within the Powder
38 River Canyon ACEC. The Powder River Canyon ACEC measures approximately 5,880 acres.

39 The 11.7 miles of the Powder River WSR (Scenic) segment of the Powder River flows through a
40 rugged, incised canyon with steep walls, jagged outcrops, and geologic formations recognized
41 for their outstanding scenic quality. The portion of the Powder River Canyon ACEC above the
42 canyon appear flat to gently rolling with low-growing grass and shrub vegetation that stipples the
43 landscape. Human development includes dirt roads within the Powder River Canyon ACEC and
44 an existing 230-kV transmission line visible to the. Wind turbines are visible in the distance
45 outside of the Powder River Canyon ACEC boundary. Although there is existing development
46 within and visible from the Powder River Canyon ACEC, the landscape character is naturally

1 appearing. Scenic quality of the Powder River Canyon ACEC was ranked as medium (class B)
2 (BLM 1986b).

3 The Powder River Canyon ACEC and WSR is located outside of the 10 mile viewshed buffer of
4 the cleared ROW of both the Proposed Route and the Morgan Lake Alternative, and is therefore
5 impacts from this Project feature are not discussed any further in this document.

6 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
7 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
8 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
9 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
10 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
11 impacts resulting from a cleared ROW.

12 The analysis presented below pertains to the Proposed Route.

13 The Proposed Route will have medium magnitude impacts associated with 500-kV towers at
14 distances of 1.4 miles or more. These medium magnitude impacts will be limited to the uplands
15 and not affect the scenery within the canyon itself. The Proposed Route will lower the quality of
16 the Powder River Canyon ACEC's adjacent scenery in upland portions of the resource;
17 however, the overall scenic quality and landscape character will not change, and resource
18 change will be medium. Viewers will primarily be located near the bottom of the canyon where
19 the project will not be visible, so viewer perception will be low. The Project will not impact the
20 scenery ORV of the Powder River WSR (Scenic). The scenic quality of the Powder River
21 Canyon ACEC and the WSR will be maintained in accordance with the resource designation
22 and associated management objectives. Visual impacts will be medium intensity and less than
23 significant.

24 ***Ladd Marsh Wildlife Area/State Natural Heritage Area***

25 The Ladd Marsh WA/SNHA is located in the Grande Ronde Valley, approximately 6 miles
26 southeast of La Grande in southern Union County. The WA/SNHA measures 6,019 acres and is
27 managed by ODFW. Visitors to Ladd Marsh can enjoy hiking, wildlife viewing (primarily bird
28 watching), fishing, and hunting. Facilities include parking areas, restrooms, a viewing blind and
29 viewing platform, and a loop trail system.

30 The landscape includes numerous wetlands including seasonally and permanently flooded
31 meadows, marshes, and shallow lakes. In the western portion of the Ladd Marsh WA/SNHA,
32 upland areas occur that include mixed conifer at the higher elevations, upland shrub at mid
33 elevations, and agricultural areas and grasslands on the valley floor that create dense to patchy
34 patterns (ODFW 2008b). The terrain is flat in the eastern portion and rolling in the western
35 portion, with horizontal to softly curved and flowing lines. Colors primarily include a mosaic of
36 greens.

37 Human development within the Ladd Marsh WA/SNHA include four home sites, three host sites
38 (trailer pads), City of La Grande wastewater treatment facility, two storage areas, and several
39 scattered buildings on the area from old farm sites. Some are scheduled to be dismantled and
40 the rest provide habitat for bats and barn owls. The Ladd Marsh WA/SNHA is surrounded
41 primarily by agricultural and rural residential land on the valley floor, timber land to the west, and
42 industrial land to the north. Three major transportation corridors (I-84, State Highway 203, and a
43 railroad) cross through the resource. Existing utility infrastructure include a buried pipeline
44 owned by the Northwest Pipeline Corp and a 230-kV transmission line owned and operated by
45 IPC. The landscape character is agricultural. The scenic quality of the Ladd Marsh WA/SNHA is
46 considered low (class C).

1 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
2 the Double Mountain Alternative are located greater than 5 miles from this site and are therefore
3 not considered in this visual impact analysis. Because West of Bombing Range Road
4 Alternative 1, West of Bombing Range Road Alternative 2, and the Double Mountain Alternative
5 are not forested, they are not analyzed for potential visual impacts resulting from a cleared
6 ROW.

7 The analysis presented below pertains to the Proposed Route.

8 The Proposed Route will cross the Ladd Marsh WA/SNHA approximately 0.5 mile east of Foothill
9 Road. The route will parallel the existing 230-kV transmission line and access road for the entire
10 portion that crosses protected area. The Proposed Route will be located within 500 feet of this
11 existing transmission line and will therefore meet the provisions of OAR 345-022-0040(3). Visual
12 impacts of the Proposed Route will be less than significant (see Attachment L-3).

13 The Morgan Lake Alternative is located approximately 0.4 mile southwest of Ladd Marsh
14 WA/SNHA, where it traverses a higher elevation plateau in an east-west direction. The Morgan
15 Lake Alternative is outside of the protected area.

16 As with the Proposed Route, the transmission towers associated with the Morgan Lake
17 Alternative will result in medium magnitude visual impacts as it will introduce moderate contrast
18 and appear co-dominant to natural and man-made features within Ladd Marsh WA/SNHA. The
19 agricultural landscape character will be maintained and the scenic quality will not change,
20 resulting in medium resource change. Views of the Project will be equally head-on or peripheral
21 and intermittent or continuous, such that viewer perception will be medium. Therefore, impact
22 intensity will be medium. Scenic quality will be the result of the combined influence of the
23 Project and other past or present actions including Ladd Marsh WA/SNHA facilities, existing
24 230-kV transmission line, a buried pipeline, and major transportation corridors. Medium intensity
25 visual impacts will not preclude the ability of the Ladd Marsh WA/SNHA to provide the wildlife-
26 oriented recreational and educational opportunities identified in the management plan.
27 Therefore, visual impacts to the Ladd Marsh WA/SNHA will be less than significant.

28 **3.5.6.3 Visual Impacts to Class I Areas from Air Emissions**

29 There is only one Class I Area in the analysis area,⁶ the Eagle Cap Wilderness area, which lies
30 approximately 14 miles northeast of the Proposed Route and is within the 20-mile analysis area
31 identified for protected areas. The Project will have no visual impact associated with Project
32 facilities or fugitive dust for the Eagle Cap Wilderness area, because the protected area is
33 located greater than 10 miles from the Project, which is the distance threshold for perceivable
34 visual impacts.

35 **3.5.7 Other Impacts**

36 As directed by the requirements for Exhibit L, IPC did consider potential impacts from the
37 Project on protected areas other than those discussed above (noise, traffic, water/wastewater,
38 visual), and concluded that all other potential impacts from the Project are adequately analyzed
39 in the following exhibits: Exhibit P1 (Fish and Wildlife Habitat and Species), Exhibit Q
40 (Threatened and Endangered Plant and Animal Species), Exhibit S (Historic, Cultural, and
41 Archaeological Resources), and Exhibit T (Recreation).

⁶ The 1977 Clean Air Act Amendments set forth federally designated Class I areas, which include national parks greater than 6,000 acres, wilderness areas and national memorial parks greater than 5,000 acres, and international parks that existed in 1977.

3.6 Mitigation

OAR 345-022-0040(1): Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impacts to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007:

IPC determined the Project, without mitigation, may cause significant adverse visual impacts to two protected area resources within the analysis area: the Oregon Trail ACEC – NHOTIC Parcel, and the Birch Creek ACEC. Based on this conclusion, IPC developed site specific measures to avoid, reduce, or otherwise mitigate these potentially significant impacts so that the Project can ultimately be constructed, operated, and maintained without a significant adverse impact.

3.6.1 Oregon Trail Area of Critical Environmental Concern – National Historic Oregon Trail Interpretive Center Parcel

3.6.1.1 History of Siting and Mitigation Considerations

In evaluating various alternatives for project siting, IPC concluded that potentially significant visual impacts from facility structures located directly west of the NHOTIC (corresponding to the Flagstaff Alternative) could result. To address potential impacts, IPC analyzed three design options aimed at reducing adverse impact to less than significant: (1) applying a natina finish to the lattice structure; (2) using an H-frame structure with galvanized finish; or, (3) using an H-frame structure with a natina finish. These mitigation strategies were considered for six transmission tower structures located directly west and within 1,200 feet of the NHOTIC boundary. Because of the terrain backdrop, IPC selected the H-frame structure with the weathered steel surface treatment, as it was expected to reduce the visual contrast below that of the standard galvanized structures. The H-frame structure type was selected because these structure types can be designed with a lower overall height than either lattice towers or monopoles and can appear similar in character to the wood H-frame structures often used for transmission lines of 115 kV to 230 kV. H-frames also may appear to have a narrower profile, depending on the relationship of the viewer to the structure. The heights of the towers shown in the simulations prepared from KOP 25c were 145 feet for H-frame structures (as opposed to 195 feet for lattice structures). Considering this mitigation, preliminary conclusions regarding visual impacts to the Oregon Trail ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM Class II area assumed medium intensity impacts, resulting from both medium resource change and viewer perception. Medium intensity impacts were determined not to preclude the resource from providing the visual qualities that currently exist within the ACEC, or as influenced from the surrounding landscape. IPC concluded visual impacts, considering this mitigation and design, would be less than significant.

In preparation of the final indicative layout for the Proposed Route, IPC explored additional Project mitigation and siting options near the Oregon Trail ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM Class II area to address concerns expressed by Baker County regarding construction and operation of the Project in active agricultural areas and visual impacts experienced from residential areas located to the south of the NHOTIC. The mitigation and siting options considered included the following: (1) combining the existing 230-kV line and the proposed Project's 500-kV line on a double circuit; and (2) considering the Flagstaff Gulch Alternative, re-routing the Project to the north of the Flagstaff Alternative and along the southern

1 border of the Oregon Trail ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM Class II
2 area. Below, IPC discusses the double-circuit option and the Flagstaff Gulch Alternative.

3 *3.6.1.2 Double Circuit Option*

4 At the request of the BLM and local government officials, IPC considered potentially locating the
5 500-kV conductors on the same structures as the existing 230-kV line below the NHOTIC. This
6 mitigation was considered for structures located directly west and within 1,200 feet of the
7 NHOTIC boundary. The tower height used for the double-circuit option measured approximately
8 178 feet. Though the double-circuit structure reduced the overall footprint of the existing and
9 proposed transmission structures, it did not measurably reduce overall visual impacts
10 experienced from the Oregon Trail ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM
11 Class II area, as the greater height of the structures would increase visibility of the structures
12 from areas within the resource. Moreover, IPC analyzed the simultaneous loss of the Project
13 and the 230-kV line and estimates the consideration of a simultaneous loss of both transmission
14 circuits would result in a 175 megawatt reduction in the Project's capacity rating. This reduction
15 undermines the Project objective of adding approximately 1,000 megawatts of capacity to the
16 Idaho-Northwest transmission path. For these reasons, the double-circuit option was not carried
17 forward for consideration.

18 *3.6.1.3 Proposed Route/Flagstaff Gulch Alternative*

19 The Proposed Route (also referred to as the Flagstaff Gulch Alternative) relocated the Project to
20 the north, moving the Project outside of active agricultural areas to the south of the Oregon Trail
21 ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM Class II area, thereby locating
22 structures at the toe slope of the adjacent hillside. Though visual impacts were reduced for
23 viewers from the south, the resulting alignment placed Project features approximately 0.1 mile
24 closer to the Oregon Trail ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM Class II
25 area.

26 The original siting and design for the Flagstaff Gulch Alternative incorporated lattice structures.
27 Preliminary review of lattice structures indicated potentially significant visual impacts to the
28 Oregon Trail ACEC – NHOTIC Parcel, NHOTIC recreation site, and VRM Class II area could
29 result from the large scale of the structures and the visual clutter of the lattice structure when
30 viewed at close proximity. In response, IPC considered mitigation options that would reduce
31 impacts to less than significant to incorporate into the Project's final indicative design.

32 IPC engaged the BLM on June 24, 2016, to discuss general mitigation goals and options that
33 could achieve those goals. Given the proximity of Project structures to the Oregon Trail ACEC –
34 NHOTIC Parcel, NHOTIC recreation site, and VRM Class II area (including the Panorama Point
35 viewpoint), IPC's primary goal was to reduce visual clutter created by the lattice structure.
36 Typically, when transmission towers are placed within a half mile or less from observer
37 locations, the monopoles will occupy a smaller field of view than lattice thereby reducing overall
38 contrast and scale dominance (BLM 2013). H-frame structures can achieve the same goal
39 provided they are oriented parallel to the viewer such that the entirety of the structure does not
40 occupy the field of view.

41 IPC considered the use of both mono-poles and H-frame structures for the Flagstaff Gulch
42 Alternative. Mono-poles, though believed to have cleaner lines when viewed at close proximity,
43 generally require a greater number of towers located closer together than H-frames or lattice
44 towers. In this instance for the Flagstaff Gulch Alternative, mono-poles were dismissed due to
45 the relatively tall height and broad diameter that would be required to support a 500-kV line. The
46 large stature of these structures could result in greater overall contrast by increasing skylining.

1 Additionally, it was concluded that monopoles could appear less harmonious with the more rural
2 landscapes of the analysis area.

3 As noted, IPC also considered using the H-frame structure type to minimize visual clutter in the
4 immediate foreground. Because the Flagstaff Gulch Alternative necessitated four dead-end
5 (DE) structures, IPC proposed to use all H-frame “family” tower structures, incorporating two-
6 legged tangents and 3-legged DE structures. The H-frame “family” mitigation was applied to
7 towers 145/5, 146/1 (DE), 146/2, 146/3 (DE), 146/4 (DE), 146/5, 147/1, 147/2 (DE), and 147/3.
8 This approach allowed for the use of shorter-stature structures ranging in height from 100 feet to
9 129 feet for towers located directly to the west of the NHOTIC. The proposed finish is weathered
10 steel. As demonstrated by the analysis, IPC concluded visual impacts to the Oregon Trail ACEC
11 – NHOTIC Parcel, NHOTIC recreation site, and VRM II area from the Proposed Route (Flagstaff
12 Gulch Alternative), as mitigated, will be less than significant.

13 To ensure no significant adverse visual impacts will occur to the Oregon Trail ACEC – NHOTIC
14 Parcel, NHOTIC recreation site, and VRM II area, IPC proposes that the Council include the
15 following condition in the site certificate incorporate the mitigation measures discussed herein:

16 **Scenic Resources Condition 2:** *During construction, to avoid significant*
17 *adverse impacts to the scenic resources at the National Historic Oregon Trail*
18 *Interpretative Center, the site certificate holder shall construct the Project using*
19 *tower structures that meeting the following criteria between approximately*
20 *Milepost 145.1 and Milepost 146.6:*

- 21 a. H-frames;
22 b. Tower height no greater than 130 feet; and
23 c. Weathered steel (or an equivalent coating).

24 *Additionally, the site certificate holder shall construct the Project using tower*
25 *structures that meeting the following criteria between approximately Milepost*
26 *146.6 and Milepost 146.7:*

- 27 a. H-frames;
28 b. Tower height no greater than 154 feet; and
29 c. Weathered steel (or an equivalent coating).

30 **3.6.2 Birch Creek Area of Critical Environmental Concern**

31 Preliminary impact assessments concluded the Project would result in less than significant
32 visual impacts because the Proposed Route was sited outside of the VRM II area. Feedback
33 from ODOE stated,

34 *the department disagrees with IPC’s determination of less than significant impact based*
35 *solely on the proposed B2H facility being sited outside of the Birch Creek ACEC VRM*
36 *Class II objective area. The department does not have adequate information to*
37 *otherwise make a recommendation to Council regarding the significance of any impact*
38 *to the scenic resources and values identified in the BLM’s management plan for the*
39 *Birch Creek ACEC. The department requests that IPC consider potential mitigation*
40 *measures such as alternative structure finishes (e.g., natina finish), and alternative*
41 *structure types (e.g., H-frame), and then prepare visual simulations and re-conduct the*
42 *impact assessment to scenic resources at Birch Creek ACEC to include such mitigation*
43 *measures.*

1 In response, IPC explored the potential for H-frame structures with varying finishes to reduce
2 visual impacts to less than significant, while addressing ODOEs concern that,

3 *the identified scenic resource value of Birch Creek ACEC goes beyond the boundaries*
4 *of the ACEC itself, and incorporates the "landscape integrity" of the area, including the*
5 *hills and views north of Farwell Bend and the Snake River.*

6 IPC concluded that the H-frame structures would not be sufficient to mitigate impacts, and that
7 visual impacts to views to the north of the ACEC would remain. To address this concern, IPC
8 explored alternative routes south of the ACEC and further to the north, where siting of the
9 Project at lower elevations would allow topographic features to screen views of the Project.

10 The Southern Route headed south just west of MP 195, at structure 196/1. The route was
11 located on the west and south sides of a ridgeline; as a result, the structures were screened
12 from view by this topographical feature. The Southern Route rejoined the Proposed Route south
13 of MP 201.6. This siting scenario was successful in eliminating visual impacts to the Birch Creek
14 ACEC, particularly by eliminating views of the structures to the north. However, the Southern
15 Route presented an additional siting constraint in that it crossed lands identified as Sage
16 Grouse Core Area (Category 1) and Core Area Exclusion.

17 To address this constraint, alternative routes located to the north of the Birch Creek ACEC were
18 examined. The Northern Route proposal sought to eliminate views of transmission structures
19 entirely by siting the Project in lower elevations to the north. This route headed northeast from
20 the Proposed Route at MP 197.3. After approximately 0.4 mile, the route veered southeast to
21 parallel the Proposed Route. The Northern Route reconnected with the Proposed Route at
22 approximately MP 199.6. This route was successful in screening Project features from view of
23 the ACEC; however, it presented additional operational challenges in that it was sited within
24 active agricultural areas and in close proximity to existing residents.

25 To address these constraints, IPC developed the Birch Creek North Route. The Birch Creek
26 North Route, now incorporated into the Proposed Route analyzed in this document, includes the
27 rebuild of 1.1 miles of the existing Quarts to Weiser 138-kV transmission line and the siting of
28 the Project transmission line within the existing ROW. Between MP 197.6 and MP 198.8, the
29 Proposed Route will be located in the existing IPC 138-kV transmission line ROW. The 138-kV
30 transmission line will be rebuilt to the southwest of the Proposed Route in a new ROW. H-frame
31 structures ranging in height from 65 to 100 feet will be used between MP 198 and MP 199. This
32 structure type, combined with constructing towers at lower elevations than the ACEC, will
33 maximize the proportion of the Project screened from view by existing topography. Though
34 visible, the transmission towers associated with the Proposed Route will not substantially lower
35 the quality of the adjacent scenery outside the Birch Creek Parcel. As demonstrated by the
36 analysis, IPC concludes that visual impacts to the Oregon Trail ACEC – Birch Creek Parcel from
37 the Proposed Route (Birch Creek North Route), as mitigated, will be less than significant. To
38 ensure no adverse visual impacts will occur to the Oregon Trail ACEC – Birch Creek Parcel,
39 IPC proposes that the Council include the following condition in the site certificate to incorporate
40 the mitigation measures discussed herein:

41 ***Scenic Resources Condition 3: During construction, to avoid significant adverse***
42 ***impacts to the scenic resources at the Birch Creek Area of Critical Environmental***
43 ***Concern, the site certificate holder shall construct the Project using tower***
44 ***structures that meeting the following criteria between approximately Milepost***
45 ***199.1 and Milepost 197.9:***

- 46 ***a. H-frames; and***
47 ***b. Tower height no greater than 100 feet.***

1 **3.6.3 Noise and Traffic Impacts**

2 As discussed in Sections 3.5.3 and 3.5.4, Project construction will not result in significant
3 adverse noise or traffic impacts. Even so, in those sections, IPC proposes the following
4 conditions to address and minimize construction-related helicopter-noise and traffic impacts at
5 the protected areas:

6 **Public Services Condition 2:** *Prior to construction, the site certificate holder
7 shall submit to the department for its approval a Helicopter Use Plan, which
8 identifies or provides:*

- 9 a. *The type of helicopters to be used;*
10 b. *The duration of helicopter use;*
11 c. *Roads or residences over which external loads will be carried;*
12 d. *Multi-use areas and light-duty fly yards containing helipads shall be located: (i)
13 in areas free from tall agricultural crops and livestock; (ii) at least 500 feet from
14 organic agricultural operations; and (iii) at least 500 feet from existing dwellings
15 on adjacent properties; and*
16 e. *Flights shall occur only between sunrise and sunset.*

17 **Public Services Condition 3:** *Prior to construction, the site certificate holder
18 shall finalize, and submit to the department for its approval, a final Transportation
19 and Traffic Plan. The protective measures as described in the draft
20 Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be
21 included and implemented as part of the final Transportation and Traffic Plan.*

22 **Public Services Condition 7:** *During construction, the site certificate holder
23 shall conduct all work in compliance with the final Transportation and Traffic Plan
24 referenced in Public Services Condition 3.*

25 **4.0 IDAHO POWER'S PROPOSED SITE CERTIFICATE CONDITIONS**

26 IPC proposes the following site certificate conditions to ensure compliance with the Protected
27 Area Standard and other EFSC standards where applicable:

28 **Prior to Construction**

29 **Public Services Condition 2:** *Prior to construction, the site certificate holder
30 shall submit to the department for its approval a Helicopter Use Plan, which
31 identifies or provides:*

- 32 a. *The type of helicopters to be used;*
33 b. *The duration of helicopter use;*
34 c. *Roads or residences over which external loads will be carried;*
35 d. *Multi-use areas and light-duty fly yards containing helipads shall be located: (i)
36 in areas free from tall agricultural crops and livestock; (ii) at least 500 feet from
37 organic agricultural operations; and (iii) at least 500 feet from existing dwellings
38 on adjacent properties; and*
39 e. *Flights shall occur only between sunrise and sunset.*

40 **Public Services Condition 3:** *Prior to construction, the site certificate holder
41 shall finalize, and submit to the department for its approval, a final Transportation
42 and Traffic Plan. The protective measures as described in the draft
43 Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be
44 included and implemented as part of the final Transportation and Traffic Plan.*

During Construction

Scenic Resources Condition 1: During construction, the site certificate holder shall use dull-galvanized steel for lattice towers and non-specular conductors.

Scenic Resources Condition 2: During construction, to avoid significant adverse impacts to the scenic resources at the National Historic Oregon Trail Interpretative Center, the site certificate holder shall construct the Project using tower structures that meeting the following criteria between approximately Milepost 145.1 and Milepost 146.6:

- a. H-frames;
- b. Tower height no greater than 130 feet; and
- c. Weathered steel (or an equivalent coating).

Additionally, the site certificate holder shall construct the Project using tower structures that meeting the following criteria between approximately Milepost 146.6 and Milepost 146.7:

- a. H-frames;
- b. Tower height no greater than 154 feet; and
- c. Weathered steel (or an equivalent coating).

Scenic Resources Condition 3: During construction, to avoid significant adverse impacts to the scenic resources at the Birch Creek Area of Critical Environmental Concern, the site certificate holder shall construct the Project using tower structures that meeting the following criteria between approximately Milepost 199.1 and Milepost 197.9:

- a. H-frames; and
- b. Tower height no greater than 100 feet.

Public Services Condition 7: During construction, the site certificate holder shall conduct all work in compliance with the final Transportation and Traffic Plan referenced in Public Services Condition 3.

5.0 CONCLUSION

Exhibit L demonstrates the design, construction, and operation of the Project—taking into account IPC’s proposed site-specific mitigation measures for the NHOTIC and Birch Creek ACECs—are not likely to result in significant adverse impact to any relevant protected areas.

6.0 COMPLIANCE CROSS-REFERENCES

Table L-3 identifies the location within the application for site certificate of the information responsive to the application submittal requirements OAR 345-021-0010(1)(I), the Protected Area Standard at OAR 345-022-0040, and the relevant Amended Project Order provisions.

Table L-3. Compliance Requirements and Relevant Cross-References

Requirement	Location
OAR 345-021-0010(1)(I)	
Exhibit L. Information about the proposed facility’s impact on protected areas, providing evidence to support a finding by the Council as required by OAR 345-022-0040, including:	

Requirement	Location
(A) A list of the protected areas within the analysis area showing the distance and direction from the proposed facility and the basis for protection by reference to a specific subsection under OAR 345-022-0040(1).	Exhibit L, Section 3.3 and Attachment L-1
(B) A map showing the location of the proposed facility in relation to the protected areas listed in OAR 345-022-0040 located within the analysis area.	Exhibit L, Section 3.4 and Attachment L-2
(C) A description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to, potential impacts such as: (i) Noise resulting from facility construction or operation; (ii) Increased traffic resulting from facility construction or operation; (iii) Water use during facility construction or operation; (iv) Wastewater disposal resulting from facility construction or operation; (v) Visual impacts of facility structures or plumes; (vi) Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class I Areas as described in OAR 340-204-0050.	Exhibit L, Section 3.5
(C) A description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to, potential impacts such as: (i) Noise resulting from facility construction or operation; (ii) Increased traffic resulting from facility construction or operation; (iii) Water use during facility construction or operation; (iv) Wastewater disposal resulting from facility construction or operation; (v) Visual impacts of facility structures or plumes; (vi) Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class I Areas as described in OAR 340-204-0050.	Exhibit L, Section 3.5
OAR 345-022-0040	
(1): Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007.	Exhibit L, Section 3.5, Section 3.6, Section 4.0, and Section 5.0
(2) Notwithstanding section (1), the Council may issue a site certificate for a transmission line or a natural gas pipeline or for a facility located outside a protected area that includes a transmission line or natural gas or water pipeline as a related or supporting facility located in a protected area identified in section (1), if other alternative routes or sites have been studied and determined by the Council to have greater impacts. Notwithstanding section (1), the Council may issue a site certificate for surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if other alternative routes or sites have been studied and determined by the Council to be unsuitable.	Not applicable

Requirement	Location
(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.	Exhibit L, Section 3.5.2.1
(C) A description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to, potential impacts such as: (i) Noise resulting from facility construction or operation; (ii) Increased traffic resulting from facility construction or operation; (iii) Water use during facility construction or operation; (iv) Wastewater disposal resulting from facility construction or operation; (v) Visual impacts of facility structures or plumes; (vi) Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class I Areas as described in OAR 340-204-0050.	Exhibit L, Section 3.5
OAR 345-022-0040	
(1): Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007.	Exhibit L, Section 3.5, Section 3.6, Section 4.0, and Section 5.0
(2) Notwithstanding section (1), the Council may issue a site certificate for a transmission line or a natural gas pipeline or for a facility located outside a protected area that includes a transmission line or natural gas or water pipeline as a related or supporting facility located in a protected area identified in section (1), if other alternative routes or sites have been studied and determined by the Council to have greater impacts. Notwithstanding section (1), the Council may issue a site certificate for surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if other alternative routes or sites have been studied and determined by the Council to be unsuitable.	Not applicable
(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.	Exhibit L, Section 3.5.2.1

Requirement	Location
Amended Project Order, Section III(I)	
Note that OAR 345-022-0040(1) generally prohibits siting of transmission lines through protected areas, which include state parks. However, under OAR 345-022-0040(2), EFSC may approve a route that passes through a protected area if the council determines that other routes outside the protected area would “have greater impacts.” If the transmission line routing proposed by the applicant will pass through a protected area, the applicant shall describe in detail the alternative routes it studied and provide analysis in the application to support a finding that routing the transmission line through the protected area would have less impacts than the alternatives.	Exhibit L, Section 3.5.1.1
Where OAR 345-022-0040(3) is applicable, ensure that the application provides evidence that the proposed line is routed within 500 feet of an existing utility right of way containing at least one transmission line with a voltage rating of 115 kV or higher.	Exhibit L, Section 3.5.2.1
Ensure that each potentially impacted state scenic waterway listed in ORS 390.826 is addressed in Exhibit L and that the evidence to address the requirements of ORS 390.845 is also included. Provide an analysis of the evidence to support a finding by the Council that the requirements of the Oregon Parks and Recreation Department related to the siting of a utility facility in a scenic waterway have been met.	The Project does not cross any state scenic waterways (see Exhibit L, Attachment L-1)

1 7.0 RESPONSES TO PUBLIC COMMENTS

2 Table L-4 provides IPC’s responses to the public comments cited in the Amended Project
3 Order.

4 Table L-4. Public Comments

Public Comments	Response
Commenters expressed concern about a variety of areas that the commenter believed should be protected, including the Nature Conservancy area near the Boardman Bombing Range, Virtue Flat (Union County), the Area of Critical Environmental Concern at Horn Butte, and the upper Kitchen Creek valley. Exhibit L shall evaluate potential impacts to protected areas (as defined in Council rules) identified in the analysis area.	The Boardman RNA is not considered a protected area under OAR 345-022-0040(1)(o) (see Exhibit L, Section 3.5.2.1). Virtue Flat is located to the east of the NHOTIC and will not be impacted by the current Proposed Route. The Horn Butte ACEC is addressed in Exhibit L, Attachment L-1, Table L-1-1. With respect to the Kitchen Creek valley, it is not considered a protected area under OAR 345-022-0040(1)(o) and therefore it is not addressed in this Exhibit.

1 8.0 REFERENCES

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1 **ATTACHMENT L-1**
2 **IDENTIFICATION AND ASSESSMENT OF PROTECTED AREAS**

Table L-1-1. Summary of Impact Determinations for Protected Areas

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
Wilderness Areas	Eagle Cap Wilderness	OR - Baker, Union, Wallowa	13.7 mi NE of Proposed Route	126.2	None	Negligible construction-related noise impacts due to distance of protected area from construction noise sources (including access roads) and the expected attenuation of A-weighted decibel (dBA) levels based on distance (see Exhibit X).	No traffic impacts during construction, due to distance from Proposed Route, distance from multi-use areas in Union and Baker counties, and because Eagle Cap Wilderness is not situated along any of the preliminary Project roads. No or negligible impacts during operation.	Not Analyzed ⁴	No	1, 2
			16.6 mi NE of Morgan Lake Alternative	18.5			No traffic impacts during construction or operation for the same reasons noted above.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	North Fork John Day Wilderness	OR - Baker, Grant, Umatilla	19.1 mi SW of Proposed Route	119	None	Negligible construction-related noise impacts due to distance of protected area from construction noise sources (including access roads) and the expected attenuation of dBA levels based on distance (see Exhibit X).	No traffic impacts during construction due to the distance from Proposed Route, distance from multi-use areas, and because the Wilderness is situated on the other side of I-84 from nearby multi-use areas and access roads in Union and Baker Counties. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
			19.2 mi SW of Morgan Lake Alternative	18			No traffic impacts during construction or operation for the same reasons noted above.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	North Fork Umatilla Wilderness	OR - Umatilla, Union	18.7 mi NE of Proposed Route	85.2	None	Negligible construction-related noise impacts due to distance of protected area from construction noise sources (including access roads) and the expected attenuation of dBA levels based on distance (see Exhibit X).	No traffic impacts during construction due to the distance from the Proposed Route, distance from the multi-use areas UM-06 and UM-07, and because it is situated on the other side of I-84 from the closest Project areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
National and State Wildlife Refuges	Cold Springs National Wildlife Refuge	OR - Umatilla	20.9 mi NE of Proposed Route	0	None	Negligible construction-related noise impacts due to distance of protected area from construction noise sources (including access roads) and the expected attenuation of dBA levels based on distance (see Exhibit X).	No traffic impacts during construction due to distance from the Proposed Route, distance from the multi-use areas (minimum 10 miles from UM-01), and the positioning of the Refuge on the opposite side of I-82 and I-84 relative to the Project area. No or negligible impacts during operation.	Not Analyzed ⁴	No	1

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Deer Flat National Wildlife Refuge (including Snake River Island Units)	OR - Malheur; ID - Ada, Canyon, Owyhee, Payette, Washington	0.4 mi E of Proposed Route	198.9	None	Less than significant temporary construction-related noise impacts due to proximity of Proposed Route; however, noise impacts will be temporary and episodic and dBA levels will attenuate with distance (see Exhibit X). Areas located the farthest north near a MUA may experience temporary traffic-related noise.	Less than significant temporary traffic impacts possible during construction. Although portions of the Refuge are close to the Project site, others are several miles away. Many are more accessible from US 95 in Idaho than they are to I-84 in Oregon. Those parcels most affected will be near Huntington and Adrian, OR. Closest MUAs are those in Malheur and Owyhee counties. No or negligible impacts during operation.	Low	No	2, 3

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
			12.2 mi E of Double Mountain Alternative	7.4		Negligible noise-related impacts will result from the Double Mountain Alternative because it is located >10 miles from this protected area.	No traffic impacts during construction for the reasons noted above. The Double Mountain Alternative farther from the Refuge than the Proposed Route. No or negligible impacts during operation.	Not Analyzed ⁵		
	McKay Creek National Wildlife Refuge	OR - Umatilla	9.7 mi N of Proposed Route	67	3-20; 3-21	Less than significant temporary construction-related noise impacts due distance of Proposed Route and attenuation of dBA levels. Areas located along US 395 may experience temporary traffic-related noise as vehicles access Proposed Route from I-84.	Less than significant, temporary traffic impacts during construction due to the proximity of UM-04 about eight miles away and the position of the Refuge along US 395 outside Pilot Rock between I-84 and the Proposed Route. No or negligible impacts during operation.	Not Analyzed ⁵	Yes	1

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	McNary National Wildlife Refuge	OR - Umatilla; WA - Walla Walla	24.5 mi NE of Proposed Route	0.0	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from route and multi-use areas (nearest is UM-01), and position on the other side of I-84 and I-82 from the Project. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
	Umatilla National Wildlife Refuge	OR - Morrow; WA - Benton	1.3 mi N of Proposed Route	0.0	None	Negligible construction-related noise impacts construction-related noise impacts due to proximity of protected area to I-84.	Less than significant temporary traffic impacts possible during construction due to proximity of I-84 and US 730, multi-use area MO-01, and existing access roads. No proposed temporary haul routes in the vicinity of the NWR. No or negligible impacts during operation.	Medium ³	No	1
			9.6 mi N of West Bombing Range Road Alternative 1	0.0		Negligible construction-related noise impacts from	Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
			9.6 mi N of West Bombing Range Road Alternative 2	0.0		West of Bombing Range Road Alternatives 1 and 2 due to attenuation of dBA levels based on distance.	Impacts will be similar to or less than those for Proposed Route.			
National and State Fish Hatcheries	Irrigon Hatchery	OR - Morrow	6.6 mi N of Proposed Route	0.0	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant temporary traffic impacts possible during construction due to location of Hatchery along US 730. No or negligible impacts during operation.	Not Analyzed ⁵	No	1
			14.7 mi NE of West Bombing Range Road Alternative 1	0.0			Impacts will be similar to or less than those for Proposed Route.			
			14.7 mi NE of West Bombing Range Road Alternative 2	0.0			Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Umatilla Hatchery	OR - Morrow	5.5 mi N of Proposed Route	0.0	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance of over three miles from US 730 and distance of about 5 miles from route and multi-use area MO-01. No or negligible impacts during operation.	Not Analyzed ⁵	No	1
15.0 mi NE of West Bombing Range Road Alternative 1			0.0	No traffic impacts during construction or operation for the same reasons noted above.						
15.0 mi NE of West Bombing Range Road Alternative 2			0.0	No traffic impacts during construction or operation for the same reasons noted above.						

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
State Parks and Waysides	Battle Mountain Forest State Scenic Corridor	OR - Umatilla	8.0 mi S of Proposed Route	56.9	None	Less than significant, temporary noise impacts due to attenuation of dBA levels based on distance (see Exhibit X). Areas along US 395 (Battle Mountain Scenic Corridor) may experience traffic-related noise; however impacts will be temporary, episodic, and less than significant.	Less than significant, temporary traffic impacts possible during construction due to use of I-84 and US 395 as Preliminary Haul Roads for multi-use area UM-03, which lies along the access route to Battle Mountain from I-84. No or negligible impacts during operation.	Not Analyzed ⁵	No	1
	Blue Mountain Forest State Scenic Corridor	OR - Umatilla, Union	Crossed Proposed Route	94.7	4-5	Less than significant temporary construction-related noise impacts due to proximity of the Proposed Route to this protected area, and the location where this protected area is crossed. Areas near haul routes and MUAs may experience	Less than significant temporary traffic impacts possible during construction as a result of nearby Preliminary Haul Roads including I-84, other access roads, and multi-use area UM-07; no or negligible impacts during operation.	Low	Yes	1

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
			3.7 mi NW of Morgan Lake Alternative	0.0		traffic-related noise; however impacts will be temporary and episodic.	Impacts will be similar to or less than those for Proposed Route.	None ⁶	No	
	Catherine Creek State Park	OR - Union	7.7 mi NE of Proposed Route	126.2	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction. No or negligible impacts during operation. Nearest multi-use area (UN-03) is nearly ten miles away, the Park does not fall between the UN-03 and the Project area.	Not Analyzed ⁵	No	1
	Emigrant Springs State Heritage Area	OR - Umatilla	3.3 mi N of Proposed Route	82.8	3-14	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance and location of this protected area near I-84 (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to proximity of I-84 and Project access roads that may be used to access multi-use area UM-07 about 5 miles away; no or negligible impacts during operation.	Low	No	1

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
			16.5 mi NW of Morgan Lake Alternative	0.0			Impacts will be similar to or less than those for Proposed Route.	Not Analyzed ⁵		
	Farewell Bend State Recreation Area	OR - Baker	0.7 mi NE of Proposed Route	197.6	5-13	Less than significant, temporary construction-related noise impacts due to proximity of Proposed Route, MUAs, and access roads; however impacts would be temporary and episodic. Noise-related impacts would also be mitigated by the close proximity of I-84 and its contribution to existing baseline noise levels.	Less than significant, temporary traffic impacts possible during construction due to proximity to multi-use area UM-06, I-84, US 30, and several access roads; no or negligible impacts during operation.	Medium	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Hat Rock State Park	OR - Umatilla	21.3 mi E of Proposed Route	0.0	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from any of the multi-use areas (over 10 miles) or Project areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
	Hilgard Junction State Recreation Area	OR - Union	0.3 mi E of Proposed Route	99.1	4-19	Less than significant, temporary construction-related noise impacts due to close proximity of Proposed Route, Preliminary Hauling Roads, and access roads. Impacts would be temporary and episodic.	Less than significant, temporary traffic impacts possible during construction due to close proximity of Proposed Route, Preliminary Hauling Roads, and access roads; nearest multi-use area (UN-01) is about 7 miles away. No or negligible impacts during operation.	Low	No	1
			0.4 mi N of Morgan Lake Alternative	0.0			Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Lake Owyhee State Park	OR - Malheur	6 mi W of Proposed Route	261.4	8-18	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to the location of the Park on the other side of highway. Nearest multi-use areas are MA-08 and MA-09. No or negligible impacts during operation.	Not Analyzed ⁵	No	3
			15.4 mi S of Double Mountain Alternative	7.39			Impacts will be similar to or less than those for Proposed Route.			
	Ontario State Recreation Site	OR - Malheur; ID - Payette	11.9 mi E of Proposed Route	211.5	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from multi-use areas and Project areas (over 10 miles). No or negligible impacts during operation.	Not Analyzed ⁴	No	3

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Red Bridge State Wayside	OR - Union	4.8 mi SW of Proposed Route	97.9	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity access roads, proposed haul routes, and multi-use areas UM-07 and UN-01. No or negligible impacts during operation.	Low	No	1
			4.7 mi SW of Morgan Lake Alternative	0.6			Impacts will be similar to or less than those for Proposed Route.			
	Succor Creek State Natural Area/SNA	OR - Malheur	3.4 mi SW of Proposed Route	269.1	8-37; 8-101	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity to access roads and multi-use areas including MA-09 and OW-01. No or negligible impacts during operation.	Low	No	3

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Ukiah-Dale Forest State Scenic Corridor	OR -	19.3 mi S of Proposed Route	56.9	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to location along 395 which is a proposed haul route; the nearest multi-use area is UM-03. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
	Unity Forest State Scenic Corridor	OR - Baker	10 mi W of Proposed Route	154.6	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from route and position along US 26 away from any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
State Natural Heritage Areas	Lindsay Prairie Preserve/ SNHA	OR - Morrow	1.6 mi W of Proposed Route	18.1	2-16	Less than significant, temporary noise impacts possible during construction due to proximity to Proposed Route; however, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to close proximity to Proposed Route and multi-use area MO-02.No or negligible impacts during operation.	Medium ³	No	1
			3.9 mi SW of West of Bombing Range Road Alternative 1	3.72			Impacts will be similar to or less than those for Proposed Route.			
			3.9 mi SW of West of Bombing Range Road Alternative 2	3.72			Impacts will be similar to or less than those for Proposed Route.			
	Sumpter Valley Dredge SNHA	OR – Baker	21.3 mi W of Proposed Route	150.3	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
Scenic Waterways, Wild and Scenic Rivers and Waterways, and Rivers Listed as Potential for Designation	Eagle Creek (Recreational)	OR - Baker	16.7 E of Proposed Route	138.6	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from Proposed Route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
	Five Points Creek (Wild)	OR - Umatilla, Union	2.0 mi NE of Proposed Route	98.3	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity to I-84, access roads, and La Grande. No or negligible impacts during operation.	Low	No	1
			2.1 mi NE of Morgan Lake Alternative	0.0			Impacts will be similar to or less than those for Proposed Route			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Minam River (Wild)	OR - Union, Wallowa	19.4 mi E of Proposed Route	126.2	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
	North Fork Catherine Creek (Recreational)	OR - Union	11.3 mi E of Proposed Route	127.8	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
			17.2 mi E of Morgan Lake Alternative	18.5			No traffic impacts during construction or operation for the same reasons noted above.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	North Fork Catherine Creek (Wild)	OR - Union	13.4 mi E of Proposed Route	126.3	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
			18.3 mi E of Morgan Lake Alternative	18.5			No traffic impacts during construction or operation for the same reasons noted above.			
	North Fork John Day River (Recreational)	OR - Grant, Umatilla	21.4 mi W of Proposed Route	118.8	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	North Fork John Day River (Wild)	OR - Baker, Grant	21.7 mi W of Proposed Route	120.5	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from route and any multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
	North Powder River (Scenic)	OR - Baker	15.2 mi W of Proposed Route	132.2	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity of I-84, access roads, and UN-04 on west side of route; no or negligible impacts during operation.	Not Analyzed ⁴	No	2
			17.8 mi S of Morgan Lake Alternative	18.5			Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Powder River WSR (Scenic)	OR - Baker, Union	1.4 mi E of Proposed Route	136	5-34; 5-35; 5-36	Less than significant, temporary noise impacts possible during construction; however noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant temporary traffic impacts possible during construction due to close proximity to I-84, US 203, access roads, and multi-use areas UN-04 and BA-01. No or negligible impacts during operation.	Medium	No	2
			14.8 mi SE of Morgan Lake Alternative	18.5			Impacts will be similar to or less than those for Proposed Route due to far distance from Morgan Lake Alternative.	Not Analyzed ⁴		
	The Minam Scenic Waterway	OR - Union, Wallowa	19.6 mi E of Proposed Route	126.2	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from the Proposed Route, access roads, and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Upper Grande Ronde River (Recreational)	OR - Union	10.9 mi SW of Proposed Route	98.9	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from the Proposed Route, access roads, and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
			10.6 mi S of Morgan Lake Alternative	0.6			No traffic impacts during construction or operation for the same reasons noted above.			
	Upper Grande Ronde River (Wild)	OR - Grant, Union	15.7 mi SW of Proposed Route	118.2	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from the Proposed Route, access roads, and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
			14.9 mi S of Morgan Lake Alternative	14.4			No traffic impacts during construction or operation for the same reasons noted above.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
Experimental Areas	Starkey Experimental Forest/Game Management Area	OR - Umatilla, Union	8.0 mi S of Proposed Route	70.7	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance along US 244 from the Proposed Route and being over 10 miles from the closest multi-use area. No or negligible impacts during operation.	None ⁸	No	1
			12.8 mi W of Morgan Lake Alternative	0.0			No traffic impacts during construction or operation for the same reasons noted above.			
Agricultural Experimental Stations	Columbia Basin Ag Research Station	OR - Sherman, Umatilla	16.6 mi N of Proposed Route	78	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant traffic impacts during construction due to use of Pendleton as a nearby community for workers and resources. No traffic impacts during operation.	Not Analyzed ⁴	No	1

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	Eastern Oregon Ag Research Station	OR - Union	6.4 mi NE of Proposed Route	119.9	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance along OR 203 to the multi-use area UN-01. No or negligible impacts during operation.	None ⁸	No	1
			7.0 mi E of Morgan Lake Alternative	18.5			No traffic impacts during construction or operation for the same reasons noted above.			
	Hermiston Ag Research and Extension Center	OR - Umatilla	15.8 mi E of Proposed Route	0.0	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity to I-84, multi-use area UM-01, and use of Hermiston as a nearby community for workers and resources. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
			18.6 mi E of West of Bombing Range Road Alternative 1	0.0			Impacts will be similar to or less than those for Proposed Route			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
			18.6 mi E of West of Bombing Range Road Alternative 2	0.0			Impacts will be similar to or less than those for Proposed Route.			
	Malheur Experiment Station	OR - Malheur	13.1 mi E of Proposed Route	211.5	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity to I-84 and use of Ontario as a nearby community for workers and resources. No or negligible impacts during operation.	Not Analyzed ⁴	No	3
			19.8 mi NE of Double Mountain Alternative	7.39			Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
BLM ACECs, Outstanding Natural Areas and Research Natural Areas	Columbian Sharp-tailed Grouse Habitat Area ACEC	ID - Washington	17.7 mi NE of Proposed Route	198.9	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
	Dry Creek Gorge ACEC	OR - Malheur	15 mi W of Proposed Route	261.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	3
			18.7 mi S of Double Mountain Alternative	4.6			No traffic impacts during construction or during operation for same reasons noted above.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Hammond Hill Sand Hills RNA	OR - Malheur	19.2 mi W of Proposed Route	266.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads and multi-use areas OW-01, OW-02, and OW-03. No or negligible impacts during operation.	Not Analyzed ⁴	No	3
	Honeycombs RNA	OR - Malheur	11.3 mi SW of Proposed Route	266.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	3

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Horn Butte ACEC	OR - Gilliam, Morrow	18.1 mi W of Proposed Route	11.8	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	1
18.2 mi W of West of Bombing Range Road Alternative 1			2.1	No traffic impacts during construction or operation for same reasons noted above.						
18.1 mi W of West of Bombing Range Road Alternative 1			1.7	No traffic impacts during construction or long-term impacts during operation for same reasons noted above.						

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Hunt Mountain ACEC	OR - Baker	13.1 mi W of Proposed Route	136.5	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance of at least 10 miles from Proposed Route, access roads, and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
			19.7 mi W of Morgan Lake Alternative	18.5			No traffic impacts during construction or operation for same reasons noted above.			
	Jump Creek Canyon ACEC	ID - Owyhee	6.8 mi SE ⁷ of Proposed Route	270.7	12-8	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to close proximity to Proposed Route, access roads, and multi-use areas OW-02 and OW-03. No or negligible impacts during operation.	Not Analyzed ⁵	No	3

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	Keating Riparian ACEC/RNA	OR - Baker	11.2 mi E of Proposed Route	141.7	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to far distance from Proposed Route, access roads, and multi-use areas BA-01 and BA-02. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
	Leslie Gulch ACEC	ID - Owyhee	18.1 mi SW of Proposed Route	270.7	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads and multi-use areas OW-01, OW-02, OW-03, and OW-04. No or negligible impacts during operation.	Not Analyzed ⁴	No	3

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BLM ACECs, Outstanding Natural Areas and Research Natural Areas	Long-billed Curlew Habitat Area ACEC	ID - Ada, Canyon, Gem, Payette	14.7 mi E of Proposed Route	256.9	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads, and multi-use areas MA-07 and MA-08. No or negligible impacts during operation.	Not Analyzed ⁴	No	3
			19.6 mi E of Double Mountain Alternative	7.39			No traffic impacts during construction or operation for same reasons noted above.			
	McBride Creek RNA	ID - Owyhee	15.3 mi S ⁷ of Proposed Route	270.7	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance of over 10 miles from Proposed Route, access roads, and multi-use area OW-03. No or negligible impacts during operation.	Not Analyzed ⁴	No	3

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	North Ridge Bully Creek RNA	OR - Malheur	17.7 mi W of Proposed Route	227	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance of over 15 miles from Proposed Route, access roads, and nearest multi-use areas (MA-2, MA-03, and MA-04). No or negligible impacts during operation.	Not Analyzed ⁴	No	2
	Oregon Trail ACEC - Birch Creek parcel	OR - Malheur	0.2 mi SW of Proposed Route	199.2	8-3	Less than significant, temporary noise impacts possible during construction due to close proximity to I-84, access roads, multi-use area MA-01, and Proposed Route.	Less than significant, temporary traffic impacts possible during construction due to close proximity to I-84, access roads, multi-use area MA-01, and Proposed Route. No or negligible impacts during operation.	Medium	Yes	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Oregon Trail ACEC - Blue Mountain Parcel	OR - Union	0.9 mi NE of Proposed Route	91.8	None	Less than significant, temporary construction-related noise impacts due to proximity of Proposed Route, MUAs, and access roads; however, impacts would be temporary and episodic. Noise-related impacts would also be mitigated by the close proximity of I-84 and its contribution to existing baseline noise levels.	Less than significant, temporary traffic impacts possible during construction due to close proximity to I-84, Proposed Route, access roads. Nearest multi-use areas (UM-07 and UN-01) are over ten miles away. No or negligible impacts during operation.	Low	No	1
			6.7 mi NW of Morgan Lake Alternative	0.0			Impacts will be similar to or less than those for Proposed Route.			
	Oregon Trail ACEC - Echo Meadows Parcel	OR - Umatilla	11.1 mi NE of Proposed Route	29.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to location near I-84 and OR 207 between Hermiston and several multi-use areas (UM-01, MO-02 and MO-03). No or negligible impacts during operation.	Not Analyzed ⁴	No	1

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Oregon Trail ACEC - Echo Meadows Parcel	OR - Umatilla	15.1 mi E of West of Bombing Range Road Alternative 1	0.2	None		Impacts will be similar to or less than those for Proposed Route.	Not Analyzed ⁴	No	1
			15.2 mi E of West of Bombing Range Road Alternative 2	0.0			Impacts will be similar to or less than those for Proposed Route.			
	Oregon Trail ACEC - Keeney Pass Parcel	OR - Malheur	5.7 mi E of Proposed Route	245.4	8-16; 8-25	Less than significant, temporary noise impacts possible during construction due to traffic on US 20. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to location along US 20 and US 26 between Ontario and several multi-use areas (MA-02, MA-03, MA-04, MA-05, and MA-06). No or negligible traffic impacts during operation.	Not Analyzed ⁵	No	3
			5.7 mi NE of Double Mountain Alternative	7.39						

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Oregon Trail ACEC - NHOTIC Parcel	OR - Baker	123.4 ft NE of Proposed Route	146.3	5-25c; 5-25d; 5-25e	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route and access roads. However, noise will be temporary and episodic, and dBA levels will attenuate with distance (see Exhibit X).	Less than significant temporary traffic impacts possible during construction due to close proximity to access roads, the Proposed Route, I-84, US 30, and two multi-use areas (BA-01 and BA-02). No or negligible impacts during operation.	Medium	Yes	2
	Oregon Trail ACEC - Powell Creek Parcel	OR - Baker	1.2 mi E of Proposed Route	185.2	None	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to close proximity to multi-use area BA-05, I-84, access roads, and the Proposed Route. No or negligible impacts during operation.	Medium	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Oregon Trail ACEC - Straw Ranch 1 Parcel	OR - Baker	0.1 mi SW of Proposed Route	163.6	None	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to close proximity to multi-use area BA-03, I-84, access roads, and Proposed Route. No or negligible impacts during operation.	Medium	No	2
	Oregon Trail ACEC - Straw Ranch 2 Parcel	OR - Baker	1.1 mi NE of Proposed Route	161.9	None	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to close proximity to multi-use area BA-03, I-84, access roads, and Proposed Route. No or negligible impacts during operation.	Low	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Oregon Trail ACEC - Tub Mountain Parcel	OR - Malheur	0.5 mi W of Proposed Route	212.3	8-1; 8-24	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Project construction activity will occur to the east and south requiring visitors to cross the construction area when accessing the SRMA, likely causing intermittent delays. Temporary traffic impacts possible during construction due to this arrangement, as well as close proximity of I-84, access roads, Proposed Route, and multi-use area MA-02. No or negligible impacts during operation.	High	No	2
			17.2 mi N of Double Mountain Alternative	0.0			Impacts will be similar to or less than those for Proposed Route.	Not Analyzed ⁵		

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Oregon Trail ACEC - White Swan Parcel	OR - Baker	2.9 mi E of Proposed Route	158.7	None	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to proximity to I-84, access roads, Proposed Route, and multi-use area BA-02. No or negligible impacts during operation.	None ⁶	No	2
	Owyhee River Below the Dam ACEC	OR - Malheur	249 ft SW of Proposed Route	254	8-52	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary intermittent traffic delays during construction possible for some visitors due to very close proximity to Proposed Route and access roads, as well as multi-use areas (MA-07 and MA-08) about 5 miles away. No or negligible impacts during operation.	Medium	Yes	3
			7.6 mi SE of Double Mountain Alternative	7.39						

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Owyhee Views ACEC	OR - Malheur	5.3 mi SW of Proposed Route	262	None	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route, MUAs, and access roads. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to access roads and Proposed Route about 5 miles away, as well as three multi-use areas located between 6 and 9 miles away (MA-07, MA-08, and MA-09). No or negligible impacts during operation.	Not Analyzed ⁵	No	3
			14.7 mi S of Double Mountain Alternative	7.39			Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Powder River Canyon ACEC	OR - Baker	1.4 mi E of Proposed Route	136.1	5-34; 5-35	Less than significant, temporary noise impacts possible during construction due to proximity to the Proposed Route and access roads; however, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to position along OR 203 near the Proposed Route, with multi-use area BA-01 about 4 miles away. No or negligible impacts during operation.	Medium	No	2
			16.3 mi SE of Morgan Lake Alternative	18.5			Impacts will be similar to or less than those for Proposed Route.	Not Analyzed ⁵		
	Squaw Creek RNA	ID - Owyhee	11.4 mi SE ⁷ of Proposed Route	270.7	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to proximity to multi-use area MA-09. No or negligible impacts during operation.	Not Analyzed ⁴	No	3

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	South Alkali Sand Hills ACEC	OR - Malheur	2.1 mi E of Proposed Route	211.8	None	Less than significant, temporary noise impacts possible during construction due to location along US 26 and proximity to Proposed Route. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to position along US 20 and US 26 between Ontario and several multi-use areas, especially MA-02. No or negligible impacts during operation.	Low	No	2, 3
			12.6 mi N of Double Mountain Alternative	7.39			Impacts will be similar to or less than those for Proposed Route.	Not Analyzed ⁵		
	South Ridge Bully Creek RNA	OR - Malheur	15.1 mi W of Proposed Route	227	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance from Proposed Route, access roads, and multi-use areas. No or negligible impacts during operation.	Not Analyzed ⁴	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
State Wildlife Areas and Management Areas	Columbia Basin - Coyote Springs WA	OR - Morrow	0.5 mi W of Proposed Route	0.6	None	Less than significant, temporary noise impacts possible during construction due to access roads and proximity to a MAU. However, noise will be temporary and episodic and dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to use of access roads running through the Parcel and close proximity to multi-use area MO-01, I-84, and the Proposed Route. No or negligible impacts during operation.	Low ³	No	1
			8.9 mi N of West of Bombing Range Road Alternative 1	0.0			Impacts will be similar to or less than those for Proposed Route.			
			8.9 mi N of West of Bombing Range Road Alternative 2	0.0			Impacts will be similar to or less than those for Proposed Route.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Columbia Basin - Irrigon WA	OR - Morrow, Umatilla	7.4 mi NE of Proposed Route	0.0	None	Less than significant, temporary noise impacts possible during construction due to location along US 730. However, noise dBA levels will attenuate with distance (see Exhibit X).	Less than significant, temporary traffic impacts possible during construction due to location along US 730 between Hermiston and multi-use area MO-01, as well as proximity to I-82, Hermiston, and multi-use area UM-01. No or negligible traffic impacts during operation.	Not Analyzed ^{3,5}	No	1
14.9 mi NE of West of Bombing Range Road Alternative 1			0.0	Impacts will be similar to or less than those for Proposed Route.						
14.9 mi NE of West of Bombing Range Road Alternative 2			0.0	Impacts will be similar to or less than those for Proposed Route.						

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Columbia Basin - Power City WA	OR - Umatilla	15.7 mi NE of Proposed Route	0.0	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	Less than significant, temporary traffic impacts possible during construction due to location along US 395, and proximity to I-82, Hermiston, and multi-use areas MO-01 and UM-01. No traffic impacts during operation.	Not Analyzed ⁴	No	1
	Columbia Basin - Willow Creek WA/SNHA	OR - Gilliam	18.3 mi W of Proposed Route	3.3	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to distance of over 15 miles from Proposed Route access roads, and multi-use areas. No or negligible impacts during operation.	Not Analyzed ^{3, 4}	No	1
18.8 mi NW of West of Bombing Range Road Alternative 1			0.0	No traffic impacts during construction or operation for same reasons noted above.						
18.8 mi NW of West of Bombing Range Road Alternative 2			0.0	No traffic impacts during construction or operation for same reasons noted above.						

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Elkhorn - Auburn WA Tract	OR - Baker	7.9 mi SW of Proposed Route	153.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to the position on the other side of Baker City from all planned access roads, the Proposed Route, and the closest multi-use area (BA-02). No or negligible impacts during operation.	Not Analyzed ⁵	No	2
	Elkhorn - Muddy Creek WA Tract	OR - Baker	12.1 mi W of Proposed Route	132.8	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to the position on the other side of North Powder and Baker City from all planned access roads, the Proposed Route, I-84, and multi-use area UN-04. No or negligible impacts during operation.	Not Analyzed ⁴	No	2
			16.5 mi S of Morgan Lake Alternative	18.5			No traffic impacts during construction or operation for same reasons noted above.			

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Elkhorn - North Powder WA Tract	OR - Baker, Union	7.5 mi W of Proposed Route	120.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for use during construction.	No traffic impacts during construction due to the position on the other side of North Powder and Baker City from all planned access roads, the Proposed Route, I-84, and multi-use area UN-04. No or negligible impacts during operation.	None ⁵	No	2
			7.8 mi S of Morgan Lake Alternative	18.1			No traffic impacts during construction or operation for same reasons noted above.			
	Elkhorn - Roth WA Tract	OR - Baker	11.6 mi W of Proposed Route	135.4	None	Negligible construction-related noise impacts due to attenuation of dBA levels based on distance (see Exhibit X) and because this protected area is not situated along any Project roads planned for	No traffic impacts during construction due to the position on the other side of North Powder and Baker City from all planned access roads, the Proposed Route, I-84, and multi-use area BA-01.	Not Analyzed ⁴	No	2

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
			18.4 mi S of Morgan Lake Alternative	18.5		use during construction.	No traffic impacts during construction or operation for the same reasons noted above.			
	Ladd Marsh WA/SNHA	OR - Union	Crossed Proposed Route	110.6	4-16; 4-26; 4-27	Less than significant, temporary noise impacts possible during construction where the Proposed Route and access roads crosses the protected area. However, noise will be temporary and episodic, and dBA levels will attenuate with distance (see Exhibit X).	Less than significant temporary traffic impacts associated with increased traffic on I-84, location between La Grande and multi-use area UN-02, and overlap of access roads and Proposed Route at the area. No or negligible impacts during operation.	Low	No	1
			208.3 ft E of Morgan Lake Alternative	11.1			Impacts will be similar to or less than those for Proposed Route.	Medium		

Protected Area Category	Protected Area Resource within Exhibit L Analysis Area ¹	State - County	Location of Protected Area Relative to Route Centerlines ²	Closest MP by Route	KOP Reference	Construction Noise Impact Level ⁹	Traffic Impact	Visual Impact Intensity Level	Photo-simulation included in Attachment L-4 (Yes/No)	Map Sheet Reference
	Rogers WA	OR - Malheur	7.1 mi E of Proposed Route	255.6	No	Less than significant, temporary noise impacts possible during construction due to location along OR 201. However, noise dBA levels will attenuate with distance (see Exhibit X)	Less than significant, temporary traffic impacts possible during construction due to location along OR 201 between Ontario and two multi-use areas (MA-07 and MA-08). No or negligible traffic impacts operation.	Not Analyzed ⁵	No	3
			12.0 mi SE of Double Mountain Alternative	7.39			Impacts will be similar to or less than those for Proposed Route.			

¹ Analysis Area, as defined in the Amended Project Order, extends 20 miles from the Project Site Boundary.

² Location of protected area is relative to each route segment's centerline, not Site Boundary. There are values greater than 20 miles listed because temporary Project features (multi-use areas, pulling and tensioning sites) are located several miles away from route centerlines. The Amended Project Order states "20 miles from site boundary" and therefore these features beyond 20 miles from centerlines are still analyzed in Exhibit L.

³ Visual impacts from West of Bombing Range Road Alternative 1 and Alternative 2 are considered the same as the Proposed Route.

⁴ Resource was not analyzed for visual impacts because it was further than 10 miles from the site boundary and therefore outside of the visual analysis area. It is assumed that there are no visual impacts to this resource.

⁵ Resource was not analyzed for visual impacts because it is further than 5 miles from the Proposed Route and/or Alternative Route and further than 10 miles from cleared right-of-way in a forested area.

⁶ Resource is completely outside of the modeled bare-earth viewshed so there will be no visual impacts to the resource.

⁷ Distance is from the Proposed Route in Oregon, which is the portion of the Project analyzed in this Exhibit. Impacts have been assessed only in relation to proposed work in Oregon, because work in Idaho is outside the scope of Oregon's ASC process.

⁸ Resource is greater than 5 miles from the Proposed Route centerline and outside of the modeled cleared right-of-way viewshed so there will be no visual impacts to the resource.

⁹ At all protected areas analyzed, typical operational sound levels within the ROW are low, not exceeding 30 dBA at the edge of the ROW. During infrequent foul weather events, operational sound levels will temporarily increase but will also attenuate with increasing distance from the line.

