ATTACHMENT B-6
2017 SUPPLEMENTAL SITING STUDY
Boardman to Hemingway Transmission Line Project 2017 Supplemental Siting Study

Prepared By

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# Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
</tr>
<tr>
<td>BPA</td>
<td>Bonneville Power Administration</td>
</tr>
<tr>
<td>EFSC</td>
<td>Energy Facility Siting Council</td>
</tr>
<tr>
<td>HMA</td>
<td>Habitat Management Area</td>
</tr>
<tr>
<td>IPC</td>
<td>Idaho Power Company</td>
</tr>
<tr>
<td>kV</td>
<td>kilovolt</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
</tr>
<tr>
<td>NWSTF</td>
<td>Naval Weapons System Training Facility</td>
</tr>
<tr>
<td>pASC</td>
<td>preliminary Application for Site Certificate</td>
</tr>
<tr>
<td>Project</td>
<td>Boardman to Hemingway Transmission Line Project</td>
</tr>
<tr>
<td>RNA–B</td>
<td>Research Natural Area–B</td>
</tr>
<tr>
<td>ROW</td>
<td>right-of-way</td>
</tr>
<tr>
<td>USFS</td>
<td>United States Forest Service</td>
</tr>
<tr>
<td>WBRR</td>
<td>West of Bombing Range Road</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

This 2017 Supplemental Siting Study addresses changes to the proposed and alternative routes for the Boardman to Hemingway Transmission Line Project (Project) that have been developed since June 2016, when Idaho Power Company (IPC) submitted its Draft Amended preliminary Application for Site Certificate (Draft Amended pASC), which contained the 2015 supplemental siting study. Since the 2015 Supplemental Siting Study and filing of the Draft Amended pASC, the Project has undergone many route adjustments. The changes include the addition of alternatives and changes to the Proposed Route including major line and road location adjustments as well as minor adjustments to avoid sensitive resources, reduce redundancy of Project features, and improve the preliminary engineering design. Section 2 explains why IPC modified the Project following the submittal of its 2016 Draft Amended pASC, and Section 3 describes the specific route modifications. Exhibit C contains a detailed description and map sets documenting the location of the proposed and alternative routes that will be included in the Amended pASC.

2 REASONS FOR FURTHER SITING STUDY

After filing the Draft Amended pASC for the Project in 2016, IPC performed additional analysis and revision to the Project. The primary factors driving the need for modifying the Project were:

- The Bureau of Land Management's (BLM) identification of an agency-preferred alternative that included several alternatives not analyzed in the Draft Amended pASC;
- Further coordination with the Department of Defense and project stakeholders in the Boardman, Oregon area;
- Further coordination with land owners; and
- Route refinements by IPC due to continued engineering to avoid sensitive resources and improve design.

2.1 BLM's Agency Preferred Alternative

In March of 2016, the BLM requested additional input from stakeholders on the alternatives being considered in the National Environmental Policy Act (NEPA) process. The BLM took the information provided by the stakeholders and developed a revised Agency Preferred Alternative. The revised BLM Agency Preferred Alternative resulted in 147.4 miles of route modifications to the IPC Proposed Route as presented in the Draft Amended pASC. The majority of the route modifications occurred in Morrow, Umatilla, Union, and Baker counties (Table 2.1-1).

Table 2.1-1. Miles of Route Modifications as a Result of the BLM Agency Preferred Alternative

<table>
<thead>
<tr>
<th>County</th>
<th>Alternatives</th>
<th>Miles of Route Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morrow</td>
<td>Sand Hollow/Whittaker Flats</td>
<td>31.4</td>
</tr>
<tr>
<td>Umatilla</td>
<td>Sand Hollow/Whittaker Flats</td>
<td>30.5</td>
</tr>
<tr>
<td>Union</td>
<td>Mill Creek and Magpie Peak Collocation with Existing 230-kilovolt transmission lines</td>
<td>32.3</td>
</tr>
<tr>
<td>Baker</td>
<td>Magpie Peak, Flagstaff Gulch, Lone Pine Mountain, West Durkee, and Table Mountain</td>
<td>47.2</td>
</tr>
<tr>
<td>Malheur</td>
<td>Owyhee River Crossing</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>147.4</td>
</tr>
</tbody>
</table>
The BLM identified the Agency Preferred Alternative that it believed will fulfill the statutory mission and responsibilities of the relevant agencies, including giving consideration to economic, environmental, and other factors, including:

- Cultural resources, including historic trails, visual impacts on historic properties, and prehistoric archaeological sites;
- Fish presence and stream crossings;
- Native vegetation and forest and riparian habitats;
- Overall visibility from key observations points, and BLM and United States Forest Service (USFS) visual management objectives and criteria; and
- Greater sage-grouse, big-game winter range, raptors, special status species, and sensitive species.
- Certain sensitive areas including Areas of Critical Environmental Concern, lands with wilderness characteristics, and wild and scenic suitable rivers;
- Agriculture;
- Use of corridors including the West-wide Energy Corridor, BLM Vale District utility corridor, and USFS utility corridor; proximity to existing roads including Interstate 84; and adjacency to existing transmission lines;
- Socioeconomics; and
- Technical and other considerations (military operations, constructability, and Resource Management Plan and USFS plan conformance).

2.2 IPC Route Modifications

IPC made minor changes to the sections of the Proposed Route submitted in the Draft Amended pASC that were not eliminated by the new BLM Agency Preferred Alternative. These included minor line and road location adjustments as well as adjustments to avoid sensitive resources, reduce redundancy of project features, and improve the preliminary engineering design. In addition, in coordination with permitting partners PacifiCorp and Bonneville Power Administration (BPA) and other stakeholders, IPC also added two alternatives in Morrow County and one alternative in Union County.

3 ROUTE MODIFICATIONS

3.1 Overview

This section describes changes to the Proposed Route and alternatives by county that have been identified since the last Supplemental Siting Study submitted as Exhibit B, Attachment B-4, 2015 Supplemental Siting Study.

The naming convention and map labeling identifies IPC’s Energy Facility Siting Council (EFSC) Proposed Route and BLM’s Agency Preferred Alternative in red, IPC’s EFSC alternative segments in green, routes that were not be analyzed in the Draft Amended pASC in purple, and routes that were not analyzed in the Final Environmental Impact Statement in blue (see Table 3.1-1). Figures in this section show an overview of the route locations and of the route adjustments between 2016 and 2017. Tables in this section compare the constraints between the Proposed Route and alternatives.
Table 3.1-1. Summary of the EFSC and NEPA Status of the Routes and Stations Considered in the Amended pASC

<table>
<thead>
<tr>
<th>Route Originator</th>
<th>Route Designation</th>
<th>EFSC Status</th>
<th>Status in FEIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Morrow County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC</td>
<td>Proposed Route (includes West of Bombing Range Road Route and Longhorn Station)</td>
<td>Proposed Route and Longhorn Station.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td>IPC</td>
<td>West of Bombing Range Road Alternatives 1 and 2</td>
<td>IPC Alternative Routes in the Amended pASC.</td>
<td>Not Analyzed in the FEIS</td>
</tr>
<tr>
<td>BLM</td>
<td>Sand Hollow/Whittaker Flats Alternative</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td><strong>Umatilla County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC</td>
<td>Proposed Route</td>
<td>Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td>BLM</td>
<td>Sand Hollow/Whittaker Flats Alternative</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td><strong>Union County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC</td>
<td>Proposed Route</td>
<td>Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td>IPC</td>
<td>Morgan Lake</td>
<td>Not Analyzed in the Draft Amended pASC. IPC Alternative Route in the Amended pASC.</td>
<td>Not Analyzed in the FEIS</td>
</tr>
<tr>
<td>BLM</td>
<td>Mill Creek</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td>BLM</td>
<td>Magpie Peak</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td><strong>Baker County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLM</td>
<td>Magpie Peak, Flagstaff Gulch, Lone Pine Peak</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td>BLM</td>
<td>Durkee West</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
<tr>
<td>BLM</td>
<td>Table Mountain</td>
<td>Not Analyzed in the Draft Amended pASC. Proposed Route in the Amended pASC.</td>
<td>BLM’s Agency Preferred Alternative in the FEIS.</td>
</tr>
</tbody>
</table>
### 3.2 Changes by County

#### 3.2.1 Morrow County, Oregon

The Project’s northern termination point is Longhorn Station and the Proposed Route includes West of Bombing Range Road and Sand Hollow/Whitaker Flats Routes in Morrow County.