Table L-1-2. Detailed Visual Analysis of Protected Areas

Protected Area by Jurisdiction (Map ID) ¹	Distance to Proposed Route (PR), Morgan Lake Alternative (MLA), West of Bombing Range Road Alt. 1 (W1) or Alt. 2 (W2)	Map Sheet Reference (Attachment L-2)	KOP(s) ²	PART 1: Baseline Characteristics			Part 2: Impact Assessment				Part 3: Significance Determination			
				Scenic Quality / Scenic Attractiveness Class	Landscape Character ³	Observer Characteristics (Geometry / Exposure) ⁴	Impact Duration ⁵	Magnitude	Resource Change	Viewer Perception	Intensity Rating	Context ⁶	Contribution of the Project to Impacts ⁷	Significance Determination
National and State Wildlife Refuges														
Deer Flat NWR	0.4 mile (PR)	2, 3	N/A	B	Nat App	T; S	LT	Med	Low	Low	Low	NA	CE	Less than Significant
Umatilla NWR	1.3 miles (PR); 9.6 miles (W1); 9.6 miles (W2)	1	N/A	C	Cult	T; S	LT	Med	Med	Low	Med	NP	CE	Less than Significant
State Parks and Waysides														
Blue Mountain Forest State Scenic Corridor	Crossed (PR); 3.7 miles (MLA)	1	4-5	B	Nat App	T	LT	Low	Low	Low	Low	NA	PE	Less than Significant
Emigrant Springs State Heritage Area	3.3 miles (PR)	1	3-14	B	Cult	T; S	LT	Low	Low	Low	Low	NA	PE	Less than Significant
Farewell Bend State Recreation Area	0.7 mile (PR)	2	5-13	B	Cult	S	LT	Med	Med	Med	Med	NP	CE	Less than Significant

Protected Area by Jurisdiction (Map ID) ¹	Distance to Proposed Route (PR), Morgan Lake Alternative (MLA), West of Bombing Range Road Alt. 1 (W1) or Alt. 2 (W2)	Map Sheet Reference (Attachment L-2)	KOP(s) ²	PART 1: Baseline Characteristics			Part 2: Impact Assessment				Part 3: Significance Determination			
				Scenic Quality / Scenic Attractiveness Class	Landscape Character ³	Observer Characteristics (Geometry / Exposure) ⁴	Impact Duration ⁵	Magnitude	Resource Change	Viewer Perception	Intensity Rating	Context ⁶	Contribution of the Project to Impacts ⁷	Significance Determination
Hilgard Junction State Recreation Area	0.3 mile (PR)	1	4-19	A	Cult	T; S	LT	Med	Low	Low	Low	NA	CE	Less than Significant
	0.4 mile (MLA) ⁹													
Red Bridge State Wayside	4.8 miles (PR)	1	N/A	B	Cult	T; S	LT	Low	Low	Low	Low	NA	CE	Less than Significant
	4.7 miles (MLA) ⁹													
Succor Creek State Natural Area/SNA	3.4 miles (PR)	3	8-37 8-101	A	Nat App	T; S	LT	Low	Low	Low	Low	NA	PE	Less than Significant
State Natural Heritage Areas														
Lindsay Prairie Preserve/SNHA	1.6 miles (PR); 3.9 miles (W1); 3.9 miles (W2) ⁸	1	2-16	C	Cult	T	LT	Med	Med	Low	Med	NP	CE	Less than Significant
Scenic Waterways, and Rivers Listed as Potential for Designation														
Five Points Creek (Wild)	2.0 miles (PR)	1	N/A	A	Nat App	T; S	LT	Low	Low	Low	Low	NA	PE	Less than Significant
	2.1 miles (MLA) ⁹													

Protected Area by Jurisdiction (Map ID) ¹	Distance to Proposed Route (PR), Morgan Lake Alternative (MLA), West of Bombing Range Road Alt. 1 (W1) or Alt. 2 (W2)	Map Sheet Reference (Attachment L-2)	KOP(s) ²	PART 1: Baseline Characteristics			Part 2: Impact Assessment				Part 3: Significance Determination				
				Scenic Quality / Scenic Attractiveness Class	Landscape Character ³	Observer Characteristics (Geometry / Exposure) ⁴	Impact Duration ⁵	Magnitude	Resource Change	Viewer Perception	Intensity Rating	Context ⁶	Contribution of the Project to Impacts ⁷	Significance Determination	
Powder River WSR (Scenic)	1.4 miles (PR)	2	5-34 5-35	B	Nat App	T; S	LT	Med	Low	Low	Med	NP	CE	Less than Significant	
BLM ACECs, Outstanding Natural Areas and Research Natural Areas															
Oregon Trail ACEC - Birch Creek parcel	0.2 mile (PR)	2	8-3	C	Hist	T; S	LT	Low	Med	Med	Med	NP	PE	Less than Significant	
Oregon Trail ACEC - Blue Mountain Parcel	0.9 mile (PR)	1	N/A	B	Nat App	T; S	LT	Low	Low	Low	Low	NA	PE	Less than Significant	
	6.7 mile (MLA)	1	N/A	B	Nat App	T; S	LT	Low	Low	Low	Low	NA	PE	Less than Significant	
Oregon Trail ACEC - NHOTIC Parcel	123.4 feet (PR)	2	5-25c; 5-25d; 5-25e	B	Cult	T; S	LT	Med	Med	Med	Med	NP	CE	Less than Significant	
Oregon Trail ACEC - Powell Creek Parcel	1.2 mile (PR)	2	N/A	C	Cult	T	LT	Med	Med	Med	Med	NP	CE	Less than Significant	
Oregon Trail ACEC - Straw Ranch 1 Parcel	0.1 mile (PR)	2	N/A	C	Cult	T	LT	Med	Med	Med	Med	NP	CE	Less than Significant	

Protected Area by Jurisdiction (Map ID) ¹	Distance to Proposed Route (PR), Morgan Lake Alternative (MLA), West of Bombing Range Road Alt. 1 (W1) or Alt. 2 (W2)	Map Sheet Reference (Attachment L-2)	KOP(s) ²	PART 1: Baseline Characteristics			Part 2: Impact Assessment				Part 3: Significance Determination				
				Scenic Quality / Scenic Attractiveness Class	Landscape Character ³	Observer Characteristics (Geometry / Exposure) ⁴	Impact Duration ⁵	Magnitude	Resource Change	Viewer Perception	Intensity Rating	Context ⁶	Contribution of the Project to Impacts ⁷	Significance Determination	
Oregon Trail ACEC - Straw Ranch 2 Parcel	1.1 miles (PR)	2	N/A	C	Nat App	T	LT	Low	Low	Low	Low	Low	NA	CE	Less than Significant
Oregon Trail ACEC - Tub Mountain Parcel	0.5 mile (PR)	2	8-1; 8-24	C	Nat App	T; S	LT	Med	High	Low	High	High	NP	PE	Less than Significant
Owyhee Below Dam ACEC	249 ft (PR)	3	8-52	A	Nat App	T; S	LT	Med	Med	Low	Med	Med	NP	CE	Less than Significant
Powder River Canyon ACEC	1.4 miles (PR)	2	5-34 5-35	B	Nat App	T; S	LT	Med	Med	Low	Med	Med	NP	CE	Less than Significant
South Alkali Sand Hills ACEC	2.1 miles (PR)	2, 3	N/A	C	Nat App	T	LT	Low	Low	Low	Low	Low	NA	PE	Less than Significant
State Wildlife Areas and Management Areas															
Columbia Basin – Coyote Springs WA	0.5 mile (PR); 8.9 miles (W1); 8.9 miles (W2) ⁸	1	None	C	Urb	S	LT	High	Low	High	Low	Low	NA	CE	Less than Significant

Protected Area by Jurisdiction (Map ID) ¹	Distance to Proposed Route (PR), Morgan Lake Alternative (MLA), West of Bombing Range Road Alt. 1 (W1) or Alt. 2 (W2)	Map Sheet Reference (Attachment L-2)	KOP(s) ²	PART 1: Baseline Characteristics			Part 2: Impact Assessment				Part 3: Significance Determination			
				Scenic Quality / Scenic Attractiveness Class	Landscape Character ³	Observer Characteristics (Geometry / Exposure) ⁴	Impact Duration ⁵	Magnitude	Resource Change	Viewer Perception	Intensity Rating	Context ⁶	Contribution of the Project to Impacts ⁷	Significance Determination
Ladd Marsh WA/SNHA	Crossed (PR)	1	4-16 4-26 4-27	C	Ag	T; S	LT	Med	Med	Med	Med	NP	CE	Less than Significant
	208.3 feet (MLA) ⁸	1	4-16 4-26 4-27	C	Ag	T; S	LT	Med	Med	Med	Med	NP	CE	Less than Significant

¹ Map ID = The reference label used to indicate location of scenic resources on location and viewshed maps presented in Attachment L-2 and Exhibit R, Attachment R-6a, R-6b, and R-6c.

² KOP = Key Observation Point

³ Landscape Character Type: Nat App = Naturally Appearing; Cult = Cultural; Hist = Historical; Urb = Urban; Ag = Agricultural

⁴ Observer Characteristics: T= Transient; S = Stationary

⁵ Duration: LT = Long-term; ST= Short-term

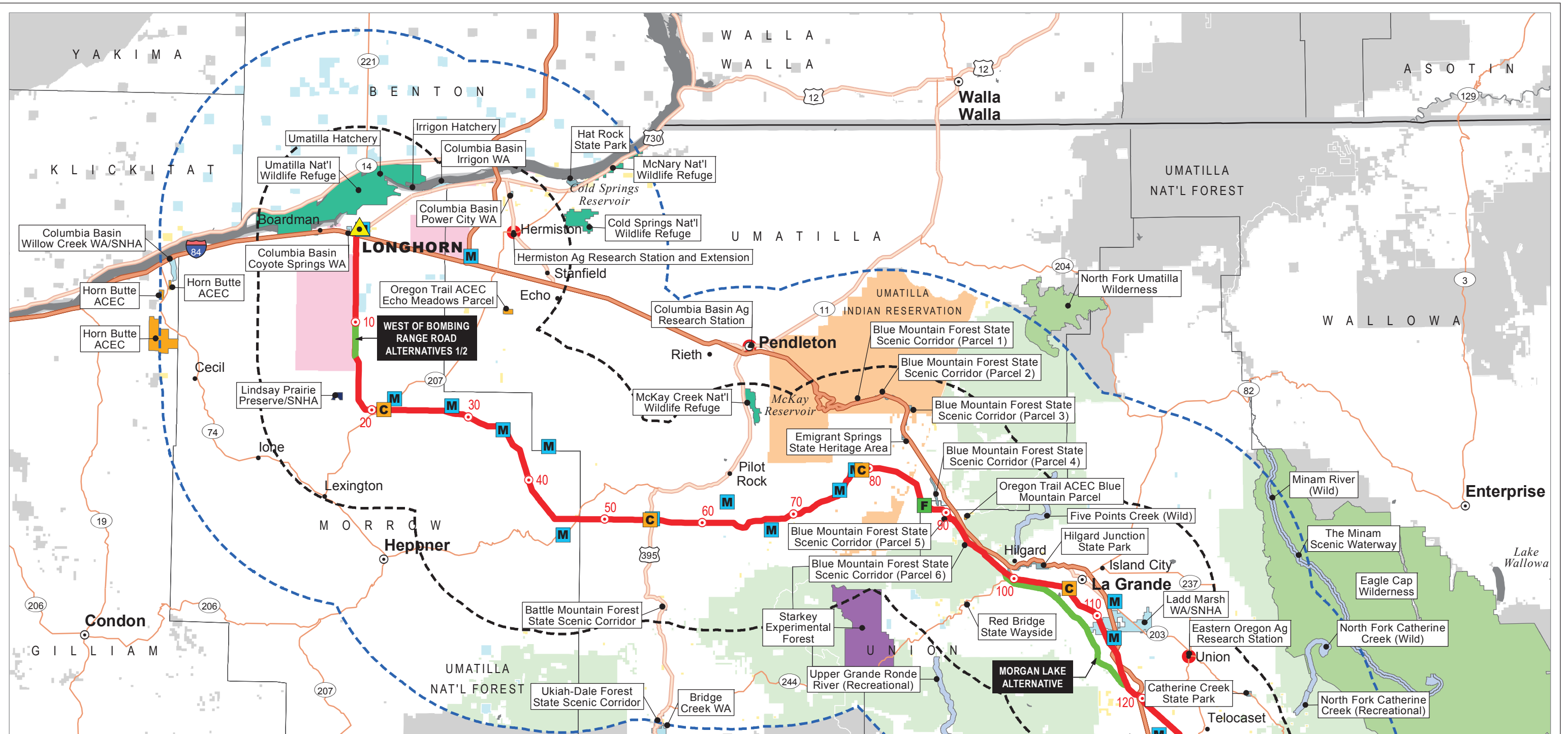
⁶ Context: NP = Not Precluded; P = Precluded; NA = Not Analyzed; low intensity impact

⁷ Contribution of the Project = Indicates if impacts are caused by the proposed facility (PE = Project Effects), or the combined influence of the Project and other past or present actions (CE = Combined Effects)

⁸ Visual impacts from West of Bombing Range Road Alternative 1 and Alternative 2 are considered the same as the Proposed Route

⁹ Located within 10 miles of the forested portion of the Morgan Lake Alternative

- 1 **ATTACHMENT L-2**
 - 2 **MAPS OF PROTECTED AREAS IN THE ANALYSIS AREA**
-



Map Area

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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June 2017

Protected Areas Features

Analysis Areas

- Scenic Resources (10-mile buffer of Site Boundary)
- Protected Areas (20-mile buffer of Site Boundary)
- Protected Areas within 20-miles of Project Site Boundary
- Agricultural Experimental Stations
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
- Experimental Areas

Protected Areas Features

- National and State Fish Hatcheries
- National and State Wildlife Refuges
- Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation
- State Natural Heritage Areas
- State Parks and Waysides
- State Wildlife Areas and Management Areas
- Wilderness Areas

Project Features

- Proposed Route
- Alternative Route
- Ten-mile Marker
- Communication Station
- Light-Duty Fly Yard
- Multi-Use Area
- Station

Land Status

- Bureau of Land Management

- Bureau of Reclamation
- Indian Reservation
- Military Reservation or Corps of Engineers
- Other Federal
- Private
- State or Local
- State or Local Parks and Recreation, Wildlife or Forest
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Other Federal or State Lands or Indian Reservation

Other Features

Cities or Towns

- County Seat
- Other

Roads

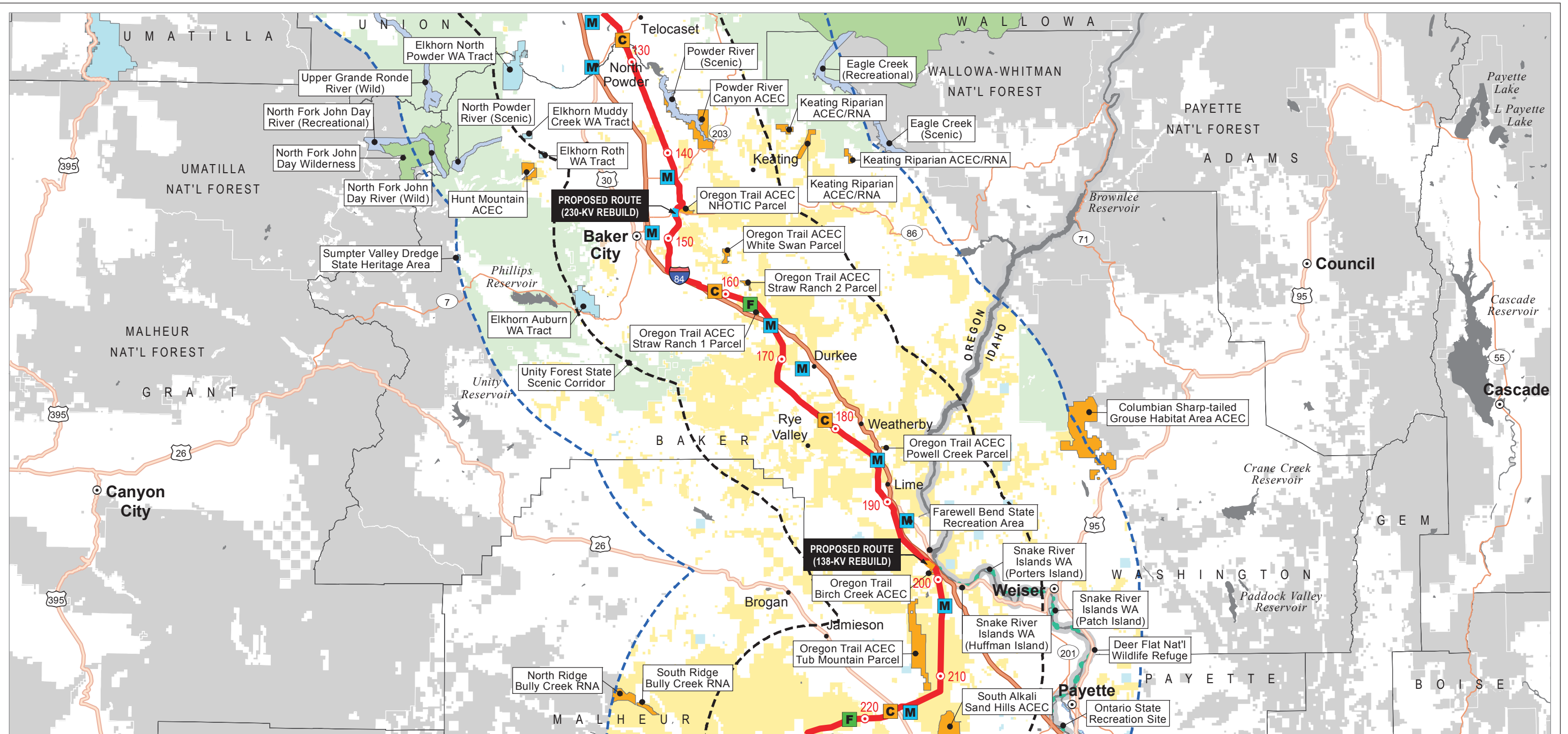
- Interstates
- Highways
- Major Roads

IDAHO POWER Boardman to Hemingway Transmission Line Project
An IDACORP Company

Attachment L-2 Protected Areas

Proposed and Alternative Routes

Map 1



- Protected Areas Features**
- Analysis Areas
 - Scenic Resources (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
 - Protected Areas within 20-miles of Project Site Boundary
 - Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
 - National and State Wildlife Refuges

- Project Features**
- Proposed Route
 - Proposed Route (138-kV Rebuild)
 - Proposed Route (230-kV Rebuild)

- Land Status**
- Bureau of Land Management
 - Bureau of Reclamation
 - Indian Reservation
 - Military Reservation or Corps of Engineers
 - Other Federal

- Other Features**
- Cities or Towns
 - County Seat
 - Other

- Roads**
- Interstates
 - Highways
 - Major Roads

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Boardman to Hemingway
Transmission Line Project

**Attachment L-2
Protected Areas**

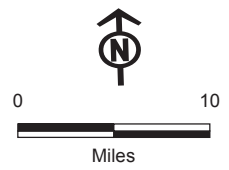
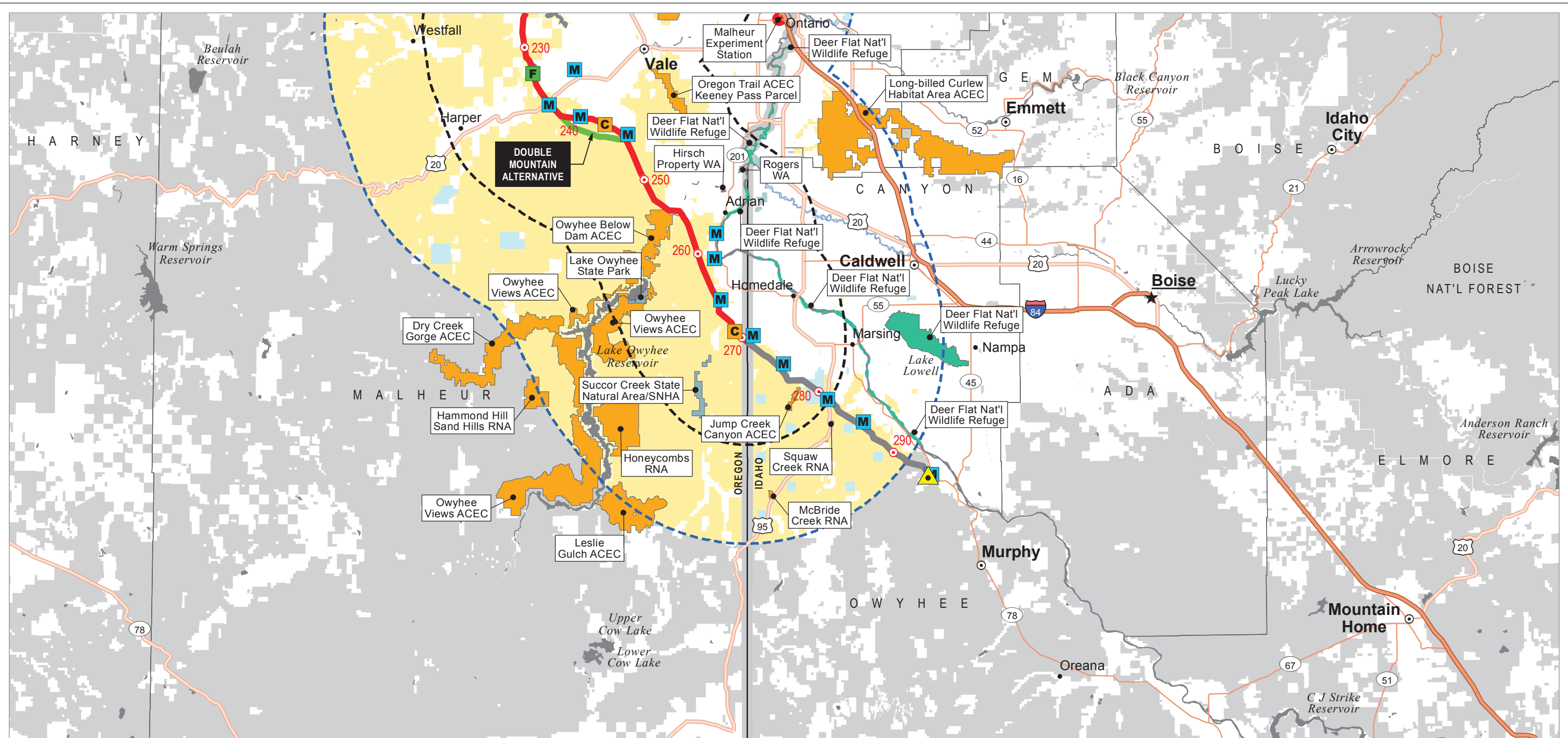
Proposed and Alternative Routes

Map 2

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystrelsen and the GIS User Community

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June 2017



Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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June 2017

- | | | | | | |
|--|---|--|---|---|---|
| <p>Protected Areas Features</p> <p>Analysis Areas</p> <ul style="list-style-type: none"> Scenic Resources (10-mile buffer of Site Boundary) Protected Areas (20-mile buffer of Site Boundary) <p>Protected Areas within 20-miles of Project Site Boundary</p> <ul style="list-style-type: none"> Agricultural Experimental Stations Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only) | <p>Project Features</p> <ul style="list-style-type: none"> Proposed Route Alternative Route Proposed Route Not In Oregon Ten-mile Marker Communication Station Light-Duty Fly Yard | <p>Protected Areas Features</p> <ul style="list-style-type: none"> National and State Wildlife Refuges State Parks and Waysides State Wildlife Areas and Management Areas <p>Project Features</p> <ul style="list-style-type: none"> Proposed Route Alternative Route Proposed Route Not In Oregon Ten-mile Marker Communication Station Light-Duty Fly Yard | <p>Land Status</p> <ul style="list-style-type: none"> Bureau of Land Management Bureau of Reclamation Indian Reservation Military Reservation or Corps of Engineers Other Federal Private State or Local State or Local Parks and Recreation, Wildlife or Forest | <p>Other Features</p> <ul style="list-style-type: none"> U.S. Fish and Wildlife Service U.S. Forest Service Other Federal or State Lands or Indian Reservation <p>Other Features</p> <ul style="list-style-type: none"> State Capital County Seat Other | <p>Roads</p> <ul style="list-style-type: none"> Interstates Highways Major Roads |
|--|---|--|---|---|---|

Boardman to Hemingway Transmission Line Project

Attachment L-2 Protected Areas
Proposed and Alternative Routes
Map 3

- 1 **ATTACHMENT L-3**
- 2 **VISUAL IMPACT ASSESSMENT METHODOLOGY AND ANALYSIS**

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ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
Amended Project Order	First Amended Project Order, Regarding Statutes, Administrative Rules and Other Requirements Applicable to the Proposed Boardman to Hemingway Transmission Line (December 22, 2014)
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
DE	dead end
GIS	geographic information system
I-84	Interstate 84
IPC	Idaho Power Company
KOP	Key Observation Point
kV	kilovolt
MP	milepost
NF	National Forest
NHOTIC	National Historic Oregon Trail Interpretive Center
NWR	National Wildlife Refuge
OAR	Oregon Administrative Rules
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
OPRD	Oregon Parks and Recreation Department
OR	Oregon (State) Highway
ORV	Outstandingly Remarkable Values
Project	Boardman to Hemingway Transmission Line Project
RAI	Request for Additional Information
RMP	Resource Management Plan
ROW	right-of-way
SEORMP	Southeast Oregon Resource Management Plan
SHA	State Heritage Area
SNHA	State Natural Heritage Area
SRA	State Recreation Area
USFS	United States Forest Service
VRM	Visual Resource Management
WA	Wildlife Area
WSR	Wild and Scenic River

1 INTRODUCTION

2 This Attachment L-3 describes the scenic resources impact assessment methodology used by
3 Idaho Power Company (IPC) to determine whether construction and/or operation of the
4 Boardman to Hemingway Transmission Line Project (Project), after taking into account
5 mitigation, may result in a “significant adverse impact” to protected areas identified per Oregon
6 Administrative Rule (OAR) 345-022-0040.

7 The methodology described in Attachment R-1 of this document was applied to the impact
8 assessment and significance determination presented in Exhibits L, R, and T. This
9 methodology, though rooted in impact assessment procedures established by the Bureau of
10 Land Management (BLM) and United States Forest Service (USFS), addresses feedback from
11 ODOE received via Request for Additional Information (RAI) R-24, asking that the definition of
12 “significance” provided in the Council’s rules at OAR 345-001-0010(53) be considered in the
13 analysis. This RAI states:

14 *“The visual impact assessment in Exhibit R, and IPC’s conclusions whether the project*
15 *will result in a significant visual impact is based entirely on impact assessment*
16 *methodologies used by the BLM and USFS. Although EFSC rules do not mandate a*
17 *particular visual assessment methodology (only that it be described in detail), the basis*
18 *of the EFSC findings pertaining to IPC’s compliance with the Scenic Resource Standard*
19 *(and the findings related to protected areas and recreation areas) is whether the facility*
20 *will have a “significant adverse impact” after taking into account mitigation (see OAR*
21 *345-022-0080).*

22 *Exhibit R (and its attachments) do not consider the definition of “significant” set forth in*
23 *the Council’s rules at OAR 345-001-0010(53) when drawing its conclusions using the*
24 *BLM/USFS methodologies. Provide an analysis of how the impact “rating” for each*
25 *potentially affected scenic resource supports an affirmative Council finding on the Scenic*
26 *Resource Standard (taking into account mitigation). That analysis should address and*
27 *incorporate the EFSC definition of “significant” when drawing conclusions concerning*
28 *visual impacts.”*

29 In response to this RAI, IPC refined the visual impact assessment approach to more explicitly
30 address the Council’s definition of significance. IPC and its contractor met with ODOE on
31 December 7, 2016, to discuss the proposed framework for the revised methodology. ODOE
32 reviewed the methodology and provided comment to IPC on January 15, 2016. The visual
33 impact assessment methodology developed by IPC and described in Section 2.5 addresses
34 those comments. The visual impact methodology was also applied to the impact analysis for
35 protected areas.

36 The visual impact assessment methodology provides background and context regarding the
37 development of the methodology, and explains in detail each step of the methodology. This
38 Attachment L-3 is organized as follows:

- 39 • Section 2.1 – Applicable EFSC standards and rules;
- 40 • Section 2.2 – IPC’s interpretation of a “significant” impact as defined in OAR 345-001-
41 0010(53);
- 42 • Section 2.3 – A description of the analysis area pursuant to the Project Order;
- 43 • Section 2.4 – A description of resources considered in the analysis per OAR 345-022-
44 0040; and,

- 1
 - 2
 - 3
- Section 2.5 - A detailed explanation of IPC's methodology for assessing visual impact and determining whether an impact is "significant" and visual impact assessment methodology.

2 IMPACT ASSESSMENT PROCEDURE

2.1 Applicable Rules and Standards

The EFSC Protected Areas Standard is set forth in OAR 345-022-0040:

(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impacts to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007:

(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;

(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;

(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;

(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;

(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;

(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;

(g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;

(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;

(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;

(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR Chapter 142;

(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;

(L) Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;

1 (m) Agricultural experimental stations established by the College of Agriculture,
2 Oregon State University, including but not limited to:

3 Coastal Oregon Marine Experiment Station, Astoria
4 Mid-Columbia Agriculture Research and Extension Center, Hood River
5 Agriculture Research and Extension Center, Hermiston
6 Columbia Basin Agriculture Research Center, Pendleton
7 Columbia Basin Agriculture Research Center, Moro
8 North Willamette Research and Extension Center, Aurora
9 East Oregon Agriculture Research Center, Union
10 Malheur Experiment Station, Ontario
11 Eastern Oregon Agriculture Research Center, Burns
12 Eastern Oregon Agriculture Research Center, Squaw Butte
13 Central Oregon Experiment Station, Madras
14 Central Oregon Experiment Station, Powell Butte
15 Central Oregon Experiment Station, Redmond
16 Central Station, Corvallis
17 Coastal Oregon Marine Experiment Station, Newport
18 Southern Oregon Experiment Station, Medford
19 Klamath Experiment Station, Klamath Falls;

20 (n) Research forests established by the College of Forestry, Oregon State
21 University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the
22 Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and
23 the Marchel Tract;

24 (o) Bureau of Land Management areas of critical environmental concern,
25 outstanding natural areas and research natural areas;

26 (p) State wildlife areas and management areas identified in OAR chapter 635,
27 Division 8.

28 (2) Notwithstanding section (1), the Council may issue a site certificate for a
29 transmission line * * * located in a protected area identified in section (1), if other
30 alternative routes or sites have been studied and determined by the Council to have
31 greater impacts. * * *

32 3) The provisions of section (1) do not apply to transmission lines or natural gas
33 pipelines routed within 500 feet of an existing utility right-of-way containing at least one
34 transmission line with a voltage rating of 115 kilovolts or higher or containing at least one
35 natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125
36 psig.

37 In turn, OAR 345-001-0010(53) defines "significant" as:

38 "having an important consequence, either alone or in combination with other factors,
39 based upon the magnitude and likelihood of the impact on the affected human
40 population or natural resources, or on the importance of the natural resource affected,
41 considering the context of the action or impact, its intensity and the degree to which the
42 possible impacts are caused by the proposed action. Nothing in this definition is
43 intended to require a statistical analysis of magnitude or likelihood of a particular
44 impact."

1 To demonstrate compliance with this standard, and in accordance with OAR 345-021-
2 0010(1)(L), Exhibit L must include the following:

- 3 (A) *A list of the protected areas within the analysis area showing the distance and*
4 *direction from the proposed facility and the basis for protection by reference to a*
5 *specific subsection under OAR 345-022-0040(1).*
- 6 (B) *A map showing the location of the proposed facility in relation to the protected areas*
7 *listed in OAR 345-022-0040 located within the analysis area.*
- 8 (C) *A description of significant potential impacts of the proposed facility, if any, on the*
9 *protected areas including, but not limited to, potential impacts such as:*
- 10 (i) *Noise resulting from facility construction or operation;*
11 (ii) *Increased traffic resulting from facility construction or operation;*
12 (iii) *Water use during facility construction or operation;*
13 (iv) *Wastewater disposal resulting from facility construction or operation;*
14 (v) *Visual impacts of facility structures or plumes.*

15 The Project Order requires Exhibit L to include the following specific information:

- 16 • *The applicant should thoroughly research all of the protected areas listed at OAR 345-*
17 *022-0040 to ensure that the application addresses the potential impacts to protected*
18 *areas within the Analysis Area identified in Section VI.*
- 19 • *Note that OAR 345-022-0040(1) generally prohibits siting of transmission lines through*
20 *protected areas, which include state parks. However, under OAR 345-022-0040(2),*
21 *EFSC may approve a route that passes through a protected area if the council*
22 *determines that other routes outside the protected area would “have greater impacts.” If*
23 *the transmission line routing proposed by the applicant will pass through a protected*
24 *area, the applicant should describe in detail the alternative routes it studied and provide*
25 *analysis in the application to support a finding that routing the transmission line through*
26 *the protected area would have less impacts than the alternatives.*
- 27 • *Where OAR 345-022-0040(3) is applicable, ensure that the application provides*
28 *evidence that the proposed line is routed within 500 feet of an existing utility right of way*
29 *containing at least one transmission line with a voltage rating of 115 kV or higher.*
- 30 • *Ensure that each potentially impacted state scenic waterway listed in ORS 390.826 is*
31 *addressed in Exhibit L and that the evidence to address the requirements of ORS*
32 *390.845 is also included. Provide an analysis of the evidence to support a finding by the*
33 *Council that the requirements of the Oregon Parks and Recreation Department related*
34 *to the siting of a utility facility in a scenic waterway have been met.*
- 35 • *The application should include visual depictions (photo-simulations) of the project’s*
36 *impact on scenic resources within the analysis area. It is recommended that visual*
37 *simulations include depictions from select viewpoints in protected areas identified in*
38 *Exhibit L that may be affected by the proposed facility. Photo-simulations and visual*
39 *impacts assessments of permanent structures should include switching*
40 *stations/substations, in addition to transmission lines, towers, and roads.*

41 Additionally, the Amended Project Order requires Exhibit R to include the following specific
42 information that relates to Exhibit L:

- 43 *The application should include visual depictions (photo-simulations) of the project’s*
44 *impact on scenic resources within the analysis area, especially protected areas identified*
45 *in Exhibit L. Photo-simulations and visual impacts assessments of permanent structures*

1 *should include substations, in addition to transmission lines/towers, and roads. For the*
 2 *purposes of Exhibit R, “local” land use plans include state, county, and city planning*
 3 *documents or inventories. The applicant should also describe the measures it will take to*
 4 *minimize significant adverse impacts to important scenic resources identified by*
 5 *reviewing agencies (see Section VII of this order).*

6 **2.2 Interpretation of “Significant”**

7 IPC incorporated the definition of “significant” per OAR 345-001-0010(53) as it pertains to
 8 protected areas into the visual impact assessment methodology by dividing the text of the
 9 definition into individual components, assigning specific indicators to address each component,
 10 and evaluating each indicator using specific criteria. Indicators and criteria are described in
 11 Table L-3-1, below.

12 **Table L-3-1. The Definition of Significance (per Council’s Rule OAR 345-001-**
 13 **0005(53)) and Interpretation for Visual Impacts in Exhibit L)**

Excerpt	Interpretation for Exhibit L
“having an important consequence,”	An important consequence is considered a significant impact.
“either alone or in combination with other factors,”	Qualifying language suggests that an “important consequence” may be caused by the proposed development either alone or in combination with other past or present actions.
“based upon the magnitude and likelihood of the impact”	Magnitude represents the size and scale of the impact, and is measured in terms of visual contrast and scale dominance. Likelihood represents the probability of occurrence of an impact; for the purposes of Exhibit L, impacts analyzed were assumed to be likely to occur.
“on the affected human population”	The impact on the human population is measured in terms of the viewer’s perception of impacts to valued scenic attributes of the protected area.
“or [on the] natural resources”	The impact to the natural resource is measured in terms of the potential change in scenic quality and/or landscape character of the protected area.
“or on the importance of the natural resource affected”	The disjunction of the magnitude of the impact from the importance of the natural resource suggests that an impact to scenic values may not result in an “important consequence” if the scenic value affected is not considered important to the protected area.
“Considering the context of the action or impact,”	The Council shall also consider the other “mitigating” (or “aggravating”) contextual factors, such as the extent to which impacts to visual values are consistent with the standards and guidelines of relevant land management objectives of the protected area.
“[the impact’s] intensity...”	The intensity of the impact considers how impacts would manifest on the landscape by assessing the combined effect of resource change and viewer perception.
“...and the degree to which the possible impacts are caused by the proposed action.”	Consider the extent to which adverse impacts are caused by the proposed facility, as opposed to other past or present actions. The contribution of this action to potential cumulative (additive) impacts should be disclosed.

2.3 Analysis Area

Pursuant to the Project Order, the analysis area for Exhibit L is “the area within the site boundary and 20 miles from the site boundary, including areas outside the state.” In accordance with OAR 345-001-0010(55), the “Site Boundary” is “the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas, and all corridors and micro-siting corridors proposed by the applicant.”

The Site Boundary encompasses the following facilities in Oregon:

- The Proposed Route, consisting of 270.8 miles of new 500-kilovolt (kV) electric transmission line, removal of 12 miles of existing 69-kV transmission line, rebuilding of 0.9 mile of a 230-kV transmission line, and rebuilding of 1.1 miles of an existing 138-kV transmission line;
- Four alternatives that each could replace a portion of the Proposed Route, including the West of Bombing Range Road Alternative 1 (3.7 miles), West of Bombing Range Road Alternative 2 (3.7 miles), Morgan Lake Alternative (18.5 miles), and Double Mountain Alternative (7.4 miles);
- One proposed 20-acre station (Longhorn Station);
- Ten communication station sites of less than ¼-acre each and two alternative communication station sites;
- Permanent access roads for the Proposed Route, including 206.3 miles of new roads and 223.2 miles of existing roads requiring substantial modification, and for the Alternative Routes including 30.2 miles of new roads and 22.7 miles of existing roads requiring substantial modification; and
- Thirty-one temporary multi-use areas and 299 pulling and tensioning sites of which four will have light-duty fly yards within the pulling and tensioning sites.

The Project features are fully described in Exhibit B and the Site Boundary for each Project feature is described in Exhibit C, Table C-24. The location of the Project features and the Site Boundary is outlined in Exhibit C.

2.4 Resources Considered in the Analysis

Resources considered in this analysis include protected areas evaluated in Exhibit L per OAR 345-021-0010(1)(L)(C)(v). For each protected area, IPC identified the purpose of recognition or designation, relevant management standards and/or guidelines, and valued scenic attribute(s). Additionally, each protected area was described in terms of its geographic location and footprint (including size and configuration). Resources were classified as a point, area, and/or corridor based on the following definitions:¹

- **Point:** Point-based resources include specific locations, such as designated vistas or interpretive signs, where the viewer experience is typically stationary and experienced from a single vantage point. Views from these locations may be directional (i.e., focal) or not (i.e., 360 degree panoramic).

¹ Note that one or more of these categories may be applicable to a scenic resource; for example, an area-based resource may include one or more point-based resources within the boundary.

- **Area:** Area-based resources include geographic areas where scenic values could be experienced from a variety of locations. Views from these locations are typically transient and experienced by viewers moving through the area (i.e., dispersed recreation). The likelihood of viewers standing in the same spot during repeated visits is low. The degree of variability of views experienced from area-based resources will depend on a variety of landscape characteristics.
- **Corridor:** Corridors represent linear viewing experiences, in which scenic attributes are experienced as a continuum. They may be focal (i.e., leading toward a noteworthy natural feature; entrance way), and/or transient (i.e., passing through a landscape).

2.5 Visual Impact Assessment Procedure

The methods used to evaluate Project impacts on the scenic attributes of protected areas and to determine the significance of Project impacts to those scenic attributes are described in a series of three parts, below. These steps are illustrated in Figure L-3-1.

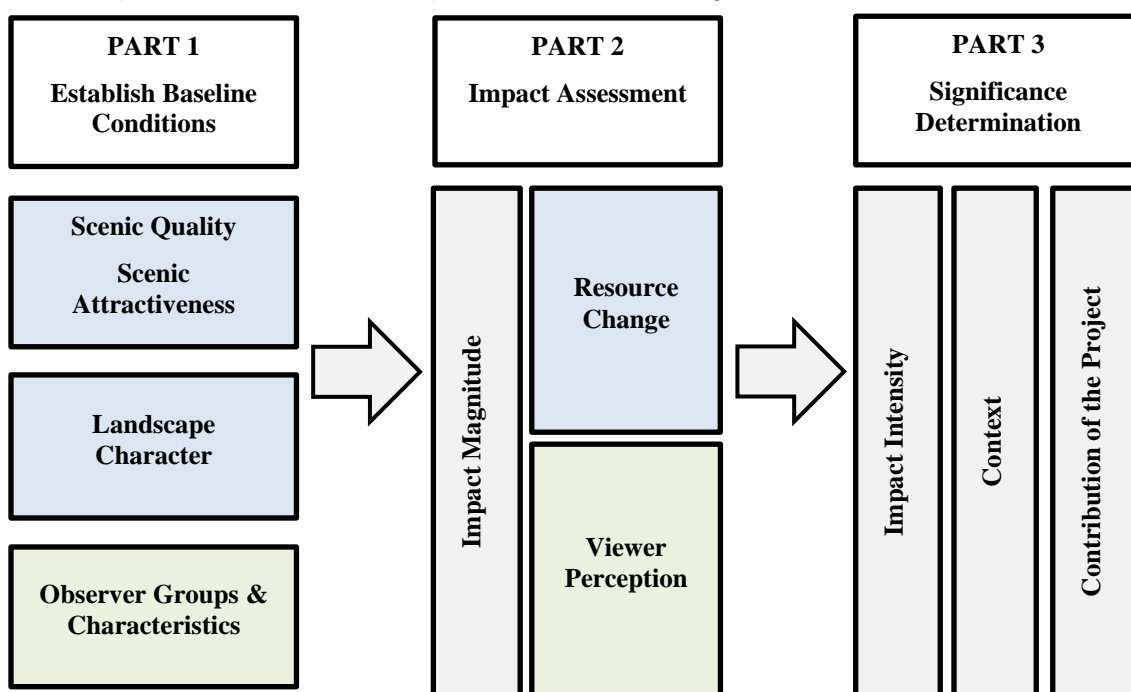


Figure L-3-1. Visual Impact Assessment Methodology Flowchart

The impact assessment considered potential impacts that could result from major Project components, such as the transmission towers, conductors, cleared right-of-way (ROW), access roads, and temporary support facilities that would be used during construction. IPC used several sources of data to inform the analysis of potential impacts of the Project on scenic resources, including GIS-based viewshed models, field visits, site-specific analysis at Key Observations Points (KOPs), photosimulations, and review of Google Earth imagery.

PART 1: Establish Baseline Conditions

Baseline conditions were established by assessing indicators of *scenic quality/attractiveness* and *landscape character* for each resource. The assessment was completed using a combination of general observations made during field visits, baseline data collected at representative KOPs, and review of landscape features relative to Project components using

1 Google Earth. These data were used to identify baseline landscape character and scenic quality
2 for each scenic resource. Viewer groups were also identified as part of establishing baseline
3 conditions. KOPs were identified through review of applicable land use and resource plans,
4 consultation with agencies and organizations, and viewshed analysis. The KOPs used in the
5 analysis are indicated on the maps included as Exhibit R, Attachment R-2.

6 The analysis area includes scenic resources administered by the BLM and USFS. Both
7 agencies have established baseline scenic resources inventory procedures:

- 8 • The BLM manages visual resources through the Visual Resource Management (VRM)
9 System (BLM 1986). Visual values are established through the visual resource inventory
10 process, which classifies scenery based on the assessment of three components: scenic
11 quality, visual sensitivity, and distance.
- 12 • The USFS manages scenic resources through the Visual Management System
13 established in The National Forest Management, Volume 2, Agricultural Handbook 462
14 (1974) to inventory, classify, and manage lands for visual resource values. In 1995, the
15 USFS visual resource management guidelines and monitoring techniques evolved into
16 the Scenery Management System as described in *Landscape Aesthetics: A Handbook
17 for Scenic Management, Agricultural Handbook* (USFS 1995). The USFS describes
18 baseline condition in a similar manner; however baseline components include measures
19 of scenic attractiveness and integrity, landscape visibility (i.e., distance zones), and
20 concern level (i.e., sensitivity).

21 Because analogous concepts to scenic quality are found in the USFS Scenery Management
22 System as scenic attractiveness and in the BLM VRM system as scenic quality, the approach
23 and terminology used by these land management agencies was used to assess baseline
24 conditions on lands administered by these agencies. In other words, the BLM system was used
25 on BLM lands and USFS system was used on USFS lands. To address scenic resources on
26 non-BLM or non-USFS lands, the method that most closely matched the prevailing geographic
27 location and physiography of the resource were used according to the following conventions:

- 28 • BLM methods were applied to scenic resources in non-forested areas.
- 29 • USFS methods were applied to scenic resources in forested areas.

30 For both systems, the evaluation of scenic quality or attractiveness was typically applied to
31 specific geographic areas referred to as Scenic Quality Rating Units (BLM) and Ecological Units
32 (USFS). For the purpose of this analysis, the geographic areas considered were defined by the
33 boundaries of scenic resources analyzed. The goal of the application of the BLM and USFS
34 systems was to develop consistent baseline data for scenic quality for each resource that could
35 be used to measure resource change in the impact determination.

36 **Scenic Quality / Attractiveness**

37 *BLM Visual Resource Management System*

38 Baseline conditions on BLM-administered lands were established by measuring the scenic
39 quality per BLM Visual Resource Inventory procedures (BLM 1986). Scenic quality was
40 quantified through the scoring of seven key factors: landform, vegetation, water, color, adjacent
41 scenery, scarcity, and cultural modifications. Each key factor was scored based on guidelines
42 described below (BLM 1986). Ranking is relative to other similar features within the
43 physiographic province. Table L-3-2, below, lists the scoring criteria used to rank of each key
44 factor (BLM 1986).

1 **Table L-3-2. Rating Criteria for Key Factors Used to Assess Scenic Quality per BLM Visual Resource Management**
 2 **System**

Factor	Rating Criteria and Score		
Landform	5 – High vertical relief as expressed in prominent rock cliffs, spires, or massive rock outcrops, or severe surface variation or highly eroded formations including major badlands or dune systems; or detailed features dominant and exceptionally striking and intriguing such as glaciers	3 – Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional.	1 – Low, rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.
Vegetation	5 – A variety of vegetation types as expressed in interesting forms, textures, and patterns.	3 – Some variety of vegetation, but only one or two major types.	1 – Little or no variety or contrast in vegetation.
Water	5 – Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.	3 – Flowing, or still, but not dominant in the landscape.	0 – Absent, or present, but not noticeable.
Color	5 – Rich color combinations, variety or vivid color, or pleasing contrasts in soils, rock, vegetation, water, or snow fields.	3 – Some intensity or variety in colors and contrast of the soil, rock, and vegetation, but not a dominant scenic element.	1 – Subtle color variations contrast or interest; generally mute tones.
Influence of Adjacent Scenery	5 – Adjacent scenery greatly enhances visual quality.	3 – Adjacent scenery moderately enhances overall visual quality.	0 – Adjacent scenery has little or no influence on overall visual quality.
Scarcity	5+ – One of a kind; or unusually memorable, or very rare within a region. Consistent chance for exceptional wildlife or wildflower viewing, etc.	3 – Distinctive, though somewhat similar to others within the region.	1 – Interesting within its setting, but fairly common within the region.
Cultural Modification	2 – Modifications add favorably to visual variety while promoting visual harmony.	0 – Modifications add little or no visual variety to the area, and introduce no discordant elements.	-4 – Modifications add variety but are very discordant and promote strong disharmony.

1 After the scenic quality evaluation was completed, scores for each key factor were totaled to
 2 derive an overall Scenic Quality Classification for the resource. Scenic quality was classified as
 3 Class A, B, or C, with Class A receiving a total score of 19 or more, Class B receiving a score
 4 from 12 to 18, and Class C scoring 11 or less. Landscapes ranked as Class A have the highest
 5 apparent scenic quality, while landscapes ranked as Class C have the lowest (BLM 1986).

6 *USFS Scenery Management System*

7 Baseline conditions for resources located on USFS-administered lands were described in terms
 8 of both “Scenic Attractiveness” and “Scenic Integrity.”

9 Scenic attractiveness pertains to the “intrinsic scenic beauty of the project area,” and is
 10 categorized as: Class A (Distinctive), B (Typical), or C (Indistinctive). The combination of valued
 11 landscape elements such as landform, water characteristics, vegetation, and cultural features,
 12 are used in determining the measure of Scenic Attractiveness.

- 13 • **Landform Patterns and Features:** Includes characteristic landforms, rock features, and
 14 their juxtaposition to one another.
- 15 • **Surface Water Characteristics:** The relative occurrence and distinguishing
 16 characteristics of rivers, streams, lakes, and wetlands. Includes features such as
 17 waterfalls and coastal areas.
- 18 • **Vegetation Patterns:** Relative occurrence and distinguishing characteristics of potential
 19 vegetative communities and the patterns formed by them.
- 20 • **Land Use Patterns and Cultural Features:** Visible elements of historic and present
 21 land use that contribute to the image and sense of place.

22 Scenic integrity refers to the degree to which a landscape is free from visible disturbances that
 23 detract from the natural or socially valued appearance (i.e., valued landscape character). Scenic
 24 integrity is evaluated by measuring degree of alteration in line, form, color, texture from natural
 25 or naturally appearing landscape character by measuring changes in scale, intensity, and
 26 pattern against the attributes of that landscape character and is classified as follows (USFS
 27 1995):

- 28 • **Very High:** Valued existing or desired future landscape character is intact and complete
 29 with only minute, if any, deviations.
- 30 • **High:** Valued landscape character appears unaltered. Deviations may be present but
 31 they mimic the landscape character so completely that they are not evident.
- 32 • **Moderate:** Valued landscape character appears slightly altered. Noticeable deviations
 33 remain visually subordinate to the landscape character.
- 34 • **Low:** Valued landscape character appears moderately altered. Deviations begin to
 35 dominate the valued landscape character.
- 36 • **Very Low:** Valued landscape character appears heavily altered. Deviations strongly
 37 dominate the valued landscape character.
- 38 • **Unacceptably Low:** Landscapes appear extremely altered. Deviations extremely
 39 dominate the valued landscape character.

40 **Landscape Character**

41 Landscape character is a descriptive means to assess a landscape. Attributes of landform,
 42 vegetation, waterform, wildlife, spatial character, and cultural or historic features were described
 43 in terms of their relative dominance or prominence to the character and influence on the “sense

1 of place” (USFS 1995). Character elements were described in terms of existing form, line, color,
2 and texture, with consideration of landscape factors (principles) such as contrast, sequence,
3 axis, convergence, co-dominance, scale and enframement (USFS 1995, BLM 1986). Because
4 the BLM does not have a classification system for landscape character, landscape character for
5 all resources was classified per the USFS system (1995), regardless of jurisdiction or
6 physiography of the resource. Landscape character classes are described below:

- 7 • **Naturally Evolving:** Landscape character expresses the natural evolution of biophysical
8 features and processes, with very limited human intervention.
- 9 • **Natural Appearing:** Landscape character expresses predominantly natural evolution,
10 but also human intervention including cultural features and processes.
- 11 • **Cultural:** Landscape character expresses built structures and landscape features that
12 display the dominant attitudes and beliefs of specific human cultures.
- 13 • **Pastoral:** Landscape character expresses dominant human created pastures,
14 “meadows,” and associated structures, reflecting valued historic land uses and lifestyles.
- 15 • **Agricultural:** Landscape character expresses dominant human agricultural land uses
16 producing food crops and domestic products.
- 17 • **Historic:** Landscape character expresses valued historic features that represent events
18 and period of human activity in the landscape.
- 19 • **Urban:** Landscape character expresses concentrations of human activity, primarily in
20 the form of commercial, cultural, education, residential, transportation structures, and
21 supporting infrastructure.

22 **Viewer Groups and Characteristics**

23 Viewer groups associated with each resource were evaluated to understand certain
24 characteristics that inform the extent to which potential changes in landscape character and
25 quality would be perceived (perception of change). This assessment assumes a high sensitivity
26 exists among all viewer groups based on the identification of the resource as important in a
27 planning document. Therefore, this assessment instead focuses on understanding
28 characteristics that describe the relationship of the observer to the potential impact, and the
29 landscape context of that relationship. Viewer characteristics assessed included viewer location
30 (distance), viewer geometry (superior, inferior, or at grade), and viewer duration or exposure
31 (BLM 1986). The landscape context included consideration of landscape type – i.e., focal or
32 panoramic. Observer characteristic are summarized below:

- 33 • **Viewer Location:** The degree of perceived visual contrast and scale dominance of an
34 object is influenced by its distance from the observer. As viewing distance increases, the
35 Project would appear smaller and less dominant. Likewise, as distance increases, the
36 apparent contrast of color would decrease (BLM 1986)
- 37 • **Viewer Geometry:** Viewer geometry refers to the spatial relationship of the observer to
38 the viewed object (i.e., the Project), including both the vertical and horizontal angles of
39 view (BLM 2013). The vertical angle of view refers to the observer’s elevation relative to
40 the viewed object. The horizontal angle of view refers to the compass direction of the
41 view from the observer to the object. Visibility is typically greater for observers whose
42 viewing angle is directed toward a Project feature than for those with a lateral view.
- 43 • **Viewer Duration / Exposure:** Viewer duration/exposure refers to the length of time
44 Project features may be in view. This description would disclose whether expected

1 viewer exposure was limited to a short duration or number of viewpoints or prolonged
2 and/or experienced from multiple viewpoints.

3 **PART 2: Impact Likelihood and Magnitude Assessment**

4 The definition of “significant” per OAR 345-001-0010(53) and the interpretation for Exhibit L are
5 described in Table L-3-1, above. Per the Council’s rule OAR 345-001-0010(53), an important
6 consequence is in part determined by the likelihood and magnitude of the impact. In this part of
7 the analysis, IPC first identified the Project-related actions that could affect the resource.
8 Project-related actions that could affect scenic resources included construction and operation of
9 Project facilities including permanent features (transmission towers, conductors, access roads,
10 stations, communication stations), temporary features (multi-use sites and pulling and
11 tensioning sites), and other actions, such as revegetation or restoration, that could be prolonged
12 in time, but not permanent. Next, IPC evaluated the likelihood of the impact and the magnitude
13 of the impact, considering such factors as the duration of the impact, visual contrast and scale
14 dominance, and resource change and viewer perception.

15 Likelihood of Impact

16 IPC considered all identified impacts to be “likely” to occur.

17 Magnitude of Impact - Impact Duration

18 The “magnitude” of impacts was evaluated, in part, by the duration of the impact.

19 “Impact duration” was categorized as temporary, short-term, or long-term based on whether an
20 impact would occur only during Project construction, or for up to 3 years (temporary), for less
21 than 10 years (short-term), or for greater than 10 years or for the life of the Project (long-term).
22 This analysis assumes only those actions identified as long-term are considered potentially
23 significant. Temporary or short-term impacts were dismissed because they would not
24 permanently alter scenic quality or landscape character, or jeopardize the ability of the resource
25 to provide the scenic value for which it was designated or recognized in relevant land use plans.
26 The magnitude of temporary and short-term impacts is disclosed; however, potential impacts
27 are not analyzed in detail.

1 The criteria used to evaluate the “impact duration” indicator are shown in Table L-3-3, below.

2 **Table L-3-3. Criteria Used to Determine Impact Duration**

Indicator	Criteria		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).

3 Impact Magnitude of Impact – Visual Contrast and Scale Dominance

4 The “magnitude” of impacts was measured by assessing the level of visual contrast and scale
 5 dominance of Project components relative to the existing landscape. Visual contrast is
 6 described as the extent to which an object appears different from the surrounding visual
 7 environment. It is measured using the four basic design elements of form, line, color, and
 8 texture (BLM 1986). Primary sources of visual contrast for transmission towers typically include
 9 form and line, based on the straight vertical lines of the structures relative to the flat, horizontal,
 10 or rolling lines of the horizon. This method assumes that visual contrast between the Project and
 11 the existing landscape character contributes to an adverse visual impact and it is not a measure
 12 of the Project’s overall attractiveness (BLM 1986). Visual contrast rating criteria are described
 13 below:

- 14 • **None:** The element contrast is not visible or perceived.
- 15 • **Weak:** The element contrast can be seen but does not attract attention.
- 16 • **Moderate:** The element contrast begins to attract attention and begins to dominate the
 17 characteristic landscape.
- 18 • **Strong:** The element contrast demands attention, will not be overlooked, and is
 19 dominant in the landscape.

20 Visual contrast was determined by implementing the visual contrast rating at each relevant KOP
 21 (BLM 1986) remotely using Google Earth and supporting photography and photosimulations
 22 when available. The character, composition, and dimensions of the various structural
 23 components of the Project, as defined in Exhibit B, were used to determine the expected
 24 appearance of the Project from select resources. Realistic models of the Project structures
 25 (towers) and conductors were used to develop computer-generated photosimulations of the
 26 Project from selected KOPs representing visibility from these resources. The appearance of the
 27 Project at locations where photosimulations were not prepared was inferred based on visibility
 28 assessment, inferences provided by the simulations at other locations, and the graphical
 29 representations of the Project facilities in Exhibit B.

1 Several “environmental factors” were considered in the contrast rating process (BLM 1986):

- 2 • **Distance:** The contrast created by a project usually is less as viewing distance
3 increases.
- 4 • **Relative Size or Scale:** The contrast created by a project is directly related to its size
5 and scale as compared to the surroundings in which it is placed. Scale dominance refers
6 to the scale of an object relative to the visible expanse of the landscape that forms its
7 setting (BLM 1986). A dominant feature of a landscape tends to attract attention to it and
8 becomes the focal point of the view. Where two or more features both attract attention
9 and have generally equal visual influence over the landscape, they are considered co-
10 dominant. An object or feature that is easily overlooked or absorbed by the surrounding
11 landscape is considered subordinate.
- 12 • **Light Conditions:** The amount of contrast can be substantially affected by the light
13 conditions. The direction and angle of lighting can affect color intensity, reflection,
14 shadow, form, texture, and many other visual aspects of the landscape. The influence of
15 lighting conditions is considered in the interpretation of visual simulations and expected
16 visual contrast.
- 17 • **Spatial Relationships:** The spatial relationship within a landscape is a major factor in
18 determining the degree of contrast.
- 19 • **Motion:** Movement, such as that from increased vehicles or personnel, can draw
20 attention to or away from a project

21 A weighted viewshed model was used to support our understanding of the influence of scale (as
22 determined by the number of transmission towers visible) and spatial relationship on the impact
23 magnitude. The weighted viewshed model considered the contribution of each tower to potential
24 visibility such that the resulting “positive” signature for visibility indicated the number of towers
25 visible from each pixel (Exhibit R, Attachment R-6b). Though this model provides a better
26 indication of potential visibility of transmission towers, it is also limited in that it does not provide
27 information on what Project features triggered the positive signature, or at what distance these
28 features are located. Consequently, the weighted bare-earth model is of greatest utility in
29 determining potentially visibility of a limited number of transmission towers.

30 IPC incorporated the contrast rating and environmental factors discussed above as criteria used
31 to evaluate the “impact magnitude” indicator are shown in Table L-3-4 below.

32 **Table L-3-4. Criteria Used to Determine Visual Contrast and Scale Dominance**

Indicator	Criteria		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.

1 Magnitude of Impact - Resource Change and Viewer Perception

2 The determination of magnitude is used as the basis for evaluating the level of change to scenic
3 quality and landscape character of the resource (resource change) and how that change would
4 be perceived by viewers (viewer perception). Resource change and viewer perception were
5 evaluated to determine the intensity of the visual impact.

6 **Resource Change**

7 Per the Council's rule OAR 345-001-0010(53), an important consequence is determined, in part,
8 by assessing the impact of the proposed action on the natural resource. The impact to the
9 natural resource was determined by measuring the change in baseline conditions of scenic
10 quality/attractiveness and landscape character likely to result based on the design, construction,
11 and operation of the Project. "Resource change" was considered low, medium, or high based
12 upon the geographic extent of medium to high magnitude impacts and the degree to which
13 those impacts alter scenic quality/attractiveness and/or character of the landscape (Table L-3-
14 4). A change in landscape character could result if Project features introduce character
15 attributes that deviate substantially from those present in the existing landscape such that the
16 resulting landscape assumes a new character type.

17 *BLM Visual Resource Management System*

18 For those resources for which baseline scenic quality was assessed using BLM Visual
19 Resource Inventory assessment methodology (BLM 1986), change in scenic quality was
20 determined by assessing potential change in any of the key factors used to assess scenic quality.
21 Whether a reduction in score for any key factor used to assess scenic quality results in a
22 change in scenic quality class is dependent on the overall post-Project score of the key factors
23 for scenic quality. Although each key factor considered in the assessment of scenic quality has
24 the potential to change under operational conditions, the primary factors that tended to change
25 based on operational conditions were "Adjacent Scenery" and "Cultural Modification." The level
26 of change induced by either of these key factors under operational conditions provides one
27 metric of the overall contribution of the Project to visual impacts.

28 As indicated in Table L-3-2, "Adjacent Scenery" considers the degree to which scenery outside
29 the resource being evaluated enhances the overall impression of the scenery of the resource.
30 The distance at which adjacent scenery will influence scenery within the rating unit typically
31 ranges from 0 to 5 miles, depending upon the characteristics of the topography, the vegetative
32 cover, and other such factors (BLM 1986). This factor is generally applied to units that would
33 normally rate very low in score, but the influence of the adjacent unit would enhance the visual
34 quality and raise the score. Under operational conditions, the contribution of adjacent scenery to
35 overall scenic quality may be reduced in situations where the Proposed Route is located within
36 the middleground distance zone of the scenic resource.

37 "Cultural modification" to landform/water, vegetation, and from the Project facilities within the
38 resource being evaluated could also lower scenic quality scores. As indicated in Table L-3-2,
39 Cultural modification that detracts from scenic quality can be rated with a negative value,
40 thereby lowering the overall scenic quality score.

41 *USFS Scenery Management System*

42 For those resources for which baseline scenic attractiveness was assessed using USFS
43 Scenery Management System assessment methodology (USFS 1995), potential change in
44 scenic attractiveness was assessed by considering change landscape attributes or cultural
45 features that are expected to result from operation of the Project, and the extent to which those

1 features could alter scenic attractiveness. The potential for reduction in scenic integrity was also
2 considered in the assessment of the overall intactness of the landscape character.

3 For resources where there was a change in landscape character, scenic quality/attractiveness,
4 or scenic integrity (resource change of medium or high) the Project's overall contribution to that
5 change was disclosed.

6 **Viewer Perception**

7 Per the Council's rule OAR 345-001-0005(53), an important consequence is determined, in part,
8 by the impact on the affected human population. The impact to the human population was
9 interpreted as the extent to which an observer would perceive changes to valued landscape
10 attributes. "Viewer perception" was ranked as low, medium, or high based on the location of the
11 viewer relative to the medium to high magnitude impact (i.e., elevated, neutral, or inferior
12 vantage point, and whether views are predominantly peripheral, or head-on) and the duration
13 the impact would be viewed (episodic, intermittent, or continuous).

- 14 • **Angle of Observation:** The apparent size of a project is directly related to the angle
15 between the viewer's line-of-sight and the slope upon which the project is to take place.
16 As this angle nears 90 degrees (vertical and horizontal), the maximum area is viewable.
- 17 • **Length of Time the Project Is In View:** If the viewer has only a brief glimpse of the
18 project, the contrast may not be of great concern. If, however, the project is subject to
19 view for a long period, as from an overlook, the contrast may be very significant.
- 20 • **Season of Use:** Contrast ratings should consider the physical conditions that exist
21 during the heaviest or most critical visitor use season, such as snow cover and tree
22 defoliation during the winter, leaf color in the fall, and lush vegetation and flowering in
23 the spring.

24 The criteria used to evaluate two indicators of intensity (resource change and viewer perception)
25 are shown in Table L-3-5 below.

1 **Table L-3-5. Criteria Used to Determine Resource Change and Viewer Perception**

Indicator	Criteria		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the Project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the Project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the Project is located primarily in the immediate foreground distance zone (up to 0.5 mile).

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 Per the Council's rule OAR 345-001-0010(53), an important consequence also considers the
4 "context of the action or impact, its intensity, and the degree to which the degree to which the
5 possible impacts are caused by the proposed action." Drawing from impact determinations
6 made in Part 2, significance criteria addressing each of these components was assessed as
7 described below.

8 **Impact Intensity**

9 Impact intensity was determined by considering the level of resource change and how those
10 visual impacts were perceived by viewers. As shown in Table L-3-6, impacts were considered to
11 be of high intensity if the level of resource change was ranked as high, despite whether visual
12 impacts were perceived by viewers. Resource change ranked as medium was considered to be
13 of high intensity where viewer perception of impacts was considered high.

14

1 **Table L-3-6. Criteria Used to Determine Impact Intensity**

Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

2 Adverse impacts rated as low *intensity* were not considered to be potentially significant and
 3 were not considered further. As stated previously, only long-term impacts were considered to be
 4 potentially significant. Accordingly, only long-term impacts of medium or high intensity were
 5 considered to be potentially significant.

6 **Degree to Which the Possible Impacts are Caused by the Proposed Action**

7 The degree to which the possible impacts are caused by the proposed action is disclosed for
 8 resources determined to be adversely impacted by the Project. The contribution of the Project to
 9 adverse impacts is based on the level of resource change, taking into account baseline
 10 conditions (past or present actions) and direct and indirect impacts of the Project. Per the
 11 definition of “significant” in OAR 345-001-0010(53), an “important consequence” may occur
 12 either alone or in combination with other factors. Accordingly, the degree to which possible
 13 impacts may be caused by the Project are analyzed, however, this aspect of the significance
 14 criteria was not considered a discriminator of significance. Instead, it clarifies the potential role
 15 of the Project in altering baseline conditions by re-stating metrics used to determine resource
 16 change.

17 The degree to which the possible impacts are caused by the proposed action was classified as
 18 follows:

- 19 • Project Effects (P): The impacts disclosed in this assessment are caused by the
 20 proposed facility, and are not the result of other past or present actions.
- 21 • Combined Effects (C): The scenic quality of the resource under operational conditions is
 22 the result of the combined influence of the Project and other past or present actions.
 23 Additional narrative is provided for each resource, as applicable.

24 **Context**

25 For those impacts judged to be long-term and medium to high intensity, a determination of
 26 significance was made by considering the context of adverse impacts. The *context* of the
 27 impact considered the role of scenery as a valued attribute of the resource and the extent to
 28 which expected impacts are consistent with the standards and guidelines of relevant land
 29 management objectives. As follows, a conclusion of “less than significant” impact could be
 30 reached if the valued attributes of the resource could persist despite a high intensity impact. If,
 31 because of high intensity impacts, the resource no longer provided the valued scenic attribute(s)
 32 for which it was deemed important, the impact was found to be “significant.”

33 Criteria used to evaluate context in order to come to an overall significance determination are
 34 described in Table L-3-7.

35

1 **Table L-3-7. Criteria Used to Determine Context**

Indicator	Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or , Scenery is not a valued attribute of the resource.
Persistence of Scenic Value	<p>Persistence of Scenic Value is either:</p> <p>Not-Precluded Impacts would not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or,</p> <p>Precluded Impacts would preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.</p>

2 As summarized in Table L-3-8 below, in order for an adverse visual impact to be potentially
3 significant, it must affect a resource for which scenery is considered a valued attribute in such a
4 manner that the valued scenic attribute no longer provides the scenic value for which it was
5 designated or recognized.

6 **Table L-3-8. Criteria Used to Determine Potentially Significant Adverse Impacts**

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

7

8 A conclusion of “less than significant” could be reached if the valued scenic attributes of the
9 resource could persist. If, because of high intensity impacts, the protected area would no longer
10 provide the valued scenic attribute(s) for which it was deemed important, the impact was found
11 to be “potentially significant.”

12

1 **3 VISUAL IMPACT ASSESSMENT FOR PROTECTED AREAS**

2 For each protected area, IPC performed a three-part analysis to determine whether the Project
3 will result in a significant adverse impact: (1) established baseline visual conditions; (2)
4 assessed potential visual impacts of the Project; and (3) considered intensity, causation, and
5 context. The following pages contain the visual impact assessments for protected areas
6 identified per OAR 345-022-0040 for the Project.

7

1 **3.1 Deer Flat National Wildlife Refuge**

2 **Resource:** Deer Flat National Wildlife Refuge (NWR)

3 **Relevant Exhibit:** L, T

4 **Relevant Plan:** Deer Flat Comprehensive Plan (USFWS 2015a)

5 **Resource Type:** Area-based

6 **Relevant KOP(s):** None

7 **PART 1: Establish Baseline Conditions**

8 **Designation:** According to the Final Comprehensive Conservation Plan, the Deer Flat NWR
9 should achieve the following purposes:

- 10 • Enhance, maintain, and protect refuge habitats (including mudflats, emergent beds, and
11 open water habitats of Lake Lowell, riparian forests, non-lake wetlands, and shrub-
12 steppe) for the benefit of migratory birds and other wildlife.
- 13 • Gather sufficient scientific information to guide responsible adaptive management
14 decisions.
- 15 • Provide visitors with compatible wildlife-dependent and non-wildlife-dependent
16 recreational opportunities that foster an appreciation and understanding of the NWR's
17 fish, wildlife, and plants, and their habitats, and have limited impacts to wildlife.
- 18 • Initiate and nurture relationships and develop cooperative opportunities to promote the
19 importance of the refuge's wildlife habitat and support refuge stewardship.

20 **Interpretation Designation:** The purpose of the NWR is to protect wildlife and its habitat while
21 providing recreation opportunities that are compatible with wildlife and its habitat. The refuge is
22 not managed to protect scenic resources.

23 **Resource Overview:** The Deer Flat NWR is one of the oldest refuges in the NWR system and
24 comprises two units: Lake Lowell and the Snake River Islands. The Snake River Island Unit is
25 the only unit that is within the analysis area (Figure L-3-2). It includes approximately 800 acres
26 across 101 islands within the Snake River, which are distributed along 113 miles of the Snake
27 River from the Canyon County-Ada County line in Idaho to Farewell Bend, Oregon. The refuge
28 protects grasslands and riparian forests on the Snake River islands that provide habitat for
29 resident and migratory birds. Refuge visitation over the past 4 years has ranged between
30 167,000 and 225,000 (USFWS 2015a); however, it is likely that the majority of the visitors do
31 not visit the Snake Island Unit, since it requires a boat for access.

32 Per OAR 345-022-0040, Deer Flat NWR is being evaluated as a Protected Area.

33 Per OAR 345-022-0080, Deer Flat NWR is not considered as a Scenic Resource.

34 Per OAR 345-022-0100, Deer Flat NWR is being evaluated as a Recreation Resource.

35 **Existing Conditions:** The natural landscape of the Deer Flat NWR Snake River Island Unit is
36 characterized by flat, small islands surrounded by the generally flat, wide, and winding Snake
37 River. Vegetation on the islands consists of low- to medium-height grasses and shrubs as well
38 as taller, mature trees that create a medium texture with irregular to clumped patterns. Light-
39 colored gravel beaches surround many of the islands. Adjacent scenery includes the Snake
40 River, which is a dominant aspect of the landscape, the rolling hills and flat agricultural areas
41 that flank the river, and transportation routes including Interstate 84 (I-84) and Idaho State
42 Highway 203. There are no roads or trails on the islands. Primary recreation activities on the

1 islands include wildlife viewing, photography, hunting, and fishing. Human development is very
2 limited and the landscape natural appearing.

3 Using the BLM's visual resource inventory methods per Manual H-8410-1 (BLM 1986), the
4 scenic quality of the existing landscape for the Deer Flat NWR Snake Island Unit is considered
5 medium (class B) as shown below:

Deer Flat NWR – Snake Island Unit Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	3	4	3	3	2	0	16 (B)

6

7 **Viewers:** Viewers are limited, since access to the Snake Island Unit is by boat only, and will
8 primarily include individuals primarily engaging in hunting and fishing activities.

9 **PART 2: Impact Likelihood and Magnitude Assessment**

10 Alternatives Not Evaluated

11 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
12 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
13 from this site and are therefore not considered in this visual impact analysis.

14 This protected area is also located more than 10 miles from forested portions of the Proposed
15 Route and the Morgan Lake Alternative; consequently, potential visual impacts of the cleared
16 ROW are also not considered further in this analysis.

17 Because West of Bombing Range Road Alternative 1, West of Bombing Range Road
18 Alternative 2, and the Double Mountain Alternative are not forested, they are not analyzed for
19 potential visual impacts resulting from a cleared ROW.

20 Proposed Route

21 The closest Project component to the Deer Flat NWR is a multi-use site, located approximately
22 0.2 mile southwest of one island within the Snake Island Unit. The Proposed Route is located
23 approximately 0.6 mile to the southwest of the refuge at its closest point near Farewell Bend. At
24 that proximity, the Project will introduce strong visual contrast and could appear co-dominant
25 with the surrounding landscape. Views of the Proposed Route will be primarily peripheral and
26 intermittent since viewers will primarily be traveling to or from the island by boat or hunting, such
27 that views will not be directed toward the Proposed Route for an extended period. The
28 Proposed Route will be less than 1 mile from one island and less than 3 miles from three islands
29 within the Snake Islands Unit; the remaining 97 islands will be further than 3 miles from the
30 Proposed Route and will experience weak contrast from the Project. The transmission towers
31 associated with the Proposed Route will slightly reduce the adjacent scenery of these four
32 islands, although the landscape character will remain natural appearing and scenic quality will
33 not change. Additionally, the scenic quality score of the Snake Island Unit will not change since
34 over 95 percent of the resource will experience no perceivable changes.

35

Deer Flat NWR – Snake Island Unit Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	3	4	3	3	2	0	16 (B)

- 1 Likelihood of Impact
- 2 IPC considered all identified impacts to be “likely” to occur.
- 3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

- 4
- 5 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Towers at their closest point will be approximately 0.6 mile from one island within the Deer Flat Snake the NWR and at that proximity will be noticeable and could appear co-dominate with the surrounding landscape that includes I-84, situated between the Proposed Route and the Snake Island Unit. Therefore, magnitude will be <u>medium</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The transmission towers associated with the Proposed Route will reduce the adjacent scenery of four islands within the Snake Island Unit; however, the remaining 97 islands within the Snake Island Unit will not be affected. Therefore, the adjacent scenery to the Snake Island Unit of the Deer Flat NWR will not change overall. Consequently, the landscape character will remain natural and scenic quality will not change. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the transmission towers associated with the Proposed Route will be primarily peripheral and intermittent since viewers will primarily be traveling to or from the island by boat or participating in hunting or fishing activities, such that views directed toward the Proposed Route will be episodic. Therefore, viewer perception will be <u>low</u> .			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Proposed Route will have medium magnitude impacts and reduce the adjacent scenery of
 4 four islands within the Snake Island Unit; however, the remaining 97 islands within the Snake
 5 Island Unit will not be affected and therefore the adjacent scenery to the Snake Island Unit of
 6 the Deer Flat NWR will not change overall. Consequently, the landscape character will remain
 7 natural, and scenic quality will not change such that resource change will be low. Views of the
 8 Proposed Route will be primarily peripheral, intermittent, and episodic such that viewer
 9 perception is low. Therefore, impact intensity will be low.

10 Degree to Which Impacts are Caused by the Project

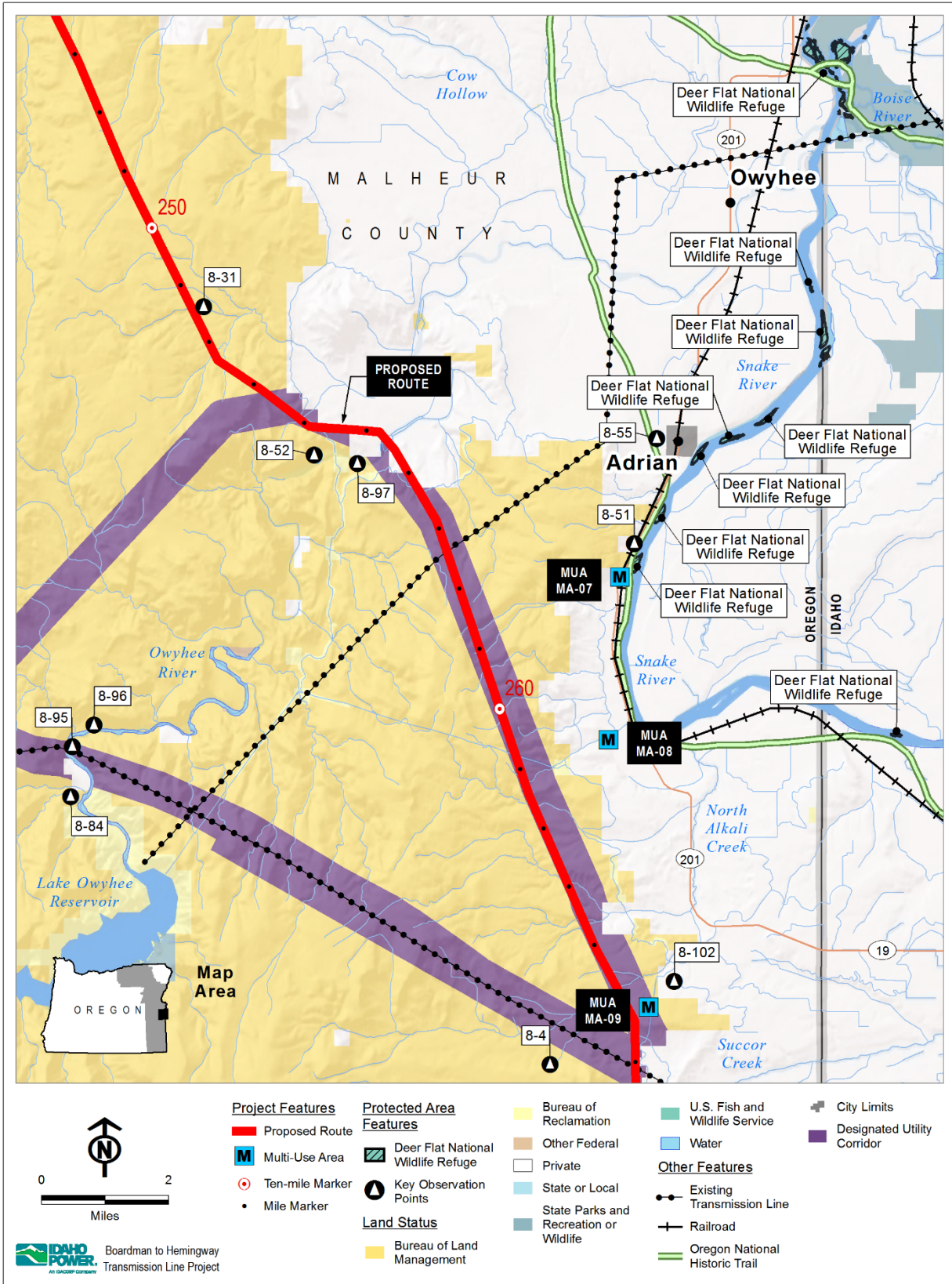
11 The scenic quality of the resource under operational conditions is the result of the combined
 12 influence of the Project and other past or present actions, including I-84 and Idaho State
 13 Highway 203.

14 Context

15 According to the visual impact methodology, an evaluation of context is not required as the
 16 Project will have low intensity impacts, which are considered less than significant.

17 **Summary and Conclusion**

18 The Project will result in long-term visual impacts to the Deer Flat NWR that will be low intensity
 19 as measured by visual contrast and scale dominance, resource change, and viewer perception.
 20 Impacts will be **less than significant**.



1
2 **Figure L-3-2. Deer Flat National Wildlife Refuge**

3.2 Umatilla National Wildlife Refuge

Resource: Umatilla NWR

Relevant Exhibit: L, T

Relevant Plan: Umatilla Comprehensive Conservation Plan (FWS 2015)

Resource Type: Area-based

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Designation: The Umatilla NWR is managed by the McNary and Umatilla Conservation Plan. Goal 9 of the McNary and Umatilla Refuges Comprehensive Conservation Plan states,

“Visitors and local residents enjoy, value, learn about, and support the Refuges”.
Objective 9d of Goal 9 is to “Enhance Viewing Opportunities at the McCormack Unit”
(FWS 2008).

Interpretation of Designation: According to the U.S. Fish and Wildlife Service, providing waterfowl habitat is a major focus of the Umatilla NWR (FWS 2016). This is interpreted to mean that scenery is not an identified attribute for which the NWR was designated as a protected area.

Resource Overview: The Umatilla NWR, which is part of the Mid-Columbia River NWR complex, comprises six units; two are located in Oregon, three are in Washington, and one is in the Columbia River. The Umatilla NWR in the Columbia River is shown in Figure L-3-3. These six units include a mix of open water, sloughs, shallow marsh, seasonal wetlands, cropland, islands, and shrub-steppe upland habitats. This NWR is vital to migratory waterfowl, bald eagles, colonial nesting birds, and other migratory and resident wildlife. Specific resources within the NWR include a boat ramp, trail, and auto tour route on McCormack Slough. Recreational opportunities in this area include wildlife viewing, interpretation, hunting, fishing, and hiking (FWS 2008, 2012).

Per OAR 345-022-0040, Umatilla NWR is being evaluated as a Protected Area.

Umatilla NWR is not considered a Scenic Resource per OAR 345-022-0080.

Per OAR 345-022-0100, Umatilla NWR is being evaluated as a Recreation Resource.

Existing Conditions: The landscape of the Umatilla NWR appears expansive and flat to gently rolling, which creates softly curved, flowing, and horizontal lines. Low-growing grasses and agricultural vegetation cover the landscape. Colors are generally muted tones of tan and light brown, with some brighter greens near riparian and agricultural areas. The wide, flat Columbia River sits along the northern boundary of the Umatilla NWR. Existing 500- and 230-kV transmission lines run north and south of the McCormack Unit along with several major highways, including I-84 to the south, such that the landscape character is considered a cultural landscape. Expansive views are available in all directions from the Umatilla NWR. Using BLM’s visual resource inventory methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Umatilla NWR is considered low (class C) as shown below:

Umatilla NWR Scenic Quality Rating: Pre-Project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	2	1	-1	6 (C)

1

2 **Viewers:** Viewers will be participating in activities on the refuge including wildlife viewing,
3 interpretation, hunting, fishing, and hiking, and their focus of view will not be directed to any one
4 particular area.

5 **PART 2: Impact Likelihood and Magnitude Assessment**

6 Alternatives Not Evaluated

7 The Morgan Lake Alternative and the Double Mountain Alternative are located greater than 5
8 miles from this site and are therefore not considered in this visual impact analysis. This protected
9 area is also located more than 10 miles from forested portions of the Proposed Route and the
10 Morgan Lake Alternative; consequently, potential visual impacts of the cleared ROW are also not
11 considered further in this analysis. Because West of Bombing Range Road Alternative 1, West of
12 Bombing Range Road Alternative 2, and the Double Mountain Alternative are not forested, they
13 are not analyzed for potential visual impacts resulting from a cleared ROW.

14 The analysis presented below pertains to the Proposed Route. Because of the proximity of the
15 Proposed Route to West of Bombing Range Road Alternative 1 and West of Bombing Range
16 Road Alternative 2, the results of this analysis are considered the same for those two
17 Alternatives.

18 Proposed Route

19 The northern end of the Proposed Route is 1.3 to 12.0 miles from various parts of this NWR.
20 Recreational use areas within the McCormack Unit of the refuge, located northeast of
21 Boardman, are within approximately 1.5 miles of the Proposed Route. The towers will be
22 skylined but partially obstructed by the two existing transmission lines that are located between
23 the Umatilla NWR and the Proposed Route such that moderate to strong contrast will likely
24 persist out to a distance of 3 miles, and the towers associated with the Proposed Route will
25 appear co-dominate with the surrounding landscape due to their size against the landscape and
26 other existing development. The majority of the Umatilla NWR will be further than 3 miles from
27 the Proposed Route, where the towers will introduce weak visual contrast and begin to appear
28 subordinate to the landscape due to distance. The Proposed Route will lower the quality of the
29 Umatilla NWR's adjacent scenery. However, adjacent scenery has a limited effect on the quality
30 of the Umatilla NWR landscape, so this change will only result in a small change to the scenic
31 quality scoring, and the overall scenic quality will not change. The landscape will remain a
32 cultural landscape.

Umatilla NWR Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	1	1	-1	5 (C)

1 Likelihood of Impact

2 IPC considered all identified impacts to be “likely” to occur.

3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Towers at their closest point will be approximately 1.5 miles from recreation areas within the Umatilla NWR. The towers will be skylined but partially obstructed by the two existing transmission lines that are located between the Umatilla NWR and the Proposed Route such that moderate to strong contrast may persist out to a distance of 3 miles. The transmission towers associated with the Proposed Route will appear co-dominant with the surrounding landscape due to their size against the landscape and other existing development. Therefore, the magnitude of impacts will be <u>medium</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Proposed Route will lower the quality of the Umatilla NWR’s adjacent scenery. However, adjacent scenery has a limited effect on the quality of the Umatilla NWR landscape, so this change will only result in a small change to the scenic quality scoring, and the overall scenic quality will not change. The cultural landscape character will be maintained. Therefore, resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the transmission towers associated with the Proposed Route will be primarily peripheral and intermittent as viewers will be situated throughout the Umatilla NWR and will not be directly facing the Project. Therefore, viewer perspective will be <u>low</u> .			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 Impact magnitude will be medium, resulting from towers as close as 1.5 miles that will introduce
 4 moderate to strong contrast and appear co-dominant with the landscape. The towers will lower
 5 the quality of adjacent scenery to the Umatilla NWR; however, this change will only result in a
 6 small change to the scenic quality scoring, and the overall scenic quality and landscape
 7 character will not change so resource change will be medium. Views of the Proposed Route will
 8 be primarily peripheral and intermittent such that viewer perception will be medium.

9 Degree to Which Impacts are Caused by the Project

10 The scenic quality of the resource under operational conditions is the result of the combined
 11 influence of the Project and other past or present actions, including existing 500- and 230-kV
 12 transmission lines and several major highways, which collectively contribute to the cultural
 13 landscape character.

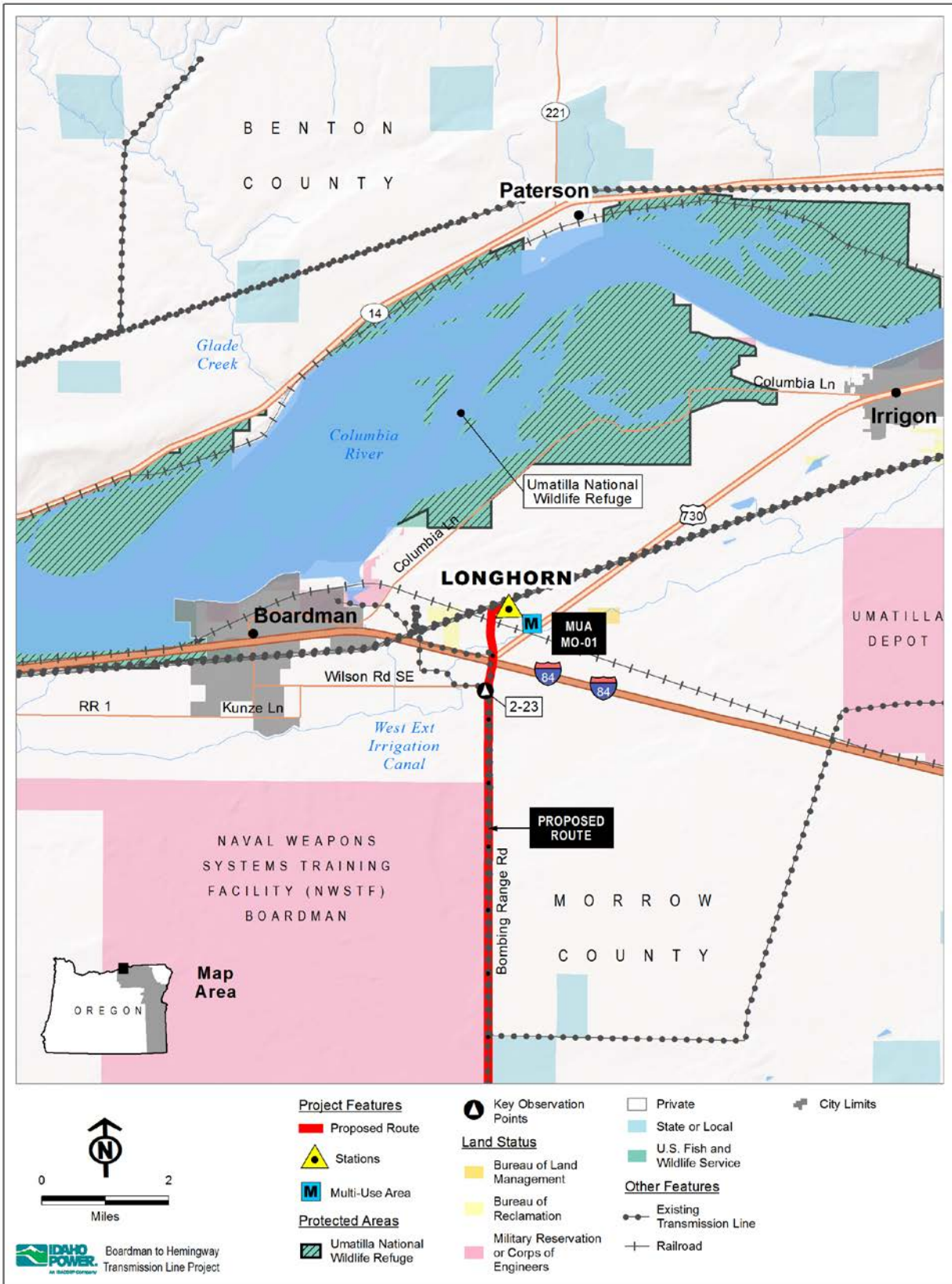
14 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: The purpose of the Umatilla NWR is to conserve, manage, and restore fish and wildlife populations and habitats. Therefore, scenery is not considered a valued attribute for which the area was designated as a protected area.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: Scenery is not considered a valued attribute for which the area was designated. Therefore, medium intensity visual impacts to the Umatilla NWR will not preclude the resource from providing the value for which it was designated as a protected area.	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

1 **Summary and Conclusion**

2 The Project will result in long-term visual impacts at the Umatilla NWR. The impacts will be
3 medium intensity as measured by visual contrast and scale dominance, resource change, and
4 viewer perception. While the Project will result in such impacts, the impacts will not preclude the
5 ability for the NWR to provide the scenic value at the McCormack unit to recreators, as was
6 deemed important to the NWR. Therefore, visual impacts to the Umatilla NWR will be **less than**
7 **significant.**



1
2 **Figure L-3-3. Umatilla National Wildlife Refuge**

3.3 Blue Mountain Forest Wayside/Blue Mountain Forest State Scenic Corridor

Resource: Blue Mountain Forest Wayside/Blue Mountain Forest State Scenic Corridor

Relevant Exhibit: L, R, T

Relevant Plan: Union County Comprehensive Plan (1979)

Resource Type: Linear Corridor

Relevant KOP(s): 4-5

PART 1: Establish Baseline Conditions

Designation: The Union County (1979) Land Use Plan notes:

“Several areas in the County have been considered by either State or Federal agencies for inclusion into their respective scenic programs. The only two areas actually designated are shown on the Plan Map as the Blue Mountain Forest Wayside and the Minam River, both designated by the Oregon Transportation Commission.” (Appendix J, Scenic Areas [p. 99])

The Blue Mountain Forest Wayside is described as an approximately 0.5-mile-wide corridor located along I-84, west of La Grande. The corridor was designated to preserve the scenic character of this portion of the Grande Ronde River and provide a rest area for travelers.

Union County (1984) supplemented the land use plan to provide additional information about Goal 5 resources. Section IX of the supplement addresses Outstanding Scenic Views and Sites (p. 44), indicating that the Blue Mountain Forest Wayside is given special consideration by the Oregon Department of Transportation and that no conflicting uses are anticipated. Union County planning staff indicated there are no planned updates or amendments to the Union County Comprehensive Plan at this time.

The Blue Mountain Forest State Scenic Corridor and Blue Mountain Forest Wayside are administered by OPRD. These resources are partially coextensive, and as such, will be collectively referred to as the Blue Mountain Corridor.

Though no planning document has been prepared for this resource, OPRD describes it as property providing the public with an opportunity to experience one of the few examples of mature evergreen forests along I-84 (OPRD 2016b).

Interpretation of Designation: OPRD provided the following comment on draft Exhibit R, prepared by IPC:

“OPRD owns the property in Union County identified as the Blue Mountain Forest Wayside. The property is managed as a State Scenic Corridor providing the public with an opportunity to relax and enjoy one of the few examples of mature evergreen forests along I-84. Blue Mountain Forest State Scenic Corridor is composed of intermittent stands of old-growth ponderosa pine, western larch, lodgepole pine and grand fir and contains undisturbed examples of native plants and animals...All attempts to locate this project outside of the viewshed, or at the extreme edge of, allowing for no visibility should be made to ensure future generations can enjoy this unique area.” (Alice Beals, OPRD, personal communication, October 8, 2012)

Based on the comment provided by OPRD, IPC interprets the scenic value of this resource to be the aesthetic quality of contiguous old growth within the Blue Mountain scenic corridor. The

1 “natural appearing” character of the resource should be maintained as perceived from the Old
2 Emigrant Hill Scenic Frontage Road in the Blue Mountains.

3 **Resource Overview:** The Blue Mountain Corridor is located along segments of the Old
4 Emigrant Hill Scenic Frontage Road in the Blue Mountains (Figure L-3-4a). The Blue Mountain
5 Corridor boundary includes approximately 990 acres within five separate parcels, all of which
6 are within the visual analysis area. In general, the parcels are relatively long, narrow, linear
7 features. Visitors typically access the Blue Mountain Corridor via one or more of three I-84
8 interchanges.

9 From northwest to southeast, the Blue Mountain corridor begins in the vicinity of Deadman’s
10 Pass, as the route climbs Emigrant Hill into the Blue Mountains. The first corridor parcel spans a
11 stretch of Old Emigrant Hill Road for approximately 0.5 mile near the headwaters of Mission and
12 Cottonwood creeks. Approximately 2 miles farther east, the second Blue Mountain Corridor
13 parcel follows I-84 and Old Emigrant Hill Road to the east and south for about 6.4 miles. This
14 parcel ends just southeast of Emigrant Springs State Heritage Area (SHA) and about 2 miles
15 north of the small community of Meacham.

16 The third Blue Mountain Corridor parcel begins just south of Meacham and follows I-84 for 1.4
17 miles. It then angles south for approximately 3.6 miles along Old Emigrant Hill Scenic Frontage
18 Road to Kamela, with approximately the last 0.5 mile in Union County.

19 The fourth Blue Mountain Corridor segment begins less than 1 mile from the end of the third
20 parcel, about 0.7 mile southeast of Kamela, following Old Emigrant Hill Scenic Frontage Road
21 and the Union Pacific Railroad for approximately 2 miles. This Blue Mountain Corridor parcel is
22 located from 1 to 1.5 miles west of I-84 in Railroad Canyon.

23 The fifth parcel of the Blue Mountain Corridor begins near Motanic and extends to the southeast
24 and east for nearly 3 miles. The eastern end of this parcel is just on the east side of I-84 near
25 Exit 248, about 11 miles northwest of La Grande. This parcel is also located within Railroad
26 Canyon and follows the course of Dry Creek, Old Emigrant Hill Scenic Frontage Road, and the
27 Union Pacific Railroad. Most of this Blue Mountain Corridor parcel is roughly parallel to I-84 and
28 is located about 0.5 mile to 1 mile southwest of the highway.

29 The resource is considered viewer-based, with scenic value perceived by viewers as they travel
30 along the corridor.

31 Per OAR 345-022-0080, Blue Mountain Forest State Scenic Corridor is being evaluated as a
32 Scenic Resource.

33 Per OAR 345-022-0040, Blue Mountain Forest State Scenic Corridor is being evaluated as a
34 Protected Area.

35 Per OAR 345-022-0100, Blue Mountain Forest State Scenic Corridor is being evaluated as a
36 Recreation Resource.

37 **Existing Conditions:** The Blue Mountain Corridor is located in the Maritime-Influenced Zone of
38 the Blue Mountains Ecoregion. Existing topography is primarily rolling, punctuated by the
39 straight to curvilinear lines created by steep drainages. Existing vegetation is dominated by
40 ponderosa pine, western larch, lodgepole pine, and grand fir, and appears nearly contiguous
41 along the edges of the Old Emigrant Hill Scenic Frontage Road.

42 The Old Emigrant Hill Scenic Frontage Road is characterized as a narrow, two-lane road that
43 winds naturally along the upper portion of a steep valley wall. The roadway runs adjacent to a
44 heavy-rail line to the south. Views to the southwest across the valley are primarily blocked by
45 dense vegetation along the perimeter. Intermittent views across the valley are characterized by
46 a mosaic of open meadows, irregularly shaped forest patches, and a network of forest roads.

1 Views to the north/northwest of the Frontage Road are dominated by the steep slope of the
2 valley wall. This steep viewing angle precludes views to the ridgeline along the majority of the
3 corridor. One notable exception is located at the northern extent of parcel 4, where eastbound
4 travelers experience temporary views of rock outcroppings along the ridgeline that extend briefly
5 to the foreground-midground distance zone. The eastern-most terminus of the scenic
6 corridor crosses I-84.

7 **Landscape Character** is largely “natural appearing.”

8 **Scenic Attractiveness:** Class B, Typical.

9 **Scenic Integrity:** High - Valued landscape character appears unaltered. Deviations
10 may be present but they mimic the landscape character so completely that they are not
11 evident.

12 **Viewer Groups:** Roadway travelers along Old Emigrant Hill Scenic Frontage Road.

13 **PART 2: Impact Likelihood and Magnitude Assessment**

14 Alternatives Not Evaluated

15 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
16 the Double Mountain Alternative are located greater than 5 miles from this site, and are
17 therefore not considered in this visual impact analysis. Likewise, because these Alternative
18 Routes are not forested, they are not analyzed for potential visual impacts resulting from a
19 cleared ROW.

20 The Morgan Lake Alternative is located approximately 3.7 miles southeast of the Blue Mountain
21 Corridor. Project components associated with this alternative route will not be visible from the
22 Blue Mountain Forest State Scenic Corridor due to screening by forest. Therefore, potential
23 visual impacts to the Blue Mountain Forest State Scenic Forest from the Morgan Lake
24 Alternative are not discussed further in this Exhibit.

25 Proposed Route

26 The Proposed Route will cross the fifth parcel of the scenic corridor between project mileposts
27 (MP) 94.6 and 94.8 near KOP 4-5. Two towers will be sited outside the scenic corridor and
28 support the line span across the resource. No towers will be placed within the scenic corridor.
29 The Project will be primarily visible from parcel 5 and 6.

30 The project, including access roads and pulling and tensioning sites, will be situated on the crest
31 of the ridgeline to the north of the sixth parcel of the scenic corridor, outside of the scenic
32 corridor boundary. The steep angle of observation would preclude views of project features from
33 Old Emigrant Hill Scenic Frontage Road. The perimeter of the roadway will remain forested,
34 thereby screening structures from view by roadway travelers. Roadway travelers approaching
35 where the project crosses the Frontage Road will experience views of the conductors spanning
36 the road in the foreground. Visual contrast of the conductors will be weak.

37 The tops of some towers may be visible from the Old Emigrant Hill Scenic Frontage Road near
38 the northern and southern ends of parcel 5 at distances of approximately 0.2 mile. The
39 perimeter of the roadway within all six parcels will remain forested, which coupled with steep
40 viewing angles from many locations along the roadway, will limit the portion of the towers visible
41 to the top. Visual contrast will be weak and the towers will appear subordinate where visible,
42 since they will be partially screened. Viewer exposure will be brief and experienced both head-
43 on and peripherally for all parcels. Old Emigrant Hill Scenic Frontage Road will be used as an
44 access road; however, no substantial improvements to this roadway will occur. Other access

1 roads, including existing roads requiring improvement and new bladed roads, will be located on
 2 the northwest side of the Proposed Route. Pulling and tensioning sites will be located adjacent
 3 to the scenic corridor.

4 The cleared ROW will not be visible from roadway viewing platforms within any of the scenic
 5 corridor parcels due to steep viewing angles and tall, mature vegetation bordering the roadway.
 6 The Landscape Character will remain primarily natural appearing. Scenic Attractiveness will
 7 remain Class B (Typical). Scenic Integrity will remain high. Valued landscape character
 8 appears unaltered. Deviations may be present, but they mimic the landscape character so
 9 completely that they are not evident.

10 Likelihood of Impact

11 IPC considered all identified impacts to be “likely” to occur.

12 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: The towers located outside of the Blue Mountain Forest State Scenic Corridor and the conductor spanning the resource will be visible from Old Emigrant Hill Scenic Frontage Road for the life of the Project.			

13 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Project features will be largely outside of the viewshed of the Old Emigrant Hill Scenic Frontage Road. Steep slopes and tall, mature vegetation abut the road such that the viewing angle is severe, limiting the extent of views. Additionally, the Proposed Route is primarily sited on the north side of the ridgetop, predominantly outside of the viewshed of the road. Where the Proposed Route crosses the corridor, the conductors will introduce weak visual contrast and will be subordinate to existing landscape features due to shielding by vegetation and topography. Therefore, impact magnitude will be <u>low</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness and/or character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality; however, it will not reduce the scenic quality class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality class and will alter landscape character of the resource.
Explanation: The landscape will remain primarily natural appearing. Scenic attractiveness will remain Class B (Typical). Scenic integrity will remain high. Valued landscape character appears unaltered. Deviations may be present, but they mimic the landscape character so completely that they are not evident. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/ middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer exposure will be brief and experienced both head-on and peripherally for all parcels. Additionally, viewing angle will typically be severe such that drivers will not experience it. Therefore, viewer perception will be <u>low</u> .			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project will have low magnitude impacts as steep slopes and tall, mature vegetation will
 4 create severe viewing angles, limiting the extent of views, and no towers will be visible where
 5 the Proposed Route crosses the scenic corridor. The landscape will remain primarily natural
 6 appearing, scenic attractiveness will remain Class B (Typical), and scenic integrity will remain
 7 high such that resource change will be low. Viewer exposure will be brief and experienced both
 8 head-on and peripherally for all parcels. Viewing angle will typically be severe such that viewer
 9 perception will be low. Therefore, impact intensity will be low.

10 Degree to Which the Possible Impacts are Caused by the Proposed Action

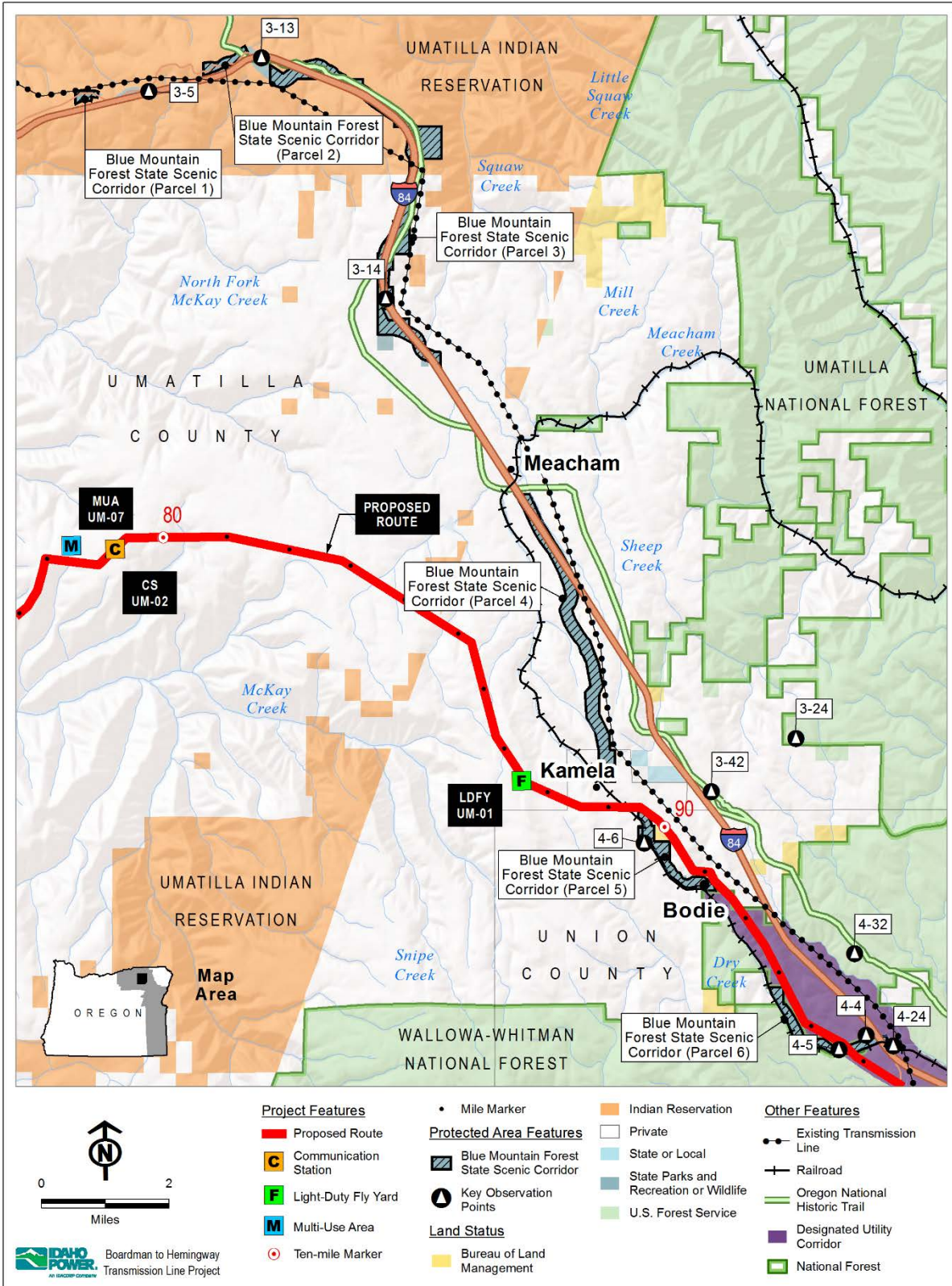
11 The impacts disclosed in this assessment are caused by the proposed facility and are not the
 12 result of other past or present actions.

13 Context

14 According to the visual impact methodology, an evaluation of context is not required as the
 15 Project will have low intensity impacts, which are considered less than significant.

16 **Summary and Conclusion**

17 The Project will result in long-term visual impacts at the Blue Mountain Corridor. The impacts
 18 are considered to be low intensity as measured by visual contrast and scale dominance,
 19 resource change, and viewer perception. Impacts will be **less than significant**.



1
2 **Figure L-3-4a. Blue Mountain Forest Wayside/Blue Mountain Forest State Scenic**
3 **Corridor**

3.4 Blue Mountain Forest Wayside/Blue Mountain Forest State Scenic Corridor: Alternative Route

Resource: Blue Mountain Forest Wayside/Blue Mountain Forest State Scenic Corridor

Relevant Exhibit: L

Relevant Plan: Union County Comprehensive Plan/OPRD

Resource Type: Linear Corridor

Relevant KOP(s): 4-5

PART 1: Establish Baseline Conditions

Designation: The Union County (1979) Land Use Plan notes:

“Several areas in the County have been considered by either State or Federal agencies for inclusion into their respective scenic programs. The only two areas actually designated are shown on the Plan Map as the Blue Mountain Forest Wayside and the Minam River, both designated by the Oregon Transportation Commission.” (Appendix J, Scenic Areas [p. 99])

The Blue Mountain Forest Wayside is described as an approximately 0.5-mile-wide corridor located along I-84, west of La Grande. The corridor was designated to preserve the scenic character of this portion of the Grande Ronde River and provide a rest area for travelers.

Union County (1984) supplemented the land use plan to provide additional information about Goal 5 resources. Section IX of the supplement addresses Outstanding Scenic Views and Sites (p. 44), indicating that the Blue Mountain Forest Wayside is given special consideration by the Oregon Department of Transportation and that no conflicting uses are anticipated. Union County planning staff indicated there are no planned updates or amendments to the Union County (1979) Land Use Plan at this time.

The Blue Mountain Forest State Scenic Corridor and Blue Mountain Forest Wayside are administered by OPRD. These resources are partially coextensive, and as such, will be collectively referred to as the Blue Mountain Corridor.

Though no planning document has been prepared for this resource, OPRD describes it as property providing the public with an opportunity to experience one of the few examples of mature evergreen forests along I-84 (OPRD 2016b).

Interpretation of Designation: OPRD provided the following comment on draft Exhibit R, prepared by IPC:

“OPRD owns the property in Union County identified as the Blue Mountain Forest Wayside. The property is managed as a State Scenic Corridor providing the public with an opportunity to relax and enjoy one of the few examples of mature evergreen forests along I-84. Blue Mountain Forest State Scenic Corridor is composed of intermittent stands of old-growth ponderosa pine, western larch, lodgepole pine and grand fir and contains undisturbed examples of native plants and animals...All attempts to locate this project outside of the viewshed, or at the extreme edge of, allowing for no visibility should be made to ensure future generations can enjoy this unique area.” (Alice Beals, OPRD, personal communication, October 8, 2012)

Based on the comment provided by OPRD, IPC interprets the scenic value of this resource to be the aesthetic quality of contiguous old growth within the Blue Mountain scenic corridor. The

1 “natural appearing” character of the resource should be maintained as perceived from the Old
2 Emigrant Hill Scenic Frontage Road in the Blue Mountains.

3 **Resource Overview:** The Blue Mountain Corridor is located along segments of the Old
4 Emigrant Hill Scenic Frontage Road in the Blue Mountains (Figure L-3-4b). The Blue Mountain
5 Corridor boundary includes approximately 990 acres within five separate parcels, all of which
6 are within the visual analysis area. In general, the parcels are relatively long, narrow, linear
7 features. Visitors typically access the Blue Mountain Corridor via one or more of three I-84
8 interchanges.

9 From northwest to southeast, the Blue Mountain corridor begins in the vicinity of Deadman’s
10 Pass, as the route climbs Emigrant Hill into the Blue Mountains. The first corridor parcel spans a
11 stretch of Old Emigrant Hill Road for approximately 0.5 mile near the headwaters of Mission and
12 Cottonwood creeks. Approximately 2 miles farther east, the second Blue Mountain Corridor
13 parcel follows I-84 and Old Emigrant Hill Road to the east and south for about 6.4 miles. This
14 parcel ends just southeast of Emigrant Springs SHA and about 2 miles north of the small
15 community of Meacham.

16 The third Blue Mountain Corridor parcel begins just south of Meacham and follows I-84 for 1.4
17 miles. It then angles south for approximately 3.6 miles along Old Emigrant Hill Scenic Frontage
18 Road to Kamela, with approximately the last 0.5 mile in Union County.

19 The fourth Blue Mountain Corridor segment begins less than 1 mile from the end of the third
20 parcel, about 0.7 mile southeast of Kamela, following Old Emigrant Hill Scenic Frontage Road
21 and the Union Pacific Railroad for approximately 2 miles. This Blue Mountain Corridor parcel is
22 located from 1 to 1.5 miles west of I-84 in Railroad Canyon.

23 The fifth parcel of the Blue Mountain Corridor begins near Motanic and extends to the southeast
24 and east for nearly 3 miles. The eastern end of this parcel is just on the east side of I-84 near
25 Exit 248, about 11 miles northwest of La Grande. This parcel is also located within Railroad
26 Canyon and follows the course of Dry Creek, Old Emigrant Hill Scenic Frontage Road, and the
27 Union Pacific Railroad. Most of this Blue Mountain Corridor parcel is roughly parallel to I-84 and
28 is located about 0.5 mile to 1 mile southwest of the highway.

29 The resource is considered viewer-based, with scenic value perceived by viewers as they travel
30 along the corridor.

31 Per OAR 345-022-0080, Blue Mountain Forest State Scenic Corridor is being evaluated as a
32 Scenic Resource.

33 Per OAR 345-022-0040, Blue Mountain Forest State Scenic Corridor is being evaluated as a
34 Protected Area.

35 Per OAR 345-022-0100, Blue Mountain Forest State Scenic Corridor is being evaluated as a
36 Recreation Resource.

37 **Existing Conditions:** The Blue Mountain Corridor is located in the Maritime-Influenced Zone of
38 the Blue Mountains Ecoregion. Existing topography is primarily rolling, punctuated by the
39 straight to curvilinear lines created by steep drainages. Existing vegetation is dominated by
40 ponderosa pine, western larch, lodgepole pine, and grand fir, and appears nearly contiguous
41 along the edges of the Old Emigrant Hill Scenic Frontage Road.

42 The Old Emigrant Hill Scenic Frontage Road is characterized as a narrow, two-lane road that
43 winds naturally along the upper portion of a steep valley wall. The roadway runs adjacent to a
44 heavy-rail line to the south. Views to the southwest across the valley are primarily blocked by
45 dense vegetation along the perimeter. Intermittent views across the valley are characterized by
46 a mosaic of open meadows, irregularly shaped forest patches, and a network of forest roads.

1 Views to the north/northwest of the Frontage Road are dominated by the steep slope of the
2 valley wall. This steep viewing angle precludes views to the ridgeline along the majority of the
3 corridor. One notable exception is located at the northern extent of parcel 4, where eastbound
4 travelers experience temporary views of rock outcroppings along the ridgeline that extend briefly
5 to the foreground-midground distance zone. The easternmost terminus of the scenic corridor
6 crosses I-84.

7 **Landscape Character** is largely “natural appearing.”

8 **Scenic Attractiveness:** Class B, Typical.

9 **Scenic Integrity: High** - Valued landscape character appears unaltered. Deviations
10 may be present but they mimic the landscape character so completely that they are not
11 evident.

12 **Viewer Groups:** Roadway travelers along Old Emigrant Hill Scenic Frontage Road.

13 **PART 2: Impact Likelihood and Magnitude Assessment**

14 Blue Mountain Alternative Route

15 The Blue Mountain Forest State Scenic Corridor Alternative Route is 3.2 miles long and is
16 located within the Wallowa-Whitman National Forest (NF) utility corridor, managed as a VQO of
17 “Retention”. This VQO area was designated to protect viewshed of Sensitivity Level 1 travel
18 routes, including I-84, the railroad along Old Emigrant Hill Frontage Road, and the Oregon Trail
19 Interpretive Park trail system, per the Wallowa-Whitman NF Land and Resource Management
20 Plan (USFS 1990). Per the Plan, “Sensitivity Level 1 normally indicates that landscapes
21 adjacent to the travel route are managed in such a manner that management activities are not
22 visually evident (Retention).”

23 The Alternative Route departs from the Proposed Route at MP 94.1 and proceeds easterly,
24 crossing I-84 before angling southeasterly to pass along the eastern edge of the southernmost
25 parcel of the scenic corridor. The Alternative Route then angles farther to the south, crosses
26 back over I-84, and rejoins with the Proposed Route at MP 96. The transmission line ROW
27 would be 250-feet wide in this area and cross through approximately 141 acres of forest, 16
28 more acres than the Proposed Route. The Alternative Route would result in two crossings of I-
29 84 (north and south of the Glover Interchange) within approximately a one-mile stretch along the
30 interstate. Under the Alternative Route, at least one structure and a set of conductors would be
31 visible from viewpoints located within the western-most terminus of the parcel of the BMFSSC.

32 Due to the level of vegetation clearing, landscape character would change from naturally
33 appearing to cultural, as transmission structures and ROW clearing would appear dominant
34 from the I-84 viewer platform.

1 Likelihood of Impact

2 IPC considered all identified impacts to be “likely” to occur.

3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: The towers located outside of the Blue Mountain Forest State Scenic Corridor and the conductor spanning the resource will be visible from Old Emigrant Hill Scenic Frontage Road for the life of the Project.			

4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The Alternative Route would result in two crossings of I-84 (north and south of the Glover Interchange) within approximately a 1-mile stretch along the Interstate. The Project would appear dominant in this localized area.			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness and/or character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality; however, it will not reduce the scenic quality class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality class and will alter landscape character of the resource.
Explanation: Landscape character would change from naturally appearing to cultural, as transmission structures and ROW clearing would appear dominant from the I-84 viewer platform. Therefore, resource change will be high.			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/ middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer exposure will be brief and experienced both head on and peripherally for all parcels. Additionally, viewing angle will typically be severe such that drivers will not experience it. Therefore, viewer perception will be <u>low</u> .			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

4 The Project will have high magnitude impacts as the Project will cross I-84 at two locations
 5 within a mile. The landscape will change to a “cultural” character, scenic attractiveness will

1 remain Class B (Typical), and scenic integrity will be low, as the transmission structures and
 2 associated ROW visible at the crossing location begin to dominate the valued landscape
 3 character. Viewer exposure will be brief and experienced both head-on and peripherally for all
 4 parcels. Viewing angle will typically be severe such that viewer perception will be low. Overall
 5 impact intensity will be low.

6 Degree to Which the Possible Impacts are Caused by the Proposed Action

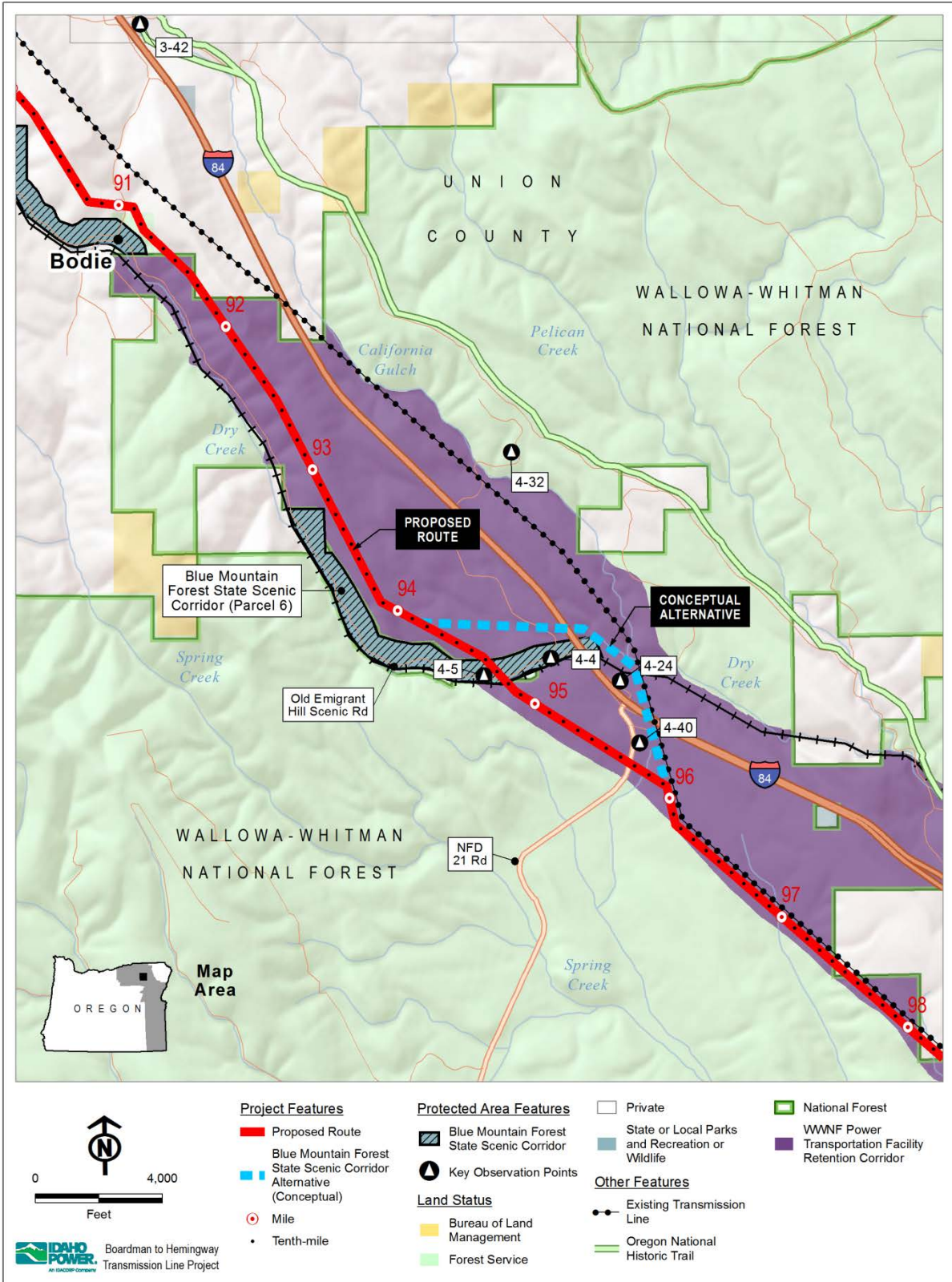
7 The impacts disclosed in this assessment are caused by the proposed facility and are not the
 8 result of other past or present actions.

9 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: The portion of the Wallowa-Whitman NF crossed by the Alternative Route is managed with a VQO of Retention, provides for management activities that are not visually evident. Under Retention, activities may only repeat form, line, color and texture that are frequently found in the characteristic landscape. Changes in qualities of size, amount, intensity, direction, pattern, etc., should not be evident.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: Scenic resources on the Wallowa-Wittman NF are managed per the Visual Resource Management System. The portion of the Forest crossed by the Alternative Route is managed per VQO of Retention, provides for management activities that are not visually evident. The Alternative Route would not meet the objective of VQO Retention because Project features would be visually evident.	

10 **Summary and Conclusion**

11 The Project will result in long-term visual impacts to a portion of the Wallowa-Whitman NF
 12 managed with a VQO of Retention. The impacts are considered to be high intensity as
 13 measured by visual contrast and scale dominance, and resource change, despite a low viewer
 14 perception. Without a plan amendment reducing the restrictiveness of the VQO standard to
 15 “modification,” impacts of this alternative route will be **significant**.



1
2 **Figure L-3-4b. Blue Mountain Forest Wayside/Blue Mountain Forest State Scenic**
3 **Corridor: Alternative Route**

3.5 Emigrant Springs State Heritage Area

Resource: Emigrant Springs SHA

Relevant Exhibit: L

Relevant Plan: N/A

Resource Type: Area

Relevant KOP(s): 3-14

PART 1: Establish Baseline Conditions

Designation: There is no management plan prepared to date for the Emigrant Springs SHA. The mission of the OPRD is to “provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations” (OPRD 2016a).

Interpretation of Designation: The SHA provides outdoor recreation opportunities to the public to explore the history of the Oregon Trail in a forested landscape setting. The park setting is nestled within old-growth forest. Although the park is not managed by specific management objectives for scenic resources, the old-growth forest is considered an important aspect of the park’s setting and overall recreation experience of the park.

Resource Overview: Emigrant Springs SHA is a unit of the Oregon State Parks system administered by the OPRD (Figure L-3-5). The park is bisected by I-84 and the Old Emigrant Hill Scenic Frontage Road. The site is near the Umatilla Indian Reservation, and lands adjacent to the park and freeway are generally forested. The park offers several recreation activities including hiking, picnicking, and interpretive programs. The park includes tent sites, RV sites, cabins, a community building, an Oregon Trail interpretive display, and day use areas (OPRD 2015a, b).

Per OAR 345-022-0080, Emigrant Springs SHA is not considered a Scenic Resource since the SHA is not managed for scenic resources.

Per OAR 345-022-0040, Emigrant Springs SHA is being evaluated as a Protected Area.

Emigrant Springs SHA is outside of the Recreation Analysis area and is not analyzed as a Recreation Opportunity.

Existing Conditions: The landscape of the Emigrant Springs State Heritage area includes high elevation rolling topography that is predominantly forested. The texture of the landscape appears fine to medium, although the dense coverage of tall, mature spruce and fir trees blanket the terrain creating patches of coarse textured areas. Colors are a combination of dark green of tree canopies; lighter green, brown, and sage of grasses and shrubs and lawn; and the browns associated with bare ground and pine needles on the forest floor. The tall, mature evergreens provide enclosure to the landscape. Human modifications include park buildings, dirt and paved paths and access roads, signs, and interpretive displays that are typically designed such that the colors, line, form, and texture blend well with the surrounding forest.

Landscape character is “cultural.”

Scenic integrity is moderate - valued landscape character appears unaltered and deviations may be moderate but they mimic the landscape character so completely that they are not evident.

Scenic attractiveness is Class B, Typical. The dense, mature vegetation and rolling hills contribute strong, yet common, attributes of variety, unity, intactness, harmony, and pattern in the landscape.

1 **Viewers:** Viewers include individuals participating in day use or overnight activities at
 2 the park, including hiking, picnicking, camping, and viewing the interpretive displays.
 3 Viewers will be both transient and stationary.

4 **PART 2: Impact Likelihood and Magnitude Assessment**

5 Alternatives Not Evaluated

6 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 7 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 8 from this site and are therefore not considered in this visual impact analysis.

9 This protected area is also located outside of the viewshed of the cleared ROW of the proposed
 10 route (forested portions), and predominantly outside of the viewshed of the cleared ROW for the
 11 Morgan Lake Alternative. Consequently, visual impacts from the cleared ROW are not
 12 considered further in this analysis.

13 Proposed Route

14 The Proposed Route is 3.3 miles southwest of the Emigrant Springs SHA at its closest point.
 15 Short segments of proposed improved and new, graded access roads are located
 16 approximately 3 to 3.5 miles southwest of the park. Dense stands of mature evergreens will
 17 screen views of project features from the majority of the Emigrant Springs SHA. The top-of-
 18 canopy viewshed model indicates that existing vegetation will screen views of the cleared ROW
 19 from the SHA. The top portions of a few towers, likely less than five, may be visible, but from a
 20 distance of 3.3 miles or more, such that towers will produce weak visual contrast and will appear
 21 subordinate to the landscape. Therefore, the landscape will retain its cultural character with
 22 moderate scenic integrity and the scenic attractiveness will be maintained as Class B (Typical).

23 Likelihood of Impact

24 IPC considered all identified impacts to be “likely” to occur.

25 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line and towers, and therefore will be <u>long-term</u> , extending for the life of the Project.			