##### 3.2.1.1 West of Bombing Range Road Route

The West of Bombing Range Road (WBRR) Route was included as IPC’s Proposed Route in Draft Amended pASC submitted in 2016. IPC has made minor modifications to the route since 2016 in an effort to improve engineering and reduce the Project footprint. IPC has also developed two short alternatives to the WBRR Route that are described below and compared in Table 3.2-1.

The WBRR Route is located along the eastern edge of the Naval Weapons Systems Training Facility (NWSTF) Boardman and the western edge of Bombing Range Road. Heading south and west away from the Longhorn Station, the WBRR Route crosses onto the Bombing Range to the west side of Bombing Range Road at approximately transmission line milepost 3.0, and runs parallel to and on the west side of Bombing Range Road for 11.9 miles. The WBRR Route continues along the NWSTF Boardman for another 1.7 miles before angling to the southeast (Figure 3.2-1).
Figure 3.2-1. Changes in Morrow County Between 2016 and 2017
The WBRR Route path from the Longhorn Station is highly constrained with significant agricultural operations, Washington ground squirrel colonies and habitat, and Department of the Navy-managed lands and avigation easement restrictions in the vicinity. The WBRR Route was sited to minimize impacts to agriculture and included micrositing to avoid Washington ground squirrel habitat and other existing infrastructure (a buried water pipeline, two existing transmission lines, and the Bombing Range flight operations). Due to these constraints, the preferred right-of-way (ROW) for the WBRR Route is to be built in the existing BPA 69-kilovolt (kV) transmission line ROW. The existing 69-kV line will be removed, and the Umatilla Electric Cooperative and BPA have agreed in principle to develop a strategy to maintain electric service to the area. The site boundary for the WBRR Route includes land on both the east and west side of Bombing Range Road.

3.2.1.2  *IPC Proposed Alternative Routes Morrow County*

**West of Bombing Range Road Alternative 1**

West of Bombing Range Road Alternative 1 is 3.7 miles in length and was developed to avoid Project-related impacts to the NWSTF Boardman Research Natural Area–B (RNA–B) and the Boardman Habitat Management Area (HMA). The Boardman RNA was established in 1978 as part of a federal government system established for research and educational purposes. It is co-managed by the Navy and The Nature Conservancy. The Boardman HMA was established in 2016 as mitigation for training impacts to the Washington ground squirrel. This alternative will result in some impacts to agricultural operations that occur along east side of Bombing Range Road.

**West of Bombing Range Road Alternative 2**

West of Bombing Range Road Alternative 2 is also 3.7 miles in length but differs from West of Bombing Range Road Alternative 1 in that it makes use of an alternative Y-frame structure type that eliminates direct impacts to the NWSTF Boardman RNA-B. It also avoids Project-related impacts to the NWSTF Boardman HMA. This alternative will also result in some impacts to agricultural operations that occur along east side of Bombing Range Road but will be less than those expected under Bombing Range Road Alternative 1.

### Table 3.2-1. Comparison of Constraints between the Proposed Route and West of Bombing Range Road Alternatives 1 and 2 in Morrow County

<table>
<thead>
<tr>
<th>Resource Group/Resource Name</th>
<th>Proposed Route</th>
<th>West of Bombing Range Road Alternative 1</th>
<th>West of Bombing Range Road Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (miles)</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Fish and Wildlife</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mule Deer Year-Round Population (USU)</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Washington Ground Squirrels CAT 2 Habitat</td>
<td>0.8</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Land Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive Farm Use</td>
<td>0.1</td>
<td>3.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Fire Management Unit</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Fire Management Zone</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Naval Weapons Systems Training Facility (NWSTF) Boardman</td>
<td>3.6</td>
<td>0.1</td>
<td>1.8</td>
</tr>
<tr>
<td>NWSTF Habitat Management Area</td>
<td>1.8</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>NWSTF Research Natural Area</td>
<td>0.4</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
### Resource Group/Resource Name

<table>
<thead>
<tr>
<th>Resource Group/Resource Name</th>
<th>Proposed Route</th>
<th>West of Bombing Range Road Alternative 1</th>
<th>West of Bombing Range Road Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon National Historic Trail Intact Segment (1/4-mile buffer)</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Sand Hollow Canyon TCP</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Sisupa TCP</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Wildland Urban Interface (ODF)</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

### Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Proposed Route</th>
<th>West of Bombing Range Road Alternative 1</th>
<th>West of Bombing Range Road Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Reservation/Corps of Engineers</td>
<td>3.7</td>
<td>0.1</td>
<td>–</td>
</tr>
<tr>
<td>Private</td>
<td>–</td>
<td>3.6</td>
<td>3.7</td>
</tr>
</tbody>
</table>

### Water and Wetlands

<table>
<thead>
<tr>
<th>Water and Wetlands</th>
<th>Proposed Route</th>
<th>West of Bombing Range Road Alternative 1</th>
<th>West of Bombing Range Road Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetlands (ONHIC)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

### Zoning

<table>
<thead>
<tr>
<th>Zoning</th>
<th>Proposed Route</th>
<th>West of Bombing Range Road Alternative 1</th>
<th>West of Bombing Range Road Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusive Farm Use</td>
<td>0.1</td>
<td>3.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Public</td>
<td>3.6</td>
<td>0.1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

NWSTF – Naval Weapons System Training Facility
ODF – Oregon Department of Forestry
ONHIC – Oregon Natural Heritage Information Center
TCP – Tribal Consultation Policy area (Umatilla Tribe)
USU – Utah State University

#### 3.2.1.3 Sand Hollow/Whitaker Flats Route

The Sand Hollow/Whitaker Flats Route is part of the Proposed Route in Morrow and Umatilla counties. It was developed by the BLM with input from Morrow and Umatilla counties as a route that would help to avoid agricultural and residential areas. In Morrow County, this route replaced 31.4 miles of the Proposed Route that was included in the Draft Amended pASC. A total of 16.1 miles of the Proposed Route that was included in the Draft Amended pASC is being carried forward in the Amended pASC (see Figure 3.2-1).

#### 3.2.2 Umatilla County

In Umatilla County, the Proposed Route includes the Sand Hollow/Whitaker Flats and a portion of the Proposed Route that was included with the Draft Amended pASC.

#### 3.2.2.1 Sand Hollow/Whitaker Flats

The Sand Hollow/Whitaker Flats Route is part of the Proposed Route in Morrow and Umatilla counties. It was developed by the BLM with input from Morrow and Umatilla counties as a route that would avoid agricultural and residential areas. In Umatilla County, the Sand Hollow/Whitaker Flats route replaced 39.1 miles of the Proposed Route that was included in the Draft Amended pASC (see Figure 3.2-2). Only 10.4 miles of the Proposed Route that was included in the Draft Amended pASC is being carried forward into the Amended pASC. This portion of the Draft Amended pASC route is located in the Blue Mountains in the vicinity of the towns of Kamela and Meacham.
Figure 3.2-2. Changes in Umatilla County Between 2016 and 2017
3.2.3  Union County, Oregon

In Union County, the Proposed Route includes portions of the Proposed Route that were included in the Draft Amended pASC and the Mill Creek Route that was developed by the BLM. In addition, the BLM also developed routes that collocated the Project with the existing La Grande to Quartz 230-kV transmission line. IPC also developed the Morgan Lake Alternative to the Mill Creek Route.