26 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Dense stands of mature evergreen trees will screen views of project features from the majority of the Emigrant Springs SHA. Because of limited visibility of the transmission towers and other project features coupled with the distance of the park from the Project (3.3 miles at its closest point), the Project will produce weak visual contrast against the existing landscape and will appear subordinate. Based on these criteria, visual impacts resulting from the Project will be of <u>low</u> magnitude.			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Project will introduce weak contrast and appear subordinate such that the landscape character, scenic integrity, and scenic attractiveness of the resource will be maintained. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).

Indicator	Criteria used to Determine Resource Change
Explanation: Viewer perception will be <u>low</u> , as views of the Project will be primarily intermittent due to the screening of project features by tall, mature evergreen trees from the majority of the park. Continuous, head-on views of the Project will not occur from the Emigrant Springs SHA.	

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project will result in low magnitude impacts due to the distance of the towers and cleared
 4 ROW (3.3 miles) from the Emigrant Springs SHA and the screening of project features provided
 5 by the dense, mature vegetation. The landscape character, scenic integrity, and scenic
 6 attractiveness of the resource will not change. Viewer perception will be low as views of the
 7 Project will be primarily intermittent due to screening by vegetation. Therefore, impact intensity
 8 will be low.

9 Degree to Which Impacts are Caused by the Project

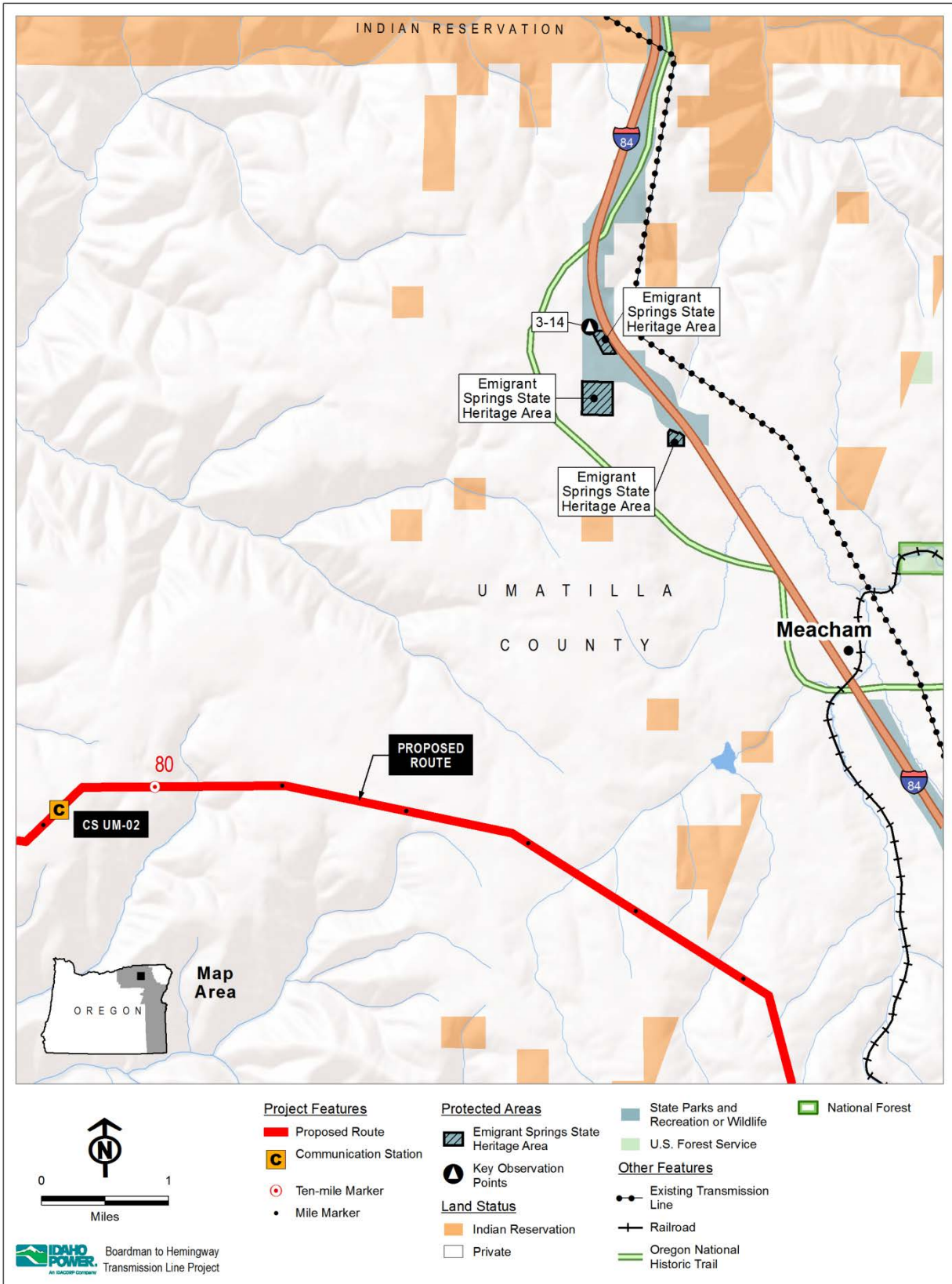
10 The low intensity impacts disclosed in this assessment are caused by the proposed facility and
 11 are not the result of other past or present actions.

12 Context

13 According to the visual impact methodology, an evaluation of context is not required as the
 14 Project will have low intensity impacts, which are considered less than significant.

15 **Summary and Conclusion**

16 The Project will result in long-term visual impacts to the Emigrant Springs SHA that will be low
 17 intensity as measured by visual contrast and scale dominance, resource change, and viewer
 18 perception. While the project will result in such impacts, the impacts will not preclude the ability
 19 of the Emigrant Springs SHA to provide the valued scenic attributes experienced by park
 20 visitors. Therefore, visual impacts to the Emigrant Springs SHA will be **less than significant**.



1

2 **Figure L-3-5. Emigrant Springs State Heritage Area**

3.6 Farewell Bend State Recreation Area

Resource: Farewell Bend State Recreation Area (SRA)

Relevant Exhibit: L, T

Relevant Plan: No applicable land use plan.

Resource Type: Area

Relevant KOP(s): 5-13

PART 1: Establish Baseline Conditions

Designation: There is no management plan prepared to date for the Farewell Bend SRA. The mission of the Oregon Parks and Recreation Department (OPRD) is to “provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations” (OPRD 2016a).

Interpretation of Designation: The SRA provides the public with day use and overnight recreation outdoor opportunities along the Brownlee Reservoir. Although there is no management plan for the SRA, OPRD includes scenery as one of the park’s attributes for visitor enjoyment on the Park website (OPRD 2015c). Additionally, since the mission of OPRD includes providing and protecting outstanding natural scenery; visual resources are considered a valued attribute to this recreation resource.

Resource Overview: Farewell Bend SRA is a designated unit of the Oregon state park system and is administered by the OPRD. The park is located about 3 miles southeast of Huntington in Baker County on the west shore of the Snake River’s Brownlee Reservoir (Figure L-3-6). The principal facilities at the park are a campground with 91 sites with electricity and water and 30 tent sites, and restrooms with flush toilets and showers; a boat ramp and large parking area; a wastewater dump station; and a day-use area. The day-use area includes picnic tables and fire rings, a fishing dock, a viewing deck, and basketball and volleyball courts. Additional facilities at the site include a group tent camp, two cabins available for rent, a hiker/biker camp, and a shelter with Oregon Trail interpretive displays (OPRD 2015c).

Per OAR 345-022-0040, Farewell Bend SRA is being evaluated as a Protected Area.

Per OAR 345-022-0080, Farewell Bend SRA is not considered a Scenic Resource.

Per OAR 345-022-0100, Farewell Bend SRA is being evaluated as a Recreation Resource.

Existing Conditions: The landscape of the SRA is primarily flat to gradually sloping. Vegetation includes groups of tall, deciduous trees and mowed grass lawns. Human development is associated with the recreational facilities in the park including flat, smooth, paved and gravel parking lots, roads, paths, and tent pads. Buildings appear rectangular and include bathroom facilities, cabins, and a fish-cleaning station. The Brownlee Reservoir to the east of the day use and camping areas appears large, smooth, and glassy and is the primarily scenic attribute of the SRA. Colors include light browns, tans, greens, and blue from the reservoir. The landscape to the east of the reservoir includes rolling hills with short grass and shrub vegetation. The hills flanking the reservoir and the mature trees provide some enclosure. I-84 travels immediately west of the SRA and the reservoir. Though located approximately 0.5 mile from the SRA, views of I-84 are generally shielded by mature vegetation in the SRA. Existing views from the SRA directed to the southeast over the reservoir will include I-84 and some scattered development. Overall, the landscape of the SRA is considered a cultural landscape. Using the BLM’s visual resource inventory methods per Manual H-8410-1 (BLM

1 1986), the scenic quality of the existing landscape for the Farewell Bend SRA is considered
 2 medium (class B) as shown below:

Farewell Bend SRA Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	3	4	3	2	3	-1	16 (B)

3
 4 **Viewers:** Viewers will be individuals participating in day use or overnight activities. Viewers will
 5 be located both on land and on the water and be primarily stationary, with the majority of views
 6 focused at or across the water to the east and southeast.

7 **PART 2: Impact Likelihood and Magnitude Assessment**

8 Alternatives Not Evaluated

9 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 10 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 11 from this site and are therefore not considered in this visual impact analysis.

12 This protected area is also located more than 10 miles from forested portions of the Proposed
 13 Route and the Morgan Lake Alternative; consequently, potential visual impacts of the cleared
 14 ROW are also not considered further in this analysis.

15 Because West of Bombing Range Road Alternative 1, West of Bombing Range Road
 16 Alternative 2, and the Double Mountain Alternative are not forested, they are not analyzed for
 17 potential visual impacts resulting from a cleared ROW.

18 Proposed Route

19 The Proposed Route is located 0.7 mile west and south of the park. Existing roads located
 20 between the SHA and the Project would be used; however, these roads would not require
 21 extensive upgrades. New improved primitive and graded access roads along the centerline
 22 may be visible. The transmission towers associated with the Proposed Route will be the primary
 23 source of visual contrast experienced from the SRA, primarily due to their size, proximity, and
 24 number of towers that will be visible. The large, geometrical form and smooth texture will
 25 contrast against the fine to medium rolling, rounded hills to the south. The scale of the
 26 structures will appear smaller between MP 197.9 and MP 199.1, as H-frame structures in this
 27 segment will range in height from 65 to 100 feet. Collectively, transmission towers will introduce
 28 moderate visual contrast due to backdropping of the terrain. The light, reflective color will also
 29 contrast against the light to medium brown color of vegetation and rock outcrops.

30 The transmission towers associated with the Proposed Route will be backdropped by light-
 31 colored terrain when viewed from day use areas and camp sites to the south/southeast at
 32 distances of approximately 1 to 1.7 miles. From these viewing areas, the Brownlee Reservoir
 33 and development along its southern shore and I-84 will appear co-dominant with the Project.
 34 Views to the west will be primarily blocked by vegetation bordering the SRA. Views of the
 35 Project will be equally head-on or peripheral, depending on where the viewer is located within
 36 the SRA and will generally be experienced from a neutral vantage point. The proposed 500-kV
 37 towers will reduce the quality of adjacent scenery to the south of the SRA; however, this
 38 reduction will be relatively small due to the backdropping of the hills. The overall scenic quality
 39 will not change and the landscape will retain its cultural character.

Farewell Bend SRA Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	3	4	3	1	3	-1	15 (B)

- 1 Likelihood of Impact
- 2 IPC considered all identified impacts to be “likely” to occur.
- 3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

1 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
<p>Explanation: At its closest point, the Proposed Route is approximately 0.7 mile west of Farewell Bend SRA. At this location, both I-84 and a band of mature trees at the western boundary of the SRA are situated between the SRA and the Proposed Route. These features will be co-dominant in the landscape with transmission line. The mature trees shield views of the Project from the interior of the SRA. Where visible from day use areas and camp sites to the south/southeast, the transmission towers associated with the Proposed Route will be backdropped by light-colored terrain. The Project will introduce moderate contrast in the middleground, at distances of approximately 1 to 1.7 miles. From these viewing areas, the Brownlee Reservoir (and development along its southern shore) and I-84 will appear co-dominant with the Project. Due to moderate contrast and the co-dominance of other landscape elements, magnitude will be <u>medium</u>.</p>			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The transmission towers associated with the Proposed Route will lower the quality of the SRA's adjacent scenery. However, this change will only result in a small change to the scenic quality scoring, and the overall scenic quality will not change. The cultural landscape character will be maintained. Therefore, resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/ middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the Project will be equally head-on or peripheral, depending on where the viewer is located within the SRA and will generally be experienced from a neutral vantage point. Therefore, viewer perception will be <u>medium</u> .			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Proposed Route will have medium magnitude impacts from 500-kV towers placed up to 0.7
 4 mile from the SRA to the west and southwest. The structures will introduce moderate visual
 5 contrast and appear co-dominant. The quality of the SRA's adjacent scenery will be lowered;
 6 however, the overall scenic quality and landscape character will remain the same such that the
 7 resource change will be medium. Views of the Project will be head-on and peripheral,
 8 depending on where the viewer is located within the SRA, and will generally be experienced
 9 from a neutral vantage point such that viewer perception will be medium. Views of the Brownlee
 10 Reservoir from the SRA, the primary scenic attribute, will not be affected. Visual impacts will be
 11 medium intensity.

12 Degree to Which Impacts are Caused by the Project

13 The scenic quality of the resource under operational conditions is the result of the combined
 14 influence of the Project and other past or present actions. The landscape has a cultural
 15 character due to the past actions including rural development and I-84. The Project is consistent
 16 with this landscape character type.

17 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: Although there is no management plan for the SRA, OPRD includes scenery as one of the park's attributes for visitor enjoyment. Therefore visual resources are considered to be a valued attribute to this resource.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.

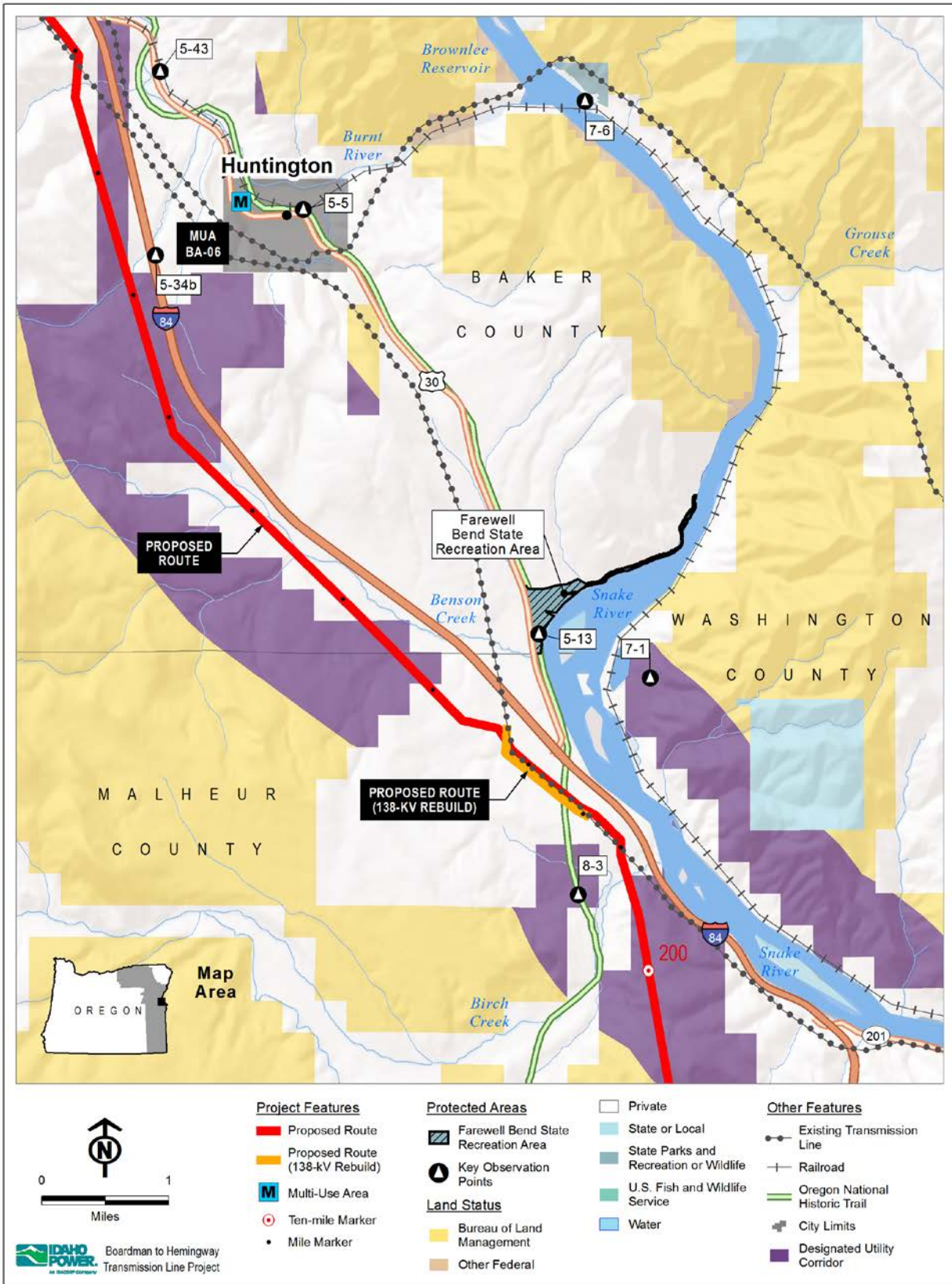
Indicator	Context Criteria
<p>Explanation: Although the Project will introduce moderate contrast to the landscape, it will <u>not preclude</u> visitors from enjoying the day use and overnight facilities offered at the SRMA. The Brownlee Reservoir, which is the primary scenic attribute, will persist and views from the SRMA to the east would be unaffected.</p>	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

1 Although the Project will introduce moderate contrast to the landscape, it will not preclude
2 visitors from enjoying the day use and overnight facilities offered at the SRMA. The Brownlee
3 Reservoir, which is the primary scenic attribute, will persist and views from the SRMA to the
4 east would be unaffected.

5 **Summary and Conclusion**

6 The Project will result in long-term visual impacts to the Farewell Bend SRA that will be medium
7 intensity as measured by visual contrast and scale dominance, resource change, and viewer
8 perception. Visual impacts will not preclude the ability of the Farewell Bend SRA to provide the
9 valued scenic attributes experienced by park visitors. Therefore, visual impacts to the Farewell
10 Bend SRA will be **less than significant**.



1

2 **Figure L-3-6. Farewell Bend State Recreation Area**

3.7 Hilgard Junction State Park

Resource: Hilgard Junction State Park

Relevant Exhibit: L, T

Relevant Plan: No applicable land use plan.

Resource Type: Area

Relevant KOP(s): 4-19

PART 1: Establish Baseline Conditions

Designation: There is no management plan prepared to date for the Hilgard Junction State Park. The mission of the OPRD is to “provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations” (OPRD 2016a).

Interpretation of Designation: The Hilgard Junction State Park provides the public with day-use and overnight recreation opportunities along the Grand Ronde River. Although there is no management plan for the Hilgard Junction State Park, the landscape setting of the Hilgard Junction State Park, including cottonwood and ponderosa pine forests and the Grande Ronde River, is considered an aspect of the State Park experience as included on the park’s website (OPRD 2016b). This is interpreted to mean that the landscape setting is an important aspect of the overall recreation experience provided by resource.

Resource Overview: Hilgard Junction State Park is a designated unit of the Oregon State Park system and is administered by the OPRD. The Hilgard Junction State Park property includes three parcels and a total of 1,084 acres. The Hilgard Junction State Park parallels I-84 for more than 4 miles, with almost all of the State Park located on the south side of the highway (Figure L-3-7). The western end of the Hilgard Junction State Park is slightly to the west of the I-84 interchange with Oregon (State) Highway (OR) 244 (Exit 252, Hilgard Junction), approximately 8 miles west of La Grande. The eastern end of the Hilgard Junction State Park is at Wilson Canyon, about 2 miles from the western outskirts of La Grande.

The developed facilities at the Hilgard Junction State Park are located south of the interchange and on the north bank of the Grande Ronde River. The facilities include an Oregon Trail interpretive shelter and a campground with 18 recreational vehicle and tent camping sites, potable water, and restrooms with flush toilets along the river upstream of the OR 244 bridge across the river (OPRD 2016c, d). A day-use area with picnic tables, water, restrooms, and horseshoe pits is situated downstream of the bridge. In addition to camping and picnicking, the Hilgard Junction State Park is popular for fishing, rafting trips, and other water-based activities.

Per OAR 345-022-0040, Hilgard Junction State Park is being evaluated as a Protected Area.

Per OAR 345-022-0080, Hilgard Junction State Park is not considered a Scenic Resource since there is no management plan that includes scenery as an important value of the park.

Per OAR 345-022-0100, Hilgard Junction State Park is being evaluated as a Recreation Resource.

Existing Conditions: Because of its forested setting and location near USFS-administered lands, this resource was evaluated using methods adapted from the USFS Scenery Management System (USFS 1995).

The landscape of the Hilgard Junction State Park includes a flat, grassy area for day use (KOP 4-19). The day-use area is located at a lower elevation along the river such that the landscape

1 is moderately enclosed with limited middleground views available to the southwest. Campsites
2 are located on a flat grassy area adjacent to the Grande Ronde River.

3 The Grande Ronde River has cut a wide, curving path through the landscape and has formed a
4 complex network of hills and ridges with moderately steep sides. Unobstructed views of both a
5 river of this size and the wide variety of vegetation along its banks are interesting and
6 memorable. The steep and incised valley walls are characterized by diagonal and curved lines
7 that extend toward the valley floor. Prominent lines of the valley floor are horizontal and sinuous.
8 Mature cottonwoods and ponderosa pines are common throughout the Hilgard Junction State
9 Park. Vegetation consists of a variety of species and patterns. Thin patches of short grasses are
10 located along the flat floodplain bordering the river. Sparse clusters of tall, conical conifers can
11 be seen on the slopes of some of the hills surrounding the alluvial plains. The clusters become
12 more dense on some of the steeper slopes on the hills in middleground views to the west. Thin
13 strips of low, round shrubs, taller grasses, and tall, deciduous trees can also be seen along the
14 banks of the river. The colors of the vegetation predominantly consist of large patches of varying
15 shades of green and tan, including dark green (conifers) and vibrant green (short grasses), and
16 light tan and grayish red (shrubs and taller grasses). The wide, flat, meandering, greenish-blue,
17 smooth to rippling Grande Ronde River and the surrounding valley walls comprise the primary
18 scenic attribute of the Hilgard Junction State Park. The steep topography flanking the river
19 encloses the landscape around the river, including the camping area, limiting views to within the
20 valley walls.

21 Human development consists of the wide, curving band of a rural highway (OR 244), and the
22 moderately tall linear wood-poles of an existing electric transmission line. A narrow access road
23 has been cut into the slope paralleling the river, creating a thick band of exposed rock and dirt.
24 Numerous park recreational facilities, such as informational kiosks, picnic tables, and fire pits,
25 are also visible. While these structures are visible, they do not dominate the landscape.

26 The landscape has a cultural character with moderate scenic integrity, as both the development
27 and natural features leave lasting impressions.

28 Scenic attractiveness was classified as Class A (Distinctive) due to the positive attributes of the
29 steep valley, winding river, and dense vegetation that combine to provide strong attributes of
30 variety, unity, vividness, harmony, pattern, and balance that are unique to the area.

31 **Viewers:** The primary viewer groups include recreators participating in day-use or overnight
32 activities. Viewers will be located both on land and on the water and will experience the
33 landscape setting in both a stationary and transient manner (for those floating the river).
34 However, visitor facilities are limited and overall visitor use in this area is low.

35 **PART 2: Impact Likelihood and Magnitude Assessment**

36 Alternatives Not Evaluated

37 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
38 the Double Mountain Alternative are located greater than 5 miles from this site and are therefore
39 not considered in this visual impact analysis. Because West of Bombing Range Road
40 Alternative 1, West of Bombing Range Road Alternative 2, and the Double Mountain Alternative
41 are not forested, they are not analyzed for potential visual impacts resulting from a cleared
42 ROW.

43 The Morgan Lake Alternative Route is located greater 0.4 mile from Hilgard Junction State Park
44 and within 10 miles of the forested portion of that Alternative Route. Visual impacts from the
45 Morgan Lake Alternative will be similar to that described for parallel portions of the Proposed
46 Route. However, due to the steep topography and forest vegetation adjacent to the Hilgard

1 Junction State Park, views will not extend beyond the foreground. Consequently, there is a low
 2 likelihood that the cleared ROW of the Morgan Lake Alternative will be visible. Impacts from the
 3 cleared ROW where the Morgan Lake Alternative crosses forested portions of the analysis area
 4 are not discussed further.

5 Proposed Route

6 The Proposed Route is located about 0.3 mile west of the Hilgard Junction State Park at its
 7 closest point. However, the parcel closest to the Proposed Route is used for administrative
 8 purposes only and does not have any recreational uses. The next closest parcel is the day-use
 9 area of the Hilgard Junction State Park, which is used for recreational purposes and is located
 10 within 0.7 mile of the Proposed Route. From this area, transmission towers will appear partially
 11 skylined and situated behind a ridgeline that will partially obstruct them from view. The majority
 12 of the campsites and areas of the Hilgard Junction State Park near the river are outside of the
 13 modeled viewshed due to the steep topography surrounding the river limiting views to the
 14 foreground. Towers will be visible from the highlands along the southern boundary of the Hilgard
 15 Junction State Park, south of the camping area. Viewshed models indicate the cleared ROW will
 16 not be visible from the day-use or camping areas of the Hilgard Junction State Park. Although
 17 views from the day-use area will include head-on views of the Proposed Route, predominant
 18 views will be peripheral and intermittent. The landscape will retain its cultural landscape and
 19 moderate scenic integrity. The scenic attractiveness will be maintained as class A (Distinctive)
 20 because the areas within the river valley containing the positive visual attributes unique to the
 21 area are enclosed and will not be affected by the Project.

22 Likelihood of Impact

23 IPC considered all identified impacts to be “likely” to occur.

24 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

1 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Transmission towers will be located within 0.7 mile of the day-use area of the Hilgard Junction State Park. These towers will be partially skyline'd and situated behind a ridgeline that will partially obstruct them from view such that visual contrast will be moderate and the towers will appear co-dominant with the surrounding landscape. Impact magnitude will be <u>medium</u> from the day-use area (KOP 4-19).			

2 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The landscape will retain its cultural landscape and moderate scenic integrity. The scenic attractiveness will be maintained as Class A, Distinctive, because the areas within the river valley containing the positive visual attributes unique to the area are enclosed and will not be affected by the Project. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: The majority of the campsites and areas of the Hilgard Junction State Park near the river are outside of the modeled viewshed due to the steep topography surrounding the river limiting views to the foreground. Although views from the day-use area will include head-on views of the Proposed Route, views will be predominantly peripheral and intermittent, such that viewer perception will be <u>low</u> for Hilgard Junction State Park overall.			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 Impact magnitude will be medium from the day-use area of the Hilgard Junction State Park,
 4 where the towers will be as close as 0.7 mile, partially skylined and partially obstructed by
 5 topography. The landscape will retain its cultural landscape, moderate scenic integrity, and
 6 Class A, Distinctive, scenic attractiveness since the areas within the river valley containing the
 7 positive visual attributes unique to the area are enclosed and will not be affected by the Project.
 8 Therefore, resource change will be low. Views from the day-use area will be predominantly
 9 peripheral and intermittent and primarily blocked from the camping areas, such that viewer
 10 perception will be low for Hilgard Junction State Park overall. Therefore, visual impacts will be
 11 low intensity.

12 Degree to Which Impacts are Caused by the Project

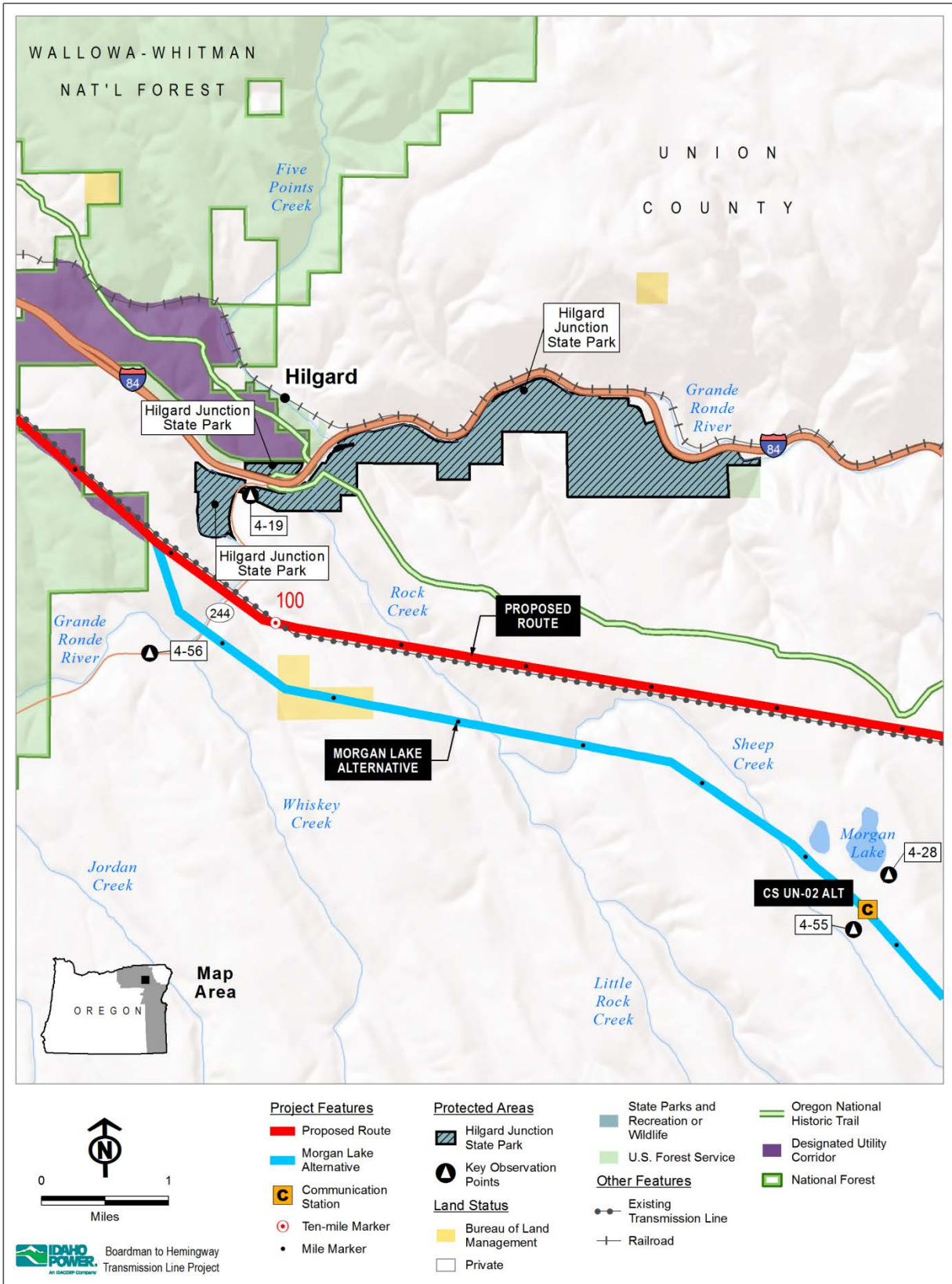
13 The scenic quality of the resource under operational conditions is the result of the combined
 14 influence of the Project and other past or present actions, including OR 244 and an existing
 15 electric transmission line, which collectively are consistent with the cultural landscape character.

16 Context

17 According to the visual impact methodology, an evaluation of context is not required, as the
 18 Project will have low intensity impacts, which are considered less than significant.

19 **Summary and Conclusion**

20 The Project will result in long-term visual impacts to the Hilgard Junction State Park. The
 21 impacts will be low intensity as measured by visual contrast and scale dominance, resource
 22 change, and viewer perception. Therefore, visual impacts to the Hilgard Junction State Park will
 23 be **less than significant**.



1

2 **Figure L-3-7. Hilgard Junction State Park**

3.8 Red Bridge State Wayside

Resource: Red Bridge State Wayside

Relevant Exhibit(s): L

Relevant Plan: No applicable land use plan.

Resource Type: Area-based

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Designation: There is no management plan prepared to date for the Red Bridge State Wayside. The mission of the OPRD is to “provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations” (OPRD 2016a).

Interpretation of Designation: The Red Bridge State Wayside provides outdoor recreation opportunities for the public. OPRD notes in an OPRD brochure for the Red Bridge State Wayside that the forest and river create a “scenic fishing retreat” (OPRD 2015d); therefore, visual resources are considered a valued attribute to the resource.

Resource Overview: The Red Bridge State Wayside encompasses 42 acres and is located on the Grande Ronde River, about 8 miles west of the junction of OR-244 and I-84 (Figure L-3-8). The wayside features a forested river setting, including Douglas fir, ponderosa pine, and stands of cottonwoods. Amenities include 10 primitive walk-in sites, 10 primitive sites that accommodate RVs, restrooms with flush toilets, horseshoe pits, and a day-use area for picnicking and fishing.

Per OAR 345-022-0040, Red Bridge State Wayside is being evaluated as a Protected Area.

Per OAR 345-022-0080, Red Bridge State Wayside is not considered a Scenic Resource.

Red Bridge State Wayside is outside of the Recreation Analysis Area.

Existing Conditions: The Red Bridge State Wayside is located in the Maritime-Influenced Zone of the Blue Mountains Ecoregion. The Red Bridge State Wayside encompasses a stretch of the Grande Ronde River along the eastern boundary and appears wide and meandering, with a smooth to rippled texture and blue-green color. Gravel bars line the shoreline, appearing as coarse-textured, light-colored bands. Steep hills flank the river to the east, enhancing the view of the river from the day-use and overnight areas of the wayside, which lay to the west of the river. These hills are primarily browns and greys, with a hint of red, and appear tall and steep, introducing diagonal lines and v-shaped drainages lined with dark green vegetation. The day-use and overnight areas are positioned on the flat terrain between OR 244 and the river. Vegetation includes mowed lawn, tall mature Douglas fir, ponderosa pine, and cottonwoods, which are evenly scattered throughout the area. West of OR 244, rolling hills rise to the west, introducing curved, undulating lines, brown and grey colors, and smooth to medium textures. Dense, green vegetation lines the bottom of the hillside and appears in clumps on the hillsides.

Human development include a large, smooth, grey parking area; roads; camp sites that appear as grey smooth surfaces; and restroom buildings and picnic tables that appear as smooth geometric shapes punctuating the grassy areas. OR 244 appears wide, smooth, and grey and bisects the resource to the west of all of the visitor facilities.

Landscape Character of the Red Bridge State Wayside is “cultural.”

1 **Scenic integrity is high** - valued landscape character appears unaltered, and
2 deviations may be moderate but they mimic the landscape character so completely that
3 they are not evident.

4 **Scenic attractiveness is class B, Typical**, resulting from the moderately steep terrain,
5 evenly scattered to clumped mature vegetation, and large, winding river that introduce
6 attributes of variety, harmony, and balance that are positive yet common for the area.

7 **Viewer Groups:** Viewers include individuals stopping at the wayside to rest, picnic, and camp,
8 as well as motorists passing through on OR 244, and are therefore transient and stationary.
9 Stationary viewers will primarily focusing views to the east toward the river while motorists will
10 primarily be facing north or south in the direction of travel.

11 **PART 2: Impact Likelihood and Magnitude Assessment**

12 Alternatives Not Evaluated

13 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
14 the Double Mountain Alternative are located greater than 5 miles from this site and are therefore
15 not considered in this visual impact analysis. Because West of Bombing Range Road
16 Alternative 1, West of Bombing Range Road Alternative 2, and the Double Mountain Alternative
17 are not forested, they are not analyzed for potential visual impacts resulting from a cleared
18 ROW.

19 . 20 Proposed Route and Morgan Lake Alternative

21 The Proposed Route and Morgan Lake Alternative is located approximately 4.8 miles and 4.7
22 miles, respectively, northeast of the wayside at its closest point. Over 75 percent of the wayside
23 is outside of the modeled viewshed of the Proposed Route as stands of mature Douglas fir,
24 ponderosa pine, and cottonwoods and topography screen the majority of the Red Bridge State
25 Wayside. The limited visibility of the transmission towers and other project features due to
26 vegetation, coupled with the distance of the park from the Project, will result in weak visual
27 contrast and subordinate appearance where visible under both the Proposed and Alternative
28 Routes. Additionally, the wayside is outside of the modeled viewshed of the cleared ROW of the
29 Proposed Route. Due to low visibility, the Project will not change the appearance of the
30 landscape. The Grande Ronde River and the steep hillside backdropping the river will continue
31 to be the dominant aspects of the landscape under both the Proposed Route and Morgan Lake
32 Alternative scenarios. The landscape will retain its cultural character, and scenic integrity will be
33 high, as the Project will not result in evident deviations to the landscape. Scenic attractiveness
34 will remain class B, Typical. Views of the Project will be primarily intermittent due to tall, mature
35 evergreens, which will screen views of the Project from the majority of the park, preventing
36 continuous head-on views.

37 Likelihood of Impact

38 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Over 75 percent of the Red Bridge State Wayside is outside of the modeled viewshed of the Proposed Route, and stands of mature Douglas fir, ponderosa pine, and cottonwoods and topography will screen the majority of the Red Bridge State Wayside. Under both the Proposed Route and the Morgan Lake Alternative, limited visibility of project features and distance of the park from the Project will result in weak visual contrast, and project features will appear subordinate where visible. Additionally, the wayside is outside of the modeled viewshed of the cleared ROW. Therefore, impact magnitude will be <u>low</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: Due to low visibility, the Project, under either the Proposed Route or the Morgan Lake Alternative, will not change the appearance of the landscape. The Grande Ronde River and the steep hillside backdropping the river will continue to be the dominant aspects of the landscape. The landscape will retain its cultural character, and scenic integrity will be high, as the Project will not result in evident deviations to the landscape. Scenic attractiveness will remain class B, Typical. Therefore, the resource change will be <u>low</u> , and the Project will have an overall low contribution to visual impacts on the resource.			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the Project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the Project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the Project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>low</u> under both the Proposed Route and the Morgan Lake Alternative, as views of the Project will be primarily intermittent due to tall, mature evergreens that will screen views of the Project from the majority of the park, preventing continuous head-on views.			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 Impact magnitude will be low primarily due to low visibility from vegetation screening and a
 4 distance of 4.8 miles to the Proposed Route (4.7 miles from the Morgan Lake Alternative). The
 5 landscape will maintain its cultural landscape character, high scenic integrity, and class B
 6 (typical) scenic quality such that the resource change will be low, and the Project will only have
 7 a minor contribution to visual impacts. Views of the Project will be primarily intermittent due to
 8 tall, mature evergreens that will screen views of the Project from the majority of the park; viewer
 9 perception will be low. Therefore, visual impacts will be of low intensity.

10 Degree to Which Impacts are Caused by the Project

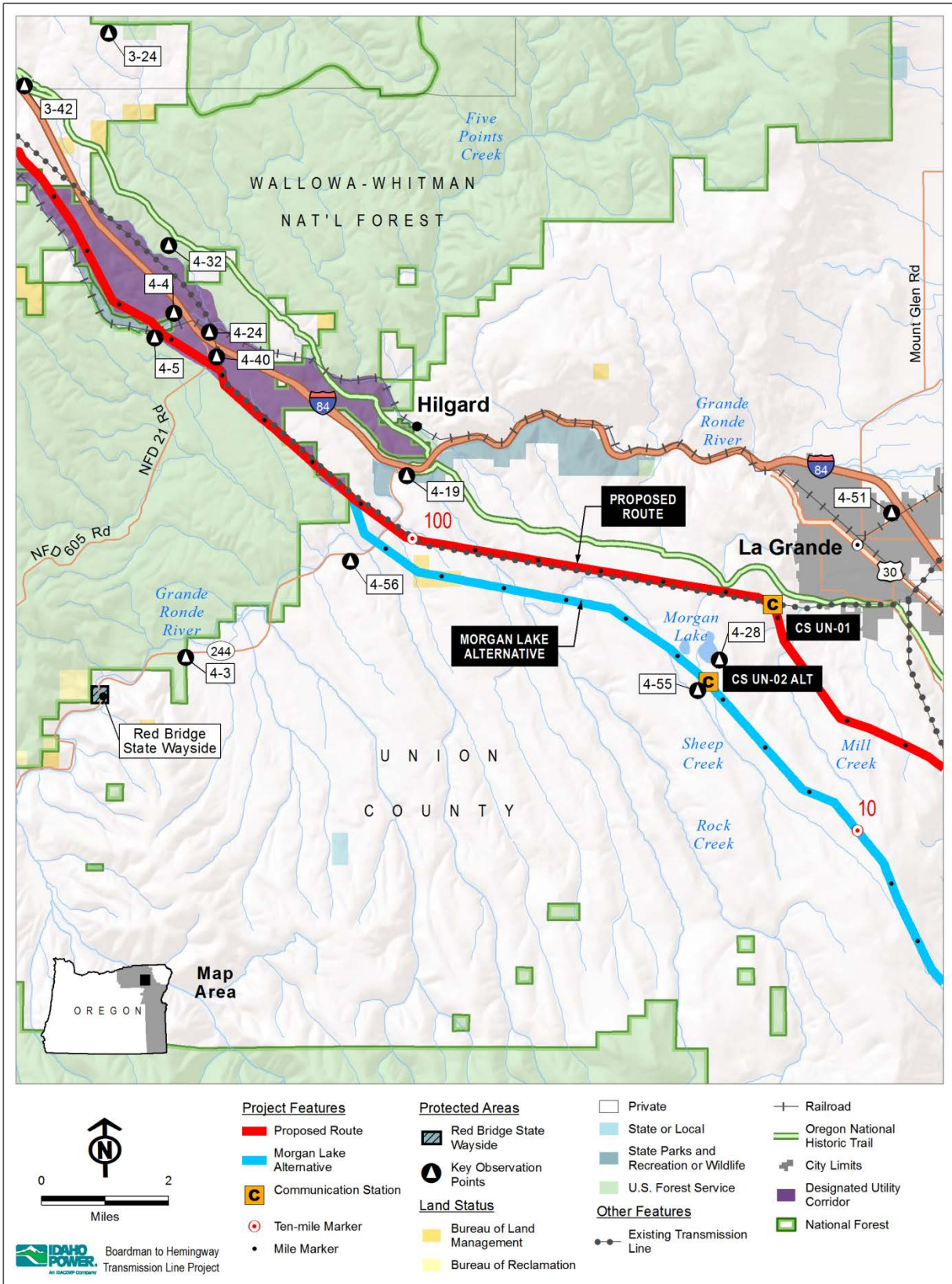
11 The scenic quality of the resource under operational conditions is the result of the combined
 12 influence of the Project and other past or present actions, including OR 244 and facilities within
 13 the Red Bridge State Wayside that collectively are consistent with the cultural landscape
 14 character.

15 Context

16 According to the visual impact methodology, an evaluation of context is not required, as the
 17 Project will have low intensity impacts, which are considered less than significant.

18 **Summary and Conclusion**

19 The Project, under both the Proposed Route and the Morgan Lake Alternative, will result in
 20 long-term visual impacts to the Red Bridge. Impacts will be low intensity as measured by visual
 21 contrast and scale dominance, resource change, and viewer perception. The Red Bridge State
 22 Wayside will maintain its scenic integrity and landscape character and continue to provide the
 23 function for which it was designated. Therefore, visual impacts to the Red Bridge State Wayside
 24 under both the Proposed Route and the Morgan Lake Alternative, will be **less than significant**.



1

2 Figure L-3-8. Red Bridge State Wayside

3.9 Succor Creek State Natural Area

Resource: Succor Creek State Natural Area (SNA)

Relevant Exhibit: L

Relevant Plan: No applicable land use plan

Resource Type: Area

Relevant KOP(s): 8-37; 8-101

PART 1: Establish Baseline Conditions

Designation: There is no management plan prepared to date for the Succor Creek SNA. The mission of the OPRD is to “provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations” (OPRD 2016a).

Interpretation of Designation: Although there is no management plan for the SNA, OPRD lists viewing scenery as a park activity (OPRD 2016a). The SNA is also located within a remote, deep, rocky canyon, and therefore scenery is considered a valued attribute to this resource.

Resource Overview: Succor Creek SNA encompasses 2,202 acres and is located on Succor Creek near the intersection of Succor Creek Road and Antelope Spring Road (Figure L-3-9). The natural area comprises two parcels. The smaller parcel is 160 acres and contains no visitor facilities (KOP 8-37). The larger parcel is located approximately 1 mile south of the smaller parcel and extends for approximately 5 miles in a southerly direction. Activities include camping, hiking, picnicking, wildlife watching, and rock hounding. The natural area includes scenic viewpoints, 23 rustic walk-in campsites, and a day-use area (OPRD 2015e, f).

Per OAR 345-022-0040, Succor Creek SNA is being evaluated as a Protected Area.

Per OAR 345-022-0080, Succor Creek SNA is not considered a Scenic Resource.

Succor Creek Research Natural Area is outside of the Recreation Analysis Area and is not evaluated as a Recreation Resource per OAR 345-022-0100.

Existing Conditions: The natural area lies in a deep, rocky canyon, which creates an enclosed landscape. Canyon walls are incised and steep, with vertical cliffs and spires enclosing the landscape and limiting views to within canyon walls. Lines are vertical, angular, and jagged and meet with the sinuous line of the valley bottom below. Colors from the landforms include browns, blacks, reds, and whites. The low-growing sagebrush/steppe vegetation and medium-height riparian vegetation adds clumps of greens and greys to the landscape. Succor Creek flows throughout the SNA, appearing generally smooth to rippling as it moves through the area. The highlands of the SNA, as demonstrated in KOP 8-37, appear flat to rolling, stippled with sagebrush, with moderate hills in the background. Human development is limited in the area to a dirt roads and paths, rustic campsites, signage, and picnic tables. The landscape character is natural appearing. Using BLM visual resource inventory methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Succor Creek SNA is considered high (class A) as shown below:

Succor Creek SNA Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
4	3	3	4	1	4	0	19 (A)

1

2 **Viewers:** Viewers will primarily be located in the canyon and will be both transient and
3 stationary as they engage in activities such as hiking, camping, picnicking, and sightseeing.

4 **PART 2: Impact Likelihood and Magnitude Assessment**

5 Alternatives Not Evaluated

6 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
7 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
8 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
9 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
10 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
11 impacts resulting from a cleared ROW.

12 Succor Creek is located outside of the 10-mile viewshed buffer of the cleared ROW of both the
13 Proposed Route and the Morgan Lake Alternative, and therefore impacts from this Project
14 feature are not discussed any further in this document.

15 Proposed Route

16 The smaller of the two parcels is located approximately 3.4 miles southwest of the Proposed
17 Route and the larger parcel is located more than 5 miles from the Proposed Route. Based on
18 the modeled viewshed, the only portion of the SNA where the proposed 500-kV towers may be
19 visible is from the highlands at the top northeast corner of the 160-acre parcel, where the tops of
20 up to two towers may be visible. Proposed access roads near and within the Proposed Route
21 will not be visible. Proposed towers will have limited visibility, introduce weak contrast, and
22 appear subordinate to the surrounding landscape at a distance of 3.4 miles. The Project will not
23 alter the scenic quality scoring, and similarly, the overall scenic quality will not change. The
24 landscape will maintain its natural appearing character.

Succor Creek SNA Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
4	3	3	4	1	4	0	19 (A)

25 Likelihood of Impact

26 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The natural area lies in a deep, rocky canyon, which creates an enclosed landscape, and views of the middleground and background are generally blocked from all areas of the natural area. Because of this limited visibility and distance from the Project, transmission towers will introduce weak visual contrast and will appear subordinate; therefore, magnitude of impacts will be <u>low</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Project will not alter the scenic quality scoring, and similarly, the overall scenic quality will not change. The landscape will maintain its natural-appearing character. Therefore, the resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the Project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the Project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the Project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>low</u> , since views of the Project will be limited and intermittent due to the deep, rugged canyon setting of the natural area.			

2

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 Low magnitude impacts will not alter the scenic quality component scoring, overall scenic
 4 quality, or landscape character; therefore, resource change will be low. Viewer perception will
 5 be low since views of the Project will be limited and intermittent due to the deep, rugged canyon
 6 setting of the natural area. The Proposed Route will have low magnitude impacts on the Succor
 7 Creek SNA due to distance (3.7 miles or more) and limited visibility within the deep canyon.
 8 Impacts will be of low intensity.

9 Degree to Which Impacts are Caused by the Project

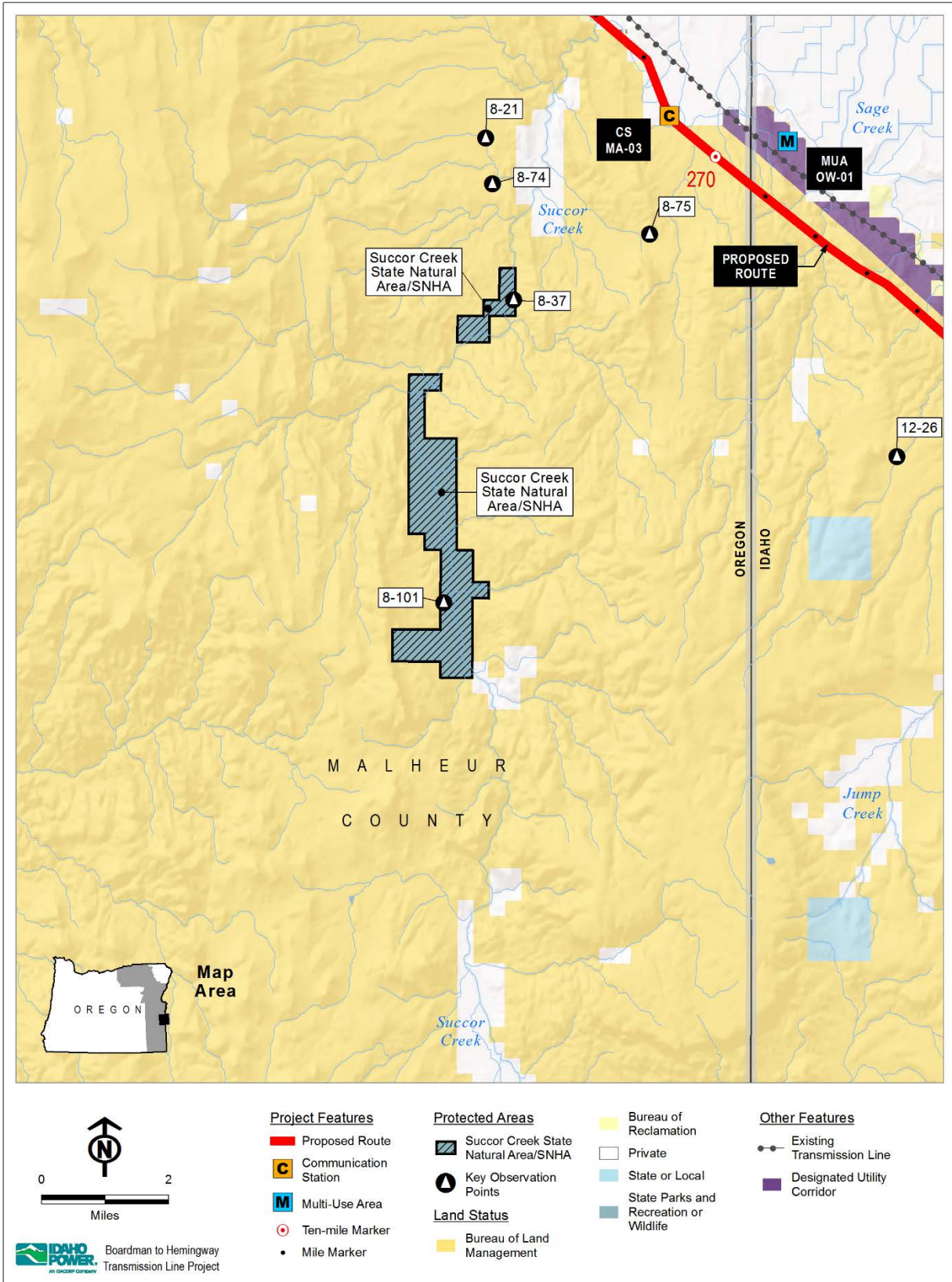
10 The impacts disclosed in this assessment are caused by the proposed facility and are not the
 11 result of other past or present actions.

12 Context

13 According to the visual impact methodology, an evaluation of context is not required, as the
 14 Project will have low intensity impacts, which are considered less than significant.

15 **Summary and Conclusion**

16 The Project will result in long-term visual impacts to the Succor Creek SNA. Visual impacts will
 17 be low intensity as measured by visual contrast and scale dominance, resource change, and
 18 viewer perception. While the Project will result in such impacts, the scenic quality component
 19 scoring, overall scenic quality, or landscape character will be maintained and the Succor Creek
 20 SNA will still provide the valued attributes for which it was designated. Therefore, visual impacts
 21 to the Succor Creek SNA will be **less than significant**.



1
2 **Figure L-3-9. Succor Creek State Natural Area**

1 **3.10 Lindsay Prairie Preserve / State Natural Heritage Area**

2 **Resource:** Lindsay Prairie Preserve / State Natural Heritage Area (SNHA)

3 **Relevant Exhibit:** L

4 **Relevant Plan:** Lindsay Prairie Preserve Management Plan (The Nature Conservancy 1993)

5 **Resource Type:** Area-based

6 **Relevant KOP(s):** 2-16

7 **PART 1: Establish Baseline Conditions**

8 **Designation:** The Lindsay Prairie Preserve (Preserve) is designated as a Preserve and is
9 managed by The Nature Conservancy to preserve the rare grassland habitat types within the
10 preserve. The Lindsay Prairie Management Plan does not contain any provisions for
11 management of scenic resources (Leslie Nelson, The Nature Conservancy, personal
12 communication, March 15, 2016; The Nature Conservancy 1993).

13 **Interpretation of Designation:** The Preserve is not managed for scenery, and its purpose is
14 dedicated to preservation of rare grassland habitat. Therefore, scenery is not considered a
15 valued attribute for which the area was designated.

16 **Resource Overview:** The Lindsay Prairie Preserve is a small preserve owned and managed by
17 the Nature Conservancy (Figure L-3-10). The Preserve measures approximately 377 acres. The
18 Preserve is dominated by bluebunch wheatgrass and Sandberg's bluegrass, a habitat type now
19 extremely rare in the Columbia Basin. The Preserve also contains high-quality examples of
20 three other Columbia Plateau native shrubland and grassland habitats as well as diverse
21 wildlife. Activities include hiking and wildlife viewing. There are no designated trails, although
22 hiking is allowed (The Nature Conservancy 1993).

23 Per OAR 345-022-0040, Lindsay Prairie Preserve is being evaluated as a Protected Area.

24 Lindsay Prairie Preserve is not considered a Scenic Resource per OAR 345-022-0080.

25 Per OAR 345-021-0010, Lindsay Prairie Preserve is not considered an important resource.

26 **Existing Conditions:** The Preserve is primarily situated within a small canyon but the
27 landscape also includes a small of upland plateau above the canyon. Landforms are flat to softly
28 rolling hills, drainages, and short valleys that create soft curved and horizontal lines and a fine to
29 smooth texture. Vegetation primarily consists of low, native grasslands and growing agricultural
30 fields, with scattered sagebrush and riparian vegetation. Colors are muted brown, tan, and grey
31 tones. Views within the small canyon are enclosed; however views from the upland plateau are
32 open and panoramic. Human development includes roads, a gravel quarry, agricultural fields,
33 an existing 69-kV transmission line along the western border, and dispersed rural development.
34 The area has a cultural landscape character. Using the BLM's visual resource inventory
35 methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the
36 Preserve is considered low (class C) as shown below:

Lindsay Prairie Preserve Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	1	0	2	1	2	-1	8 (C)

1 **Viewers:** Viewers will be limited and include local traffic and individuals visiting the Preserve for
 2 recreation or scientific reasons in vehicle and on foot in the canyon. Viewers will primarily be
 3 transient.

4 **PART 2: Impact Likelihood and Magnitude Assessment**

5 Alternatives Not Evaluated

6 The Morgan Lake Alternative and Double Mountain Alternative are located greater than 5 miles
 7 from this site and are therefore not considered in this visual impact analysis. This protected area
 8 is also located more than 10 miles from forested portions of the Proposed Route and the
 9 Morgan Lake Alternative; consequently, potential visual impacts of the cleared ROW are also
 10 not considered further in this analysis.

11 The Preserve is 3.9 miles from the West of Bombing Range Road Alternatives 1 and 2.
 12 Because the Alternative Routes are adjacent to the Proposed Route, visual impacts from these
 13 Routes would be similar to the analogous segment of the Proposed Route.

14 Proposed Route

15 The Preserve is located 1.6 miles the centerline of the Proposed Route, located to the east. The
 16 Project will be visible from this distance, as views from the plateau are expansive and
 17 unobstructed. The transmission towers will introduce moderate visual contrast and appear co-
 18 dominant with the landscape. Other project features, including pulling and tensioning sites,
 19 access roads, and structure work areas, will result in weak contrast in the short term. Within the
 20 canyon, views of the Project will be blocked by topography. Although head-on views of the
 21 transmission towers associated with the Proposed Route could be experienced near the eastern
 22 portion of the Preserve, views from the canyon where visitors will be hiking will be mostly
 23 blocked, and therefore intermittent. The Proposed Route will lower the quality of the Preserve's
 24 adjacent scenery. However, adjacent scenery has a limited effect on the quality of the
 25 Preserve's landscape, so this change will only result in a small change to the scenic quality
 26 scoring, and the overall scenic quality will not change. The cultural landscape character will be
 27 maintained.

Lindsay Prairie Preserve Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	1	0	2	0	2	-1	7 (C)

28 Likelihood of Impact

29 IPC considered all identified impacts to be "likely" to occur.

1 **Magnitude of Impact – Impact Duration**

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 **Magnitude of Impact – Visual Contrast and Scale Dominance**

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Towers at their closest point will be approximately 1.6 miles from the natural area. The Project will be visible from the plateau at this distance, where views are expansive and unobstructed. Towers visible from this location will be skylined and result in moderate visual contrast for distances of up to approximately 3 miles and will be co-dominant with the landscape. Other project features, including pulling and tensioning sites, access roads, and structure work areas, will be located approximately 2 miles away and will result in weak contrast. Impact magnitude will be <u>medium</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Proposed Route will lower the quality of the Preserve’s adjacent scenery. However, adjacent scenery has a limited effect on the quality of the Preserve’s landscape, so this change will only result in a small change to the scenic quality scoring, and the overall scenic quality will not change. Landscape character will remain cultural. Therefore, the resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Although head-on views of the transmission towers associated with the Proposed Route could be experienced near the northern portion of the Lindsay Prairie Preserve, views from the majority of the Preserve will be experienced from within the canyon and will be primarily blocked and intermittent. Therefore, the viewer perception will be <u>low</u> .			

1 **PART 3: Consideration of Intensity, Causation, and Context**

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The transmission towers will introduce moderate visual contrast and appear co-dominant in the
 4 landscape, resulting in medium magnitude impacts from towers located approximately 2 miles
 5 from the Preserve. Towers associated with the Proposed Route will slightly alter the adjacent
 6 scenery of the Preserve, although there will be no change in scenic quality or landscape
 7 character, such that the resource change will be low. Views from the majority of the Preserve
 8 will be experienced from within the canyon and will be primarily blocked and intermittent such
 9 that viewer perception will be low. Therefore, impact intensity will be medium.

10 Degree to Which Impacts are Caused by the Project

11 The scenic quality of the resource under operational conditions is the result of the combined
 12 influence of the Project and other past or present actions, including roads, a gravel quarry,
 13 agricultural fields, an existing 69-kV transmission line along the western border, and dispersed
 14 rural development, which collectively appear as a cultural landscape.

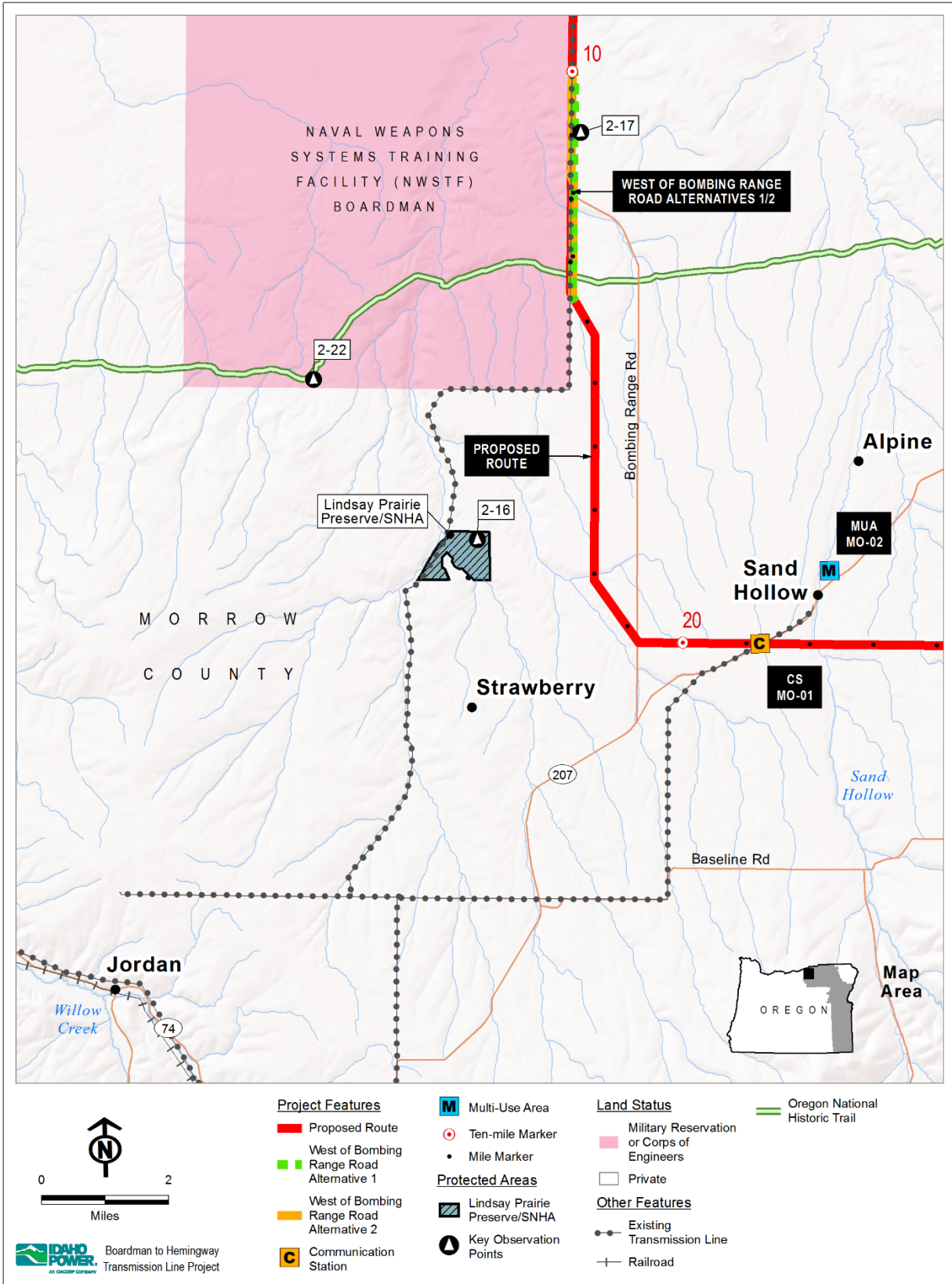
15 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: The Preserve is not managed for scenery, and its purpose is dedicated to preservation of rare grassland habitat. Therefore, scenery is not considered a valued attribute for which the area was designated.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: Scenery is not considered a valued attribute for which the area was designated. Therefore, medium intensity visual impacts to the Preserve will not preclude the resource from providing the value for which it was designated.	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

1 Summary and Conclusion

2 The Project will result in long-term visual impacts to the Preserve. The impacts are considered
3 medium intensity as measured by visual contrast and scale dominance, resource change, and
4 viewer perception. While the project will result in such impacts, they will not preclude the
5 resource from providing the value for which it was designated. Therefore, visual impacts to the
6 Preserve will be **less than significant**.



1

2 **Figure L-3-10. Lindsay Prairie Reserve/State Natural Heritage Area**

3.11 Snake River Islands Wildlife Area

Relevant Exhibit: L, T

Relevant Plan: No management plan identified

Resource Type: Area

Relevant KOP(s): N/A

PART 1: Establish Baseline Conditions

Designation: The Snake River Islands Wildlife Area (WA) is an Oregon Department of Fish and Wildlife (ODFW)-designated wildlife area. No planning documents were identified for this resource.

Interpretation Designation: The purpose of the wildlife area is to protect wildlife and its habitat while providing recreation opportunities that are compatible with wildlife and its habitat. The wildlife area is not managed to protect scenic resources.

Resource Overview: The Snake River Islands WA comprises three islands within the Snake River: Huffman Island, Porter Island, and Patch Island. The islands are distributed within the Snake River from Farewell Bend, Oregon to the just south of Weiser, Idaho (Figure L-3-11). The refuge protects grasslands and riparian forests on the Snake River islands that provide habitat for resident and migratory birds. The purpose of the wildlife area is to protect wildlife and its habitat while providing compatible recreation opportunities. The refuge is not managed to protect scenic resources. The Proposed Route is located approximately 1.0 mile to the west of the wildlife area at its closest point. There are no roads or trails on the islands, and all access is by boat. Primary recreation activities on the islands include wildlife viewing, photography, hunting, and fishing.

Per OAR 345-022-0080, Snake River Islands WA is not considered a Scenic Resource.

Per OAR 345-022-0040, Snake River Islands WA is being evaluated as a Protected Area.

Per OAR 345-022-0100, Snake River Islands WA is being evaluated as a Recreation Resource.

Existing Conditions: The natural landscape of the Snake River Islands WA is characterized as flat, small islands surrounded by the generally flat, wide, and winding Snake River. The islands are interspersed among islands associated with Deer Flat NWR, and are similar in character. Vegetation on the islands consists of low- to medium-height grasses and shrubs as well as taller, mature trees that create a medium texture with irregular to clumped patterns. Light-colored gravel beaches surround many of the islands. Adjacent scenery includes the Snake River, which is a dominant aspect of the landscape, the rolling hills and flat agricultural areas that flank the river. Huffman Island is located approximately 0.2 mile east of I-84. Both Porter and Patch Islands are located over 5 miles from I-84, and are therefore more naturally appearing than Huffman Island. There are no roads or trails on the islands. Primary recreation activities on the islands include wildlife viewing, photography, hunting, and fishing. Human development is very limited. Collectively, the landscape of the islands is natural appearing; however, Huffman Island is considered a cultural landscape due to the influence of I-84. Huffman Island is the only island located within the analysis area.

Using the BLM's visual resource inventory methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Snake River Islands WA (Huffman Island) is considered low (class C) as shown below:

Snake River Islands Wildlife Area: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	3	4	3	0	2	-2	11 (C)

1 **Viewers:** Viewers are limited, since access to the Snake Island Unit is by boat only, and will
2 primarily include individuals primarily engaging in hunting and fishing activities.

3 **PART 2: Impact Likelihood and Magnitude Assessment**

4 Alternatives Not Evaluated

5 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
6 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
7 from this site and are therefore not considered in this visual impact analysis.

8 This protected area is also located more than 10 miles from forested portions of the Proposed
9 Route and the Morgan Lake Alternative; consequently, potential visual impacts of the cleared
10 ROW are also not considered further in this analysis.

11 Because West of Bombing Range Road Alternative 1, West of Bombing Range Road
12 Alternative 2, and the Double Mountain Alternative are not forested, they are not analyzed for
13 potential visual impacts resulting from a cleared ROW.

14 Proposed Route

15 Huffman Island is the only island located within the analysis area. The Proposed Route is
16 located approximately 0.9 mile west and south of Huffman Island. Existing roads located
17 between the wildlife area and the Project would be used; however these roads would not require
18 substantial improvements. The transmission towers associated with the Proposed Route will
19 result in moderate visual contrast when viewed from the wildlife area. Although the base of
20 many towers will be shielded by topography, the structures will still appear skylined. The
21 geometric form and smooth texture will contrast against the fine to medium rolling, rounded hills
22 to the south. Views of the transmission towers will be variable due to topography, and will
23 appear subordinate to I-84 and associated traffic visible in the foreground.

24 Views of the Project will be equally head-on or peripheral, depending on where the viewer is
25 located within on the island, and the orientation of their gaze. Viewer position is subordinate to
26 the Project. The proposed 500-kV towers will reduce the quality of adjacent scenery to the south
27 of the SRA; however, this reduction will be relatively small given the dominance of I-84. The
28 overall scenic quality will not change and the landscape will retain its cultural character.

Snake River Islands Wildlife Area: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	3	4	3	0	2	-2	11(C)

1 Likelihood of Impact

2 IPC considered all identified impacts to be “likely” to occur.

3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: At its closest point, the Proposed Route is approximately 0.9 mile west of Huffman Island. I-84 is situated between the wildlife area and the Proposed Route. The interstate dominates the foreground, and the Project will appear subordinate. The Project will introduce moderate contrast. Due to moderate contrast and the dominance of I-84, magnitude will be <u>medium</u> .			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The landscape character of Huffman Island will remain cultural, and both Porter and Patch Islands will remain naturally appearing. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the transmission towers associated with the Proposed Route will be primarily peripheral and intermittent, as viewers will primarily be traveling to or from the island by boat or participating in hunting or fishing activities, such that views directed toward the Proposed Route will be episodic. I-84 will appear dominant in foreground. Therefore, viewer perception will be <u>low</u> .			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

1 The Proposed Route will have medium magnitude impacts and reduce the adjacent scenery of
2 Huffman Island; however, the other two islands within the wildlife area will not be affected.
3 Consequently, the overall landscape character of the Snake River Islands wildlife area will
4 remain naturally appearing, and resource change will be low. Views of the Proposed Route will
5 be primarily peripheral, intermittent, and episodic such that viewer perception is low. Therefore,
6 impact intensity will be low.

7 Degree to Which Impacts are Caused by the Project

8 The scenic quality of the resource under operational conditions is the result of the combined
9 influence of the Project and other past or present actions, primarily due to the proximity of I-84
10 to Huffman Island.

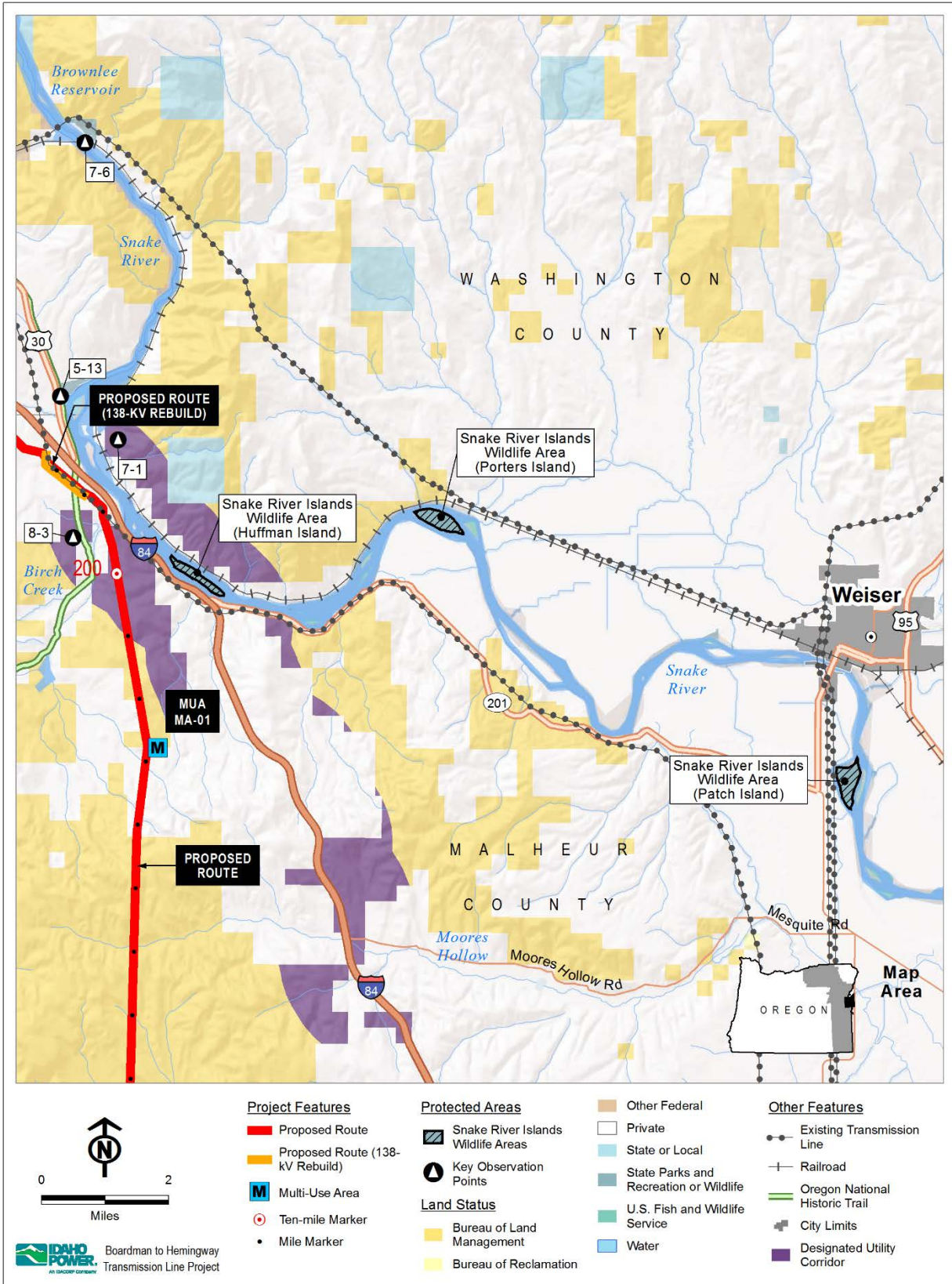
11 Context

12 According to the visual impact methodology, an evaluation of context is not required as the
13 Project will have low intensity impacts, and therefore, less than significant.

14 **Summary and Conclusion**

15 The Project will result in long-term visual impacts to the Snake River Islands wildlife area
16 (primarily Huffman Island) that will be low intensity as measured visual contrast and scale
17 dominance, resource change, and viewer perception. Impacts will be **less than significant**.

18



1
2 **Figure L-3-11. Snake River Islands Wildlife Area**

3.12 Five Points Creek (Designated Wild)

Resource: Five Points Creek (Designated Wild)

Relevant Exhibit: L, R

Relevant Plan: USFS Wild and Scenic River (WSR) Study Report and Final Legislative Environmental Impact Statement (1997); USFS Wallowa-Whitman National Forest Management Plan (1990)

Resource Type: Linear Corridor

Relevant KOP(s): None

Note that visual impacts resulting from the Project under the Proposed Route and the Morgan Lake Alternative are analyzed collectively, as impacts are considered similar under both siting scenarios.

PART 1: Establish Baseline Conditions

Designation: Wild river areas are defined by the Wild & Scenic River Act (1986) as:

“Those river or sections of river that are free of impoundments and generally inaccessible except by trail, and watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America”

Outstandingly Remarkable Values (ORV) are: scenery, fisheries, and wildlife.

Interpretation of Designation: Scenery is identified as an ORV for which the Five Points Creek Wild section of river should be managed to protect.

Section 10(a) of the Wild and Scenic Rivers Act states:

“Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeological, and scientific.”

Resource Overview: Five Points Creek is designated as a wild river. The designated corridor encompasses 3,763 acres and begins approximately 1 mile northeast of Hilgard, Oregon (Figure L-3-12). The creek receives light recreation use from hikers and hunters and has high quality scenery and remote experience. There is a network of hiking trails within the Five Points Creek canyon that is accessible from roads from the above plateau.

Per OAR 345-022-0040, Five Points Creek is being evaluated as a Protected Area.

Per OAR 345-022-0080, Five Points Creek is being evaluated as a Scenic Resource.

Per OAR 345-022-0100, Five Points Creek is not considered an important Recreation Opportunity as recreation was not identified as an ORV.

Existing Conditions: The Five Points Creek Wild River is characterized by elevated plateaus of dissected basalt and eroded canyons. The canyon is 500 to 800 feet deep with steep, rugged walls with prominent vertical and diagonal lines. Occasional outcrops and a variety of plant communities all add variety to the landscape. The free-flowing creek and its tributaries add movement and additional scenic interest to the landscape. The area is primitive and undisturbed due to the lack of human development and low visitor use. This resource is located within the

1 USFS Wallowa-Whitman NF; therefore, assessments of landscape character and quality were
2 made using USFS methodology.

3 **Landscape character** of the Five Point Creek wild river corridor is naturally evolving.

4 **Scenic integrity is very high** – Desired landscape character is visually intact and
5 complete, with only minute deviations. Valued existing or desired future landscape
6 character is intact and complete with only minute deviations, if any.

7 **Scenic attractiveness is Class A, Distinctive**, resulting from steep, incised canyon,
8 variety of vegetation, free flowing river, and lack of human development features that
9 together provide positive attributes of variety, unity, vividness, intactness, harmony, and
10 balance that are unique to the area.

11 **PART 2: Impact Likelihood and Magnitude Assessment**

12 Alternatives Not Evaluated

13 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
14 the Double Mountain Alternative are located greater than 5 miles from this site and are therefore
15 not considered in this visual impact analysis. Because West of Bombing Range Road
16 Alternative 1, West of Bombing Range Road Alternative 2, and the Double Mountain Alternative
17 are not forested, they are not analyzed for potential visual impacts resulting from a cleared
18 ROW.

19 The analysis presented below pertains to the Proposed Route and the Morgan Lake Alternative.

20 Proposed Route and Morgan Lake Alternative

21 The Proposed Route will be located 2.0 miles southwest of the Five Points Creek corridor
22 designated as wild. The western terminus of the Morgan Lake Alternative is located
23 approximately 2.1 miles from the Five Points Creek. The entire river channel is outside of the
24 modeled viewshed of both the Proposed Route and the Morgan Lake Alternative; however, the
25 towers and cleared ROW could be visible from the outer edges of the corridor in the
26 southwestern portion of the corridor, at the top of the canyon. The wild corridor of Five Points
27 Creek was designated to protect the outstanding scenery within the enclosed creek canyon.
28 Because the Project will not be visible from within the canyon under the Proposed Route or
29 Morgan Lake Alternative, the landscape character, scenic integrity, and scenic quality of the
30 WSR corridor of Five Points Creek will not change and the Project will have minor to no
31 contributions on visual impacts to the resource. Viewers along the river will not have views of
32 the Project. Portions of the Five Points Creek Wild and Scenic River corridor with Project views
33 are on the top of the canyon where viewers will be scarce.

34 Likelihood of Impact

35 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The entire Five Points Creek WSR channel is located outside of the modeled viewshed. The towers and cleared ROW could be visible from the outer edges of the corridor in the southwestern portion of the corridor, at the top of the canyon. Visual contrast will be none to weak, impact magnitude will be <u>low</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: This segment of Five Points Creek was designated a WSR (wild) to protect the outstanding scenery within the enclosed creek canyon. Since the Project will not be visible from within the canyon, the landscape character, scenic integrity, and scenic quality of the wild corridor of Five Points Creek will not change, and the Project will have minor to no contributions on visual impacts to the resource. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/ middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewers along the river will not have views of the Project. Portions of the Five Points Creek Wild and Scenic River corridor with Project views are on the top of the canyon where viewers will be scarce. Therefore, viewer perception will be <u>low</u> .			

1 **PART 3: Consideration of Intensity, Causation, and Context**

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project will have low magnitude impacts since the Project will not be visible from within the
 4 canyon. Landscape character, scenic integrity, and scenic quality of the wild corridor of Five
 5 Points Creek will not change and the Project will have minor to no contributions on visual
 6 impacts to the resource and low resource change. Scenery ORVs will not be impacted. Viewers
 7 along the river will not have views of the Project. Portions of the Five Points Creek WSR corridor
 8 with Project views are on the top of the canyon, where viewers will be scarce; viewer perception
 9 will be low. Therefore, visual impacts will be of low intensity.

10 Degree to Which Impacts are Caused by the Project

11 The low intensity impacts disclosed in this assessment are caused by the proposed facility and
 12 are not the result of other past or present actions.

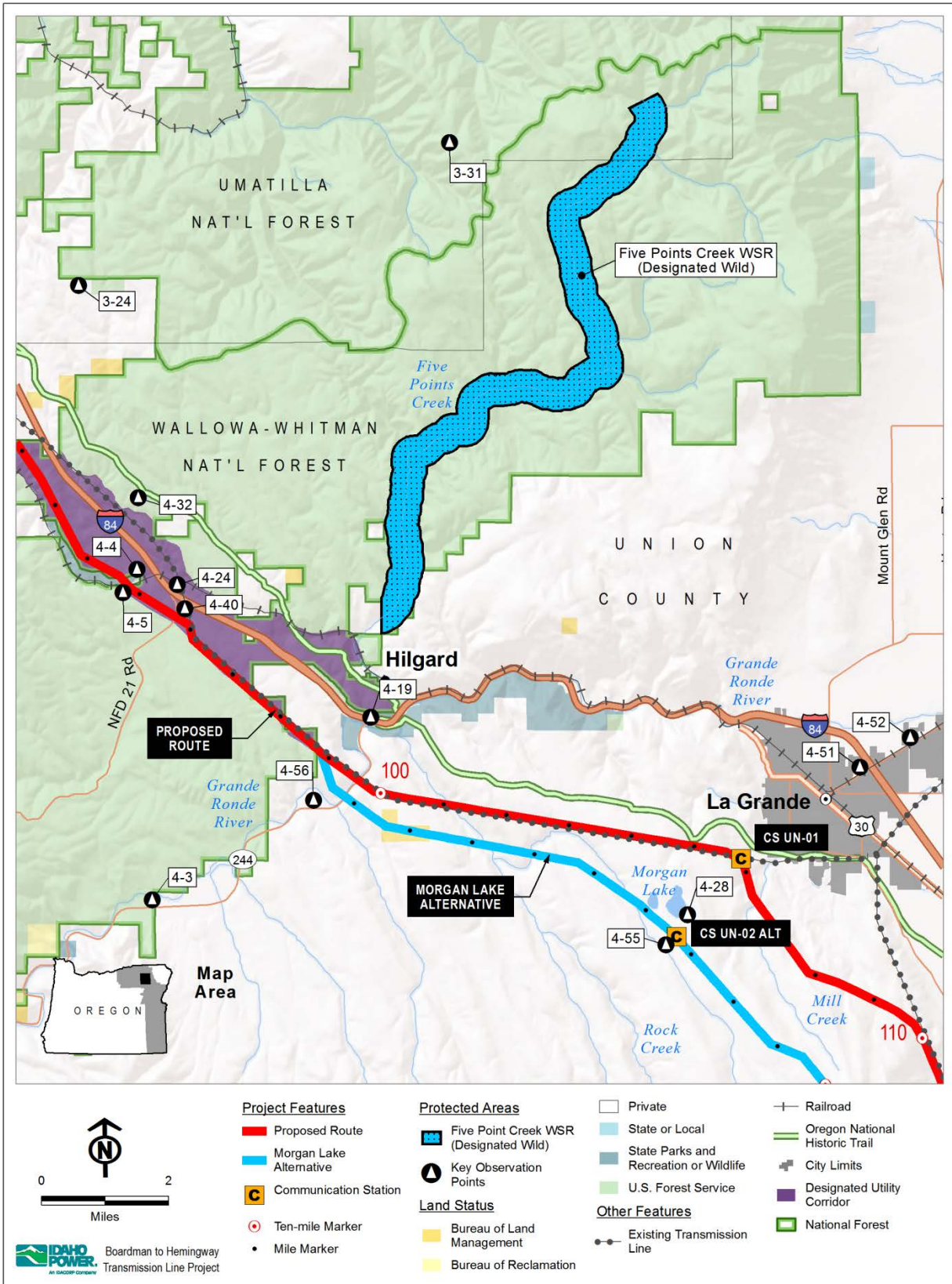
13 Context

14 According to the visual impact methodology, an evaluation of context is not required, as the
 15 Project will have low intensity impacts, which are considered less than significant.

16 **Summary and Conclusion**

17 Visual impacts to the Five Points WSR will be of low intensity, resulting from both low resource
 18 change and viewer perception. Impacts will result solely from the proposed facility, and not the
 19 other past or present actions.

20 Visual impacts to the Five Points Creek WSR, under both the Proposed Route and the Morgan
 21 Lake Alternative, will be low intensity and **less than significant**.



1
2 **Figure L-3-12. Five Points Creek (Designated Wild)**

3.13 Oregon Trail Area of Critical Environmental Concern / Special Recreation Management Area – Birch Creek parcel

Resource: Oregon Trail Area of Critical Environmental Concern (ACEC) / Special Recreation Management Area (SRMA) – Birch Creek parcel

Relevant Exhibit: L, R, T

Exhibit R Map ID: VRM M1

Relevant Plan: Southeast Oregon Resource Management Plan (SEORMP) (BLM 2002)

Resource Type: Area

Relevant KOP(s): 8-3

PART 1: Establish Baseline Conditions

Designation: The relevant and important values of the Birch Creek Parcel are historic and scenic. Per the SEORMP,

“The scenic value of this ACEC is associated with the historical landscape integrity of the area. The rolling hills and view to the north of Farewell Bend and the Snake River have not changed since the emigrants passed through this country and contribute to the overall scenic value.....the area will be managed as VRM Class II”. (BLM 2002).

The Birch Creek Parcel is also designated as an SRMA, which is managed for public education and enjoyment of the Oregon Trail and its setting and follows the direction indicated for the Birch Creek Parcel (BLM 2002).

Interpretation of Designation: Visual quality within the Birch Creek Parcel should be protected. Per VRM Class II objectives, the change in landscape character should be low such that the existing landscape character is retained within the VRM Class II boundary (BLM 1986). Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near an ACEC (BLM 1988). Consequently, should potentially adverse impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

Resource Overview: The Birch Creek Parcel includes 119 acres encompassing the Oregon National Historic Trail (Figure L-3-13). It is located approximately 2 miles south of Farewell Bend, an important landmark of the National Historic Oregon Trail that was recognized by the emigrants due to its unique shape. This segment of the trail was historically used as a camping area on approach to the Snake River at Farewell Bend. Features at the site include a parking turnout, a wagon rut swale within a fenced enclosure, a short trail adjacent to the ruts, and interpretive panels (BLM 2002). The area around the Birch Creek Parcel is characterized by a mixture of privately owned rangeland and federal lands managed by the BLM. The Birch Creek Parcel is bordered by private lands to the east, north, and west. Per OAR 345-022-0040, Oregon Trail ACEC – Birch Creek Parcel is being evaluated as a Protected Area.

Per OAR 345-022-0080, Oregon Trail ACEC – Birch Creek Parcel is being evaluated as a Scenic Resource.

Per OAR 345-022-0100, Oregon Trail ACEC – Birch Creek Parcel is being evaluated as a Recreation Resource.

Existing Conditions: The Birch Creek Parcel is located within the Unwooded Alkaline Foothills portion of the Snake River Plain Ecoregion. The view to the west from the interpretive panel

1 consists of gently rolling terrain in the foreground and middleground that subtly transitions to
 2 steeper terrain in the background. Alluvial fans and natural bowls are apparent in the
 3 background terrain. Colors in the landscape include light browns, tans, reds, grays, and blues.
 4 Lines in the landscape are undulating and horizontal with diagonal lines visible in the
 5 middleground and background. The dominant texture from the landform is smooth. Vegetation
 6 appears medium to coarse in the foreground to fine, uniform, and dotted in the foreground and
 7 middleground. Cultural modifications to the natural landscape consist of the Historic Oregon
 8 Trail, gravel-surfaced road, the interpretive site facilities, and a residence. The Birch Creek
 9 Parcel has a historic landscape character because of the Historic Oregon Trail and relative lack
 10 of additional development. The overall scenic quality is considered low (class C), due to the
 11 simplicity and uniformity of land form, colors and textures of the landscape.

Oregon Trail ACEC – Birch Creek Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (1 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	1	0	2	3	2	1	11 (C)

12

13 **Viewer Groups:** Viewers include tourists and historic trail enthusiasts. Visitor numbers are
 14 limited due to remoteness and lack of recreational facilities. Viewers will concentrate at the
 15 interpretive panel (stationary) and along the Historic Oregon Trail (transient).

16 **PART 2: Impact Likelihood and Magnitude Assessment**

17 Alternatives Not Evaluated

18 The Birch Creek ACEC is located outside of the 10-mile viewshed buffer of the cleared ROW of
 19 both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
 20 Project feature are not discussed any further in this document.

21 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 22 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 23 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 24 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 25 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 26 impacts resulting from a cleared ROW.

27 Proposed Route

28 The transmission line associated with the Proposed Route will be located 0.2 mile northeast of
 29 the Birch Creek Parcel (Figure L-3-13). The route includes the rebuild of 1.1 miles of the existing
 30 Quarts to Weiser 138-kV transmission line and the siting of the Project transmission line within
 31 the existing ROW. Between MP 197.6 and MP 198.8, the Proposed Route will be located in the
 32 existing IPC 138-kV transmission line ROW. The 138-kV transmission line will be rebuilt to the
 33 southwest of the Proposed Route in a new ROW. In siting the Project at this location, IPC
 34 employed measures to reduce visibility from the ACEC parcel. To accomplish this goal, IPC
 35 sited the Project line as far north as feasible, without encroaching on active agricultural areas.
 36 Towers located between MP 198 and MP 199 will use shorter stature H-frame structures
 37 ranging in height from 65 to 100 feet. This structure type, combined with constructing towers at
 38 lower elevations than the ACEC, will maximize the proportion of the Project screened from view
 39 by existing topography.

- 1 The structures will appear sequential as they traverse the landscape in a northwest-southeast
 2 direction. Views of the towers will primarily be head-on and experienced by both stationary and
 3 transient viewers. The structures will result in weak visual contrast and appear subordinate to
 4 the landscape. Though visible, the transmission towers associated with the Proposed Route will
 5 not substantially lower the quality of the adjacent scenery outside the Birch Creek Parcel. The
 6 landscape character will remain historic due to the prominence of natural features in the
 7 viewshed. The overall scenic quality of the landscape will remain low (class C). Because the
 8 Project has been sited outside the Birch Creek Parcel, there will be no changes to the
 9 landscape within the boundary of the Birch Creek Parcel.
- 10 The Project will conform to VRM Class II objectives within the Birch Creek Parcel, and is
 11 therefore consistent with BLM's VRM direction to protect visual values within the Birch Creek
 12 Parcel.

Oregon Trail ACEC – Birch Creek Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (1 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	1	0	2	2	2	1	10 (C)

- 13 Likelihood of Impact
- 14 IPC considered all identified impacts to be “likely” to occur.
- 15 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line and towers, and therefore will be <u>long-term</u> , extending for the life of the Project.			

1 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Magnitude		
Magnitude	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Towers located between MP 198 and MP 199 will use shorter stature H-frame structures ranging in height from 65 to 100 feet. This structure type, combined with constructing towers at lower elevations than the ACEC, will maximize the proportion of the Project screened from view by existing topography. Impacts are considered to be of <u>low</u> magnitude.			

2 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: Though visible, the transmission towers associated with the Proposed Route will not substantially lower the quality of the adjacent scenery outside the Birch Creek Parcel. The landscape character will remain historic due to the prominence of natural features in the viewshed. The overall scenic quality of the landscape will remain low (class C). Because the Project has been sited outside the Birch Creek Parcel, there will be no changes to the landscape within the boundary of the Birch Creek Parcel. The resource change will be <u>medium</u> .			

Indicator	Criteria used to Determine Resource Change		
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views from the interpretive panels and trail will primarily be directed to the northeast, north, and northwest toward the Proposed Route (head-on). Viewers walking along the trail will experience the landscape in its entirety, with 360 degree views extending across the basin. For these viewers, the Project will be experienced intermittently. Project features will be subordinate to the large scale and natural setting of the landscape. Therefore, viewer perception will be <u>medium</u> .			

1 **PART 3: Consideration of Intensity, Causation, and Context**

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project will result in long-term, medium magnitude impacts from the operation of lower
 4 stature H-frame towers sited in close proximity to the Birch Creek Parcel and associated viewer
 5 platforms. This tower type and configuration will not substantially lower the quality of the
 6 adjacent scenery. The resource change will be medium due to the small change in value of
 7 adjacent scenery; however, landscape character will remain. Views from within the ACEC will
 8 be variable such that viewer perception of medium magnitude impacts will be medium. Visual
 9 impacts will be of medium intensity.

10 Degree to Which Impacts are Caused by the Project

11 Though evidence of cultural modification exists within the landscape, impacts disclosed in this
 12 assessment will primarily result from the Project and are not the result of other past or present
 13 actions.

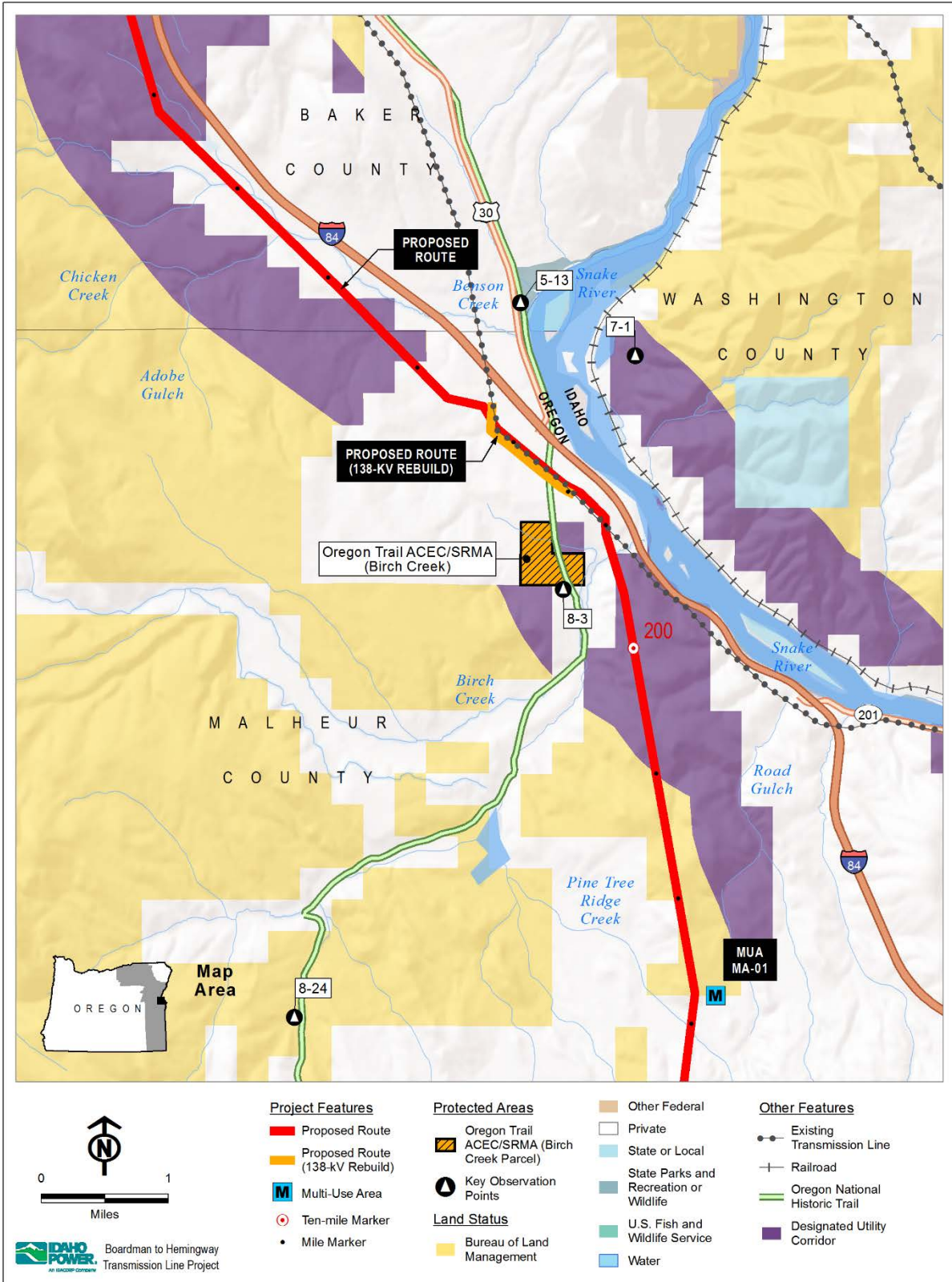
1 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: Scenery is considered a valued attribute to the Birch Creek Parcel as it is managed per the SEORMP (BLM 2002) to preserve the unique visual qualities of the area. The SEORMP is interpreted as identifying the importance of landscape integrity, particularly in views to the north toward Farewell Bend and the Snake River.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: The BLM maintains the visual values of lands they administer through their VRM System. Visual values of the Birch Creek Parcel are managed per VRM Class II objectives. The contribution of adjacent scenery to the overall scenic quality of the Birch Creek Parcel will be slightly reduced; however, the scenic class will remain the same. Views to the north toward Farewell Bend and the Snake River will be maintained. The Project will conform to the VRM Class II objectives and consequently is consistent with BLM's management of the Birch Creek Parcel's visual qualities.	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

2 **Summary and Conclusion**

3 Visual impacts to the Birch Creek ACEC will be of medium intensity, resulting from medium
4 viewer perception and medium resource change. Though evidence of cultural modification
5 exists within the landscape, impacts disclosed in this assessment will primarily result from the
6 Project. Because views to the north toward Farewell Bend and the Snake River are preserved
7 under the Project, as mitigated, IPC has not found the Project to preclude the resource from
8 providing the scenic value for which it is recognized. Visual impacts to the Birch Creek ACEC
9 will be **less than significant**.



1
2 **Figure L-3-13. Oregon Trail Area of Critical Environmental Concern/Special**
3 **Recreation Management Area – Birch Creek Parcel**

3.14 Oregon Trail Area of Critical Environmental Concern – Blue Mountain Parcel

Resource: Oregon Trail ACEC – Blue Mountain Parcel

Relevant Exhibit: L, R

Relevant Plan: Baker Resource Management Plan (BLM 1989)

Resource Type: Area

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Designation: Per Baker Resource Management Plan (BLM 1989), new uses incompatible with maintaining visual qualities or providing public interpretation are excluded in a 0.5-mile corridor, and rights-of-way should avoid the Oregon Trail. This management provision applies only to BLM-administered lands. Off-road vehicle use is limited to designated roads and trails.

Interpretation of Designation: Visual quality of the Blue Mountain Parcel should be maintained. Any new uses proposed within the boundary of the Blue Mountain Parcel that will reduce visual quality will be excluded within 0.5 mile of the Oregon Trail. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

Resource Overview: This Oregon Trail ACEC Blue Mountain parcel of 80 acres is located in the Blue Mountains, on the northeast side of I-84 about 12 miles northwest of La Grande in Umatilla County (Figure L-3-14). The Blue Mountain parcel abuts the Wallowa-Whitman NF and is accessed via Forest Road 308.

Per OAR 345-022-0080, ACEC – Blue Mountain Parcel (SR6) is being evaluated as a Scenic Resource.

Per OAR 345-022-0040, Oregon Trail ACEC – Blue Mountain Parcel is being evaluated as a Protected Area.

Per OAR 345-022-0100, Oregon Trail ACEC – Blue Mountain Parcel is not considered an important Recreation Opportunity.

Existing Conditions: The resource is located on a mostly forested ridge east of California Gulch. The terrain ranges from rolling mountains to highlands, resulting in angles and curved and converging lines. The terrain is densely covered with mature evergreens; colors are primarily dark greens and textures are soft. Views are enclosed due to vegetation. The Oregon Trail runs through the resource. Human development is limited to forest roads. The landscape character is natural appearing. Using the BLM's visual resource inventory methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Oregon Trail ACEC – Blue Mountain Parcel is considered medium (class B) as shown below:

Oregon Trail ACEC – Blue Mountain Parcel Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	4	0	3	2	3	1	16 (B)

1
2 **Viewer Groups:** Viewers are limited due to the lack of recreation facilities and are restricted to
3 those traveling along Forest Road 308 and occasional visitors of the Oregon Trail.

4 **PART 2: Impact Likelihood and Magnitude Assessment**

5 Alternative Not Evaluated

6 The Blue Mountain Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
7 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
8 Project feature are not discussed any further in this document.

9 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
10 the Double Mountain Alternative are located greater than 5 miles from this site, and are
11 therefore not considered in this visual impact analysis. Likewise, because these Alternative
12 Routes are not forested, they are not analyzed for potential visual impacts resulting from a
13 cleared ROW.

14 Proposed Route

15 The Proposed Route is located 0.9 miles to the southwest of this ACEC parcel at its closest
16 point (Figure L-3-14). Existing coniferous vegetation on and around the ACEC parcel will screen
17 or block many of the potential outward views from this site. In addition, a ridge to the immediate
18 west of the ACEC parcel and coniferous trees on the west side of I-84 will partially or entirely
19 screen potential views of the proposed transmission line. The cleared ROW will not be visible.
20 Due to limited visibility, there will be no change to the scenic quality component scores. The
21 overall scenic quality will remain medium (class B) and the natural appearing landscape will be
22 maintained.

Oregon Trail ACEC – Blue Mountain Parcel Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	4	0	3	2	3	1	16 (B)

23 Likelihood of Impact

24 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Views of the Project will introduce weak visual contrast to the landscape. The dense vegetation will entirely or partially obstruct views of some towers. Where only the top portion of a tower is visible, the scale will appear subordinate against the existing landscape. The cleared ROW will not be visible, due to the dense coverage of mature trees within the Blue Mountain Parcel. Therefore, the magnitude of impacts will be <u>low</u> .			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Project will introduce weak visual contrast to some outer edges of the Blue Mountain Parcel, but will be completely screened from view from the majority of the Blue Mountain Parcel. Consequently, there will be no change to the scenic quality component scores. The overall scenic quality will remain medium (class B) and the natural-appearing landscape will be maintained. Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the Project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the Project is located primarily in the foreground/ middleground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the Project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>low</u> . Views of the Project will primarily be experienced from a neutral or superior vantage point and will be predominantly intermittent due to the vegetation that will block the towers from view throughout the Blue Mountain Parcel.			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

1 The Project will introduce weak visual contrast to some outer edges of the Blue Mountain Parcel
2 and will be completely screened from view from the majority of the Blue Mountain Parcel.
3 Consequently, there will be low magnitude impacts and no change to the scenic quality
4 component scores. The overall scenic quality will remain medium (class B), and the natural
5 appearing landscape will be maintained such that the resource change is low. Views of the Project
6 will be predominantly intermittent due to the vegetation that will block the towers from view
7 throughout the Blue Mountain Parcel and views will primarily be experienced from a neutral or
8 superior vantage point such that viewer perception is low. Therefore, impact intensity will be low.

9 Degree to Which Impacts are Caused by the Project

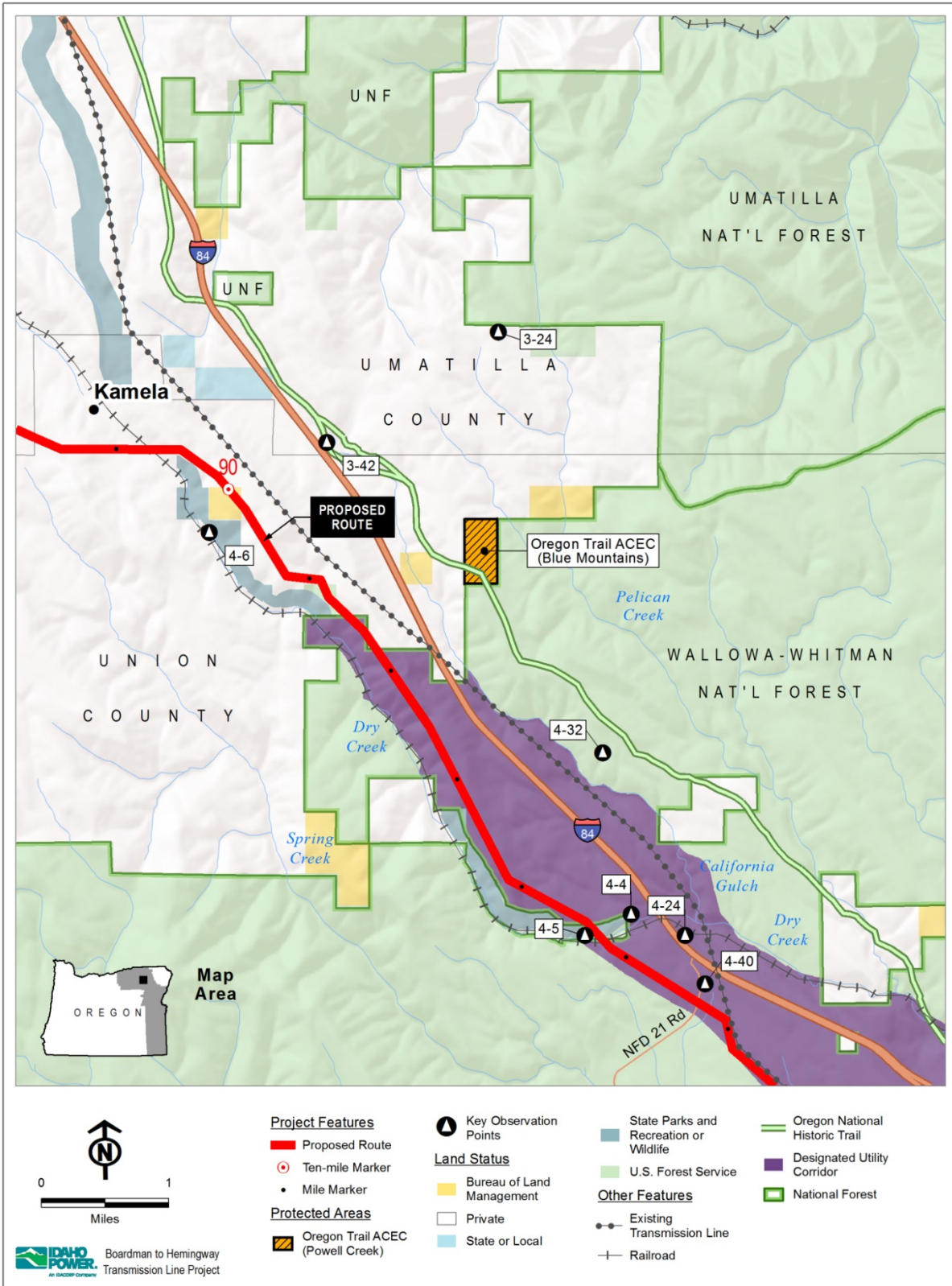
10 The low intensity impacts disclosed in this assessment are caused by the proposed facility and
11 are not the result of other past or present actions.

12 Context

13 According to the visual impact methodology, an evaluation of context is not required, as the
14 Project will have low intensity impacts, which are considered less than significant.

15 **Summary and Conclusion**

16 Visual impacts to the Oregon Trail ACEC – Blue Mountain Parcel will be of low intensity,
17 resulting from low resource change and low viewer perception. Impacts will be caused by the
18 proposed facility and are not the result of other past or present actions. Because impacts are of
19 low intensity, they are considered **less than significant**.



1
2 **Figure L-3-14. Oregon Trail Area of Critical Environmental Concern – Blue**
3 **Mountain Parcel**

3.15 Oregon Trail Area of Critical Environmental Concern– National Historic Trail Interpretive Center Parcel (SR B6)

Resource: Oregon Trail ACEC – National Historic Trail Interpretive Center (NHOTIC) Parcel (SR B6)

Relevant Exhibit: L, R, T

Relevant Plan: Baker Resource Management Plan (RMP) (BLM 1989)

Resource Type: Area-based resource. Views will be experienced from a variety of locations within the NHOTIC Parcel. Landscape setting will vary based on location within the resource.

Relevant KOP(s): 5-25c; 5-25d; 5-25e. Note that KOP 5-25c is located outside of the NHOTIC Parcel.

PART 1: Establish Baseline Conditions

Designation: The relevant and important values of the ACEC are historic and scenic. Per the Baker RMP (BLM 1989),

“Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated as an ACEC to preserve the unique historic resource and visual qualities of these areas. A management plan for preservation, public information and interpretation will be implemented. New uses incompatible with maintaining visual qualities or providing public interpretation will be excluded in a ½ mile corridor. No campgrounds will be developed within ¼ mile of the Oregon Trail in the ACEC. Rights-of-way will avoid the Oregon Trail. The ACEC is managed as VRM Class II.”

Interpretation of Designation:

Oregon Trail ACEC –NHOTIC Parcel: Visual quality of the NHOTIC Parcel should be maintained. Any new uses proposed within the boundary of the NHOTIC Parcel that will reduce visual quality will be excluded within 0.5 mile of the Oregon Trail. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

VRM Class II: Per VRM Class II objectives, the change in landscape character should be low such that the existing landscape character is retained within the boundary of the NHOTIC Parcel.

Resource Overview: The NHOTIC ACEC parcel is located on the north side of OR 86, approximately 4 miles northeast of Baker City (Figure L-3-15). The NHOTIC is one of the largest of the ACEC parcels, measuring 507 acres (BLM 1989), and is characterized by high recreational use (BLM 2011). Facilities at the site include the main NHOTIC building, with exhibit galleries, a theater and a gift shop; outdoor exhibits, including a pioneer wagon encampment, a replica stamp mill and an historic gold mine; picnic facilities; and 4 miles of interpretive trails, including a trail to a mile-long stretch of Oregon Trail ruts (BLM 2016). BLM (2011) reported over 66,000 visitors to the NHOTIC site in 2009. The relevant and important values of the NHOTIC Parcel are historic and scenic.

Per OAR 345-022-0080, Oregon Trail ACEC –NHOTIC Parcel (SR B6) is being evaluated as a Scenic Resource.

1 Per OAR 345-022-0040, Oregon Trail ACEC – NHOTIC Parcel is being evaluated as a
2 Protected Area.

3 The NHOTIC, the Oregon Trail, and other trails within the ACEC are considered recreation
4 opportunities. Per OAR 345-022-0100, Oregon Trail ACEC – NHOTIC Parcel (SR B6) is being
5 evaluated as a Recreation Resource. KOP 5-25c is located a Panorama Point, which is outside
6 of the NHOTIC Parcel. Visual impacts to this location are analyzed per OAR 345-022-0100.

7 **Existing Conditions:** The NHOTIC is located in the Continental Zone Foothills of the Blue
8 Mountains Ecoregion. This area is situated in the rain shadow of the Cascade Range and Blue
9 Mountains and is defined by wide ranges of temperature, high evapotranspiration, and early
10 season moisture stress. This temperature regime results in a wide distribution of desert shrubs
11 varying by soil depth, texture, and elevation. The landscape to the east and southeast consists
12 of the open terrain of the Virtue Flat area, with flat to gently rolling terrain in the foreground that
13 subtly transitions to steeper terrain in the middleground. These areas have a relatively even
14 cover of sagebrush and grassy vegetation. The view to the southeast is dominated by Big
15 Lookout Mountain and similar mountainous terrain, which becomes the major focal point in the
16 background of the view. Views to the northeast from the NHOTIC include the rolling terrain of a
17 small valley that transitions to a steeper, low-relief ridge in the middleground. Views to the west
18 include the Elkhorn Mountains, a major landform focal to the view, and the agricultural
19 development within the Baker Valley. Colors in the landscape primarily consist of varying
20 shades of browns and tans in the valley (based on the time of year), and the gray/blue hues of
21 the distant mountains.

22 Modifications to the natural landscape character in the foreground include portions of the paved
23 NHOTIC trail system, several light fixtures in the parking area, and the Lode Mine building on
24 the NHOTIC property. The NHOTIC Trail system includes a combination of difficulty levels:
25 Level 1 (Easy; Barrier-free access), Level 2 (Moderate; Barrier-free access) and Level 3
26 (Difficult). The paved surfaces of Level 1 and 2 Trails at the NHOTIC are visible in the
27 foreground from the Visitor Center and Amphitheater. OR 86 is evident beyond the NHOTIC
28 property, particularly from the trail system to the east. OR 86 is evident by its dark color and
29 smooth texture relative to the surrounding landscape, and also the consistent movement of
30 automobiles.

31 An existing 230-kV transmission line is located to the west. This feature is increasingly visible as
32 one approaches the western boundary of the NHOTIC Parcel. Agricultural and residential
33 development within the Baker Valley to the west is also visible from the NHOTIC Parcel.

34 The landscape character is “cultural.” Because of its location on BLM-administered lands, this
35 resource was evaluated using methods adapted from the BLM VRM system. Per Manual H-
36 8410-1 (BLM 1986), the scenic quality of the existing landscape for Oregon Trail ACEC
37 NHOTIC parcel is considered medium (class B) as shown below:

Oregon Trail ACEC – NHOTIC Parcel Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (1 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	1	0	2	5	3	0	13 (B)

38 **Viewer Groups:** Viewer groups include recreators and tourists visiting the recreational facilities
39 at the NHOTIC Parcel. The NHOTIC is located on the top of Flagstaff Hill and has extensive
40 background views to the west across Baker Valley to the Blue Mountains and to the southeast

1 across Virtue Flat. A trail network within the NHOTIC Parcel provides visitor access to areas
2 within the NHOTIC Parcel. Viewer experience within the NHOTIC Parcel varies. Panorama
3 Point is a lookout established outside of the NHOTIC Parcel, but included as a recreation
4 opportunity within the NHOTIC. This lookout directs view to the west across the valley.

5 Viewers hiking along trails will experience views in various directions depending on their
6 direction of travel, including views east toward Baker Valley and the Proposed Route. These
7 views will be from a superior vantage point where the Proposed Route will be visible in the
8 foreground or middleground distance zone, depending on location within the NHOTIC Parcel.
9 Viewers could be both transient and stationary.

10 **PART 2: Impact Likelihood and Magnitude Assessment**

11 Alternatives Not Evaluated

12 The NHOTIC Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW of
13 both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
14 Project feature are not discussed any further in this document.

15 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
16 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
17 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
18 these Alternative Routes are not forested, they are not analyzed for potential visual impacts
19 resulting from a cleared ROW.

20 Proposed Route

21 The Proposed Route is located within a mile of the NHOTIC main building and within 0.02 mile
22 of the western boundary of the NHOTIC Parcel (Figure L-3-15). KOPs 5-25c, 5-25d, and 5-25e
23 have views oriented toward the Project; simulated views from these locations are contained in
24 Exhibit L, Attachment L-4, Photosimulations. Note that KOP 5-25c is located outside of the
25 NHOTIC Parcel. Improvements to existing roads located approximately 0.02 mile directly north
26 and west of the western boundary of the NHOTIC Parcel will be made, which will also be visible.

27 In evaluating various alternatives for project siting, IPC concluded that potentially significant
28 visual impacts from facility structures in the vicinity of the NHOTIC could result. To address
29 potential impacts, IPC analyzed three design options aimed at reducing adverse impact to less
30 than significant: (1) applying a natina finish to the lattice structure; (2) using an H-frame
31 structure with galvanized finish; or, (3) using an H-frame structure with a natina finish. IPC
32 incorporated Option 3 into its revised Project design as planning for the final indicative design
33 for the Project progressed. The final indicative layout sites the Proposed Route to the east of the
34 active agriculture area, adjacent to the NHOTIC boundary. Because of the proximity of the
35 Project to the NHOTIC, IPC further refined their mitigation and design strategy by proposing to
36 use shorter stature H-frame structures ranging in height from 100 feet to 129 feet for towers
37 located directly to the north and west of the NHOTIC. The proposed finish is weathered steel.
38 The analysis presented in this document addresses the Project taking into account this
39 mitigation.

40 The transmission towers associated with the Proposed Route will be the primary source of
41 visual contrast experienced from the NHOTIC Parcel, primarily due to their scale and proximity.
42 The Baker Valley and mountainous landscape beyond will provide a backdrop for the Project
43 and will appear co-dominant with the Proposed Route and other past human developments,
44 including the existing 230-kV H-frame transmission structures.

1 The transmission towers associated with the Proposed Route will be the primary source of
 2 visual contrast experienced from the NHOTIC Parcel, primarily due to their scale and proximity.
 3 The Baker Valley and mountainous landscape beyond will provide a backdrop for the Project
 4 and will appear co-dominant with the Proposed Route and other past human developments,
 5 including the existing 230-kV H-frame transmission structures.

6 The large, geometrical form and smooth texture will contrast against the fine to medium, rolling,
 7 rounded hills, steep rugged mountains in the background, and wide, low, flat valley in the
 8 foreground. The perceived visual contrast and dominance of the Project will vary depending on
 9 viewers' locations throughout the NHOTIC Parcel. Viewers within the western portion of the
 10 NHOTIC Parcel (near Panorama Point [KOP 5-25c] and level 2 and 3 trails) will be within 0.1
 11 mile of the Proposed Route. When viewed at this distance, transmission towers will introduce
 12 moderate contrast and appear co-dominant with and the existing 230-kV H-frame transmission
 13 structures (including the portion of the 230-kV rebuild) and the natural features of Baker Valley
 14 and the Blue Mountains to the west. Views of the Project will be experienced from an elevated
 15 vantage point, with viewers gaze directed outward over the proposed towers. As viewers move
 16 throughout the NHOTIC Parcel using the various trails, viewpoints, interpretation sites, and
 17 visitor center, views will be predominantly peripheral or intermittent. Because of the distance of
 18 the visitor center from the Project, visual contrast will be reduced to a weak level, as towers will
 19 appear subordinate to the surrounding landscape. Because these amenities are distributed
 20 throughout the NHOTIC Parcel, viewer exposure to the Project will be variable. The number of
 21 towers visible will also vary depending on viewer position within the NHOTIC Parcel. Fewer
 22 towers will be visible from locations near the main NHOTIC building and level 1 trails situated
 23 west of the visitors center (KOP 5-25d; 5-25e) than from the level 2 and 3 trails situated near the
 24 western boundary of the NHOTIC Parcel because of rolling terrain throughout the NHOTIC
 25 Parcel.

26 The Project will affect the adjacent scenery of the NHOTIC Parcel. The Blue Mountains and
 27 Baker Valley situated to the west of the NHOTIC Parcel will continue to enhance the visual
 28 quality of the NHOTIC Parcel; however, this positive influence will be reduced somewhat by the
 29 presence of the Project. Despite the change to adjacent scenery, the scenic quality of the
 30 NHOTIC parcel of the Oregon Trail ACEC will remain at class B. The change in landscape
 31 character will be low such that the existing landscape character is retained within the boundary
 32 of the NHOTIC Parcel. The Project will conform to VRM Class II objectives as the proposed
 33 action occurs outside this management area.

Oregon Trail ACEC – NHOTIC Parcel Scenic Quality Rating: Operational Conditions

Landform (1 to 5)	Vegetation (1 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	1	0	2	4	3	0	12 (B)

34 Likelihood of Impact

35 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Viewers within the NHOTIC Parcel will experience low to medium magnitude impacts depending on their location within the NHOTIC Parcel. Viewers within the western portion of the NHOTIC Parcel (Panorama Point [KOP 5-25c] and level 2 and 3 trails) will be within 0.1 mile of the Proposed Route, where the towers will introduce moderate contrast and appear co-dominant with SR 86 to the south, existing 230-kV H-frame transmission structures, and the natural features of Baker Valley and the Blue Mountains to the west.. Therefore, the magnitude of impacts will be medium from these locations. Magnitude of impacts experienced from level 1 trails (KOP 5-25e) and the main NHOTIC building (KOP 5-25d) will be low. In summary, the highest magnitude of impacts experienced within the NHOTIC Parcel will be <u>medium</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
<p>Explanation: The Project will introduce weak to moderate contrast to the entire NHOTIC Parcel. Because no portion of the Project will be located within the NHOTIC Parcel, the changes to scenic quality will be related to impacts to the adjacent scenery of the landscape. The tall, large Blue Mountains and wide, expansive Baker Valley will continue to enhance the visual quality of the NHOTIC Parcel; however, this positive influence will be reduced slightly as a result of the proposed 500-kV towers located in the valley. Despite the change to adjacent scenery, the scenic quality of the NHOTIC parcel of the Oregon Trail ACEC will remain at class B. The Project will be one of several developments contributing to the overall landscape character and quality. Resource change will be <u>medium</u>.</p>			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the Project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the Project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the Project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
<p>Explanation: Views of the Project will be experienced from an elevated vantage point, where views across the top of transmission towers could be sustained. As viewers move throughout the NHOTIC Parcel using the various trails, viewpoints, interpretation sites, and visitor center views will be predominantly peripheral or intermittent. Because these amenities are distributed throughout the NHOTIC Parcel, viewer exposure to the Project will be variable and <u>medium</u> at most.</p>			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project, as mitigated to include H-frame structures, will result in medium intensity impacts to
 4 visual qualities of the Oregon Trail ACEC - NHOTIC Parcel. Impacts will slightly reduce the
 5 scenery adjacent to the NHOTIC Parcel but will not alter the overall scenic quality of the
 6 NHOTIC Parcel. The existing landscape character will be retained within the boundary of the
 7 NHOTIC Parcel and resource change will be low. Because views of the Project will be
 8 experienced from an elevated vantage point, and will be predominantly peripheral or
 9 intermittent, viewer perception will be medium. Taking into account mitigation, visual impacts to
 10 the Oregon Trail ACEC - NHOTIC Parcel will be of medium intensity.

11 Degree to Which Impacts are Caused by the Project

12 The scenic quality of the resource under operational conditions is the result of the combined
 13 influence of the Project and other past or present actions, including OR 86, the existing 230-kV
 14 H-frame transmission structures, and the agricultural and residential development within the
 15 Baker Valley, that collectively influence adjacent scenery of the resource.

16 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: Oregon Trail Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and will be managed as an ACEC to preserve the unique historic resource and visual qualities of these areas. Because of this management direction the NHOTIC ACEC is an <u>important</u> scenic resource per OAR 345-022-0080.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.

Indicator	Context Criteria
<p>Explanation: The NHOTIC Parcel was designated preserve the unique historic resource, the Oregon Trail, and visual qualities within this geographic area. Therefore, it is understood that if the scenic resources within the geographic boundary of the NHOTIC Parcel are maintained and no development occurs within ¼ mile of the Oregon Trail within the ACEC, the resource values for which this parcel was designated to protect will persist. As such, although medium intensity impacts to visual resources within this parcel will occur, these impacts will not preclude the ability of the NHOTIC Parcel to provide the scenic value for which it was designated in the BLM Baker RMP (BLM 1989). It is also understood that, per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). To address this provision, IPC has included project design measures to reduce the intensity of impacts to visual resources by using low stature H-frame structures ranging in height from 100 to 129 feet.</p>	

1

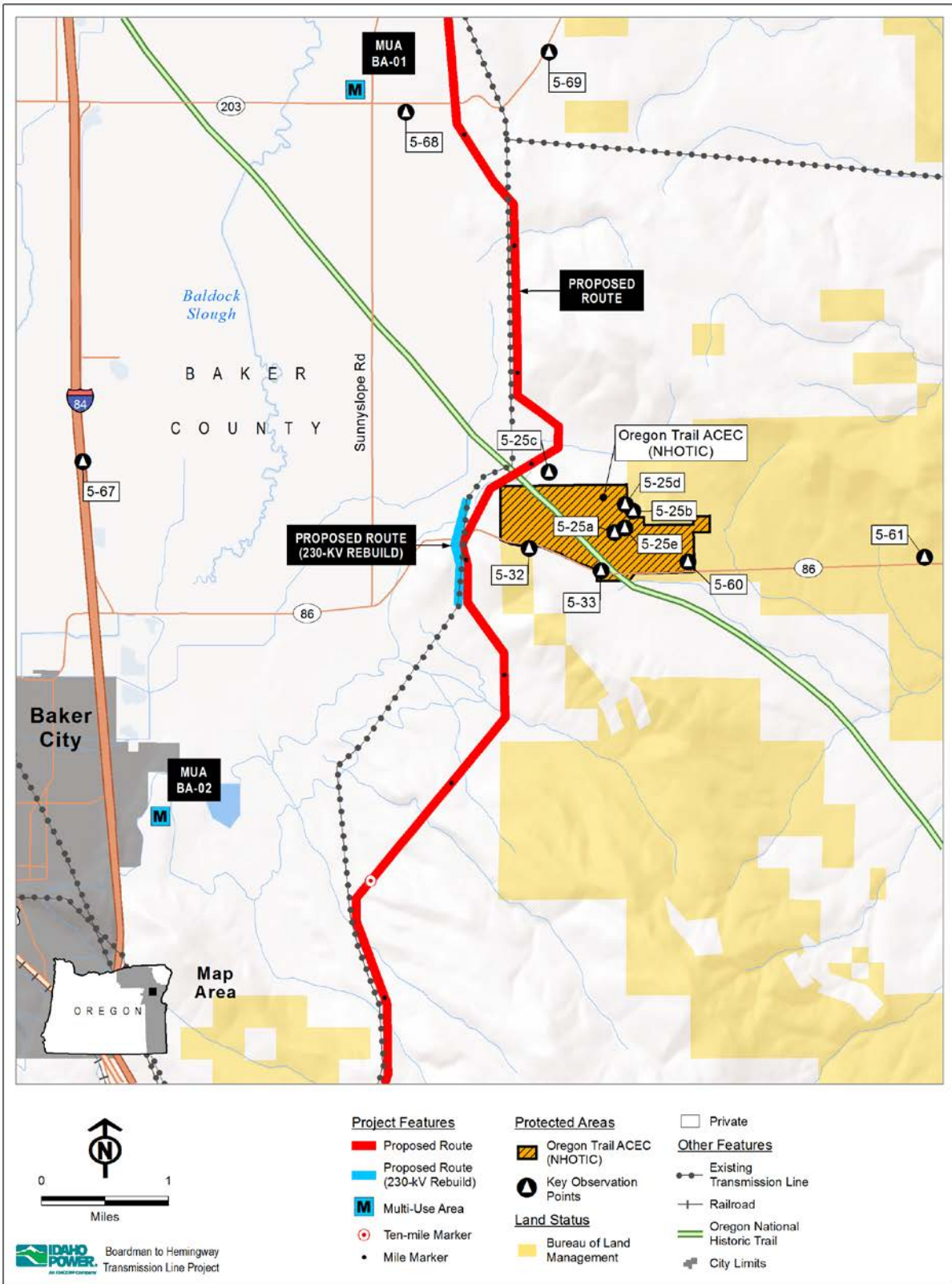
	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

2

3 The NHOTIC Parcel was designated preserve the unique historic resource, the Oregon Trail,
 4 and visual qualities within this geographic area. Therefore, it is understood that if the visual
 5 resources within the geographic boundary of the NHOTIC Parcel are maintained, the resource
 6 values for which this parcel was designated to protect will persist. As such, although medium
 7 intensity impacts to visual resources within this parcel will occur, these impacts will not preclude
 8 the ability of the NHOTIC Parcel to provide the scenic value for which it was designated in the
 9 BLM Baker RMP (BLM 1989) and provides to recreational visitors. Additionally, IPC is
 10 incorporating mitigation measures as part of the design to reduce the intensity of impacts.