3.2.3.1  The Proposed Route

The Proposed Route (Mill Creek Route and the collocated route) are part of the Proposed Route in Union County. These routes were developed by the BLM with input from Union County. In Union County, the Mill Creek Route and the Magpie Peak Route replaced 32.3 miles of the Proposed Route that was included in the Draft Amended pASC. Only 7.6 miles of the Proposed Route was included in the Draft Amended pASC and is being carried forward into the Amended pASC. This portion of the Draft Amended pASC route is located in the Blue Mountains between Kamela and Hilgard (see Figure 3.2-3).

3.2.3.2  Magpie Peak Route

The BLM developed the Magpie Peak Route in Union and Baker counties to collocate the Project with the existing Quartz to La Grande 230-kV transmission line. Where possible, the Project was located within 250 feet of the existing transmission line. See Section 3.1.1.2 of Exhibit B for a detailed discussion of extra high voltage transmission line separation criteria.

3.2.3.3  IPC’s Morgan Lake Alternative

The Morgan Lake Alternative was developed by IPC with input from local land owners. The Morgan Lake Alternative crosses fewer parcels with residences, does not cross the Ladd Marsh Wildlife Management Area, does not cross Interstate 84, and is 0.5 miles shorter than the corresponding section of the Proposed Route (Mill Creek Route; see Table 3.2-2).

Table 3.2-2.  Comparison of Constraints between the Mill Creek Route and the Morgan Lake Alternative in Union County

<table>
<thead>
<tr>
<th>Resource Group/Resource Name</th>
<th>Mill Creek Route (miles)</th>
<th>Morgan Lake Alternative (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>19.0</td>
<td>18.5</td>
</tr>
<tr>
<td><strong>Fish and Wildlife</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Game Deer Winter Range (ODFW)</td>
<td>19.0</td>
<td>15.3</td>
</tr>
<tr>
<td>Big Game Elk Winter Range (ODFW)</td>
<td>19.0</td>
<td>16.5</td>
</tr>
<tr>
<td>Elk Summer Range (USFS)</td>
<td>6.1</td>
<td>15.6</td>
</tr>
<tr>
<td>Elk Winter Range (USFS)</td>
<td>17.0</td>
<td>16.3</td>
</tr>
<tr>
<td>Elk Winter Range Concentration (USFS)</td>
<td>8.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Mule Deer Summer Range (USU)</td>
<td>2.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Mule Deer Winter Concentration (USU)</td>
<td>16.4</td>
<td>10.7</td>
</tr>
<tr>
<td>Mule Deer Year Round Population (USU)</td>
<td>16.4</td>
<td>10.7</td>
</tr>
<tr>
<td><strong>Land Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Management Unit</td>
<td>19.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Fire Management Zone</td>
<td>19.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Grazing Allotment (OR Mgmt Category: C)</td>
<td>1.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Recreation Opportunity Spectrum</td>
<td>–</td>
<td>0.8</td>
</tr>
<tr>
<td>Resource Group/Resource Name</td>
<td>Mill Creek Route (miles)</td>
<td>Morgan Lake Alternative (miles)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Wildland Urban Interface (ODF)</td>
<td>4.2</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureau of Land Management</td>
<td>–</td>
<td>0.8</td>
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<tr>
<td>Private</td>
<td>19.0</td>
<td>17.7</td>
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<tr>
<td><strong>Visual Resources</strong></td>
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<td><strong>Zoning</strong></td>
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</tr>
<tr>
<td>Agriculture-Grazing</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Timber-Grazing</td>
<td>17.3</td>
<td>17.2</td>
</tr>
</tbody>
</table>

ODF – Oregon Department of Forestry  
ODFW – Oregon Department of Fish and Wildlife  
ONHIC – Oregon Natural Heritage Information Center  
USU – Utah State University  
USFS – United States Forest Service  
VRM – Visual Resource Management
Figure 3.2-3. Changes in Union County Between 2016 and 2017
3.2.4 Baker County, Oregon

The portion of the Proposed Route located in Baker County was selected as part of the BLM’s Agency Preferred Alternative and includes the Magpie Peak Route, Flagstaff Gulch-Lone Pine Mountain Route, and the West Durkee-Table Rock Route (see Figure 3.2-4). IPC is not proposing any alternatives in Baker County in the Amended pASC. The BLM developed routes replaced 47.2 miles of the Proposed Route that was included in the Draft Amended pASC. A total of 22.1 miles of the Proposed Route that was included in the Draft Amended pASC is being carried forward into the Amended pASC.