11 **Summary and Conclusion**

12 Visual impacts to the Oregon Trail ACEC – NHOTIC Parcel will be medium intensity, resulting
 13 from both medium resource change and viewer perception. Impacts will result from the
 14 combined influence of the Project and other past or present actions. Medium intensity impacts
 15 will not preclude the NHOTIC Parcel from providing the visual qualities that exist within the
 16 ACEC, or as influenced from the surrounding landscape. Visual impacts to the NHOTIC Parcel
 17 will be **less than significant**.



1
2 **Figure L-3-15. Oregon Trail Area of Critical Environmental Concern – National**
3 **Historic Trail Interpretive Center Parcel**

3.16 Oregon Trail Area of Critical Environmental Concern – Powell Creek Parcel

Resource: Oregon Trail ACEC – Powell Creek Parcel (SR B6)

Relevant Exhibit: L, R

Exhibit R Map ID: SR B6

Relevant Plan: Baker RMP (BLM 1989)

Resource Type: Area-based

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Designation: Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and will be managed as an ACEC to preserve the unique historic resource and visual qualities of these areas. A management plan for preservation, public information, and interpretation will be implemented. New uses incompatible with maintaining visual qualities or providing public interpretation will be excluded in within 0.5 mile of the trail. No campgrounds will be developed within 0.25 mile of the Oregon Trail in the ACEC. Rights-of-way will avoid the Oregon Trail.

Interpretation of Designation: Visual quality of the Powell Creek Parcel should be maintained. Any new uses proposed within the boundary of the Powell Creek Parcel that will reduce visual quality will be excluded within 0.5 mile of the Oregon Trail. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse visual impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

Resource Overview: The Powell Creek parcel is one of the seven Oregon Trail ACEC parcels within the Baker Resource Management Area and is located slightly east of I-84 about 0.6 mile southeast of Dixie and 5 miles north of Lime (Figure L-3-16). This parcel includes approximately 70 acres and has direct access via Chimney Creek Road (BLM 2011). There are no recreation facilities within the Powell Creek parcel.

Per OAR 345-022-0080, Oregon Trail ACEC – Powell Creek Parcel (SR B6) is being evaluated as a Scenic Resource.

Per OAR 345-022-0040, Oregon Trail ACEC – Powell Creek Parcel (SR B6) is being evaluated as a Protected Area.

The Oregon Trail ACEC – Powell Creek Parcel is not considered an important Recreation Opportunity and is not evaluated per OAR-022-0100.

Existing Conditions: The Powell Creek Parcel sits slightly above I-84 and the Burnt River, which are situated at the bottom of a sinuous valley with moderate to steep sidewalls. Colors are primarily medium to dark brown, tan, and gray. Vegetation is primarily low-growing sagebrush steppe on the highlands with some surrounding agricultural areas. Existing development includes I-84 and existing 69- and 138-kV transmission lines located approximately 0.3 mile to the west of the Powell Creek Parcel, and existing gravel-surfaced roads that travel through the Powell Creek Parcel and along the western boundary. This existing development competes for visual attention with the natural features of the landscape and is co-

1 dominant. The landscape has a cultural landscape character and provides some evidence of the
 2 historic landscape of the Oregon Trail. Lasting impressions of the landscape include both
 3 human development and natural features. Using the BLM's visual resource inventory methods
 4 per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Oregon
 5 Trail ACEC – Powell Creek Parcel is considered low (class C) as shown below:

Oregon Trail ACEC – Powell Creek Parcel Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	1	2	1	8 (C)

6
 7 **Viewers:** Viewers are limited due to the lack of recreational development within the Powell
 8 Creek Parcel. Visitors are assumed to be local residents driving through the area and
 9 occasional visitors of the Oregon Trail remnants. The moderately sized hills in the area limit
 10 views from the Powell Creek Parcel to the foreground and middleground distance zones.

11 **PART 2: Impact Likelihood and Magnitude Assessment**

12 Alternatives Not Evaluated

13 The Powell Creek Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
 14 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
 15 Project feature are not discussed any further in this document.

16 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 17 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 18 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 19 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 20 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 21 impacts resulting from a cleared ROW.

22 Proposed Route

23 The Proposed Route is located approximately 1.2 miles to the south the Powell Creek Parcel.
 24 The 500-kV line will traverse the west side of the ridgeline; however, views of these towers will
 25 be largely shielded by topography located between the ACEC parcel and the Proposed Route.
 26 Moderate improvements will be made to an existing road located to the southwest of the parcel,
 27 across I-84. The roadway will become more apparent on the landscape as a result of this
 28 change, with horizontal and diagonal lines contrasting at a moderate level against the hillslope.
 29 An approximately 735-acre work area will be located to the southwest along Rye Valley Road
 30 and will introduce strong visual contrast during the temporary construction period.

31 Under operational conditions, the skylined towers 186/2, 186/3, and 186/4 will appear prominent
 32 on the ridgeline, as these structures support the span of the conductor across Rye Valley Road.
 33 Views of the Project will be equally head-on and peripheral, depending on the viewer's location
 34 and viewing direction from within the Powell Creek Parcel, and will be experienced from an
 35 inferior vantage point. The Proposed Route will introduce moderate visual contrast throughout
 36 the Powell Creek Parcel, and will appear codominant. Overall, the landscape will retain its
 37 cultural landscape character such that human development and natural features will be co-
 38 dominant, and some evidence of the historic Oregon Trail landscape will remain. The
 39 transmission towers associated with the Proposed Route will reduce the adjacent scenery to the
 40 west. The scenic quality of the Powell Creek Parcel will remain low (class C).

Oregon Trail ACEC – Powell Creek Parcel Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	0	2	1	7 (C)

1 Likelihood of Impact

2 IPC considered all identified impacts to be “likely” to occur.

3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Considerable development exists near the Powell Creek Parcel, including I-84 located approximately 0.5 mile to the west, an existing 138-kV line located just west of I-84, and an existing 69-kV transmission line located just east of I-84. The Proposed Route introduces a <u>medium</u> magnitude impact, as skylined structures will attract attention and appear co-dominant with existing development.			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The transmission towers associated with the Proposed Route will lower the quality of the Powell Creek Parcel's adjacent scenery. However, this change will only result in a small change to the scenic quality scoring and the overall scenic quality will not change. The cultural landscape character will be maintained. Therefore, resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the Project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the Project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the Project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>medium</u> . Views of the Project will be equally head-on and peripheral, depending on the viewer's location and viewing direction in the Powell Creek Parcel, and will be experienced from an inferior vantage point.			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project will result in medium magnitude visual impacts to the Powell Creek parcel of the
 4 Oregon Trail ACEC. However, the landscape in and around the Powell Creek Parcel has been
 5 modified by previous actions that are visible throughout the entire Powell Creek Parcel. The
 6 extent to which this human development is visible from the Powell Creek Parcel and its overall
 7 dominance in the landscape will not increase and the landscape character and scenic quality of
 8 the Powell Creek Parcel will not change; therefore, resource change will be medium. Views of
 9 the Project will be equally head-on and peripheral, depending on the viewer's location and
 10 viewing direction in the Powell Creek Parcel, and will be experienced from an inferior vantage
 11 point such that viewer perception will be medium. Therefore, impact intensity will be medium.

12 Degree to Which Impacts are Caused by the Project

13 The scenic quality of the resource under operational conditions is the result of the combined
 14 influence of the Project and other past or present actions, including I-84 located approximately
 15 0.5 mile to the west, an existing 138-kV line located just west of I-84, and an existing 69-kV
 16 transmission line located just east of I-84.

17 Context

18 The Powell Creek Parcel was designated to preserve the unique historic resource, the Oregon
 19 Trail, and visual qualities within this geographic area. Therefore, although medium intensity
 20 impacts to visual resources within this Powell Creek Parcel will be affected, these impacts will
 21 not preclude the ability of the Powell Creek Parcel to provide the scenic value for which it was
 22 designated in the BLM Baker RMP (BLM 1989).

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and will be managed as a Powell Creek Parcel to preserve the unique historic resource and visual qualities of these areas. Because of this management direction, the Powell Creek Parcel is an <u>important</u> scenic resource per OAR 345-022-0080.	

Indicator	Context Criteria
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: The Powell Creek Parcel was designated to preserve the unique historic resource, the Oregon Trail, and visual qualities within this geographic area. Therefore, it is understood that if the scenic resources within the geographic boundary of this Powell Creek Parcel are maintained, the resource values for which this Powell Creek Parcel was designated to protect will persist. Although the Project will result in medium intensity impacts to visual resources within this Powell Creek Parcel, these impacts will not preclude the ability of the Powell Creek Parcel to provide the scenic value for which it was designated in the BLM Baker RMP (BLM 1989).	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

1 Summary and Conclusion

- 2 Visual impacts to the Powell Creek Parcel will be of medium intensity, resulting from both
 3 medium resource change and viewer perception. Impacts will result from the combined
 4 influence of the Project and other past or present actions. The Project will not preclude the
 5 ability of the Powell Creek Parcel to provide the scenic value for which it was designated in the
 6 BLM Baker RMP (BLM 1989). Visual impacts to the Powell Creek Parcel will be **less than**
 7 **significant.**

3.17 Oregon Trail Area of Critical Environmental Concern – Straw Ranch Parcel 1

Resource: Oregon Trail ACEC – Straw Ranch Parcel 1

Relevant Exhibit: L, R

Relevant Plan: Baker Resource Management Plan (BLM 1989)

Resource Type: Area-based

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Designation: Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and managed as an ACEC to preserve the unique historic resource and visual qualities of these areas. A management plan for preservation, public information, and interpretation will be implemented. New uses incompatible with maintaining visual qualities or providing public interpretation will be excluded within a 0.5 mile of the trail. No campgrounds will be developed within 0.25 mile of the Oregon Trail in the ACEC. Rights-of-way will avoid the Oregon Trail (BLM 1989).

Interpretation of Designation: Visual quality of the ACEC should be maintained. Any new uses proposed within the boundary of the ACEC that would reduce visual quality would be excluded within 0.5 mile of the Oregon Trail. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse visual impacts from the Project be identified, IPC should mitigate those impacts to the extent feasible.

Resource Overview: The Straw Ranch Parcel 1 is one of the seven Oregon Trail ACEC parcels within the Baker Resource Management Area and is located about 2.2 miles southeast of Pleasant Valley on the north side of I-84 (Figure L-3-17). The parcel measures approximately 160 acres and has unimproved road access to the south end of the parcel (BLM 2011). There are no recreation facilities within the Straw Ranch Parcel 1.

Per 345-022-0080, Oregon Trail ACEC – Straw Ranch Parcel 1 (SR B6) is being evaluated as a Scenic Resource.

Per OAR 345-022-0040, Oregon Trail ACEC – Straw Ranch Parcel 1 (SR B6) is being evaluated as a Protected Area.

Oregon Trail ACEC – Straw Ranch Parcel 1 is not considered an important Recreation Opportunity and is not evaluated per OAR 345-022-0100.

Existing Conditions: The natural landscape is characterized by flat to rolling terrain with some rock outcroppings, including some agricultural and grazing lands. Vegetation typically consists of low grasses and sagebrush that appear green, grey, and brown. The Blue Mountains are present to the west and Wallowa Mountains to the east. Existing development visible from the Straw Ranch ACEC Parcel 1 includes I-84 immediately to the south, a gravel quarry to the northwest, scattered residential and ranching development, gravel surface roads, and existing 69-kV and 138-kV transmission lines that cross through the southern half of the ACEC parcel in an east to west direction. The natural landscape features are co-dominant with the development, and expansive views across the landscape in all directions exist providing some evidence of the historic landscape of the Oregon Trail. The landscape has a cultural landscape character. Using the BLM's visual resource inventory methods per Manual H-8410-1 (BLM

- 1 1986), the scenic quality of the existing landscape for the Straw Ranch Parcel 1 is considered
 2 low (class C) as shown below:

Oregon Trail ACEC - Straw Ranch Parcel 1 Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	3	2	-2	7 (C)

- 3
 4 **Viewers:** Viewers are limited due to the lack of recreational development within the Straw
 5 Ranch Parcel 1. Primary viewers are assumed to be local residents, driving through or near the
 6 Straw Ranch Parcel 1, and occasional visitors to the Oregon Trail remnants. The moderately
 7 sized hills in the area limit views from the Straw Ranch Parcel 1 to the foreground and
 8 middleground distance zones.

9 **PART 2: Impact Likelihood and Magnitude Assessment**

10 Alternatives Not Evaluated

11 The Straw Ranch 1 Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
 12 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
 13 Project feature are not discussed any further in this document.

14 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 15 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 16 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 17 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 18 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 19 impacts resulting from a cleared ROW.

20 Proposed Route

21 The Project will be located within the foreground distance zone. The Proposed Route will pass
 22 the Straw Ranch ACEC Parcel 1 approximately 0.1 mile to the north. New primitive and graded
 23 roads associated with the Proposed Route will also be present immediately north of and
 24 approximately 0.4 mile east of the Straw Ranch Parcel 1. The transmission towers associated
 25 with the Proposed Route will be the primary source of visual contrast experienced from the
 26 Straw Ranch Parcel 1, primarily due to their size, proximity, and the number of towers that will
 27 be visible. The large, geometrical form and smooth texture will contrast against the fine to
 28 medium rolling, rounded hills and sinuous drainages. The light, reflective color will also contrast
 29 against the light to medium brown vegetation and outcrops. The moderately rolling topography
 30 behind the towers will provide some backdrop, although portions of some towers will still be
 31 skylined. The Project access roads, though visible, will appear consistent with the surrounding
 32 landscape due to the numerous gravel roads that already exist within and near the Straw Ranch
 33 Parcel 1.

34 The Project will create moderate visual contrast against the existing landscape and will appear
 35 co-dominant with I-84 to the southwest and the existing transmission line crossing through the
 36 Straw Ranch Parcel 1. Due to the proximity, moderate visual contrast from the Proposed Route
 37 will be experienced throughout the entire Straw Ranch Parcel 1. Views of the Project will be
 38 equally head-on and peripheral depending on the viewer's location and viewing direction within
 39 the Straw Ranch Parcel 1. Views will be experienced generally from a neutral vantage point.

- 1 The proposed towers will reduce the quality of the scenery immediately adjacent to the Straw
- 2 Ranch Parcel 1, but will be consistent with the existing landscape modification, including the
- 3 transmission lines that cross the Straw Ranch Parcel 1. Development and natural landscape
- 4 features will remain co-dominant aspects of the landscape such that the cultural landscape
- 5 character will be maintained and the existing scenic quality of the Straw Ranch Parcel 1 will not
- 6 be altered.

Oregon Trail ACEC - Straw Ranch Parcel 1 Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	1	2	-2	5 (C)

7 Likelihood of Impact

- 8 IPC considered all identified impacts to be “likely” to occur.

9 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

1 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Considerable development exists within and near the Straw Ranch Parcel 1, including I-84 located immediately south, and existing 69- and 138-kV transmission lines that cross the Straw Ranch Parcel 1. Although the Project will be in close proximity to the Straw Ranch Parcel 1, it will appear co-dominant and create moderate visual contrast to the cultural landscape. Impact magnitude will be <u>medium</u> .			

2 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The transmission towers associated with the Proposed Route will lower the quality of the Straw Ranch Parcel 1's adjacent scenery. However, this change will only result in a small reduction in scenic quality score, and the scenic quality class will not change. The cultural landscape character will be maintained. Therefore, resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>medium</u> , as views of the Project will be equally head-on and peripheral (depending on the viewer's location and viewing direction within the Straw Ranch Parcel 1) and experienced generally from a neutral vantage point.			

1 **PART 3: Consideration of Intensity, Causation, and Context**

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project will result in medium intensity visual impacts to the Straw Ranch Parcel 1 of the
 4 Oregon Trail ACEC. The landscape in and around Straw Ranch Parcel 1 has been modified by
 5 previous actions that are visible throughout the entire Straw Ranch Parcel 1, including an
 6 adjacent interstate highway and two existing transmission lines running through the parcel. The
 7 quality and character of the landscape within the Straw Ranch Parcel 1 will not be altered by the
 8 Project, where both the development and natural landscape features will be prevalent such that
 9 the Straw Ranch Parcel 1 will continue to provide some evidence of the historic landscape of
 10 the Oregon Trail. Views of the Project will be equally head-on and peripheral depending on the
 11 viewer’s location and viewing direction within the Straw Ranch Parcel 1 and will be experienced
 12 generally from a neutral vantage point.

13 Degree to Which Impacts are Caused by the Project

14 The scenic quality of the resource under operational conditions is the result of the combined
 15 influence of the Project and other past or present actions, including I-84, a gravel quarry,
 16 scattered residential and ranching development, gravel surface roads, and existing 69-kV and
 17 138-kV that collectively contribute to the cultural landscape character of the resource.

18 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and will be managed as an ACEC to preserve the unique historic resource and visual qualities of these areas. Because of this management direction the Straw Ranch Parcel 1 ACEC is an <u>important</u> scenic resource per OAR 345-022-0080.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.

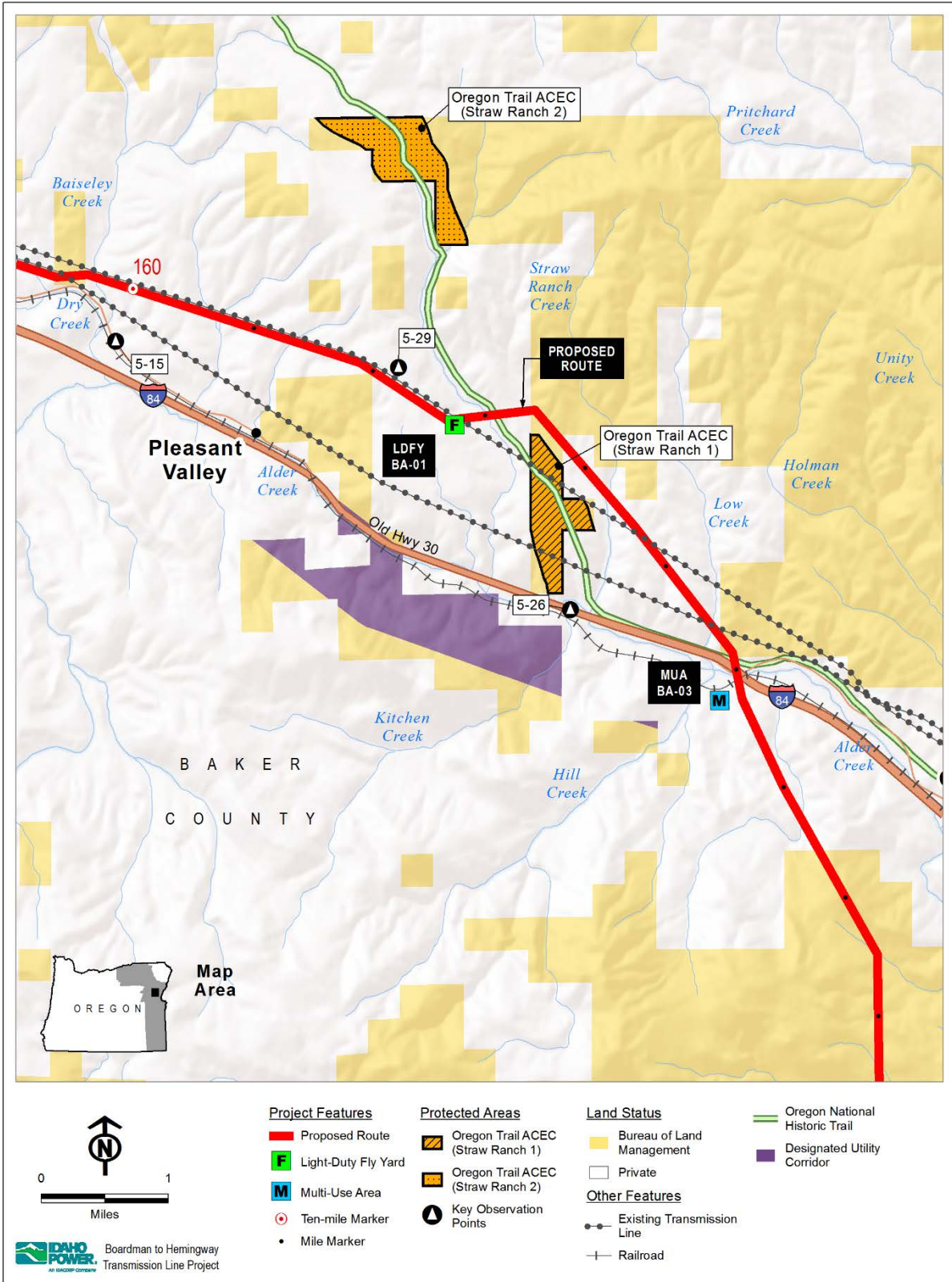
Indicator	Context Criteria
<p>Explanation: The Straw Ranch Parcel 1 was designated to preserve the unique historic resource, the Oregon Trail, and visual qualities within this geographic area. Therefore, it is understood that if the scenic resources within the geographic boundary of the Straw Ranch Parcel 1 are maintained, the resource values for which the Oregon Trail ACEC – Straw Creek Parcel 1 was designated to protect would persist. Therefore, although medium intensity impacts to visual resources within Straw Ranch Parcel 1 will be affected, these impacts will not preclude the ability of Straw Ranch Parcel 1 to provide the scenic value for which it was designated in the BLM Baker RMP (BLM 1989).</p>	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

- 1 Visual impacts to the Straw Ranch Parcel 1 will not preclude its ability to provide the scenic
- 2 value for which it was designated in the BLM Baker RMP (BLM 1989).

3 **Summary and Conclusion**

- 4 Visual impacts to the Straw Ranch Parcel 1 of the Oregon Trail ACEC will be of medium
- 5 intensity, resulting from both medium resource change and medium viewer perception. Impacts
- 6 will result from the combined influence of the Project and other past or present actions. The
- 7 Project will not preclude the ability of Straw Ranch Parcel 1 to provide the scenic value for which
- 8 it was designated in the BLM Baker RMP (BLM 1989). Visual impacts to Straw Ranch Parcel 1
- 9 of the Oregon Trail ACEC will be **less than significant**.



1
2 **Figure L-3-17. Oregon Trail Area of Critical Environmental Concern – Straw Ranch**
3 **Parcel 1**

3.18 Oregon Trail Area of Critical Environmental Concern – Straw Ranch Parcel 2

Resource: Oregon Trail ACEC – Straw Ranch Parcel 2

Relevant Exhibit: L, R

Relevant Plan: Baker Resource Management Plan (BLM 1989)

Resource Type: Area-based

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Purpose of Designation: Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and will be managed as an ACEC to preserve the unique historic resource and visual qualities of these areas. A management plan for preservation, public information, and interpretation will be implemented. New uses incompatible with maintaining visual qualities or providing public interpretation will be excluded within 0.5 mile of the trail. No campgrounds will be developed within 0.25 mile of the Oregon Trail in the ACEC. Rights-of-way will avoid the Oregon Trail.

Interpretation of Designation: Visual quality of the Straw Ranch Parcel 2 should be maintained. Any new uses proposed within the boundary of the Straw Ranch Parcel 2 that will reduce visual quality will be excluded within 0.5 mile of the Oregon Trail. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse visual impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

Resource Overview: Straw Ranch Parcel 2 is one of the seven Oregon Trail ACEC parcels within the Baker Resource Management Area (Figure L-3-18). The Straw Ranch Parcel 2 is located approximately 2 miles northeast of Pleasant Valley and measures approximately 230 to 240 acres. The Straw Ranch Parcel 2 is not accessible from existing roads, nor is it crossed by existing transmission lines. There are no recreational facilities within the Straw Ranch Parcel 2.

Per 345-022-0080, Oregon Trail ACEC – Straw Ranch Parcel 2 (SR B6) is being evaluated as a Scenic Resource.

Per OAR 345-022-0040, Oregon Trail ACEC – Straw Ranch Parcel 2 (SR B6) is being evaluated as a Protected Area.

Straw Ranch Parcel 2 is not considered an important Recreation Opportunity, and is not evaluated per OAR 345-022-0010.

Existing Conditions: The natural landscape is characterized by flat to rolling terrain with some rock outcroppings, including some agricultural and grazing lands. Vegetation generally consists of low grasses and sagebrush that appear green, grey, and brown. The Blue Mountains are present to the west and Wallowa Mountains to the east. The landscape is undeveloped in this area, and the landscape character is natural appearing, despite existing gravel-surfaced roads and 69- and 138-kV transmission lines located approximately 1 mile to the southwest. Views to the southwest and south toward the transmission lines are primarily blocked by a ridgeline such that their visual prominence in the landscape is low. Using the BLM's visual resource inventory methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Straw Ranch Parcel 2 is considered low (class C) as shown below:

Oregon Trail ACEC - Straw Ranch Parcel 2 Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	2	2	0	8 (C)

1

2 **Viewers:** Viewers are limited due to the lack of recreational development and access within the
3 ACEC parcel, and be limited to local residents and individuals using local roads in the area. The
4 moderately sized hills in the area limit views from the Straw Ranch Parcel 2 to the foreground
5 and midground distance zones.

6 **PART 2: Impact Likelihood and Magnitude Assessment**

7 Alternatives Not Evaluated

8 The Straw Ranch 1 Parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
9 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
10 Project feature are not discussed any further in this document.

11 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
12 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
13 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
14 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
15 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
16 impacts resulting from a cleared ROW.

17 Proposed Route

18 The Proposed Route is located 1.1 miles to the south of Straw Ranch Parcel 2. Potential views
19 to the southwest and south towards the transmission towers located within the Proposed Route
20 will be primarily blocked by a ridgeline approximately 0.4 mile southwest of the Straw Ranch
21 Parcel 2. Views to the west and northwest toward the Proposed Route will not be blocked;
22 however, the Proposed Route will be located 4 miles or more from the Straw Ranch Parcel 2.
23 Generally, visibility of the Project will be higher from elevated areas and lower from the lower
24 elevation valleys within the Straw Ranch Parcel 2. Existing roads with potential viewers exist
25 both in high and low elevation areas within the Straw Ranch Parcel 2.

26 Where visible, the large, geometrical form and smooth texture of the transmission towers will
27 contrast against the fine to medium rolling and rounded hills. The light, reflective color will also
28 contrast against the light to medium brown vegetation and rock outcrops. However, because the
29 towers will be primarily blocked (with only the tops of the towers visible), the structures are
30 expected to contrast at a weak level against the existing landscape. Though unobstructed views
31 of the towers will occur, the structures will be located at a distance of 4 miles or more. The
32 distance of the towers from the resource will reduce visual contrast to a weak level.

33 Where the Proposed Route will be visible, it will generally follow the alignment of existing 69-
34 and 138-kV transmission lines and appear consistent with those structures. Views of the Project
35 will primarily be experienced from a neutral vantage point and will be intermittent due to the
36 visual obstructions. Therefore, the adjacent scenery will continue to enhance the overall scenic
37 quality of Straw Ranch Parcel 2. The landscape will retain its natural-appearing landscape
38 character, as structures associated with the existing and proposed transmission corridors will be
39 subordinate to the surrounding large-scale landscape. Scenic quality will remain low (class C).

Oregon Trail ACEC - Straw Ranch Parcel 2 Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	0	2	2	2	0	8 (C)

- 1 Likelihood of Impact
- 2 IPC considered all identified impacts to be “likely” to occur.
- 3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

- 4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: At distances of 2 miles or less, the towers will be primarily blocked, with only the tops of the towers visible, resulting in weak visual contrast. At distances of 4 miles or more, there are unobstructed views of the towers, but visual contrast will also be weak due to distance. The transmission towers associated with the Proposed Route will appear consistent with the existing 69- and 138-kV transmission lines and generally subordinate to the large-scale landscape. Therefore, impact magnitude will be <u>low</u> .			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality/attractiveness and/or character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality; however, it will not reduce the quality/attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality/attractiveness class and will alter landscape character of the resource.
Explanation: Adjacent scenery will continue to enhance the overall scenic quality of Straw Ranch Parcel 2. The landscape will retain its natural-appearing landscape character, as structures associated with the existing and proposed transmission corridors will appear weak and generally subordinate to the surrounding large-scale landscape. Scenic quality will remain low (Class C). Therefore, resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>low</u> as views of the Project will primarily be intermittent due to visual obstructions. Views of the Project will be experienced from a neutral vantage point.			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

1 The Project will result in low magnitude impacts to the Straw Ranch Parcel 2 primarily due to
2 topographic screening and distance. The landscape will retain its natural-appearing landscape
3 character, and scenic quality will remain low (Class C), such that the resource change is low.
4 Views of the Project will primarily be intermittent due to visual obstructions and will be
5 experienced from a neutral vantage point; therefore, viewer perception will also be low.
6 Therefore, visual impacts will be of low intensity.

7 Degree to Which Impacts are Caused by the Project

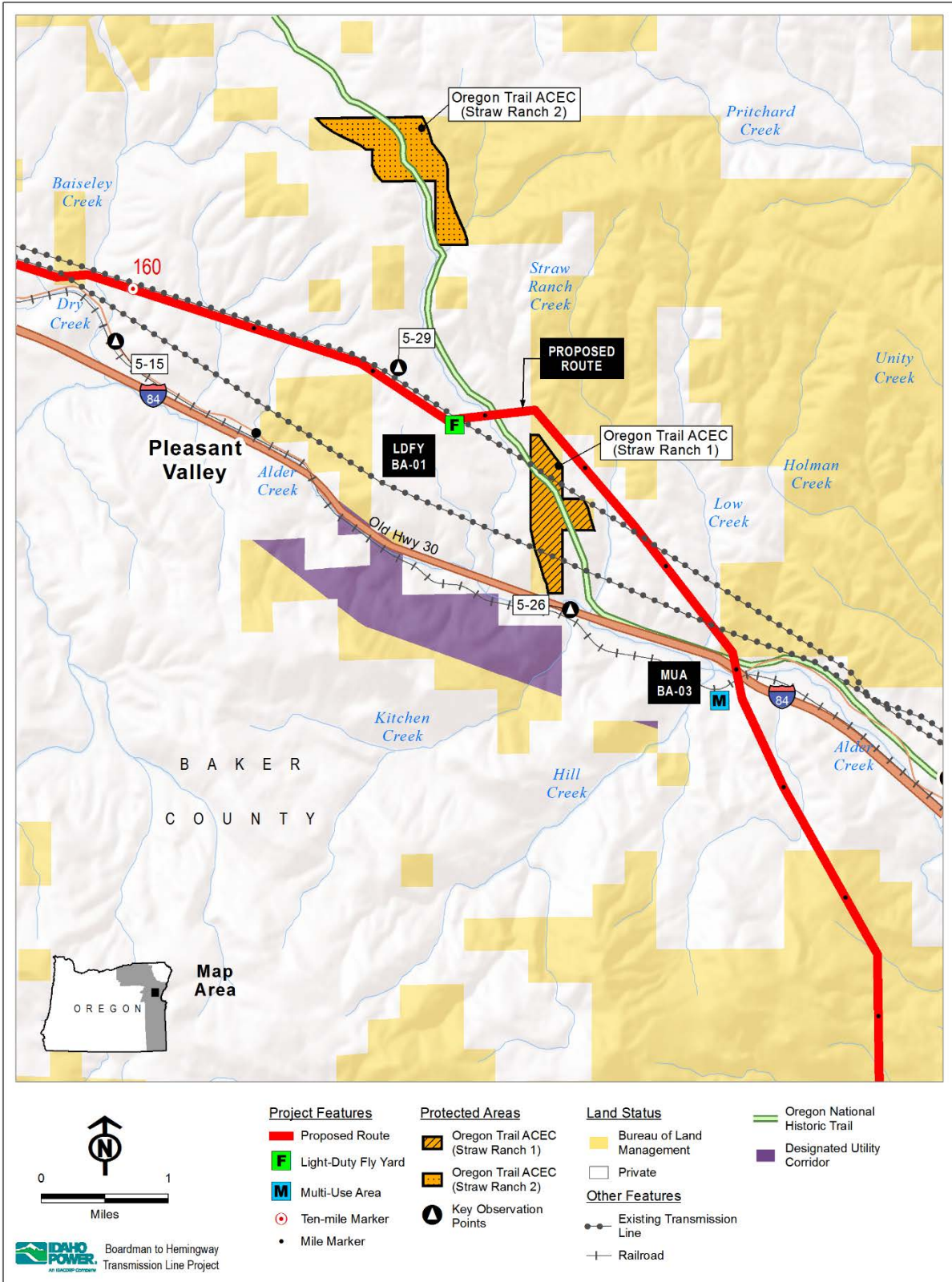
8 The scenic quality of the resource under operational conditions is the result of the combined
9 influence of the Project and other past or present actions, existing 69- and 138-kV transmission
10 lines. These modifications all appear subordinate to the natural appearing landscape of the
11 resource.

12 Context

13 According to the visual impact methodology, an evaluation of context is not required, as the
14 Project will have low intensity impacts, which is considered less than significant.

15 **Summary and Conclusion**

16 Visual impacts to the Straw Ranch Parcel 2 of the Oregon Trail ACEC will be of low intensity,
17 resulting from both low resource change and low viewer perception. Impacts will result from the
18 combined influence of the Project and other past or present actions. The Project will not
19 preclude the ability of Straw Ranch Parcel 2 to provide the scenic value for which it was
20 designated in the BLM Baker RMP (BLM 1989). Visual impacts to Straw Ranch Parcel 2 of the
21 Oregon Trail ACEC will be **less than significant**.



1
2 **Figure L-3-18. Oregon Trail Area of Critical Environmental Concern – Straw Ranch**
3 **Parcel 2**

3.19 Oregon Trail Area of Critical Environmental Concern – Tub Mountain Parcel (VRM M2) and Oregon Trail Special Recreation Management Area – Tub Mountain Parcel

Resource: Oregon Trail ACEC – Tub Mountain Parcel (VRM M2) and Oregon Trail Special Recreation Management Area (SRMA) – Tub Mountain Parcel

Relevant Exhibit: L, R, T

Relevant Plan: SEORMP (BLM 2002)

Resource Type: Area

Relevant KOP(s): 8-1; 8-24

PART 1: Establish Baseline Conditions

Designation: The relevant and important values of the Oregon Trail ACEC are historic, cultural, and scenic. Per the SEORMP,

“Management decisions provide for Oregon Trail protection within a 0.25-mile wide corridor... The scenic values of this ACEC are associated with the integrity of the historical landscape. The rolling hills, covered with sagebrush, grasses, and dust, remain relatively unchanged since the emigrants passed through this country and contribute to the overall scenic value... Rights-of-way will be granted only if there is minimal conflict with identified resource values and impacts can be mitigated...the ACEC will be VRM Class II” (BLM 2002).

The ACEC is also designated as an SRMA, which is managed for public education and enjoyment of the Oregon Trail and its setting and follows the direction indicated for the ACEC (BLM 2002).

Interpretation of Designation: Visual quality within the ACEC should be protected. Any new uses proposed within the boundary of the ACEC that could impact visual values should be excluded within 0.25 mile of the Oregon Trail and only have a minimal impact to visual quality of the ACEC. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

The objective of Visual Resource Management (VRM) Class II is to “retain the existing character of the landscape. The level of change to the characteristic landscape should be low” (BLM 1986). This management objective applies to lands within the ACEC managed per VRM Class II objectives. Conformance is not considered for project features outside of the ACEC.

Resource Overview: The Oregon National Historic Trail ACEC – Tub Mountain Parcel is a long, narrow geographic area located in northeastern Malheur County (Figure L-3-19). The ACEC includes approximately 5,900 acres of BLM-administered lands. The Tub Mountain parcel is situated between I-84 and U.S. Highway 26; the southern end of the Tub Mountain parcel is approximately 13 miles north of Vale and 9 miles east of the small community of Jamieson. The ACEC includes one interpretive site at Alkali Springs, which was the “nooning” spot for wagon trains leaving Vale (BLM 2002). The ACEC is remote and accessible only by local gravel roads.

Per OAR 345-022-0040, Oregon Trail ACEC – Tub Mountain Parcel is being evaluated as a Protected Area.

- 1 Per OAR 345-022-0080, VRM M2 is being evaluated as a Scenic Resource.
 2 Per OAR 345-022-0100, Oregon Trail SRMA – Tub Mountain Parcel is being evaluated as a
 3 Recreation Resource.

4 **Existing Conditions:** The Oregon National Historic Trail ACEC – Tub Mountain Parcel is
 5 located within the Unwooded Alkaline Foothills portion of the Snake River Plain Ecoregion. The
 6 view to the northwest consists of gently rolling terrain in the foreground and middleground that
 7 subtly transitions to steeper terrain in the background. Alluvial fans and natural bowls are
 8 apparent in the background terrain. Colors in the landscape are limited to light browns, tans,
 9 grays, and blues. Lines in the landscape are primarily undulating and horizontal, with diagonal
 10 lines visible in the middleground and background. The dominant texture of landforms is smooth.
 11 Texture of existing vegetation appears medium to coarse in the immediate foreground, and fine,
 12 uniform, and dotted in the foreground and middleground. The landscape is free of cultural
 13 modifications with the exception of a few gravel surfaced roads, the Alkali Springs interpretive
 14 site, and some evidence of grazing and off-highway vehicle (OHV) use. Old Oregon Trail Road
 15 travels north-south through the majority of the ACEC and is a native-surfaced, two-track
 16 maintained by Malheur County that is roughly parallel to the Oregon Trail route. The landscape
 17 character is natural appearing. Using the BLM’s visual resource inventory methods per Manual
 18 H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Oregon Trail ACEC –
 19 Tub Mountain Parcel is considered low (class C) as shown below:

Oregon Trail ACEC – Tub Mountain Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	1	0	2	2	2	0	10 (C)

20 **Viewer Groups:** Viewer groups include local residents driving through or near the area and
 21 recreators such as OHV users or visitors to the Oregon Trail remnants and interpretive site.
 22 Viewers are limited by difficult access and lack of developed recreation facilities. Views within
 23 the ACEC are enclosed and limited to the foreground and middleground from lower elevation
 24 spots; however, views experienced from higher elevations extend to the background distance
 25 zones throughout the ACEC.

26 **PART 2: Impact Likelihood and Magnitude Assessment**

27 Alternatives Not Evaluated

28 The Tub Mountain parcel is located outside of the 10-mile viewshed buffer of the cleared ROW
 29 of both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
 30 Project feature are not discussed any further in this document.

31 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 32 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 33 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 34 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 35 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 36 impacts resulting from a cleared ROW.

1 Proposed Route

2 The Proposed Route runs along the eastern and southern boundary of the ACEC at a distance
 3 of 0.5 mile at its closest point. The Proposed Route is approximately 1.5 miles east of the Alkali
 4 Springs interpretive site. The transmission towers and conductors will be partially screened from
 5 view by rolling terrain in the foreground. New and improved access roads will be constructed
 6 along the Proposed Route. The transmission towers associated with the Proposed Route will be
 7 the primary source of visual contrast experienced from the ACEC, primarily due to their size,
 8 form, and texture. The large, geometrical form and smooth texture will contrast against the fine
 9 to medium, rolling, rounded hills. The light, reflective color will also contrast against the light to
 10 medium brown vegetation and outcrops.

11 Viewers from Alkali Springs (KOP 8-1) will have views of the transmission towers associated
 12 with the Proposed Route to the east that will be partially blocked by vegetation such that the
 13 Project will appear co-dominant with the landscape and produce moderate visual contrast.
 14 While traveling along Old Oregon Trail Road or the Oregon Trail route, the Proposed Route will
 15 be generally located to the east, and most towers will either not be visible or only the top
 16 portions will be visible. Some towers will be skylined and some backdropped depending on
 17 location within the ACEC, introducing moderate to strong visual contrast for up to approximately
 18 3 miles. Views of the Project will primarily be experienced from a neutral vantage point and will
 19 be peripheral and intermittent due to topographic screening for viewers traveling along the Old
 20 Oregon Trail Road or the Oregon Trail route.

21 As a result of the proposed 500-kV towers, the landscape character in the western portion of the
 22 ACEC will change from natural appearing to a cultural landscape. The scenic quality of the
 23 landscape will not change. No project development will occur within the boundary of the ACEC;
 24 therefore, the Project will conform to VRM Class II management objectives.

Oregon Trail ACEC – Tub Mountain Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	1	0	2	1	2	0	9 (C)

25 Likelihood of Impact

26 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line and towers, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: Impacts to the ACEC and scenic resource will be of <u>medium</u> magnitude. Views of the towers associated with the Proposed Route to the east of this resource will be partially blocked by rolling terrain such that the Project will appear co-dominant with the landscape and produce moderate visual contrast.			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: As a result of the proposed 500-kV towers, the landscape character in the western portion of the ACEC will change from natural appearing to a cultural landscape. Although the landscape quality will remain the same as Class C (low), the resource change will be <u>high</u> due to the change in landscape character. Resource change will primarily result from operation of the Project; past and present actions do not contribute to change in landscape character.			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the Project will be experienced from a neutral vantage point and will primarily be peripheral and intermittent to viewers traveling along the along Old Oregon Trail Road or the Oregon Trail route due to topographic screening. Therefore, viewer perception will be <u>low</u> .			

1 **PART 3: Consideration of Intensity, Causation, and Context**

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 Towers associated with the Proposed Route will be located within 0.5 mile of the Oregon Trail
 4 ACEC– Tub Mountain Parcel (Protect Area) and VRM M2 (Scenic Resource). The structures
 5 will be partially blocked from viewing locations within the ACEC, resulting in medium magnitude
 6 impacts. Resource change will be high due to the shift in landscape character from natural
 7 appearing to cultural. The scenic quality will remain class C. Views of the Project will primarily
 8 be experienced from a neutral vantage point and will be peripheral and intermittent due to
 9 topographic screening. Viewer perception will be low. Impact intensity will be high.

10 Degree to Which Impacts are Caused by the Project

11 The impacts disclosed in this assessment are caused by the proposed facility and are not the
 12 result of other past or present actions.

13 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
<p>Explanation: The relevant and important values of the ACEC are historic, cultural, and scenic. The scenic values of this ACEC are associated with the integrity of the historical landscape. Because of this designation and management direction, scenery is considered a <u>valued attribute</u> of the Oregon Trail ACEC – Tub Mountain Parcel.</p> <p>The ACEC is managed per VRM Class II objectives indicating the intent to “retain the existing character of the landscape” within the ACEC. The level of change to the characteristic landscape should be low” (BLM 1986).</p>	
Persistence of Scenic Value	<p>Persistence of Scenic Value is either:</p> <p>Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or,</p> <p>Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.</p>

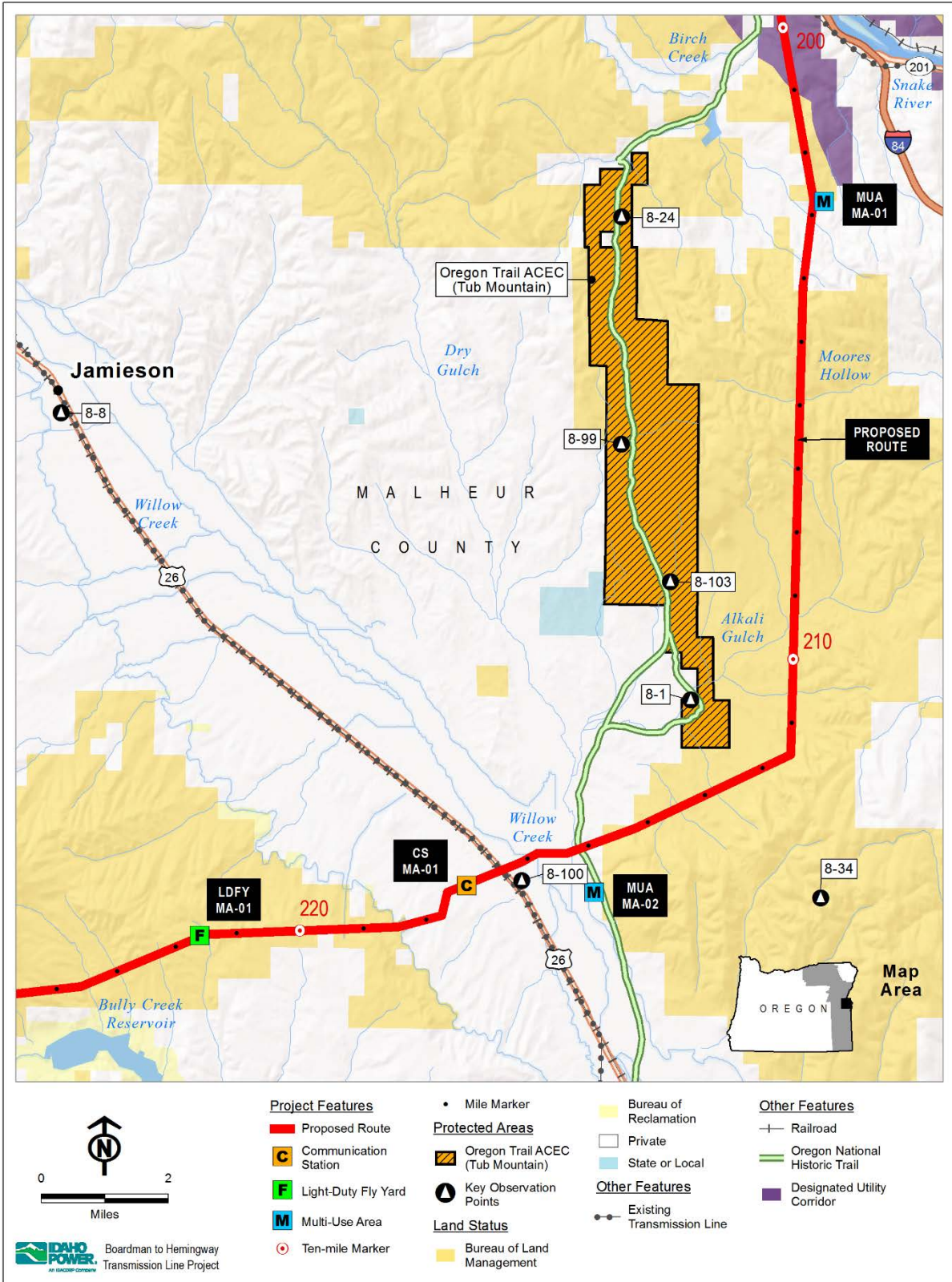
Indicator	Context Criteria
<p>Explanation: The ACEC was designated to protect the Oregon Trail within a 0.25-mile-wide corridor and maintain integrity of the historical landscape within this geographic area. The scenic values associated with the historical landscape (rolling hills covered with sagebrush, grasses, and dust) will remain relatively unchanged. Although views of the Project will be present, they will be intermittent and not in the primary viewing direction from the Oregon Trail. The ACEC and scenic resource is managed per VRM Class II objectives. The Project was found to meet those objectives. Therefore, although high intensity impacts to visual resources within this ACEC will result from the Project, these impacts will <u>not preclude</u> the ability of the ACEC to provide the scenic value for which it was designated in the BLM SEORMP (2002).</p>	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

- 1 Although the Project will result in high intensity impacts to the ACEC, views of Project features
2 will be intermittent and not focal to the viewing direction experienced from the Oregon Trail. The
3 ACEC is managed per VRM Class II objectives, and the Project was found to be in conformance
4 with those objectives.

5 **Summary and Conclusion**

- 6 Visual impacts to the Oregon Trail ACEC – Tub Mountain Parcel will be of high intensity,
7 resulting from high resource change and low viewer perception. Impacts will result solely from
8 the Project, and are not the effects of other past or present actions. The Project will not preclude
9 the ACEC from providing the scenic value for which it was designated, as integrity of the historic
10 landscape as perceived by viewers traveling along the along Old Oregon Trail Road or the
11 Oregon Trail route will be maintained. Visual impacts to the Oregon Trail ACEC – Tub Mountain
12 Parcel **will be less than significant.**



1
2 **Figure L-3-19. Oregon Trail Area of Critical Environmental Concern – Tub**
3 **Mountain Parcel**

3.20 Owyhee River below the Dam Area of Critical Environmental Concern; Owyhee River below the Dam Special Recreation Management Area

Resource: Owyhee River below the Dam ACEC; Owyhee River below the Dam Special Recreation Management Area (SRMA)

Relevant Exhibit: L, T

Relevant Plan: SEORMP (BLM 2002)

Resource Type: Area

Relevant KOP(s): 8-52

PART 1: Establish Baseline Conditions

Designation: The relevant and important values of the ACEC are identified as: “high scenic values of diverse landscape elements in a substantially natural setting, a special status plant species (Mulford’s milkvetch), the rare presence of a black cottonwood gallery in a riverine system, and the combined wildlife values of diverse habitat types supporting a large number of wildlife species and an important migratory corridor for neotropical birds.” The ACEC receives some of the highest recreational use within the southeastern Oregon planning area and is also designated as a SRMA. The area is managed for visual resources per VRM Class II objectives, and the ACEC is closed to locatable minerals within the foreground (BLM 2002).

Interpretation of Designation: Visual quality of the ACEC should be maintained, particularly within the foreground. Per VRM Class II objectives, the change in landscape character should be low such that the existing landscape character is retained within the boundary of the ACEC. Per BLM Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within the ACEC (BLM 1988). Consequently, should potentially adverse impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

Resource Overview: The Owyhee River below the Dam ACEC and SRMA encompasses 11,239 acres and includes public land of the Owyhee River canyon and its associated viewshed located just north of the Owyhee Dam (Figure L-3-20). Dominant attributes of the ACEC/SRMA include the Owyhee River, narrow canyon bottom, and rugged canyon slopes and walls, all of which contribute to the high quality scenery of the area. A paved two-lane asphalt road runs through the ACEC/SRMA, paralleling the river. There are two recreation sites within the ACEC/SRMA: Snively Hot Springs and the Lower Owyhee Canyon Watchable WA interpretive site.

Per OAR 345-022-0040, Owyhee River below the Dam ACEC is being evaluated as a Protected Area.

Per OAR 345-022-0080, Owyhee River below the Dam ACEC is not being evaluated as a Scenic Resource. Instead, Owyhee River below the Dam VRM M5 is being evaluated as a Scenic Resource, which includes the geographic area of the Owyhee River below the Dam ACEC/SRMA including a few additional areas. Note that because this resource extends farther to the north than the ACEC/SRMA, impact magnitude will not be the same.

Per OAR 345-022-0100, Owyhee River below the Dam SRMA is being evaluated as a Recreation Resource.

Existing Conditions: The landscape within the Owyhee River below the Dam ACEC/SRMA is characterized as an incised river valley, with dramatic, steep, undulating sidewalls, jagged rock

1 outcroppings, and a meandering flat, narrow river. Dramatic landforms create irregular, rounded,
 2 angular, and flowing lines. Textures are primarily medium with some rough, patchy rock
 3 formations. Colors are rich and vibrant, consisting primarily of reds, browns, and greys of the
 4 rocks and blue water. Vegetation includes short sagebrush with patches of juniper and
 5 moderate to high green and grey riparian vegetation. The variety of color and texture and
 6 dramatic landforms that comprise this landscape create a memorable landscape that is rare
 7 within the region. Views from within the canyon are enclosed and limited due to the numerous
 8 river bends preventing extended views in any direction. Above the river, the landforms are more
 9 rounded with weakly enclosed to open ridges. Development within the ACEC/SRMA is limited,
 10 consisting primarily of camp sites, off-highway vehicle roads, one paved road along the river,
 11 and the two developed recreation sites. The landscape within the ACEC/SRMA has an overall
 12 natural appearing landscape character. Just outside of the ACEC/SRMA to the northeast, the
 13 Owyhee Siphon is visible as it crosses the ridgeline and descends toward the canyon. This
 14 feature introduces strong contrast due to its linear form and bright reflective surface. Because of
 15 its location within BLM-administered lands, this resource was evaluated using methods adapted
 16 from the BLM VRM system. Per Manual H-8410-1 (BLM 1986), the scenic quality of the existing
 17 landscape for the Owyhee River below the Dam ACEC and SRMA is considered high (class A)
 18 as shown below:

Owyhee River below the Dam ACEC & SRMA Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
5	4	4	5	1	4	0	23 (A)

19 **Viewers:** Viewers within the Owyhee River below the Dam ACEC are primarily recreators that
 20 are hiking, driving, boating, camping, picnicking, or viewing scenery or wildlife within the canyon
 21 and will be both stationary and transient.

22 **PART 2: Impact Likelihood and Magnitude Assessment**

23 Alternatives Not Evaluated

24 The Lower Owyhee River VRM Class II area is located outside of the 10-mile viewshed buffer of
 25 the cleared ROW of both the Proposed Route and the Morgan Lake Alternative, and therefore
 26 impacts from this Project feature are not discussed any further in this document.

27 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 28 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 29 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 30 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 31 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 32 impacts resulting from a cleared ROW.

33 Proposed Route

34 In evaluating various alternatives for Project siting, IPC concluded that potentially significant
 35 visual impacts from facility structures in the vicinity of the Lower Owyhee River could result. To
 36 address potential impacts, IPC analyzed two mitigation options aimed at reducing adverse
 37 impacts to less than significant: (1) relocating the 175-foot tower to an alternate location (Option
 38 1); and (2) reducing the height of the structure and moving it to an alternate location (Option 2).
 39 In preparing the final indicative design for this document, IPC moved the Proposed Route to the

1 north to align with the existing utility corridor administered by the BLM (Exhibit R, Attachment R-
 2 3, Figure R-3-18). Under this Project configuration, the need to mitigate potential impacts was
 3 alleviated. Although two structures would be visible from the Lower Owyhee Canyon Watchable
 4 WA interpretive site (KOP 8-52), these structures would be sited approximately 0.75 to 1.0 mile
 5 from the interpretive site. The geometrical form and smooth texture of the tower, though visible,
 6 will introduce weak contrast against the surrounding steep to rolling hills and valley walls, brown
 7 to red color, and rough texture of the rock. Because of the steep canyon walls and enclosed
 8 landscape character at the interpretive site, towers will appear subordinate. Further, viewers at
 9 the Lower Owyhee Canyon Watchable WA interpretive site (KOP 8-52) will primarily be facing
 10 west, with the Proposed Route behind them.

11 Considering the ACEC and SRMA as a whole, viewers will primarily be within the background
 12 distance zone, and the steep topography and winding river valley will block most views of the
 13 Project from the middleground distance zone. The Snively Hot Springs recreation site is outside
 14 of the modeled viewshed and will not be impacted.

15 The Project will be located outside of the ACEC/SRMA, but will affect its adjacent scenery. Due
 16 to the enclosed nature of the canyon, views outside of the ACEC/SRMA and the visible towers
 17 will likely be visible from less than 1 percent of the ACEC/SRMA as visitors exit the resource.
 18 Additionally, adjacent scenery has little to no contribution to the scenic quality of the Owyhee
 19 River below the Dam ACEC/SRMA; therefore, a reduction to adjacent scenery will not lower the
 20 scenic quality of the ACEC/SRMA. The scenic quality will remain high (Class A) and the
 21 landscape character will remain natural appearing.

Owyhee River below the Dam ACEC & SRMA Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
5	4	4	5	0	4	0	22 (A)

22 Likelihood of Impact

23 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The Proposed Route is visible in the northern part of ACEC/SRMA within a distance of 0.05 miles. The towers will introduce weak-moderate visual contrast from this viewer location. The view looking northeast from the interpretive site will include the towers; however other structures to the north and south will be blocked by the canyon walls. The existing view from this location includes the Owyhee Siphon, which currently creates contrasts at a moderate level with the natural landscape due to its smooth texture and bright reflective surface. The skylined tower will appear subordinate to the siphon and large-scale cliffs and rock formations of the landscape. Impact magnitude will be <u>medium</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Project will affect the adjacent scenery of the ACEC and SRMA. However, adjacent scenery has little contribution to the scenic quality of the Owyhee River below the Dam ACEC; therefore, the reduction to adjacent scenery will not lower the scenic quality of the ACEC itself. The scenic quality will remain high (class A) and the landscape character will remain natural appearing. Resource change will be <u>medium</u> . The small reduction in the score for “adjacent scenery” is attributed to the Project, as no other past or present actions affect this value.			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: For views of the Project experienced from the road, views will be primarily intermittent due to screening by existing topography. When viewed from the interpretive site, project features will be primarily behind or adjacent to the viewer, and therefore considered primarily peripheral. Viewer perception will be <u>low</u> .			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Project is potentially visible in the northern part of the resource at a distance of 0.05 mile
 4 and will introduce medium magnitude impacts to this portion of the resource. The Project will
 5 affect the adjacent scenery of the ACEC and SRMA. However, adjacent scenery has little
 6 contribution to the scenic quality of the Owyhee River below the Dam ACEC; therefore, the
 7 changes to adjacent scenery will not lower the scenic quality or change the landscape character
 8 of the ACEC and SRMA and resource change will be medium. Views of the Project from
 9 Owyhee Lake Road will be primarily intermittent due to screening by topography. When viewed
 10 from the interpretive site, project features will be primarily behind or adjacent to the viewer, and
 11 therefore considered primarily peripheral. Viewer perception will be low. Therefore, impact
 12 intensity will be medium.

13 Degree to Which Impacts are Caused by the Project

14 The scenic quality of the resource under operational conditions is the result of the combined
 15 influence of the Project and other past or present actions, primarily the Owyhee Siphon.

16 Context

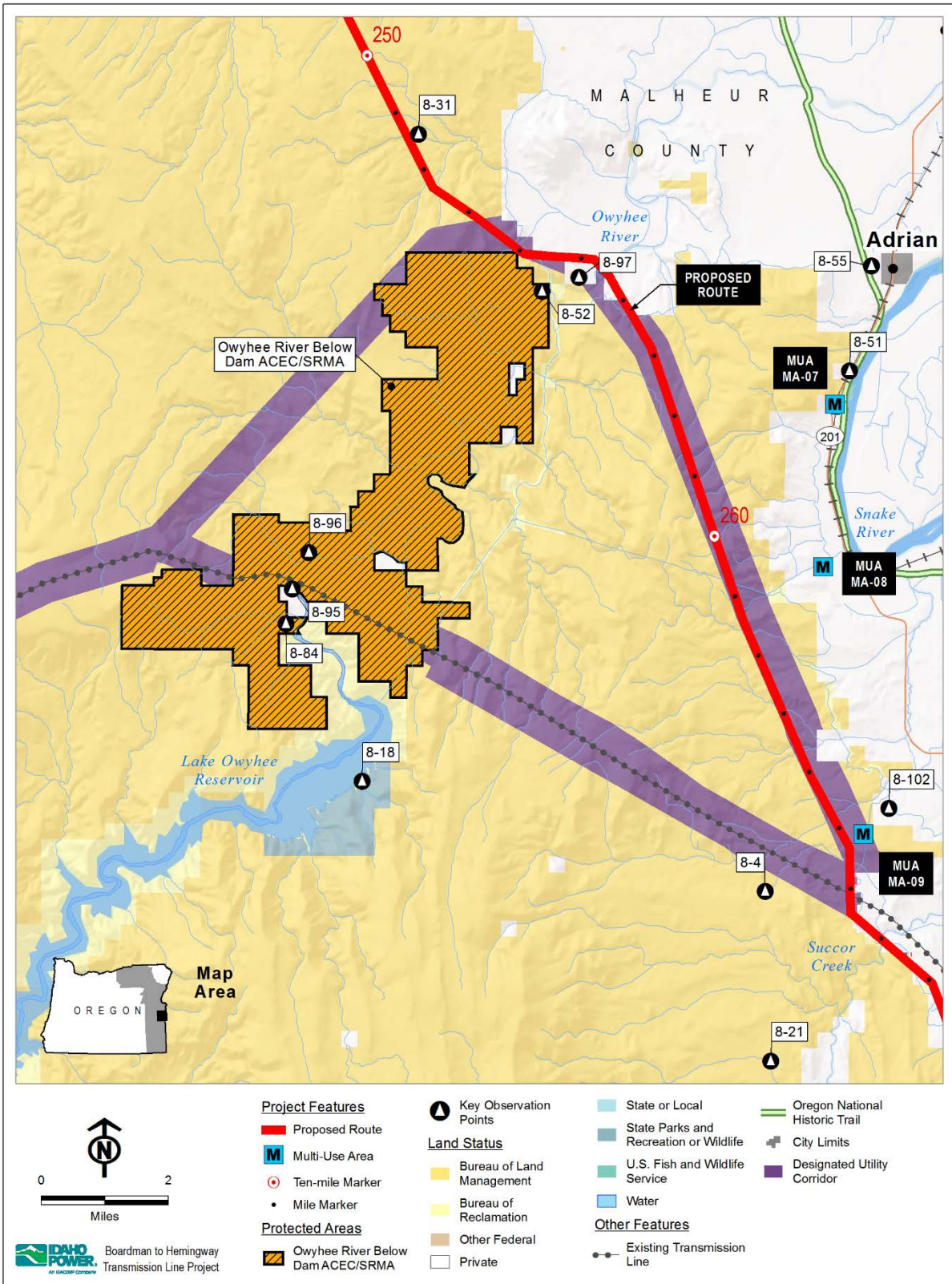
Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: Relevant and important values of the ACEC include high scenic values; therefore, the ACEC is considered important under OAR 345-022-0080.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.

Indicator	Context Criteria
	<p>Explanation: Medium intensity impacts do not preclude the ability of the ACEC to provide values for which the ACEC was designated, including identified scenic resource value and recreation opportunity and uses within the canyon. This is because the Proposed Route will not be visible from the vast majority of the canyon where scenic resources have been specifically identified in the SEORMP. Additionally, the BLM manages the visual values of the ACEC/SRMA according to VRM Class II objectives. Because the Project has been sited outside the ACEC/SRMA, there will be no changes to the landscape within the boundary of the ACEC, and the Project will conform to VRM Class II objectives. Consequently, the Project is consistent with BLM's management of the resource's visual qualities.</p>

1 The ACEC and SRMA will continue to provide the scenic resource value and recreation
2 opportunity identified as valued attributes of the ACEC and SRMA, as project features will not
3 be visible from the majority of the canyon where specific scenic features have been identified in
4 the SEORMP (BLM 2002). VRM Class II objectives will be achieved within the ACEC and
5 SRMA, as the landscape character and quality of the resource will not change.

6 **Summary and Conclusion**

7 The Project will result in long-term visual impacts to the Owyhee River below the Dam ACEC
8 and SRMA. Impacts will be medium intensity as measured by visual contrast and scale
9 dominance, resource change, and viewer perception. While the Project will result in such
10 impacts, the impacts will not preclude the ability of the Owyhee River below the Dam ACEC and
11 SRMA to provide the high quality scenery for which it was designated since the scenic quality
12 will remain high and the landscape character will remain natural appearing. Therefore, visual
13 impacts to the Owyhee River below the Dam ACEC will be **less than significant**.



1
2 **Figure L-3-20. Owyhee River below the Dam Area Area of Critical Environmental**
3 **Concern**

3.21 Powder River Canyon Area of Critical Environmental Concern, Wild and Scenic River: Powder River Canyon ACEC and WSR

Relevant Exhibit: L, R, T

Relevant Plan: Baker Resource Management Plan (BLM 1989)

Resource Type: Area

Relevant KOP(s): 5-34; 5-35

PART 1: Establish Baseline Conditions

Designation: The Powder River ACEC is managed to protect raptor habitat, wildlife habitat, and cultural resources and to maintain scenic qualities while allowing for compatible recreation uses (BLM 1989). The Powder River is designated as a scenic river for 11.7 miles, covering 2,385 acres, from the Thief Valley Dam to OR 203 within the BLM Vale District (BLM 1989; National Wild and Scenic River System 2015). Scenery is identified as an ORV.

Interpretation of Designation: Scenery is identified as an important and relevant value of the Powder River Canyon ACEC for which it should be managed to protect. Guidance Manual 1613, the designation as an ACEC serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Consequently, should potentially adverse visual impacts from the proposed action be identified, IPC should mitigate those impacts to the extent feasible.

Section 10(a) of the Wild and Scenic Rivers Act states:

“Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeological, and scientific”

Resource Overview: The Powder River flows through a rugged canyon with scenic geologic formations. Recreation opportunities include boating in the spring, fishing, and hunting, although access is limited (National Wild and Scenic River System 2015). The WSR segment is located within the Powder River Canyon ACEC (Figure L-3-21). The Powder River Canyon ACEC measures approximately 5,880 acres. Off-road vehicle use is limited to designated roads and trails. The Powder River Canyon ACEC is considered an important recreation resource because of its designation, good opportunities for fishing and hunting, and irreplaceable high scenic quality of the river canyon.

Per OAR 345-022-0080, Powder River Canyon ACEC and WSR are being evaluated as a Scenic Resource.

Per OAR 345-022-0040, Powder River Canyon ACEC and WSR are being evaluated as a Protected Area.

Per OAR 345-022-0100, Powder River Canyon ACEC and WSR are being evaluated as a Recreation Resource.

Existing Conditions: The 11.7 miles of the WSR segment of the Powder River flows through a rugged, incised canyon with steep walls, jagged outcrops, and geologic formations recognized for their outstanding scenic quality. The Powder River meanders through the bottom of the

1 canyon in a sinuous pattern. Vegetation includes medium-height riparian vegetation at the valley
 2 floor. Colors include browns and black from basalt outcrops, and browns, tans, and greens from
 3 vegetation. Views from within the canyon are enclosed. The portion of the Powder River Canyon
 4 ACEC above the canyon appear flat to gently rolling with low-growing grass and shrub
 5 vegetation that stipples the landscape. Colors are generally muted tones of tans, greens, and
 6 greys. Human development includes dirt roads within the Powder River Canyon ACEC and an
 7 existing 230-kV transmission line visible to the west. Wind turbines are visible in the distance
 8 outside of the Powder River Canyon ACEC boundary. Although there is existing development
 9 within and visible from the Powder River Canyon ACEC, the landscape character is naturally
 10 appearing. Using the BLM's visual resource inventory methods per Manual H-8410-1 (BLM
 11 1986), the scenic quality of the existing landscape for the Powder River Canyon ACEC is
 12 considered medium (class B) as shown below:

Powder River Canyon ACEC Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
4	3	3	3	1	4	0	18 (B)

13 **Viewers:** Viewers will primarily be located near the bottom of the canyon and be engaged in
 14 hunting, fishing, or floating the river although some off-highway vehicle use may occur in the
 15 uplands. Viewers within the canyon are limited by difficult access.

16 **PART 2: Impact Likelihood and Magnitude Assessment**

17 Alternatives Not Evaluated

18 The Powder River Canyon ACEC and WSR is located outside of the 10-mile viewshed buffer of
 19 the cleared ROW of both the Proposed Route and the Morgan Lake Alternative, and therefore
 20 impacts from this Project feature are not discussed any further in this document.

21 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 22 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 23 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 24 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 25 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 26 impacts resulting from a cleared ROW.

27 Proposed Route

28 Viewshed modeling indicates that the project will not be visible within the canyon; therefore, no
 29 impacts to the scenery ORV of the Powder River WSR will result, and scenic values of that
 30 portion of the Powder River Canyon ACEC will be maintained.

31 In the uplands, the proposed 500-kV towers will be visible at a minimum distance of
 32 approximately 1.4 miles. These towers will be placed parallel to the existing 230-kV
 33 transmission line and will be consistent with their form, line, color, and texture. Some towers will
 34 be skylined such that visual contrast will be moderate, and the towers will appear co-dominant
 35 with the existing transmission line. However, the majority of the views from the upland portion of
 36 the Powder River Canyon ACEC will be experienced at distances over 2 miles from the towers,
 37 where visual contrast will attenuate to a moderate to weak level.

1 Viewers will primarily be located near the bottom of the canyon where the project will not be
 2 visible. Viewers could have views of the Proposed Route when accessing the river or driving
 3 roadway or off-highway vehicles; however, these views will be peripheral and intermittent. The
 4 Project will lower the quality of the Powder River Canyon ACEC's adjacent scenery. However,
 5 adjacent scenery has a limited effect on the quality of the Powder River Canyon ACEC
 6 landscape or the Powder River WSR scenery ORV. The reduction in the value for the "adjacent
 7 scenery" key factor will only result in a small change to the scenic quality score, and the overall
 8 scenic quality class will not change. Landscape will continue to appear primarily natural.

Powder River Canyon ACEC Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
4	3	3	3	0	4	0	17 (B)

9 Likelihood of Impact

10 IPC considered all identified impacts to be "likely" to occur.

11 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the project.			

1 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The river channel of the Powder River WSR segment and adjacent steep canyon walls of the Powder River canyon will be located outside of the project viewshed. In the uplands, the proposed 500-kV towers could be visible for distances as close as approximately 1.4 miles. These towers will be placed parallel to the existing 230-kV transmission line and will be consistent with their form, line, color, and texture. Some towers will be skylined such that visual contrast will be moderate, and the towers will appear co-dominant with the existing transmission line. Therefore, impact magnitude will be <u>medium</u> .			

2 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Project will not affect the scenery ORV of the Powder River WSR. The Project will lower the contribution of adjacent scenery to scenic quality of the upland portion of the Powder River Canyon ACEC. However, adjacent scenery has a limited effect on the quality of the Powder River Canyon ACEC landscape, so this change will only result in a small change to the scenic quality score, and the overall scenic quality class will not change. Landscape will continue to appear primarily natural. Therefore, resource change will be <u>medium</u> .			

Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewers will primarily be located near the bottom of the canyon where the project will not be visible. Viewers could have views of the Proposed Route when accessing the river or driving roadway or off-highway vehicles; however, these views will be peripheral and intermittent and experienced from a neutral vantage point. Therefore, viewer perception will be <u>low</u> .			

1 **PART 3: Consideration of Intensity, Causation, and Context**

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 The Proposed Route will have medium magnitude impacts associated with 500-kV towers at
 4 distances of 1.4 miles or more. These medium magnitude impacts will be limited to the uplands
 5 and not affect the scenery within the canyon itself. The Proposed Route will lower the quality of
 6 the Powder River Canyon ACEC’s adjacent scenery in upland portions of the resource;
 7 however, the overall scenic quality and landscape character will not change, and resource
 8 change will be medium. The Project will not affect the scenery ORV of the Powder River WSR.
 9 Viewers will primarily be located near the bottom of the canyon where the project will not be
 10 visible, so viewer perception will be low. Therefore, visual impacts will be medium intensity.

11 Degree to Which Impacts are Caused by the Project

12 The scenic quality of the resource under operational conditions is the result of the combined
 13 influence of the Project and other past or present actions, including the existing 230-kV
 14 transmission line, which will appear subordinate to the natural appearing landscape character.

1 Context

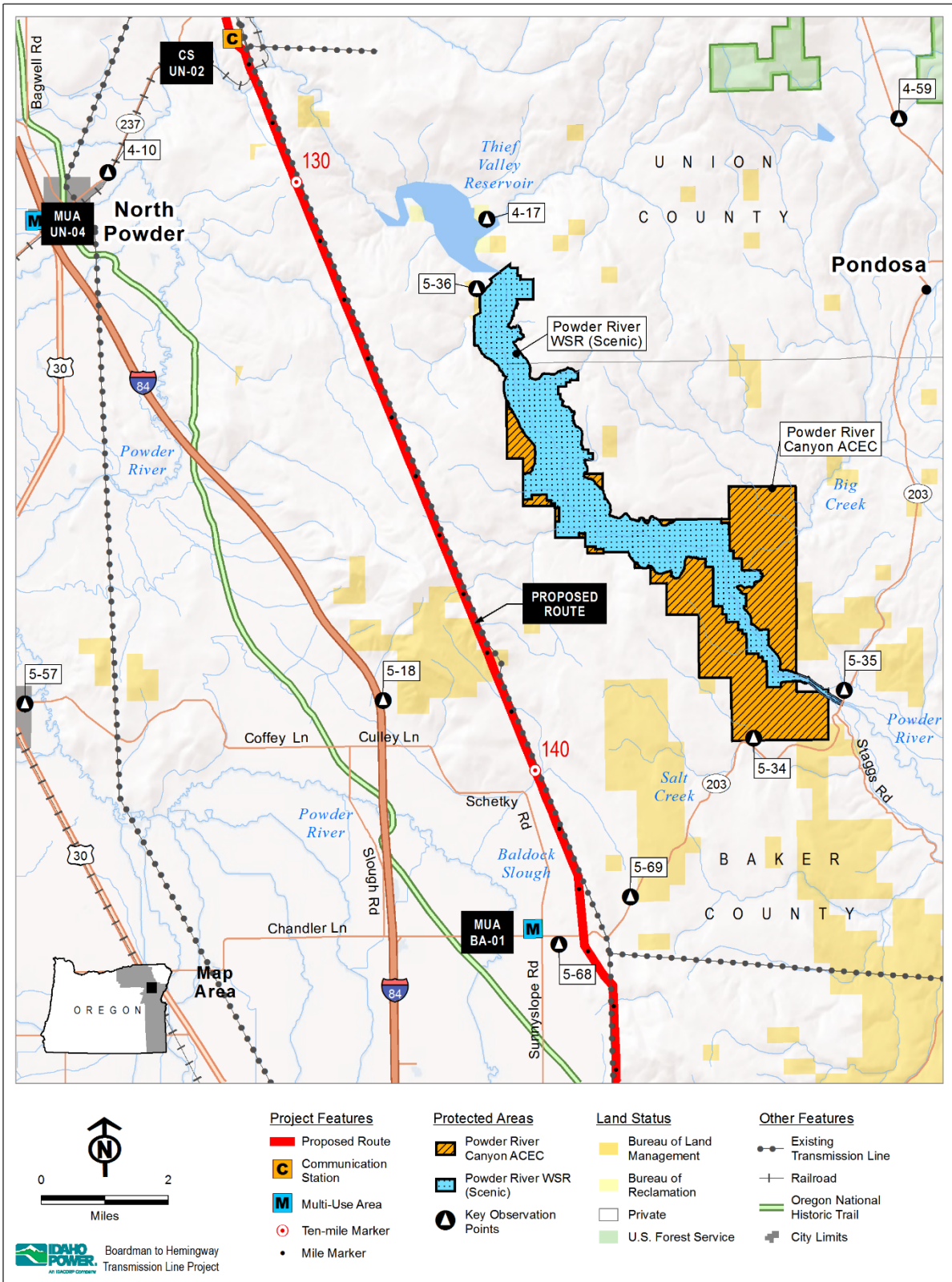
Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: The Powder River Canyon ACEC is managed to protect raptor habitat, wildlife habitat, and cultural resources and to maintain scenic qualities while allowing for compatible recreation uses (BLM 1989). Therefore, scenery is considered a valued attribute to the Powder River Canyon ACEC.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: The Powder River Canyon ACEC was designated to preserve scenic values of the Powder River Canyon. Therefore, it is understood that if the scenic resources within the geographic boundary of the Powder River Canyon ACEC are maintained, the resource values for which the Powder River Canyon ACEC was designated to protect will persist. Additionally, recreation activities will be focused near the bottom of the canyon where the project will not be visible; therefore, visual impacts will not disrupt recreation activities for which the Powder River Canyon ACEC is also managed to protect. The Project will not impact the scenery ORV of the Powder River WSR.	

	Scenery as a Valued Attribute	Persistence of Scenic Value
Less than Significant	Yes or No	Not Precluded
Potentially Significant	Yes	Precluded

2 The Project will not impact the scenery ORV of the Powder River WSR. The scenic quality of
 3 the Powder River Canyon ACEC and the WSR will be maintained in accordance with the
 4 resource designation and associated management objectives.

5 **Summary and Conclusion**

6 Visual impacts to the Powder River Canyon ACEC will be of medium intensity, resulting from
 7 medium resource change and low viewer perception. Within the designated Wild section of the
 8 Powder River, visual impacts will be of low intensity. Impacts will result from the combined
 9 influence of the Project and other past or present actions. The Project will not preclude the
 10 scenic value (scenery ORV) for which the Powder River Canyon ACEC was designated.
 11 Impacts to the Powder River Canyon ACEC will be **less than significant**.



1
2 **Figure L-3-21. Powder River Canyon Area of Critical Environmental Concern and**
3 **Powder River Wild and Scenic River (Scenic)**

3.22 South Alkali Sand Hills Area of Critical Environmental Concern

Resource: South Alkali Sand Hills ACEC

Relevant Exhibit: L

Relevant Plan: BLM SEORMP (2002)

Resource Type: Area

Relevant KOP(s): None

PART 1: Establish Baseline Conditions

Designation: Relevant and important values of the South Alkali Sand Hills ACEC are the habitat and critical populations for two special status plant species: Mulford's milkvetch and Cronquist's stickseed. The South Alkali Sand Hills ACEC is managed as VRM Class III (BLM 2002). Scenic quality is not included as a relevant and important value of the South Alkali Sand Hills ACEC.

Interpretation of Designation: The South Alkali Sand Hills ACEC was designated to protect plant species and habitat. Per VRM Class III objectives, the change in landscape character should be moderate and the landscape character partially maintained (BLM 1986).

Resource Overview: The South Alkali Sand Hills ACEC encompasses 3,520 acres and is located northeast of Vale, Oregon (Figure L-3-22). The area was designated as an ACEC to represent prime habitat and critical populations for two special status plant species: Mulford's milkvetch and Cronquist's stickseed. These species are found on sandy soils in small, localized areas within a portion of the Vale District near the town of Vale. The area represents the greatest concentration known for both species growing together on a global basis.

Per OAR 345-022-0040, South Alkali Sand Hills ACEC is being evaluated as a Protected Area.

Per OAR 345-022-0080, South Alkali Sand Hills ACEC is not considered a Scenic Resource.

South Alkali Sand Hills ACEC is not considered an important Recreation Opportunity and is not evaluated as a Recreation Resource per OAR 345-022-010.

Existing Conditions: The terrain includes soft, rolling hills carpeted by gold and brown low-growing grasses stippled with green sagebrush. The landscape is large scale with expansive views available from the numerous hilltops. The moderately high ridges and low drainages create curved, flowing, and undulating lines. Two main ridgelines and two main drainages transect the South Alkali Sand Hills ACEC. Human development is limited and includes two dirt roads that run along the two main ridges of the South Alkali Sand Hills ACEC and a portion of one livestock grazing allotment. The landscape character is natural appearing. Using BLM visual resource inventory methods per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the South Alkali Sand Hills ACEC is considered low (class C) as shown below:

South Alkali Sand Hills ACEC Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	1	1	2	2	2	0	11 (C)

1 **Viewer Groups:** Viewers are limited due to the lack of recreational facilities and access and will
 2 primarily include individuals traveling along the local roadways.

3 **PART 2: Impact Likelihood and Magnitude Assessment**

4 Alternative Not Evaluated

5 The South Alkali Sand Hills ACEC is located outside of the 10-mile viewshed buffer of the
 6 cleared ROW of both the Proposed Route and the Morgan Lake Alternative, and therefore
 7 impacts from this Project feature are not discussed any further in this document.

8 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 9 Morgan Lake Alternative, and the Double Mountain Alternative are located greater than 5 miles
 10 from this site, and are therefore not considered in this visual impact analysis. Likewise, because
 11 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 12 the Double Mountain Alternative are not forested, they are not analyzed for potential visual
 13 impacts resulting from a cleared ROW.

14 Proposed Route

15 The westernmost ridge of the South Alkali Sand Hills ACEC will be within the project viewshed
 16 and is located approximately 2.1 miles from the Proposed Route at the closest point. A new,
 17 bladed road will be sited within this segment of the Proposed Route. The towers will be
 18 backdropped, which will introduce weak visual contrast and result in the towers appearing
 19 subordinate to the large scale of the surrounding landscape. Views of the project will primarily
 20 be peripheral on the two ridges within the South Alkali Sand Hills ACEC. There will be no views
 21 of the project available within the two drainages that transect the South Alkali Sand Hills ACEC.
 22 The new access roads will appear consistent with the surrounding landscape, as gravel roads
 23 exist within and near the South Alkali Sand Hills ACEC. Because the towers will introduce weak
 24 contrast, they will not affect the quality of the adjacent scenery. Consequently, the scenic quality
 25 and natural-appearing character of the South Alkali Sand Hills ACEC will be maintained.

South Alkali Sand Hills ACEC Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
3	1	1	2	2	2	0	11 (C)

26 Likelihood of Impact

27 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The westernmost ridge of the South Alkali Sand Hills ACEC will be within the project viewshed and is located approximately 2.2 miles from the Proposed Route at the closest point. The towers will be backdropped, introducing weak visual contrast, and will appear subordinate to the large-scale surrounding landscape; therefore, impacts will be of <u>low</u> magnitude.			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality/attractiveness and/or character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality; however, it will not reduce the quality/attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality/attractiveness class and will alter landscape character of the resource.
Explanation: Because the towers will introduce weak contrast, they will not affect the quality of the adjacent scenery. Consequently, the scenic quality and character of the South Alkali Sand Hills ACEC will be maintained, and the resource change will be <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Viewer perception will be <u>low</u> , as views of the project will primarily be peripheral on the two ridges within the South Alkali Sand Hills ACEC, and there will be no views of the project available within the two drainages that transect the South Alkali Sand Hills ACEC. Where project views exist, they will be experienced from a neutral vantage point.			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

1 The Project will result in medium magnitude impacts due to distance, backdropping, and overall
2 large scale of the existing landscape. The scenic quality and landscape character will be
3 maintained. Views of the project will primarily be peripheral on the two ridges within the South
4 Alkali Sand Hills ACEC, and there will be no views of the project available within the two
5 drainages that transect the South Alkali Sand Hills ACEC. Where project views exist, they will
6 be experienced from a neutral vantage point. Therefore, visual impacts will be of low intensity.

7 Degree to Which Impacts are Caused by the Project

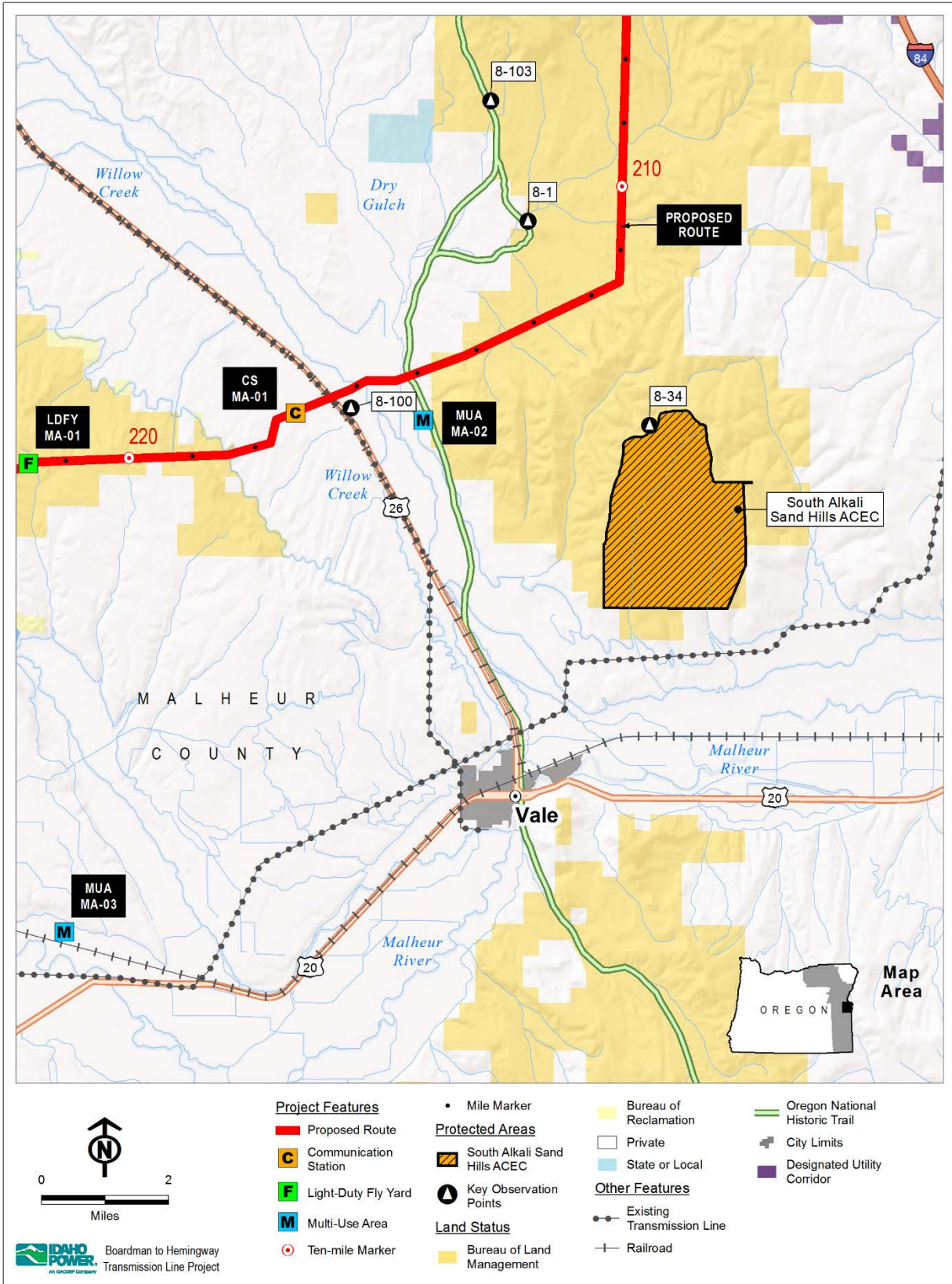
8 The impacts disclosed in this assessment are caused by the proposed facility and are not the
9 result of other past or present actions.

10 Context

11 According to the visual impact methodology, an evaluation of context is not required, as the
12 Project will have low intensity impacts, which are considered less than significant.

13 **Summary and Conclusion**

14 The Project will result in long-term visual impacts to the South Alkali Sand Hills ACEC. Visual
15 impacts will be low intensity as measured by visual contrast and scale dominance, resource
16 change, and viewer perception. While the Project will result in such impacts, the impacts will not
17 preclude the ability of the Alkali Sand Hills ACEC to provide the valued attributes for which it
18 was designated. Therefore, visual impacts to the Alkali Sand Hills ACEC will be **less than**
19 **significant**.



1
2 **Figure L-3-22. South Alkali Sand Hills Area of Critical Environmental Concern**

1 **3.23 Columbia Basin – Coyote Springs Wildlife Area**

2 **Resource:** Columbia Basin – Coyote Springs WA

3 **Relevant Exhibit:** L

4 **Relevant Plan:** Columbia Basin Wildlife Areas Management Plan (ODFW 2008a)

5 **Resource Type:** Area

6 **Relevant KOP(s):** None

7 **PART 1: Establish Baseline Conditions**

8 **Designation:** The resource is designated as a State WA and is managed by the ODFW. The
9 area was designated as a WA to protect wildlife and its habitat and provide wildlife-oriented
10 recreational and educational opportunities.

11 **Interpretation of Designation:** The purpose of the WA is to protect wildlife and its habitat. No
12 management standards or guidelines exist for the protection of scenery.

13 **Resource Overview:** The Columbia Basin – Coyote Springs WA is a 160-acre parcel of federal
14 land administered by the Bureau of Reclamation (Figure L-3-23). The property is surplus to
15 agency needs and is managed as wildlife habitat by the ODFW under lease from the Bureau of
16 Reclamation. Public access for wildlife-oriented recreation (excluding big game hunting) is
17 allowed; access is via a small parking area on the west side of the unit (ODFW 2008a).

18 Per OAR 345-022-0040, Columbia Basin – Coyote Springs WA is being evaluated as a
19 Protected Area.

20 Per OAR 345-022-0040, Columbia Basin – Coyote Springs WA is being evaluated as a
21 Protected Area.

22 Per OAR 345-021-0010, Columbia Basin – Coyote Springs WA is not considered an important
23 recreation opportunity.

24 **Pre-project Conditions:** The landscape is composed of primarily flat topography, with land use
25 dominated by agriculture. Expansive, panoramic views are available in all directions. Land cover
26 within the area includes grasslands, sagebrush-steppe, intermittently flooded wetlands, and
27 irrigated cropland. The wildlife area is crossed by I-84, a railroad line, and three transmission
28 lines, and is adjacent to industrial and agricultural land uses. Development within the Coyote
29 Springs WA is limited to one parking area with interpretive sign boards. The landscape
30 character is considered urban due to the numerous developments within and near the WA that
31 express concentrations of human activity. Using the BLM's visual resource inventory methods
32 per Manual H-8410-1 (BLM 1986), the scenic quality of the existing landscape for the Columbia
33 Basin – Coyote Springs WA is considered low (class C) as shown below:

Columbia Basin – Coyote Springs WA Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	2	2	0	1	-2	5 (C)

34 **Viewer Groups:** Viewers include individuals participating in wildlife viewing and hunting in the
35 WA who will primarily be stationary.

1 **PART 2: Impact Likelihood and Magnitude Assessment**

2 Alternatives Not Evaluated

3 Coyote Springs WA is located outside of the 10-mile viewshed buffer of the cleared ROW of
4 both the Proposed Route and the Morgan Lake Alternative, and therefore impacts from this
5 Project feature are not discussed any further in this document.

6 The Morgan Lake Alternative and the Double Mountain Alternative are located greater than 5
7 miles from this site, and are therefore not considered in this visual impact analysis. Likewise,
8 because the Double Mountain Alternative are not forested, they are not analyzed for potential
9 visual impacts resulting from a cleared ROW.

10 The analysis presented below pertains to the Proposed Route. Because of the proximity of the
11 Proposed Route to West of Bombing Range Road Alternative 1 and West of Bombing Range
12 Road Alternative 2, the results of this analysis are considered the same for those two
13 Alternatives.

14 Proposed Route

15 The northern terminus of the Proposed Route is located approximately 0.5 mile to the east of
16 the eastern boundary of the Coyote Springs WA. The Proposed Route will be approximately 0.5
17 mile directly east of the Columbia Basin – Coyote Springs WA and the Longhorn Station will be
18 located approximately 1.2 miles to the east. Transmission structures will dominate the view and
19 introduce strong contrast to the landscape due to their proximity to the WA, size, and because
20 they will primarily be skylined to over half of the Coyote Springs WA. There will also be new
21 primitive roads, pulling and tensioning sites, and new bladed access roads within 1 mile of the
22 Coyote Springs WA. These features may be visible but will appear subordinate to the large 500-
23 kV transmission towers. Primary visitor use is hunting and is dispersed throughout the WA. Due
24 to the lack of vegetation and topographic features, views of the Project will primarily be head-on,
25 continuous, and from a neutral vantage point. Although the Project will introduce strong contrast
26 and appear dominant, the landscape character will remain urban. Also, because the adjacent
27 scenery did not enhance the pre-project scenic quality of the Coyote Springs WA; the Project
28 will not result in changes to scenic quality or the scores for key factors used to assess scenic
29 quality.

Columbia Basin – Coyote Springs WA Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
1	1	2	2	0	1	-2	5 (C)

30 Likelihood of Impact

31 IPC considered all identified impacts to be “likely” to occur.

1 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

2 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The Proposed Route will be approximately 0.5 mile directly east of the Columbia Basin – Coyote Springs WA, and the Longhorn Station will be located approximately 1.2 miles to the east. Transmission structures will dominate the view and introduce strong contrast to the landscape due to their proximity to the Coyote Springs WA, size, and because they will primarily be skylined. Therefore, the magnitude of impacts will be <u>high</u> .			

1 Magnitude of Impact – Resource Change and Viewer Perception

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The landscape character will remain urban. The Project will not result in changes to scenic quality or the scores of the scenic quality components. Therefore, resource change is <u>low</u> .			
Viewer Perception	Low. Views of the project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/middleground distance zone (0.5-5 miles).	High. Views of the project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Primary visitor use is hunting and is dispersed throughout the Coyote Springs WA. Due to the lack of vegetation and topographic features, views of the Project will primarily be head-on, continuous, and from a neutral vantage point. Viewer perception will be <u>high</u> .			

1 PART 3: Consideration of Intensity, Causation, and Context

2 Impact Intensity

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

3 Transmission structures associated with the Proposed Route will dominate the view and
 4 introduce strong contrast to the landscape such that impact magnitude will be high. However,
 5 since the urban landscape character will be maintained, scenic quality component scores will
 6 not change, and the scenic quality will remain low (class C), the resource change will be low.
 7 Primary visitor use is hunting and is dispersed throughout the Coyote Springs WA. Due to the
 8 lack of vegetation and topographic features, views of the Project will primarily be head-on,
 9 continuous, and from a neutral vantage point, so viewer perception will be high. Therefore,
 10 impact intensity will be low.

11 Context

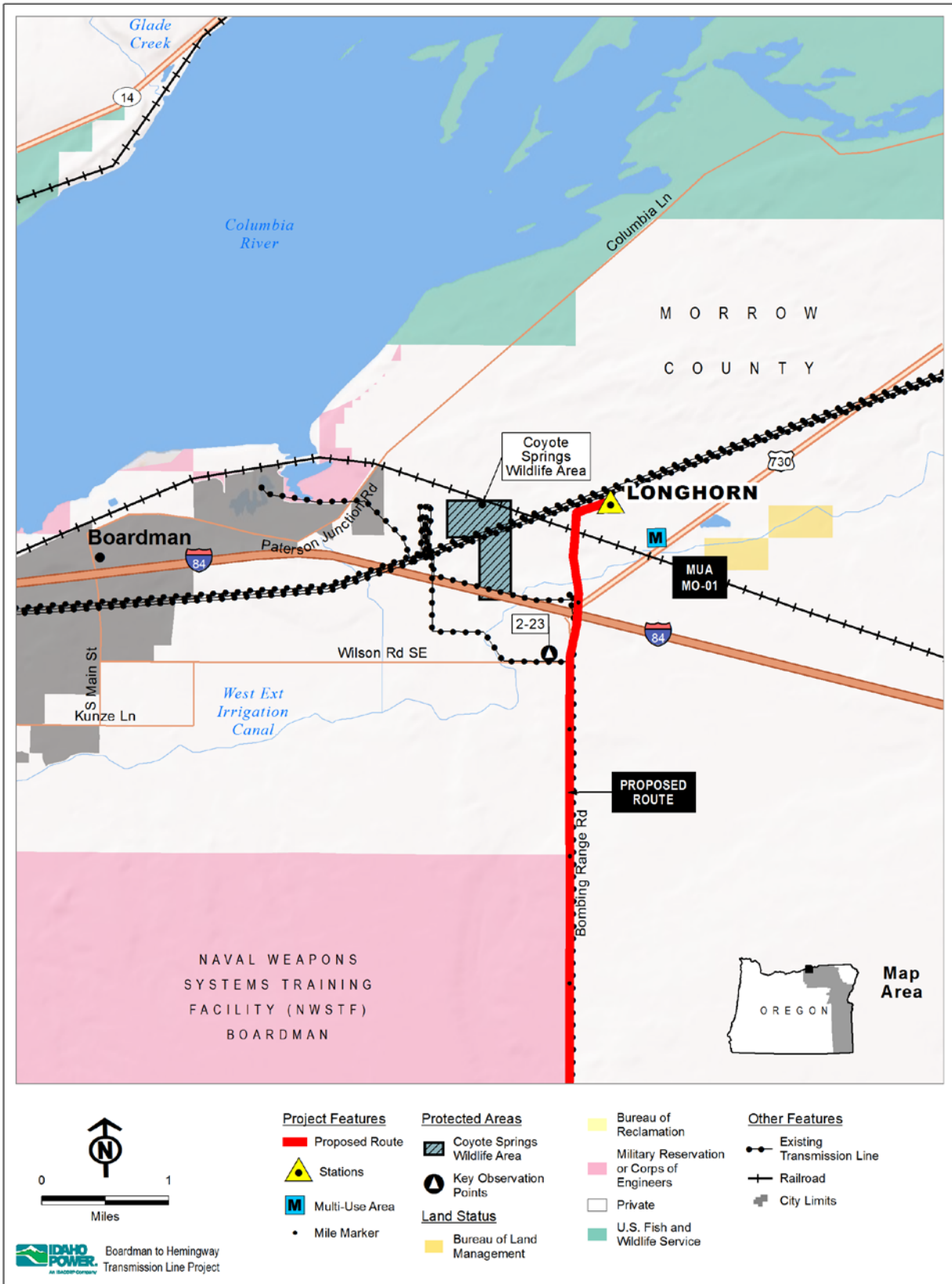
12 Scenery is not a valued attribute of the WA. However, according to the visual impact
 13 methodology, an evaluation of context is not required, as the Project will have low intensity
 14 impacts, which are considered less than significant.

15 Degree to Which the Impacts are Caused by the Project

16 The scenic quality of the resource under operational conditions is the result of the combined
 17 influence of the Project and other past or present actions including I-84, a railroad line, three
 18 transmission lines, and adjacent industrial and agricultural land, which collectively influence
 19 adjacent scenery of the resource.

20 **Summary and Conclusion**

21 The Project will result in long-term visual impacts to the Columbia Basin – Coyote Springs WA.
 22 Impacts will be low intensity as measured by visual contrast and scale dominance, resource
 23 change, and viewer perception. Impacts will be **less than significant**.



1

2 **Figure L-3-23. Columbia Basin – Coyote Springs Wildlife Area**

3.24 Ladd Marsh Wildlife Area/State Natural Heritage Area: Analysis of the Proposed Route

Resource: Ladd Marsh WA/(SNHA)

Relevant Exhibit: L, T

Relevant Plan: Ladd Marsh Wildlife Area Management Plan (ODFW 2008b)

Resource Type: Area

Relevant KOP(s): 4-16; 4-26; 4-27

PART 1: Establish Baseline Conditions

Designation: The resource is designated as a State WA and is managed by the ODFW. The area was designated as a WA to protect wildlife and its habitat and provide wildlife-oriented recreational and educational opportunities. The management plan for Ladd Marsh identifies goals to protect, enhance, and manage wetland and upland habitats to benefit a variety of fish and wildlife species, and to provide the public with wildlife-oriented recreational and educational opportunities that are compatible with the habitat goals (ODFW 2008b).

Interpretation of Designation: The purpose of the Ladd Marsh WA/SNHA is to protect wildlife and its habitat. No management standards or guidelines exist for the protection of scenery.

Resource Overview: The Ladd Marsh WA/SNHA is managed by ODFW and is located about 6 miles southeast of La Grande in southern Union County (Figure L-3-24). The Ladd Marsh WA/SNHA measures 6,019 acres comprising eight Habitat Management Units and is divided into three large parcels by I-84 and OR 203. It encompasses one of the largest wetlands in northeast Oregon, which provides habitat for breeding and nesting waterfowl and other water birds. Visitors to Ladd Marsh can enjoy hiking, wildlife viewing (primarily bird watching), fishing, and hunting. Facilities include parking areas, restrooms, a viewing blind and viewing platform, and a loop trail system.

Per OAR 345-022-0040 Ladd Marsh is being evaluated as a Protected Area.

Per OAR 345-022-0080, Ladd Marsh is not considered a Scenic Resource.

Per OAR 345-022-0100, Ladd Marsh is being evaluated as a Recreation Resource.

Existing Conditions: The Ladd Marsh WA/SNHA is located in the Grande Ronde Valley with the Wallowa Mountains to the east and the Blue Mountains to the west. The landscape includes numerous wetlands including seasonally and permanently flooded meadows, marshes, and shallow lakes. In the western portion of the Ladd Marsh WA/SNHA, upland areas occur that include mixed conifer at the higher elevations, upland shrub at mid elevations, and agricultural areas and grasslands on the valley floor that create dense to patchy patterns (ODFW 2008b). The terrain is flat in the eastern portion and rolling in the western portion, with horizontal to softly curved and flowing lines. Colors primarily include a mosaic of greens.

Human development within the Ladd Marsh WA/SNHA include four home sites, three host sites (trailer pads), City of La Grande wastewater treatment facility, two storage areas, and several scattered buildings on the area from old farm sites. Some are scheduled to be dismantled and the rest provide habitat for bats and barn owls. The Ladd Marsh WA/SNHA is surrounded primarily by agricultural and rural residential land on the valley floor, timber land to the west, and industrial land to the north. Three major transportation corridors I-84, OR 203, and a railroad) cross through the resource. Existing utility infrastructure include a buried pipeline owned by the Northwest Pipeline Corp and a 230-kV transmission line owned and operated by IPC. Single

1 track dirt roads are evident in higher elevation shrub-steppe portions of the protected area. The
 2 landscape character is agricultural. Using the BLM's visual resource inventory methods per
 3 Manual H-8410-1 (BLM 1986), the scenic quality of the Ladd Marsh WA/SNHA is considered
 4 low (class C) as shown below:

Ladd Marsh WA/SNHA Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	3	2	3	2	2	-3	11 (C)

5 **Viewer Groups:** Viewer groups include visitors to the Ladd Marsh WA/SNHA participating in
 6 hiking, wildlife viewing (primarily bird watching), fishing, and hunting activities and are both
 7 transient and stationary.

8 **PART 2: Impact Likelihood and Magnitude Assessment**

9 The visual impact assessment for Ladd Marsh WA/SNHA was prepared for both the Proposed
 10 Route and the Morgan Lake Alternative. See the next section for the analysis of the Morgan
 11 Lake Alternative.

12 Alternatives Not Evaluated

13 The West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2,
 14 and the Double Mountain Alternative are located greater than 5 miles from this site and are
 15 therefore not considered in this visual impact analysis. Because these alternatives are not
 16 forested, they are not analyzed for potential visual impacts resulting from a cleared ROW.

17 Proposed Route

18 The Proposed Route will cross the Ladd Marsh WA/SNHA approximately 0.5 mile east of
 19 Foothill Road. The route will parallel the existing 230-kV transmission line and access road for
 20 the entire portion that crosses protected area. The Proposed Route will be located within 500
 21 feet of this existing transmission line and will therefore meet the provisions of OAR 345-022-
 22 0040(3).

23 Temporary visual impacts will result from the presence of a work area located south of the Ladd
 24 Marsh WA/SNHA. The work area will introduce moderate visual contrast from presence of
 25 materials and personnel during the construction period. Existing roads will require moderate
 26 improvements, thereby resulting in weak visual contrast.

27 The transmission towers associated with the Proposed Route will introduce moderate to strong
 28 visual contrast, depending on the location of the viewer within the WA/SHA. Visual contrast will
 29 be minimized by the backdrop of the hillslopes to the west. Viewer geometry will be primarily
 30 neutral or inferior. Transmission structures will appear co-dominant to surrounding natural
 31 landscape features, and existing cultural modification.

32 The visual contrast of transmission structures would reduce the value for cultural modification
 33 to -4, and, likewise reduce the contribution of adjacent scenery to 1. Collectively, these
 34 changes would reduce the overall scenic quality score to 9; however scenic quality would
 35 remain Class C.

Ladd Marsh WA/SNHA Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	3	2	3	1	2	-4	11 (C)

- 1 Likelihood of Impact
- 2 IPC considered all identified impacts to be “likely” to occur.
- 3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

- 4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The Proposed Route will cross the Ladd Marsh WA/SNHA. The transmission line will appear backdropped with dark-colored hills such that the transmission structures will introduce moderate visual contrast. The structures will appear co-dominant to the large-scale surrounding topography, expansive landscape, and existing infrastructure. Therefore, the impact magnitude will be <u>medium</u> .			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Proposed Project will introduce moderate to strong visual contrast and appear co-dominant. Cultural modification within the protected area will increase, and the positive contribution of adjacent scenery will decrease. Collectively, these changes will alter the scenic quality score. The landscape character will remain agricultural. Therefore, resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the Project will be equally head-on or peripheral and intermittent or continuous, depending on the type of activity the viewer is participating in (viewing wildlife at a viewpoint, hiking, driving, hunting, or fishing). Therefore, viewer perception is <u>medium</u> .			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

1 The Project will result in medium magnitude visual impacts as it will introduce moderate contrast
 2 and appear co-dominant to natural and man-made features within Ladd Marsh WA/SNHA. The
 3 agricultural landscape character will be maintained and the scenic quality will not change,
 4 resulting in medium resource change. Views of the Project will be equally head-on or peripheral
 5 and intermittent or continuous, such that viewer perception will be medium. Therefore, impact
 6 intensity will be medium.

7 Degree to Which Impacts are Caused by the Project

8 The scenic quality of the resource under operational conditions is the result of the combined
 9 influence of the Project and other past or present actions including Ladd Marsh WA/SNHA
 10 facilities, existing 230-kV transmission line, a buried pipeline, and major transportation corridors.

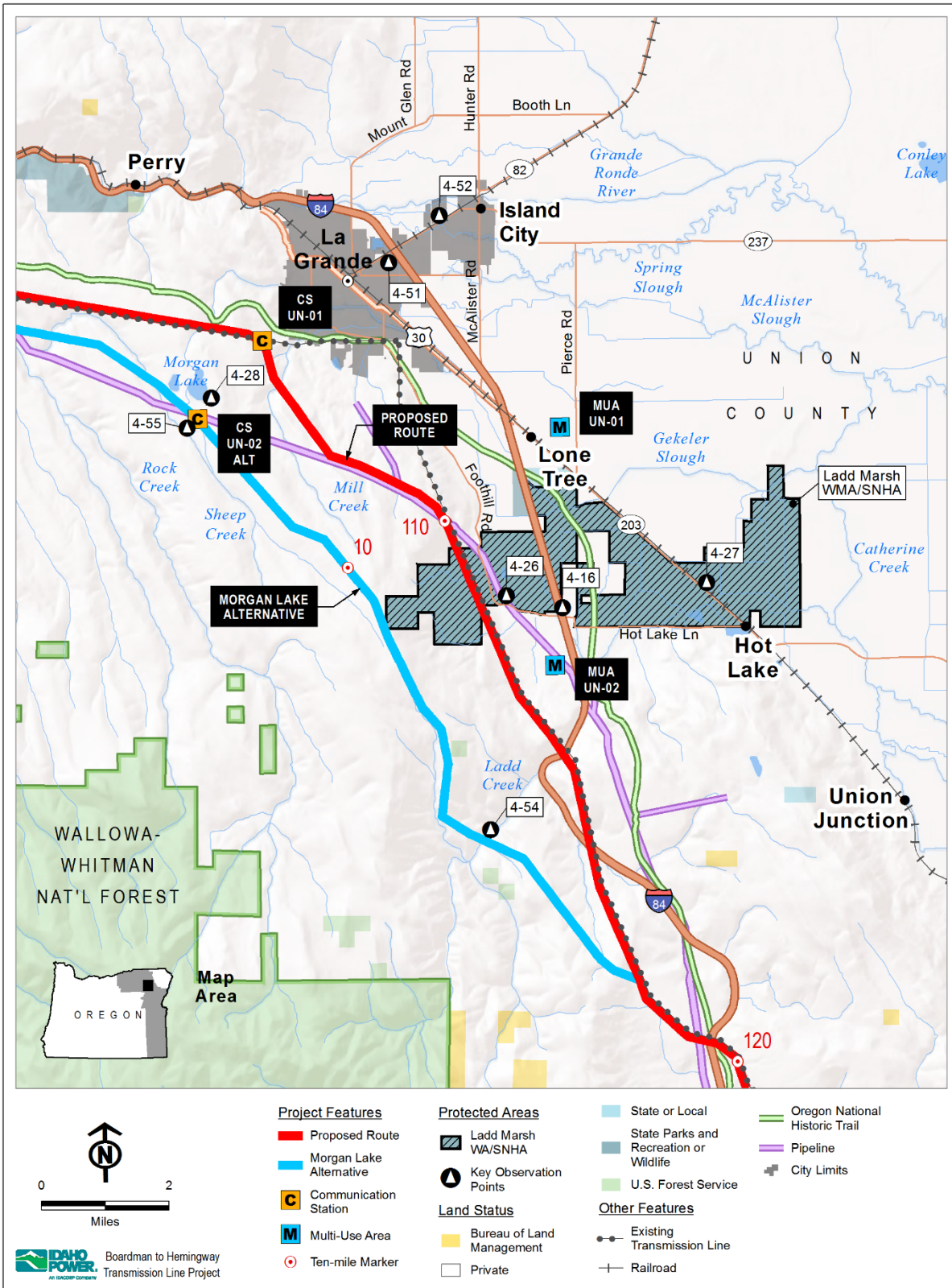
11 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: The purpose of the Ladd Marsh WA/SNHA is to protect wildlife and its habitat. No management standards or guidelines exist for the protection of scenery.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: The management plan for Ladd Marsh identifies goals to protect, enhance, and manage wetland and upland habitats to benefit a variety of fish and wildlife species, and to provide the public with wildlife-oriented recreational and educational opportunities that are compatible with the habitat goals (ODFW 2008b). The protection of scenic quality is not identified as a management goal. Medium intensity impacts will not preclude the ability of the resource to provide the wildlife-oriented recreational and educational opportunities identified in the management plan.	

12 **Summary and Conclusion**

13 The Project will result in long-term visual impacts to the Ladd Marsh WA/SNHA. Impacts will be
 14 medium intensity as measured by medium visual contrast, resource change, and viewer
 15 perception. Visual impacts will be the result of the Proposed Project and other past and present
 16 actions. Medium intensity visual impacts will not preclude the ability of the Ladd Marsh
 17 WA/SNHA to provide the wildlife-oriented recreational and educational opportunities identified in
 18 the management plan. Therefore, visual impacts to the Ladd Marsh WA/SNHA from the
 19 Proposed Route will be **less than significant**.

20 The Proposed Route will be located within 500 feet of this existing transmission line and will
 21 therefore meet the provisions of OAR 345-022-0040(3).



1
2 **Figure L-3-24. Ladd Marsh Wildlife Area/State Natural Heritage Area (Proposed**
3 **Route and Morgan Lake Alternative Route)**

3.25 Ladd Marsh Wildlife Area/State Natural Heritage Area: Analysis of the Morgan Lake Alternative

Resource: Ladd Marsh WA/SNHA

Relevant Exhibit: L, T

Relevant Plan: Ladd Marsh Wildlife Area Management Plan (ODFW 2008b)

Resource Type: Area

Relevant KOP(s): 4-16; 4-26; 4-27

PART 1: Establish Baseline Conditions

Designation: The resource is designated as a State WA and is managed by the ODFW. The area was designated as a WA to protect wildlife and its habitat and provide wildlife-oriented recreational and educational opportunities. The management plan for Ladd Marsh identifies goals to protect, enhance, and manage wetland and upland habitats to benefit a variety of fish and wildlife species, and to provide the public with wildlife-oriented recreational and educational opportunities that are compatible with the habitat goals (ODFW 2008b).

Interpretation of Designation: The purpose of the Ladd Marsh WA/SNHA is to protect wildlife and its habitat. No management standards or guidelines exist for the protection of scenery.

Resource Overview: The Ladd Marsh WA/SNHA is managed by ODFW and is located about 6 miles southeast of La Grande in southern Union County (Figure L-3-24). The Ladd Marsh WA/SNHA measures 6,019 acres comprising eight Habitat Management Units and is divided into three large parcels by I-84 and OR 203. It encompasses one of the largest wetlands in northeast Oregon, which provides habitat for breeding and nesting waterfowl and other water birds. Visitors to Ladd Marsh can enjoy hiking, wildlife viewing (primarily bird watching), fishing, and hunting. Facilities include parking areas, restrooms, a viewing blind and viewing platform, and a loop trail system.

Per OAR 345-022-0040 Ladd Marsh is being evaluated as a Protected Area.

Per OAR 345-022-0080, Ladd Marsh is not considered a Scenic Resource.

Per OAR 345-022-0100, Ladd Marsh is being evaluated as a Recreation Resource.

Existing Conditions: The Ladd Marsh WA/SNHA is located in the Grande Ronde Valley with the Willowa Mountains to the east and the Blue Mountains to the west. The landscape includes numerous wetlands including seasonally and permanently flooded meadows, marshes, and shallow lakes. In the western portion of the Ladd Marsh WA/SNHA, upland areas occur that include mixed conifer at the higher elevations, upland shrub at mid elevations, and agricultural areas and grasslands on the valley floor that create dense to patchy patterns (ODFW 2008b). The terrain is flat in the eastern portion and rolling in the western portion, with horizontal to softly curved and flowing lines. Colors primarily include a mosaic of greens.

Human development within the Ladd Marsh WA/SNHA include four home sites, three host sites (trailer pads), City of La Grande wastewater treatment facility, two storage areas, and several scattered buildings on the area from old farm sites. Some are scheduled to be dismantled and the rest provide habitat for bats and barn owls. The Ladd Marsh WA/SNHA is surrounded primarily by agricultural and rural residential land on the valley floor, timber land to the west, and industrial land to the north. Three major transportation corridors I-84, OR 203, and a railroad) cross through the resource. Existing utility infrastructure include a buried pipeline owned by the Northwest Pipeline Corp and a 230-kV transmission line owned and operated by IPC. Single

1 track dirt roads are evident in higher elevation shrub-steppe portions of the protected area. The
 2 landscape character is agricultural. Using the BLM's visual resource inventory methods per
 3 Manual H-8410-1 (BLM 1986), the scenic quality of the Ladd Marsh WA/SNHA is considered
 4 low (class C) as shown below:

Ladd Marsh WA/SNHA Scenic Quality Rating: Pre-project							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	3	2	3	2	2	-3	11 (C)

5 **Viewer Groups:** Viewer groups include visitors to the Ladd Marsh WA/SNHA participating in
 6 hiking, wildlife viewing (primarily bird watching), fishing, and hunting activities and are both
 7 transient and stationary.

8 **PART 2: Impact Likelihood and Magnitude Assessment**

9 The visual impact assessment for Ladd Marsh WA/SNHA was prepared for both the Proposed
 10 Route and the Morgan Lake Alternative. See the previous section for analysis of the Proposed
 11 Route.

12 Alternatives Not Evaluated

13 West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2, and
 14 the Double Mountain Alternative are located greater than 5 miles from this site and are therefore
 15 not considered in this visual impact analysis. Because these Alternatives are not forested, they
 16 are not analyzed for potential visual impacts resulting from a cleared ROW.

17 Morgan Lake Alternative

18 The Morgan Lake Alternative is located approximately 208 feet southwest of Ladd Marsh
 19 WA/SNHA, where it traverses a higher elevation plateau in an east-west direction. The Morgan
 20 Lake Alternative is outside of the Protected Area.

21 Temporary visual impacts will result where moderate improvements to existing roadways will
 22 increase visual contrast of these features. A proposed work area is located approximately 2.2
 23 miles southwest of the Morgan Lake Alternative, in the lower elevation agricultural areas near
 24 OR 30. This work area is in the same location under the Proposed Route and will introduce
 25 similar moderate visual contrast from presence of materials and personnel during the
 26 construction period.

27 As with the Proposed Route, the transmission towers associated with the Morgan Lake
 28 Alternative will introduce moderate to strong visual contrast, depending on the location of the
 29 viewer within the WA/SHA. As public use of the WA/SHA is primarily centered in lower
 30 elevation areas, perceived visual contrast of the transmission structures associated with Ladd
 31 Marsh WMA will be weak, as tower structures will be largely screened by existing topography
 32 and vegetation. Viewer geometry will be inferior. Transmission structures will appear
 33 subordinate to the surrounding landscape.

34 The visual contrast of transmission structures would reduce the value for cultural modification
 35 to -4, and, likewise reduce the contribution of adjacent scenery to 1. Collectively, these
 36 changes would reduce the overall scenic quality score to 9; however scenic quality would
 37 remain Class C.

Ladd Marsh WA/SNHA Scenic Quality Rating: Operational Conditions							
Landform (1 to 5)	Vegetation (0 to 5)	Water (0 to 5)	Color (1 to 5)	Adjacent Scenery (0 to 5)	Scarcity (1 to 5+)	Cultural Modification (-4 to 2)	Total Score
2	3	2	3	1	2	-4	11 (C)

1 Likelihood of Impact

2 IPC considered all identified impacts to be “likely” to occur.

3 Magnitude of Impact – Impact Duration

Indicator	Criteria used to Determine Impact Duration		
Impact Duration	Temporary. Impacts would last for up to 3 years, (construction periods only and recovery and revegetation of temporary impacts in agricultural areas).	Short-term. Impacts would 3 to 10 years (recovery and revegetation of temporary impacts in grasslands and herbaceous wetlands).	Long-term. Impacts would extend for greater than 10 years, or for the life of the Project (permanent Project facilities, recovery and revegetation of temporary impacts in shrubland and forest lands).
Explanation: Impacts will be primarily associated with the transmission line, and therefore will be <u>long-term</u> , extending for the life of the Project.			

4 Magnitude of Impact – Visual Contrast and Scale Dominance

Indicator	Criteria used to Determine Visual Contrast and Scale Dominance		
Visual Contrast and Scale Dominance	Low. Project components result in weak to no visual contrast against the existing landscape, and project-related impacts are subordinate.	Medium. Project components result in moderate visual contrast against the existing landscape, and project-related impacts are co-dominant.	High. Project components result in strong visual contrast against the existing landscape, and project-related impacts are dominant.
Explanation: The Morgan Lake Alternative is located approximately 208 feet southwest of Ladd Marsh WA/SNHA, where it traverses a higher elevation plateau in an east-west direction. The Morgan Lake Alternative is outside of the Protected Area. The transmission towers associated with the Morgan Lake Alternative will introduce moderate to strong visual contrast, depending on the location of the viewer within the WA/SHA. As public use of the WA/SHA is primarily centered in lower elevation areas, perceived visual contrast of the transmission structures associated with Ladd Marsh WMA will be weak, as tower structures will be largely screened by existing topography and vegetation. Viewer geometry will be inferior. Transmission structures will appear subordinate to the surrounding landscape. Therefore, the overall impact magnitude will be <u>medium</u> .			

1 **Magnitude of Impact – Resource Change and Viewer Perception**

Indicator	Criteria used to Determine Resource Change		
Resource Change	Low. The geographic extent of medium to high magnitude impacts is limited to a discrete portion of the resource such that scenic quality or attractiveness, and character of the resource will not change.	Medium. The geographic extent of medium to high magnitude impacts will lower the value of one or more key factor used to rank scenic quality or attractiveness; however, it will not reduce the scenic quality or scenic attractiveness class or change the overall landscape character of the resource.	High. The geographic extent of medium to high magnitude impacts will lower the scenic quality or attractiveness class and will alter landscape character of the resource.
Explanation: The Proposed Project will introduce moderate to strong visual contrast in the southern portion of the resource. Cultural modification within the protected area will increase, and the positive contribution of adjacent scenery will decrease. Collectively, these changes will alter the scenic quality score. The predominant landscape character will remain agricultural. Therefore, resource change will be <u>medium</u> .			
Viewer Perception	Low. Views of the Project are experienced from a neutral or elevated vantage point, and are predominantly peripheral, intermittent, or episodic; OR, the project is located primarily in the background distance zone (5-15 miles).	Medium. Views of the Project are experienced from a neutral or inferior vantage point, and are equally head-on and peripheral, equally continuous and intermittent; OR, the project is located primarily in the foreground/midground distance zone (0.5-5 miles).	High. Views of the Project are experienced from a neutral or inferior vantage point, and are predominantly head-on, predominantly continuous; OR, the project is located primarily in the immediate foreground distance zone (up to 0.5 mile).
Explanation: Views of the Project will be equally head-on or peripheral and intermittent or continuous, depending on the type of activity the viewer is participating in (viewing wildlife at a viewpoint, hiking, driving, hunting, or fishing). Therefore, viewer perception is <u>medium</u> .			

2 **PART 3: Consideration of Intensity, Causation, and Context**

3 **Impact Intensity**

Intensity Rating			
Viewer Perception	Resource Change		
	LOW	MEDIUM	HIGH
LOW	Low	Medium	High
MEDIUM	Low	Medium	High
HIGH	Low	High	High

1 The Project will result in medium magnitude visual impacts as it will introduce moderate contrast
 2 and appear co-dominant to natural and man-made features within Ladd Marsh WA/SNHA. The
 3 agricultural landscape character will be maintained and the scenic quality will not change,
 4 resulting in medium resource change. Views of the Project will be equally head-on or peripheral
 5 and intermittent or continuous, such that viewer perception will be medium. Therefore, impact
 6 intensity will be medium.

7 Degree to Which Impacts are Caused by the Project

8 The scenic quality of the resource under operational conditions is the result of the combined
 9 influence of the Project and other past or present actions including Ladd Marsh WA/SNHA
 10 facilities, existing 230-kV transmission line, a buried pipeline, and major transportation corridors.

11 Context

Indicator	Context Criteria
Scenery as a Valued Attribute	Scenery is a valued attribute of the resource, either as a perceived amenity (i.e., recreation setting) or as defined in OAR 345-022-0080; or, Scenery is not a valued attribute of the resource.
Explanation: The purpose of the Ladd Marsh WA/SNHA is to protect wildlife and its habitat. No management standards or guidelines exist for the protection of scenery.	
Persistence of Scenic Value	Persistence of Scenic Value is either: Not-Precluded. Impacts will not preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan; or, Precluded. Impacts will preclude the ability of the resource to provide the scenic value for which it was designated or recognized in the applicable land management plan.
Explanation: The management plan for Ladd Marsh identifies goals to protect, enhance, and manage wetland and upland habitats to benefit a variety of fish and wildlife species, and to provide the public with wildlife-oriented recreational and educational opportunities that are compatible with the habitat goals (ODFW 2008b). The protection of scenic quality is not identified as a management goal. Medium intensity impacts will not preclude the ability of the resource to provide the wildlife-oriented recreational and educational opportunities identified in the management plan.	

12 **Summary and Conclusion**

13 The Project, under the Morgan Lake Alternative, will result in long-term visual impacts to the
 14 Ladd Marsh WA/SNHA. Impacts will be medium intensity as measured by medium visual
 15 contrast, resource change, and viewer perception. Visual impacts will be the result of the
 16 Proposed Project and other past and present actions. Medium intensity visual impacts will not
 17 preclude the ability of the Ladd Marsh WA/SNHA to provide the wildlife-oriented recreational
 18 and educational opportunities identified in the management plan. Therefore, visual impacts to
 19 the Ladd Marsh WA/SNHA will be **less than significant**.

1 **4 REFERENCES**

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33 [160_northeast_oregon_\(lowres\)095139.pdf](http://oregonstateparks.org/index.cfm?do=main.loadFile&load=_siteFiles/publications/38160_northeast_oregon_(lowres)095139.pdf). Accessed on: February 3, 2016.
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- 1 **ATTACHMENT L-4**
- 2 **PHOTOSIMULATIONS FROM KOPS FOR PROTECTED AREAS**



Legend

-  Key Observation Point
Cone of Vision
-  Proposed Right-of-Way
-  Proposed Structure Locations

Photograph Information

Time of photograph: 3:38 PM
 Date of photograph: 10.12.2011
 Weather condition: Sunny
 Viewing direction: Northeast
 Latitude: 45°22'26.36"N
 Longitude: 118°18'53.52"W

Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper: The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.



**Existing Conditions
Key Observation Point 4-5**

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 July 2013




Figure: L-4-1



Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper: The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.



Legend

-  Key Observation Point
Cone of Vision
-  Proposed Right-of-Way
-  Proposed Structure Locations

Photograph Information

Time of photograph: 3:38 PM
 Date of photograph: 10.12.2011
 Weather condition: Sunny
 Viewing direction: Northeast
 Latitude: 45°22'26.36"N
 Longitude: 118°18'53.52"W
 Nearest tower in view: 0.14 mi
 Structure Type/ Material: Lattice/ Galvanized Steel




**Photographic Simulation of
Proposed Alignment
Key Observation Point 4-5**

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 July 2013

Figure: L-4-2



Legend

-  Key Observation Point
Cone of Vision
-  Alternative Right-of-Way
-  Proposed Structure
Locations

Photograph Information

Time of photograph: 1:29 PM
 Date of photograph: 3.24.2011
 Weather condition: Partly Cloudy
 Viewing direction: West
 Latitude: 44°49'11.139"N
 Longitude: 117°44'24.517"W
 Nearest tower in view: 0.45 mi

Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper: The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.





Existing Conditions
Key Observation Point 5-25C
 Photo Point 005

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 December 2012

Figure: L-4-3



Legend

-  Key Observation Point
Cone of Vision
-  Proposed Structure
Locations

Photograph Information

Time of photography:	1:29 PM
Date of photography:	24 March 2011
Weather conditions:	Clear, Few Clouds
Viewing direction:	West
Latitude:	44°49'11.12"N
Longitude:	117°44'24.46"W
Nearest structure in view:	0.14 miles
Structure Type/Material:	H-Frames Weathered steel

The above photograph is intended to be viewed at approximately 18 inches from the viewer's eyes when printed on 11x17 paper. The photograph below is the full sized wide angle view of the above photograph area outlined in yellow.






**Key Observation Point 5-25C
Photographic Simulation of
Flagstaff Hill Alternative
FASC Route**

Boardman to Hemingway
500-kV Transmission Project
Idaho, Oregon, Washington
November 2016

Figure: L-4-4



Legend

-  Key Observation Point
Cone of Vision
-  Alternative Right-of-Way
-  Proposed Structure
Locations

Photograph Information

Time of photograph: 2:25 PM
 Date of photograph: 3.24.2011
 Weather condition: Partly Cloudy
 Viewing direction: Northwest
 Latitude: 44°48'53.843"N
 Longitude: 117°43'43.826"W
 Nearest tower in view: 0.91 mi

Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper: The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.






Existing Conditions
Key Observation Point 5-25D
 Photo Point 008

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 December 2012

Figure: L-4-5



Legend

-  Key Observation Point
Cone of Vision
-  Alternative Right-of-Way
-  Proposed Structure Locations

Photograph Information

Time of photograph: 2:25 PM
 Date of photograph: 3.24.2011
 Weather condition: Partly Cloudy
 Viewing direction: Northwest
 Latitude: 44°48'53.843"N
 Longitude: 117°43'43.826"W
 Nearest tower in view: 0.72 mi
 Structure Type/ Material: H-Frames, Corten Steel and Lattice structures

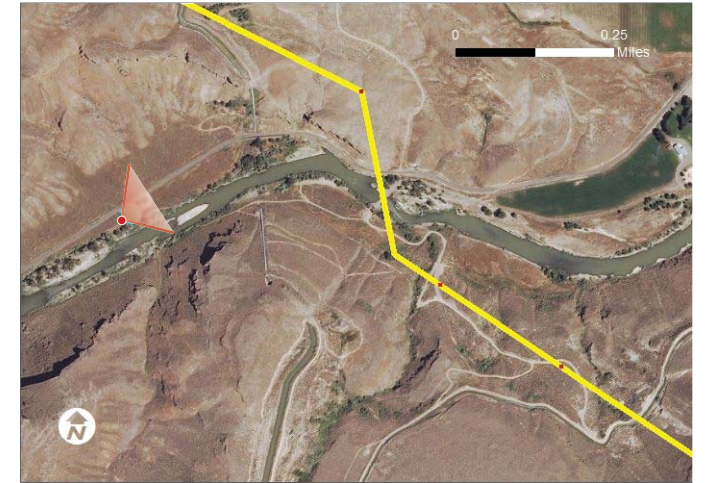
Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.






**Photographic Simulation of
 Flagstaff Hill Alternative
 Key Observation Point 5-25D
 FASC Route**

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 November 2016

Figure: L-4-6



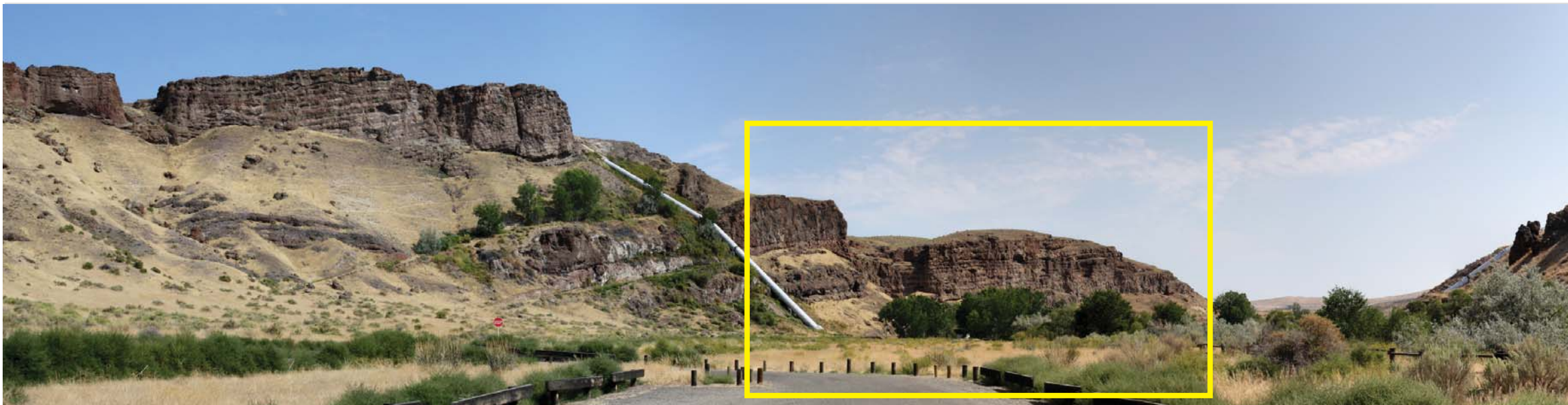
Legend

-  Key Observation Point
Cone of Vision
-  Alternative Right-of-Way
-  Proposed Structure
Locations

Photograph Information

Time of photograph: 10:59 AM
 Date of photograph: 9.13.2011
 Weather condition: Mostly Sunny
 Viewing direction: Northeast
 Latitude: 43°44'12.62"N
 Longitude: 117°11'1.67"W

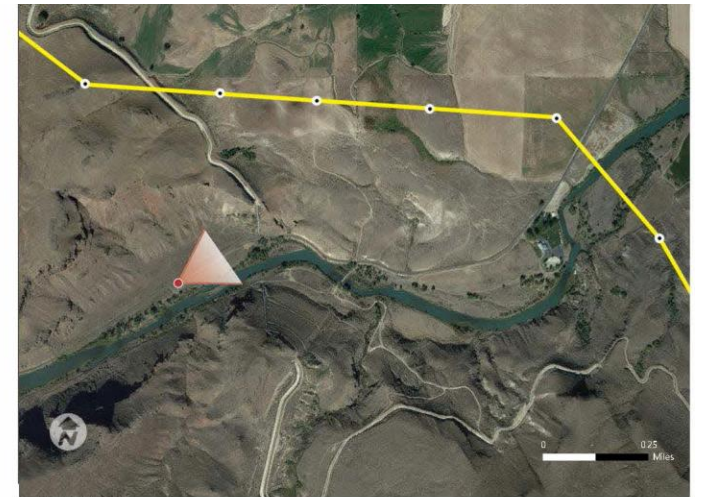
Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper: The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.






**Existing Conditions
Key Observation Point 8-52**

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 January 2013

Figure: L-4-7



Legend

-  Key Observation Point
Cone of Vision
-  Alternative Right-of-Way
-  Proposed Structure Locations

Photograph Information

Time of photograph: 10:59 AM
 Date of photograph: 9.13.2011
 Weather condition: Mostly Sunny
 Viewing direction: Northeast
 Latitude: 43°44'12.62"N
 Longitude: 117°11'1.67"W
 Nearest tower in view: 0.46 mi
 Structure Type/ Material: H-Frames, Corten Steel and Lattice structures

Above photograph is intended to be viewed 18 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped to show a wide angle of view with the above photograph's area shown in yellow.





**Photographic Simulation of Proposed Alignment
 Key Observation Point 8-52
 FASC Route**

Boardman to Hemingway
 500-kV Transmission Project
 Idaho, Oregon, Washington
 November 2016

Figure: L-4-8



Legend

-  Key Observation Point
Cone of Vision
-  Proposed Structure
Locations

Photograph Information

Time of photography	2:11 PM
Date of photography:	14 September 2011
Weather conditions:	Clear, Few Clouds
Viewing direction:	Northwest
Latitude:	44°16'22.50"N
Longitude:	117°13'12.06"W
Nearest tower in view:	N/A
Structure Type/Material:	N/A

The above photograph is intended to be viewed at approximately 18 inches from the viewer's eyes when printed on 11x17 paper. The photograph below is the full sized wide angle view of the above photograph area outlined in yellow.





**Key Observation Point 8-3
Existing Conditions**

Boardman to Hemingway
500-kV Transmission Project
Idaho, Oregon, Washington
March 2016

Figure: L-4-9



Legend

-  Key Observation Point
Cone of Vision
-  Proposed Structure
Locations

Photograph Information

Time of photography	2:11 PM
Date of photography:	14 September 2011
Weather conditions:	Clear, Few Clouds
Viewing direction:	Northwest
Latitude:	44°16'22.50"N
Longitude:	117°13'12.06"W
Nearest tower in view:	0.7mi
Structure Type/Material:	H-Frame/ Weathered steel

The above photograph is intended to be viewed at approximately 18 inches from the viewer's eyes when printed on 11x17 paper. The photograph below is the full sized wide angle view of the above photograph area outlined in yellow.

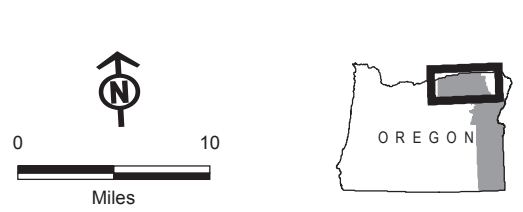
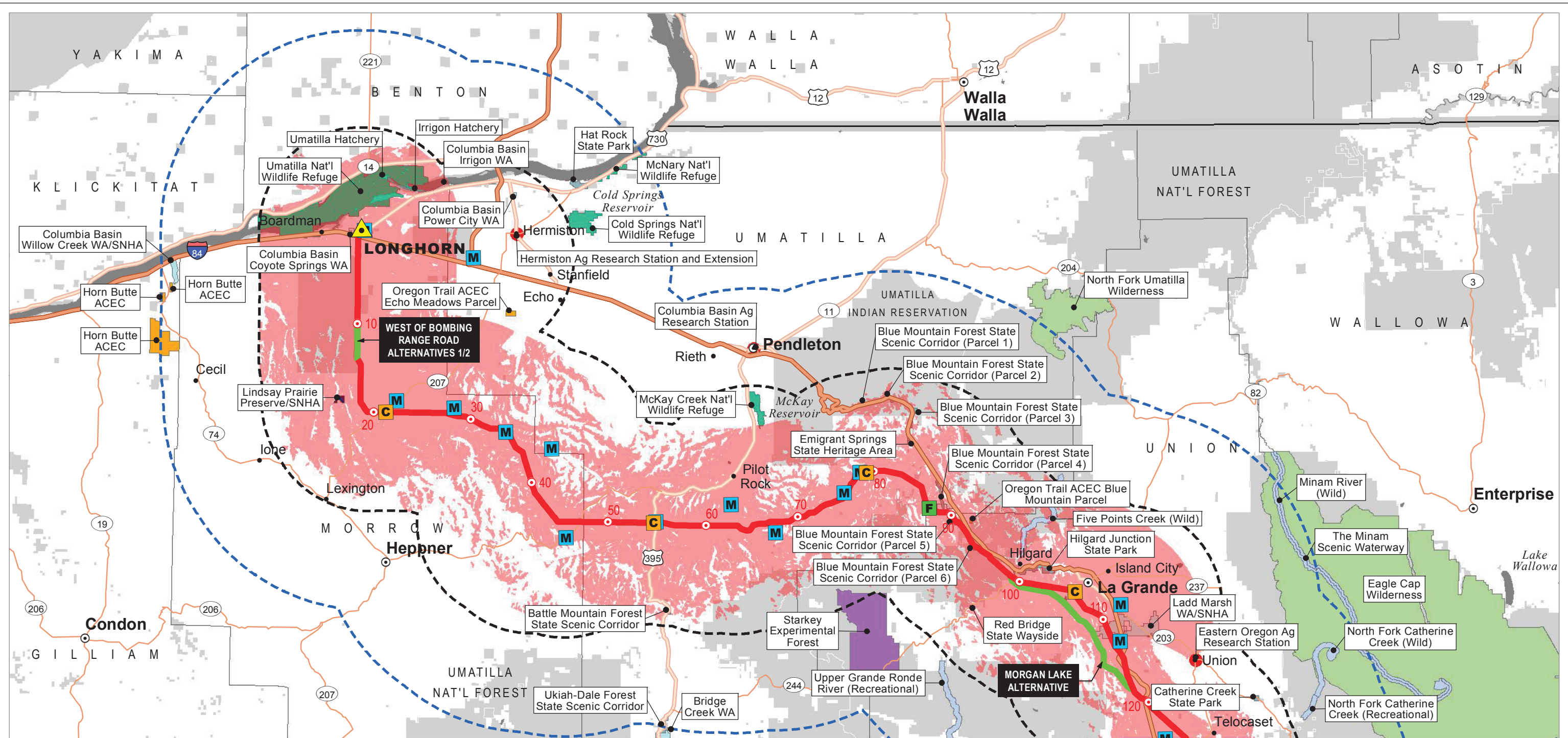


**Key Observation Point 8-3
Photographic Simulation of
Proposed Alternative North Route V2
H-Frames**

Boardman to Hemingway
500-kV Transmission Project
Idaho, Oregon, Washington
March 2016

Figure: L-4-10

- 1 **ATTACHMENT L-5**
 - 2 **VIEWSHED MAPS**
-



Map Area

- Protected Areas Features**
- Analysis Areas
 - Scenic Resources (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
 - Viewshed (Proposed Route Only)
 - Area Where One or More Towers May Be Visible to 10-miles
 - Not Visible

- Protected Areas within 20-miles of Project Site Boundary**
- Agricultural Experimental Stations
 - Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
 - Experimental Areas
 - National and State Fish Hatcheries
 - National and State Wildlife Refuges

- Project Features**
- Proposed Route
 - Alternative Route
 - Ten-mile Marker
- Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation**
- State Natural Heritage Areas
 - State Parks and Waysides
 - State Wildlife Areas and Management Areas
 - Wilderness Areas

- Land Status**
- Other Federal or State Lands or Indian Reservation
 - Private
- Other Features**
- Cities or Towns
 - County Seat
 - Other
 - Roads
 - Interstates
 - Highways
 - Major Roads

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Transmission Line Project

**Attachment L-5a
Protected Areas**

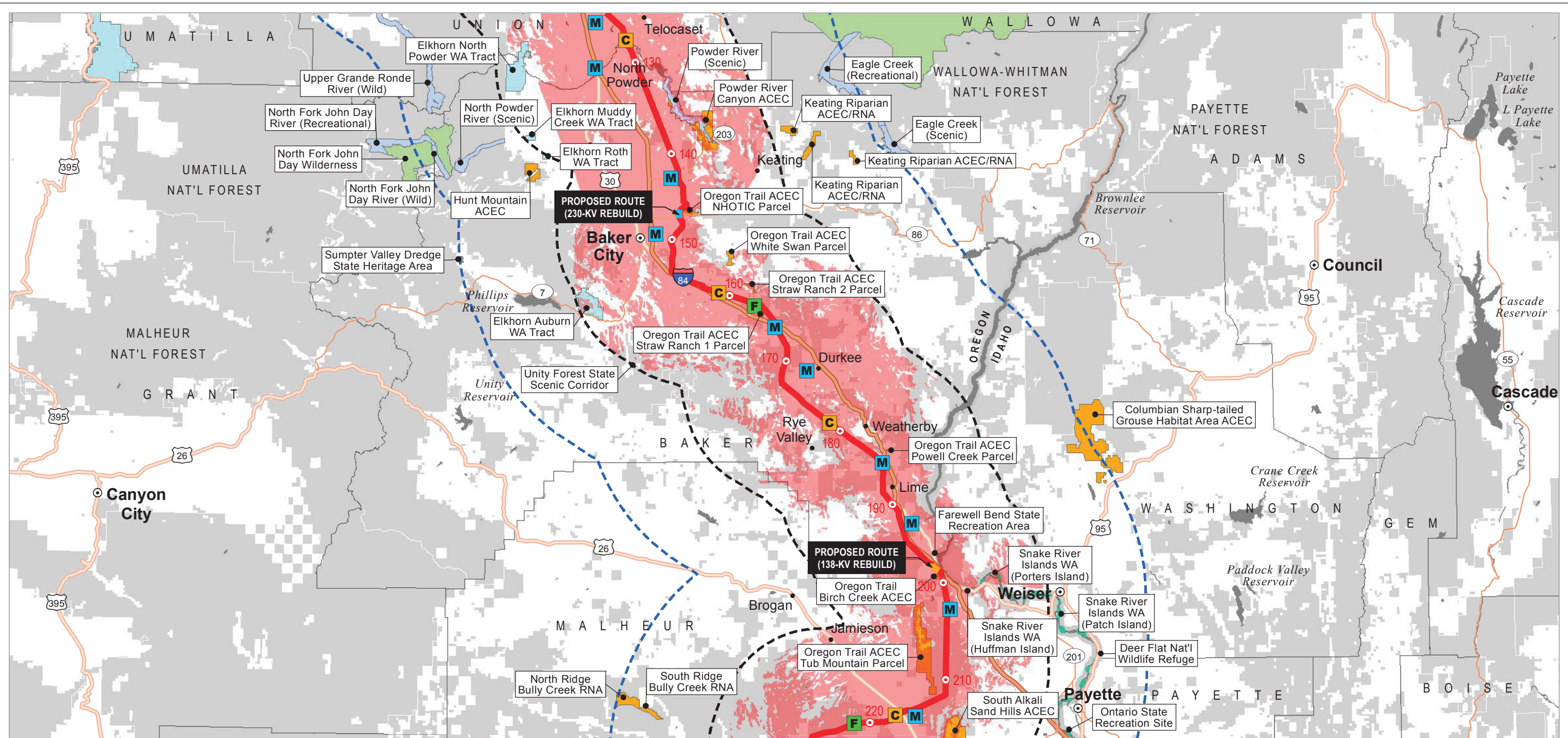
Viewshed
Proposed Route

Map 1

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastylelsen and the GIS User Community

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December 2016



- Protected Areas Features**
- Analysis Areas
 - Scenic Resources (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
 - Viewshed (Proposed Route Only)
 - Area Where One or More Towers May Be Visible to 10-miles
 - Not Visible

- Protected Areas within 20-miles of Project Site Boundary
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
 - National and State Wildlife Refuges
 - Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation
 - State Parks and Waysides
 - State Wildlife Areas and Management Areas

- Project Features**
- Wilderness Areas
 - Proposed Route
 - Proposed Route (138-kV Rebuild)
 - Proposed Route (230-kV Rebuild)
 - Ten-mile Marker
 - Communication Station
 - Light-Duty Fly Yard
 - Multi-Use Area

- Land Status**
- Other Federal or State Lands or Indian Reservation
 - Private
- Other Features**
- Cities or Towns
 - County Seat
 - Other

- Roads**
- Interstates
 - Highways
 - Major Roads

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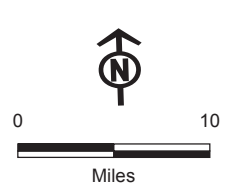
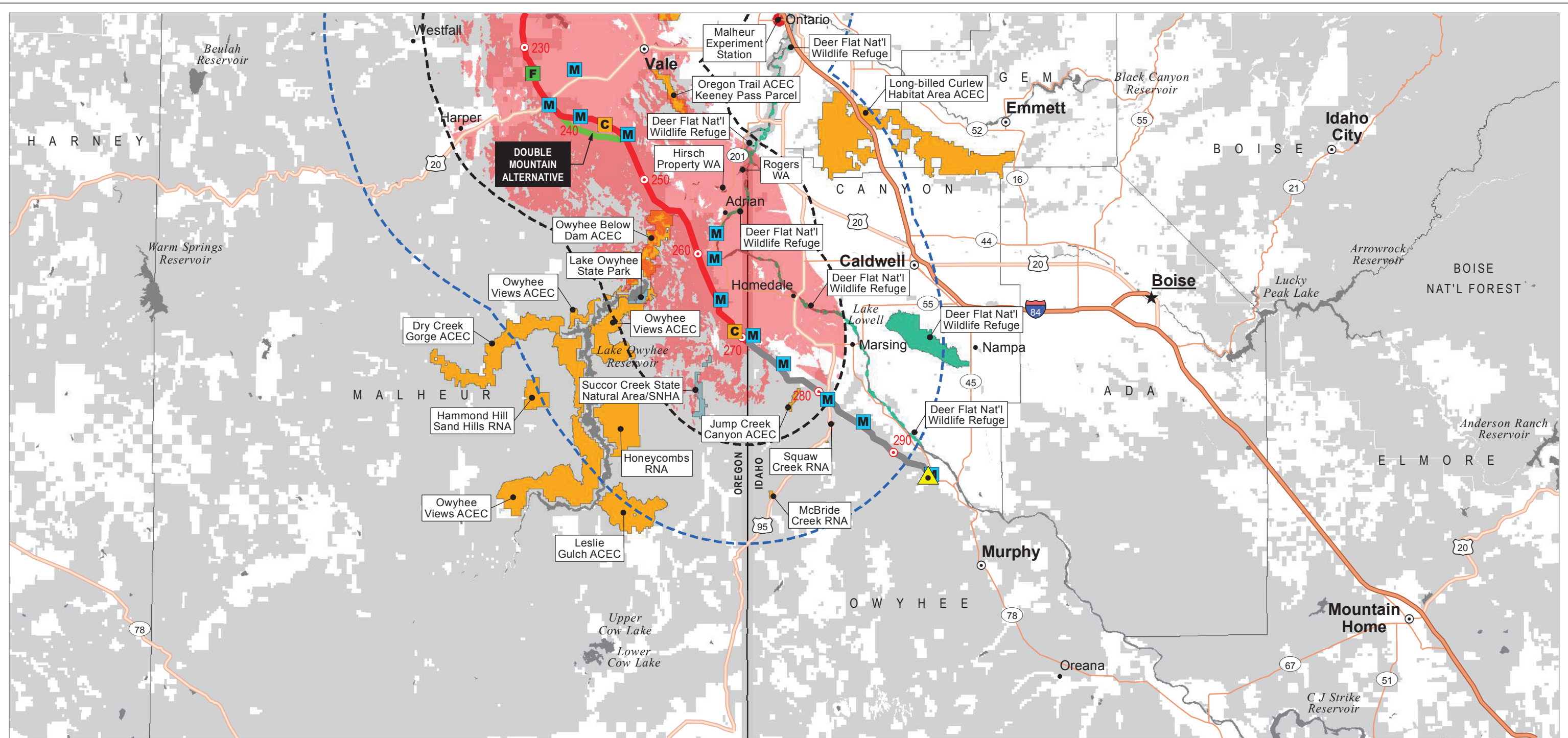
**Attachment L-5a
Protected Areas**

Viewshed
Proposed Route
Map 2

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016



Map Area

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016

Protected Areas Features

- Analysis Areas
- Scenic Resources (10-mile buffer of Site Boundary)
- Protected Areas (20-mile buffer of Site Boundary)
- Viewshed (Proposed Route Only)
 - Area Where One or More Towers May Be Visible to 10-miles
 - Not Visible

Protected Areas within 20-miles of Project Site Boundary

- Agricultural Experimental Stations
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
- National and State Wildlife Refuges
- State Parks and Waysides
- State Wildlife Areas and Management Areas

Project Features

- Proposed Route
- Alternative Route
- Proposed Route Not In Oregon
- Ten-mile Marker
- Communication Station
- Light-Duty Fly Yard
- Multi-Use Area
- Station

Land Status

- Other Federal or State Lands or Indian Reservation
- Private
- Other Features
- Cities or Towns
 - State Capital
 - County Seat
 - Other

Roads

- Interstates
- Highways
- Major Roads

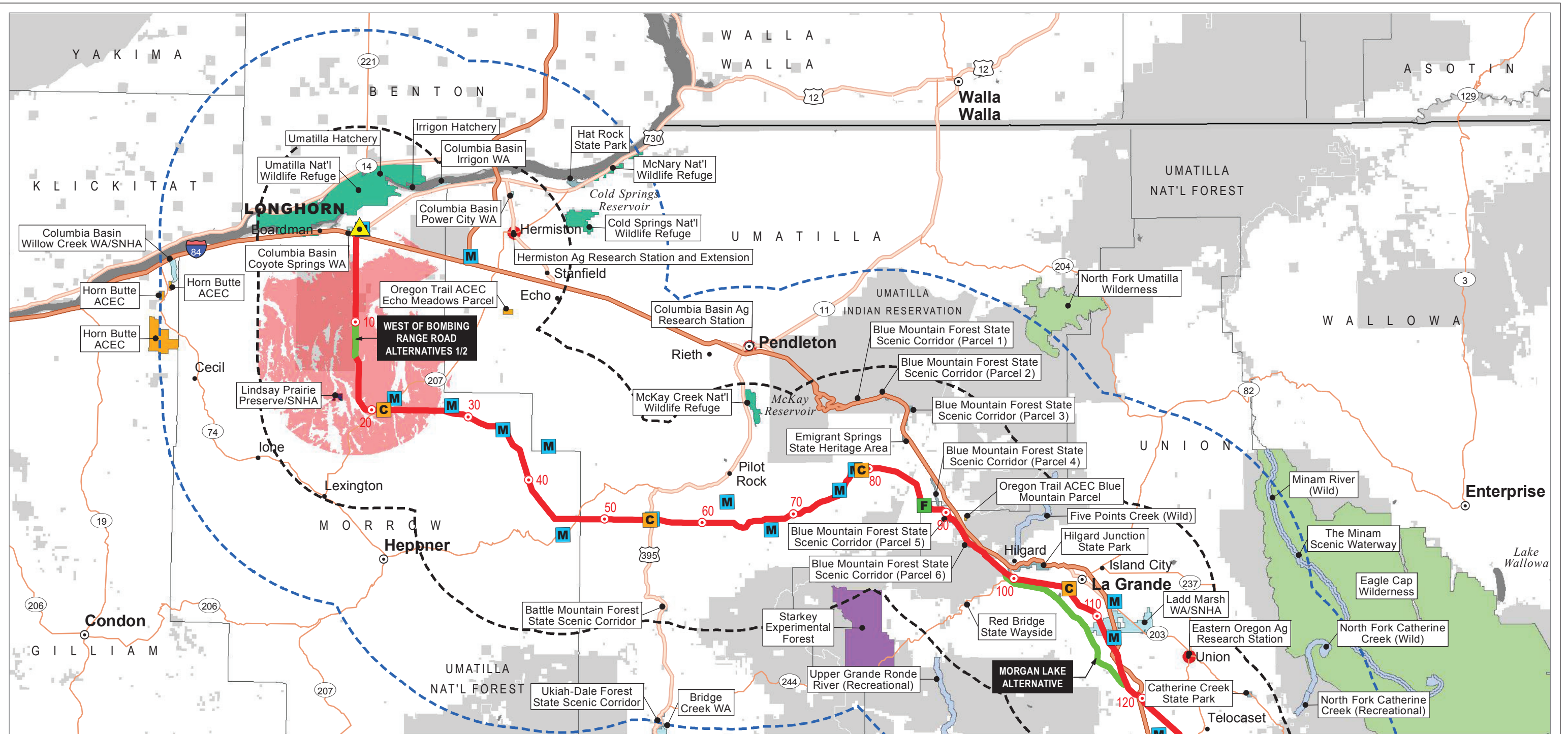


Boardman to Hemingway Transmission Line Project

Attachment L-5a Protected Areas

Viewshed Proposed Route

Map 3



- Protected Areas Features**
- Analysis Areas
 - Scenic Resources Analysis Area (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
 - Viewshed (West of Bombing Range Road Alternatives Only)
 - Area Where One or More Towers May Be Visible to 10-miles
 - Not Visible

- Protected Areas within 20-miles of Project Site Boundary**
- Agricultural Experimental Stations
 - Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
 - Experimental Areas
 - National and State Fish Hatcheries
 - National and State Wildlife Refuges

- Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation**
- State Natural Heritage Areas
 - State Parks and Waysides
 - State Wildlife Areas and Management Areas
 - Wilderness Areas
- Project Features**
- Proposed Route
 - Alternative Route
 - Ten-mile Marker

- Communication Station
 - Light-Duty Fly Yard
 - Multi-Use Area
 - Station
- Land Status**
- Other Federal or State Lands or Indian Reservation
 - Private

- Other Features**
- Cities or Towns
 - County Seat
 - Other
 - Roads
 - Interstates
 - Highways
 - Major Roads

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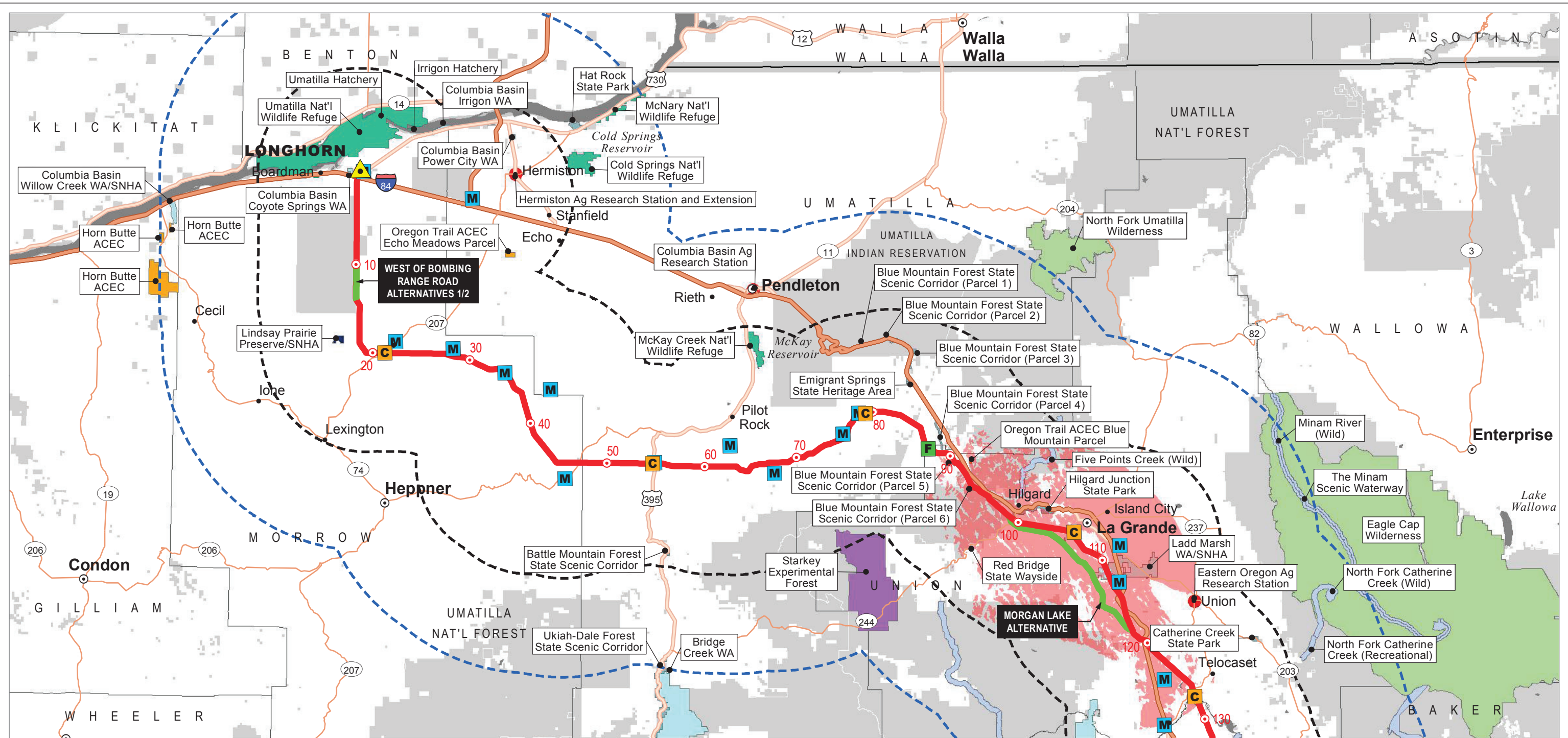
Attachment L-5a Protected Areas

Viewshed West of Bombing Range Road Alternatives 1/2

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016



Map Area

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystrelsen and the GIS User Community

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December 2016

- Protected Areas Features**
- Analysis Areas
 - Scenic Resources Analysis Area (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
 - Viewshed (Morgan Lake Alternative Only)
 - Area Where One or More Towers May Be Visible to 10-miles
 - Not Visible
- Protected Areas within 20-miles of Project Site Boundary**
- Agricultural Experimental Stations
 - Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
 - Experimental Areas
 - National and State Fish Hatcheries
 - National and State Wildlife Refuges
- Project Features**
- Proposed Route
 - Alternative Route
 - Ten-mile Marker
- Other Features**
- Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation
 - State Natural Heritage Areas
 - State Parks and Waysides
 - State Wildlife Areas and Management Areas
 - Wilderness Areas
- Land Status**
- Other Federal or State Lands or Indian Reservation
 - Private
- Other Features**
- Cities or Towns
 - County Seat
 - Other
 - Roads
 - Interstates
 - Highways
 - Major Roads
- Other Features**
- Communication Station (C)
 - Light-Duty Fly Yard (F)
 - Multi-Use Area (M)
 - Station (yellow triangle)

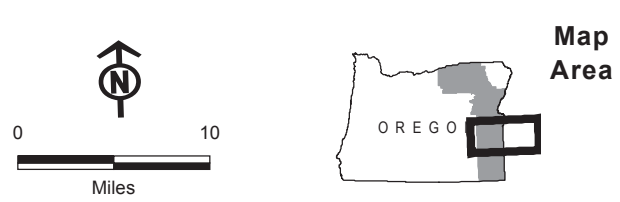
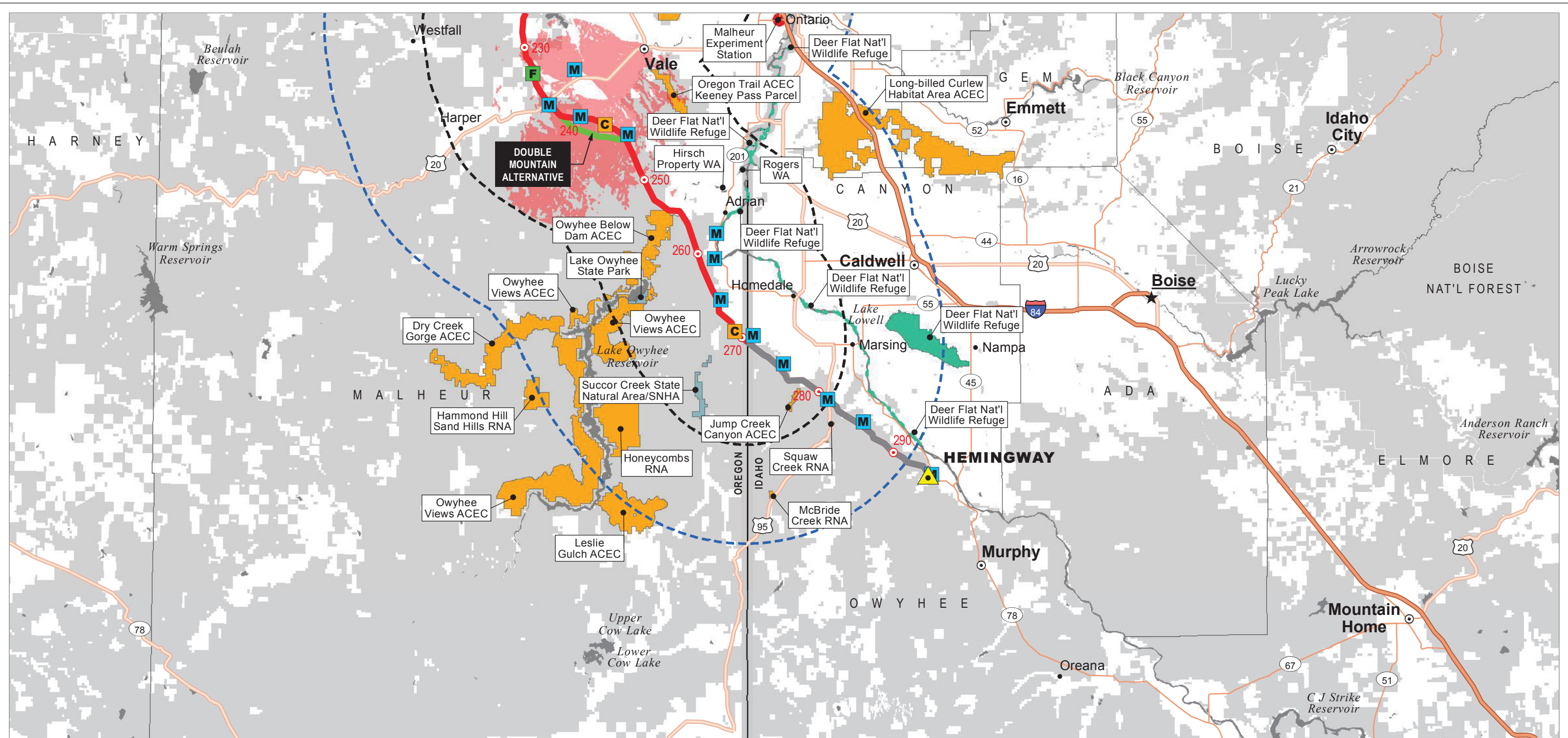
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Boardman to Hemingway
Transmission Line Project

**Attachment L-5a
Protected Areas**

Viewshed
Morgan Lake Alternative

Map 5



Map Area

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016

Protected Areas Features

- Analysis Areas
- Scenic Resources Analysis Area (10-mile buffer of Site Boundary)
- Protected Areas (20-mile buffer of Site Boundary)
- Viewshed (Double Mountain Alternative Only)
 - Area Where One or More Towers May Be Visible to 10-miles
 - Not Visible

Protected Areas within 20-miles of Project Site Boundary

- Agricultural Experimental Stations
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
- National and State Wildlife Refuges
- State Parks and Waysides
- State Wildlife Areas and Management Areas

Project Features

- Proposed Route
- Alternative Route
- Proposed Route Not in Oregon
- Ten-mile Marker
- Communication Station
- Light-Duty Fly Yard
- Multi-Use Area
- Station

Land Status

- Other Federal or State Lands or Indian Reservation
- Private

Other Features

- Cities or Towns
- State Capital
- County Seat
- Other

Roads

- Interstates
- Highways
- Major Roads

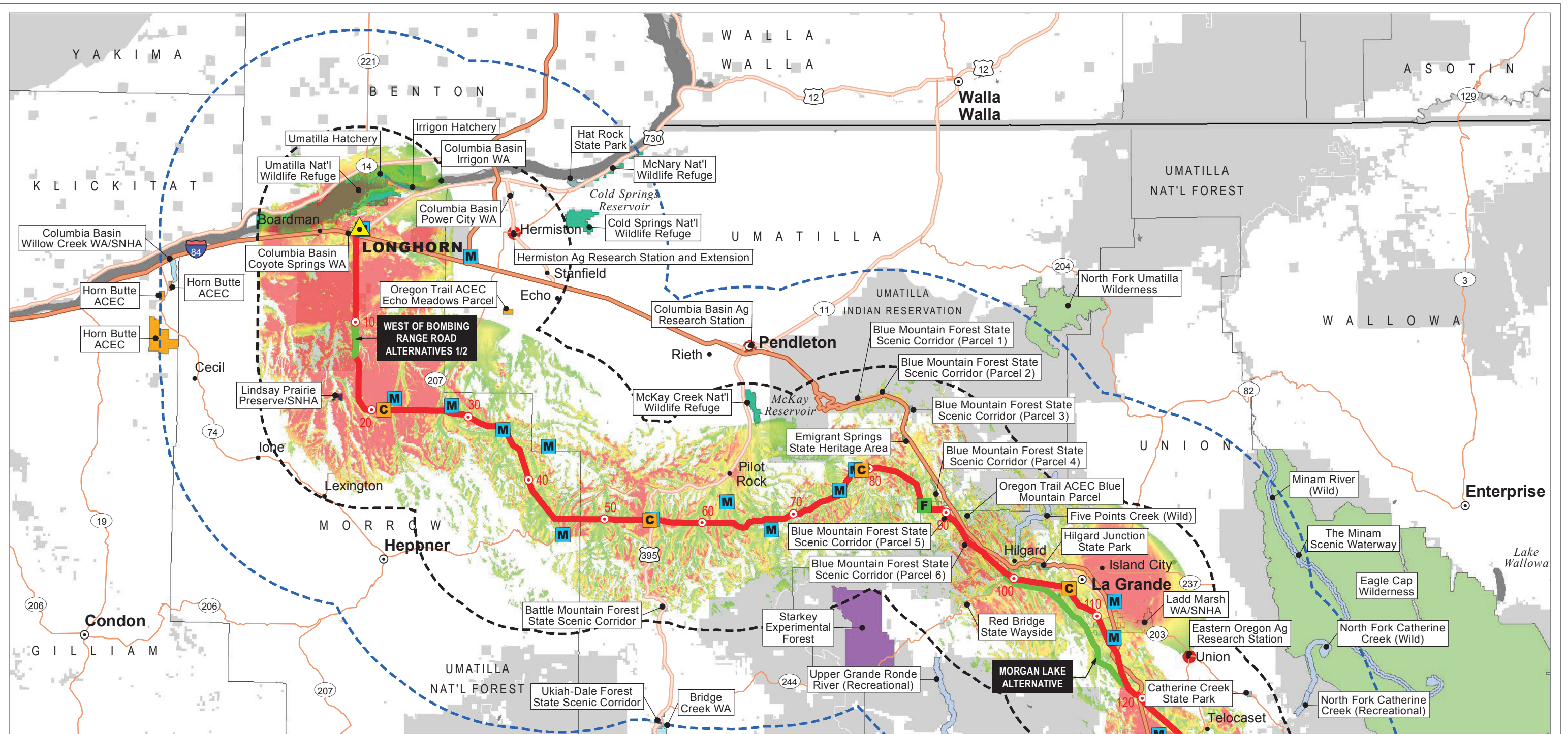


Boardman to Hemingway Transmission Line Project

Attachment L-5a Protected Areas

Viewshed Double Mountain Alternative

Map 6



Protected Areas Features

Analysis Areas

- Scenic Resources (10-mile buffer of Site Boundary)
- Protected Areas (20-mile buffer of Site Boundary)

Visibility (Proposed Route Only)
of Towers Visible to 10-miles

High

Low or Not Visible

Protected Areas within 20-miles of Project Site Boundary

- Agricultural Experimental Stations
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
- Experimental Areas
- National and State Fish Hatcheries
- National and State Wildlife Refuges

Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation

- State Natural Heritage Areas
- State Parks and Waysides
- State Wildlife Areas and Management Areas
- Wilderness Areas

Project Features

- Proposed Route
- Alternative Route
- Ten-mile Marker

Other Features

- Cities or Towns
- County Seat
- Other
- Roads
- Interstates
- Highways
- Major Roads

Land Status

- Other Federal or State Lands or Indian Reservation
- Private

Communication Station

- Light-Duty Fly Yard
- Multi-Use Area
- Station

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**Attachment L-5b
Protected Areas**

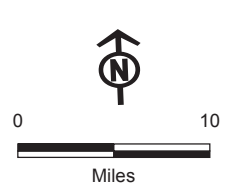
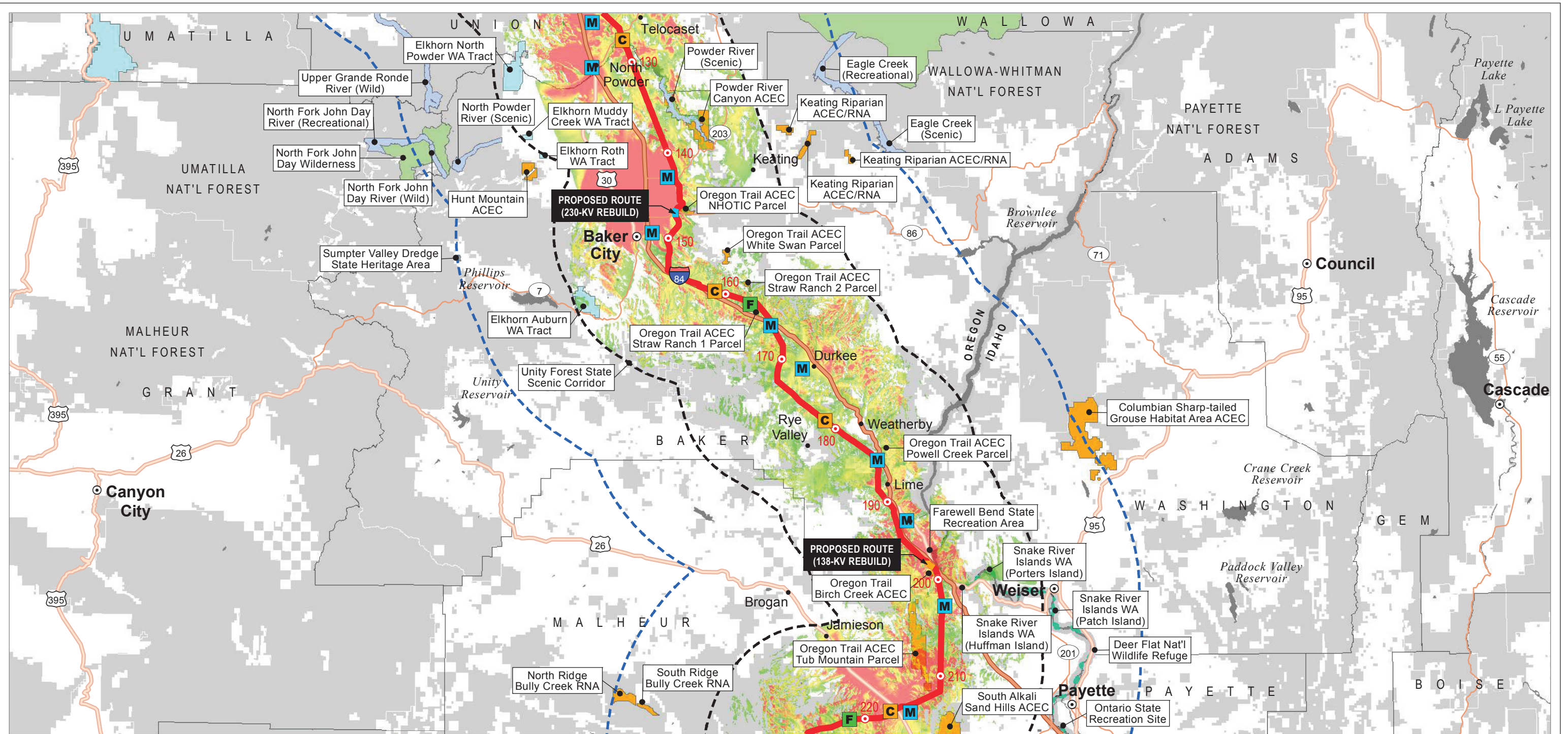
Potential Tower Visibility
Proposed Route

Map 1

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016



Protected Areas Features

- Analysis Areas
- Scenic Resources (10-mile buffer of Site Boundary)
- Protected Areas (20-mile buffer of Site Boundary)
- Visibility (Proposed Route Only)
of Towers Visible to 10-miles
- High
- Low or Not Visible

Protected Areas within 20-miles of Project Site Boundary

- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
- National and State Wildlife Refuges
- Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation
- State Parks and Waysides
- State Wildlife Areas and Management Areas
- Wilderness Areas

Project Features

- Proposed Route
- Proposed Route (138-kV Rebuild)
- Proposed Route (230-kV Rebuild)
- Ten-mile Marker
- Communication Station
- Light-Duty Fly Yard
- Multi-Use Area

Land Status

- Other Federal or State Lands or Indian Reservation
- Private
- Other Features
- Cities or Towns
- County Seat
- Other
- Roads
- Interstates
- Highways
- Major Roads



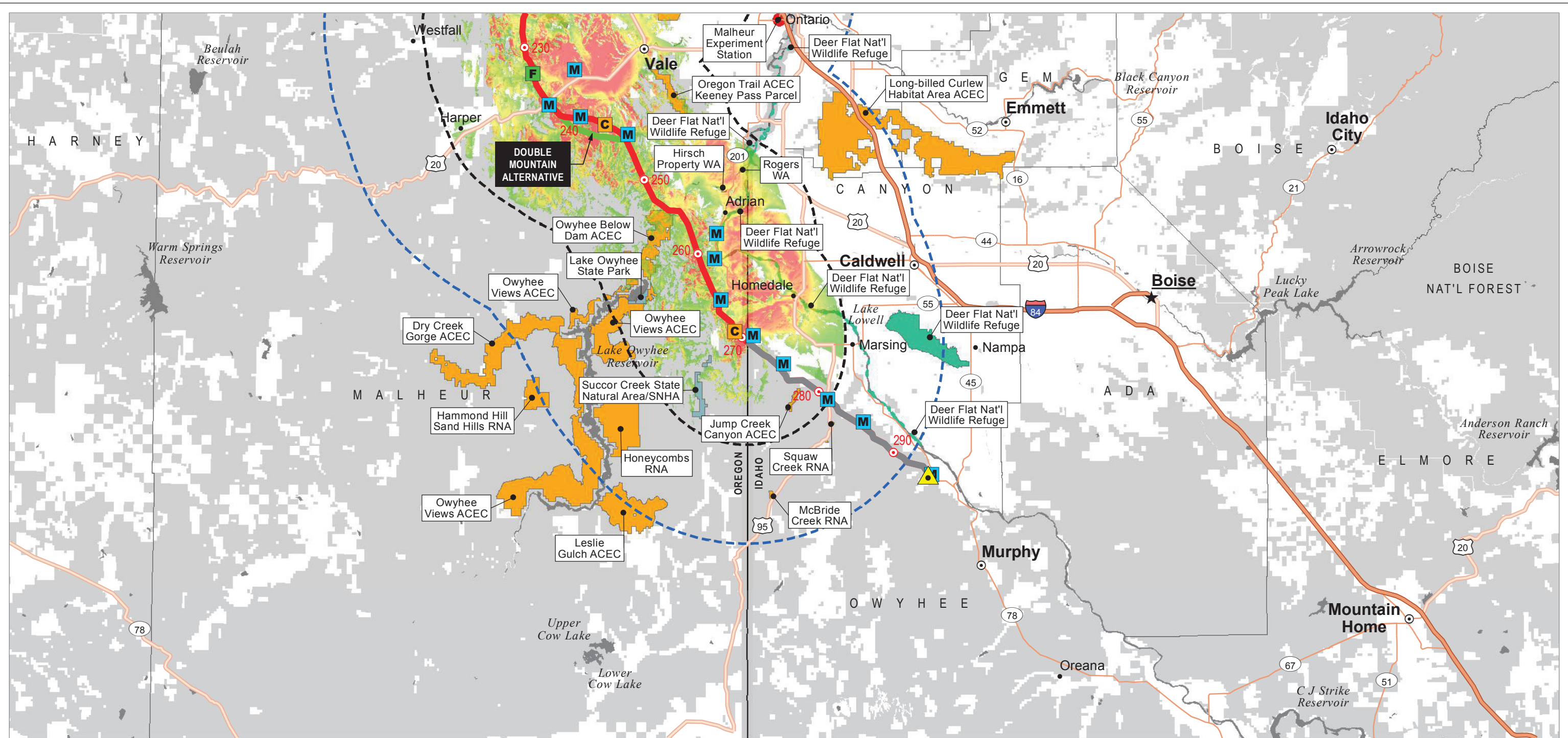
Boardman to Hemingway Transmission Line Project

Attachment L-5b Protected Areas

Potential Tower Visibility Proposed Route

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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Protected Areas Features

- Analysis Areas**
- Scenic Resources (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
- Visibility (Proposed Route Only)**
of Towers Visible to 10-miles
- High
 - Low or Not Visible

Protected Areas within 20-miles of Project Site Boundary

- Agricultural Experimental Stations
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)
- National and State Wildlife Refuges
- State Parks and Waysides
- State Wildlife Areas and Management Areas

Project Features

- Proposed Route

Alternative Route

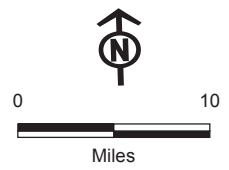
- Proposed Route Not In Oregon
- Ten-mile Marker
- Communication Station
- Light-Duty Fly Yard
- Multi-Use Area
- Station

Land Status

- Other Federal or State Lands or Indian Reservation
- Private

Other Features

- Cities or Towns**
- State Capital
 - County Seat
 - Other
- Roads**
- Interstates
 - Highways
 - Major Roads



Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016

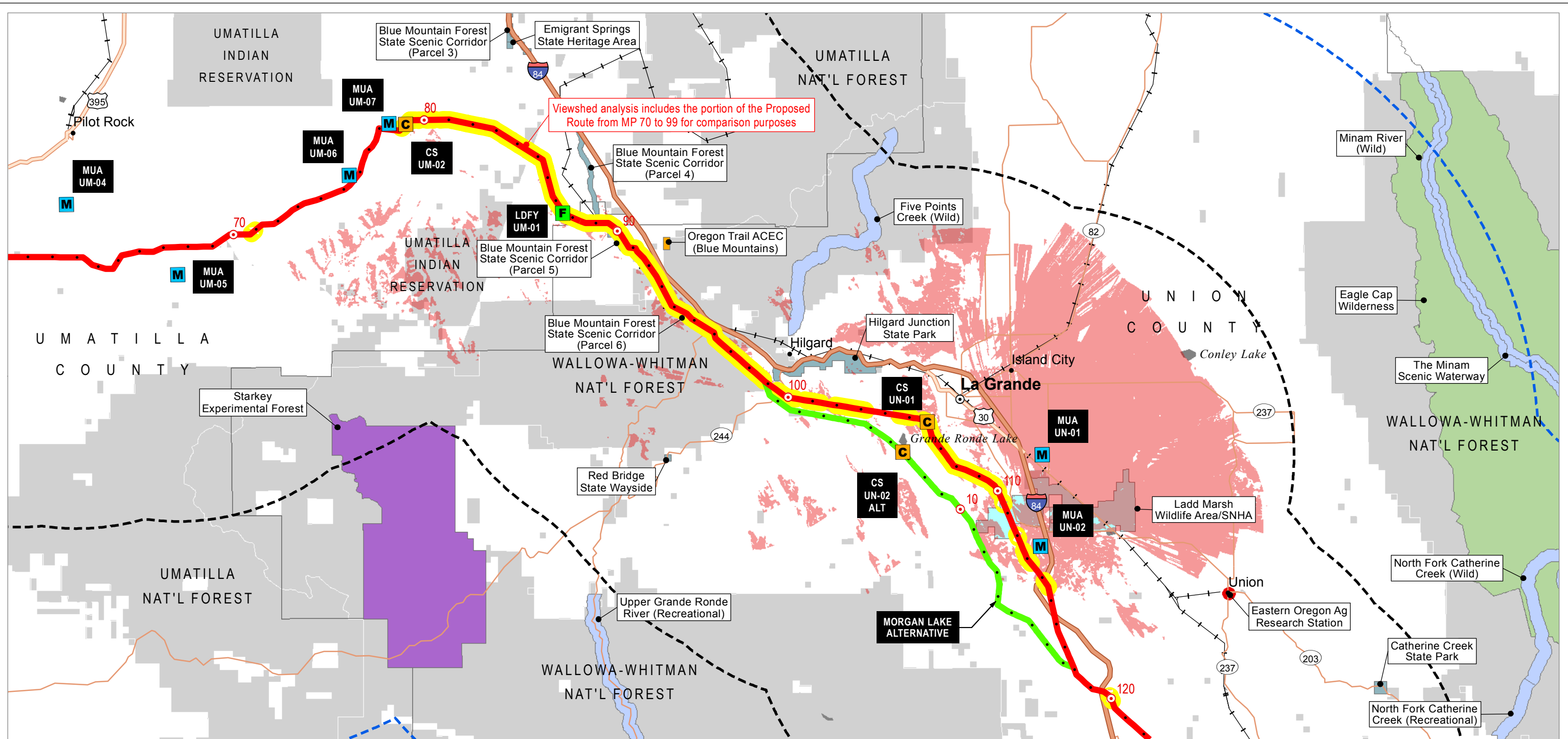


Boardman to Hemingway Transmission Line Project

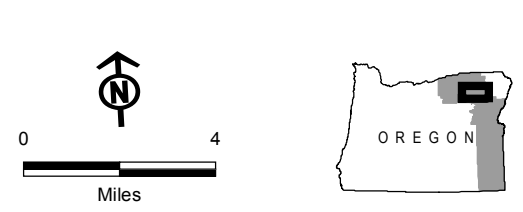
Attachment L-5b Protected Areas

Potential Tower Visibility Proposed Route

Map 3



Viewshed analysis includes the portion of the Proposed Route from MP 70 to 99 for comparison purposes



Map Area

Protected Areas Features

- Analysis Areas
- Scenic Resources Analysis Area (10-mile buffer of Site Boundary)
- Protected Areas (20-mile buffer of Site Boundary)
- Estimated ROW Clearing in Forested Land (width exaggerated for map scale)

Viewshed

- Area Where Full ROW Clearing in Forested Land May Be Visible to 10-miles
- Not Visible
- Protected Areas within 20-miles of Project Site Boundary
- Agricultural Experimental Stations
- Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)

- Experimental Areas
- Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation
- State Parks and Waysides
- State Wildlife Areas and Management Areas
- Wilderness Areas

Project Features

- Proposed Route
- Alternative Route
- Ten-mile

- Mile
- Communication Station
- Light-Duty Fly Yard
- Multi-Use Area
- Land Status
- Other Federal or State Lands or Indian Reservation
- Private

- Roads and Railroad
- Interstates
- Highways
- Major Roads
- Railroad



Boardman to Hemingway Transmission Line Project

**Attachment L-5c
Protected Areas**

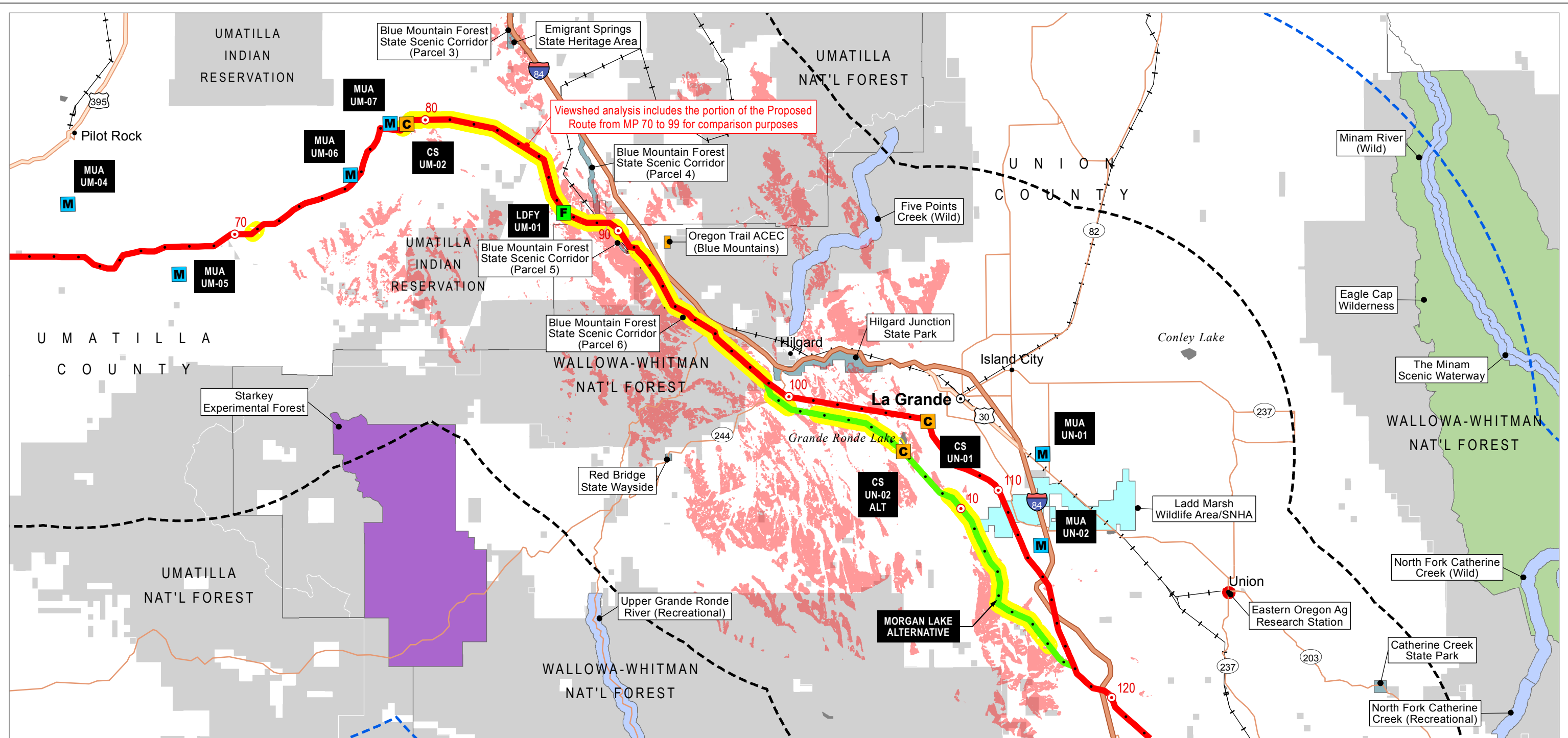
Viewshed
Proposed Route
Forested Area ROW Clearing

Map 1

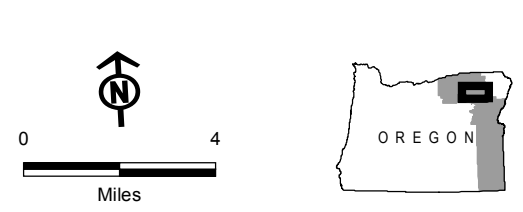
Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

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December 2016



Viewshed analysis includes the portion of the Proposed Route from MP 70 to 99 for comparison purposes



Map Area

- Protected Areas Features**
- Analysis Areas
 - Scenic Resources Analysis Area (10-mile buffer of Site Boundary)
 - Protected Areas (20-mile buffer of Site Boundary)
 - Estimated ROW Clearing in Forested Land (width exaggerated for map scale)

- Viewshed**
- Area Where Full ROW Clearing in Forested Land May Be Visible to 10-miles
 - Not Visible
 - Protected Areas within 20-miles of Project Site Boundary
 - Agricultural Experimental Stations
 - Areas of Critical Environmental Concern, Outstanding Natural Areas, and Research Natural Areas (BLM Only)

- Project Features**
- Experimental Areas
 - Scenic Waterways, Wild and Scenic Rivers, and Rivers Listed as Potential for Designation
 - State Parks and Waysides
 - State Wildlife Areas and Management Areas
 - Wilderness Areas
 - Proposed Route
 - Alternative Route
 - Ten-mile

- Land Status**
- Mile
 - Communication Station
 - Light-Duty Fly Yard
 - Multi-Use Area
 - Other Federal or State Lands or Indian Reservation
 - Private

- Roads and Railroad**
- Interstates
 - Highways
 - Major Roads
 - Railroad

Source(s): BLM, Esri, IPC, ODFW, NPS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystyrelsen and the GIS User Community
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