3.2.4.1 Magpie Peak Route

The Magpie Peak Route is part of the Proposed Route in Baker County. The Magpie Peak Route was developed by the BLM as a route that would, where possible, collocate the Project with the existing Quartz to La Grande 230-kV transmission line. See Section 3.1.1.2 of Exhibit B for a detailed discussion of extra high voltage transmission line separation criteria.

3.2.4.2 Flagstaff Gulch-Lone Pine Mountain Route

The Flagstaff Gulch-Lone Pine Mountain Route is part of the Proposed Route in Baker County. The Flagstaff Gulch portion was developed by the BLM with input from Baker County as a route that would avoid agricultural areas in the Baker Valley. The Lone Pine Mountain portion was developed by the BLM as a route that would, where possible, collocate the Project with the existing Quartz to La Grande 230-kV transmission line. The Flagstaff Gulch Route, located to the west of the National Historic Oregon Trail Interpretive Center. The Flagstaff Gulch Route will necessitate the rebuilding of a 0.9-mile segment of the existing 230-kV IPC transmission line slightly to the east between two hilltops just south of State Highway 86. The 230-kV rebuild is located on privately owned land. As shown in Exhibit B, Figure B-2, the existing 230-kV line will be shifted to the west and rebuilt to facilitate placing the 500-kV line into the existing 230-kV ROW. This will allow the use of typical height 500-kV towers and reduce visual impacts to the National Historic Oregon Trail Interpretive Center. If the 230-kV line were not shifted to the west, the 500-kV line would require taller structures with longer spans to cross over the existing 230-kV line, which potentially would have greater visual impacts to the Interpretive Center.

3.2.4.3 West Durkee-Table Rock Route

The West Durkee-Table Rock Route is part of the Proposed Route in Baker County. It was developed by the BLM with input from Baker County as a route that would avoid agricultural areas in the Durkee Valley. The Table Rock portion of the route was developed by the BLM as a route that would collocate the Project, where possible, with the existing Quartz to Weiser 138-kV transmission line.
Figure 3.2-4. Changes in Baker County Between 2016 and 2017
3.2.5 Malheur County, Oregon

In Malheur County the majority of the Proposed Route was included in the Draft Amended pASC. The BLM developed a New Owyhee River Crossing Route and IPC developed the North Birch Creek Route. In addition, IPC has maintained the Double Mountain Alternative in the Amended pASC as an Alternative to the Proposed Route in Malheur County.

3.2.5.1 Birch Creek North Route

As part of the Proposed Route, IPC developed the Birch Creek North Route. The Birch Creek North Route includes the rebuild of 1.1 miles of the existing Quartz to Weiser 138-kV transmission line and the siting of the Project transmission line within the existing 138-kV ROW. Between milepost 197.6 and milepost 198.8, the Proposed Route will be located in the existing IPC 138-kV transmission line ROW for 0.8 mile. The 138-kV transmission line will be rebuilt to the southwest of the Proposed Route in a new ROW for 1.1 miles. This is being done to reduce visual impacts to the Oregon Trail Birch Creek Area of Critical Environmental Concern (see Figure 3.2-5).

3.2.5.2 New Owyhee River Crossing Route

The New Owyhee River Crossing Route is part of the Proposed Route in Malheur County. The New Owyhee River Crossing Route was developed by the BLM as a route that would avoid crossing the Lower Owyhee River Wild and Scenic River Study Area. The New Owyhee River Crossing Route moved the Project into the BLM Vale District Utility Corridor. This route also moved the Project from public land to private land (see Figure 3.2-5).

3.2.5.3 Double Mountain Alternative

The Double Mountain Alternative is 7.4 miles in length and is presented in the Amended pASC as an alternate to the Proposed Route in Malheur County. The Double Mountain Alternative was initially developed in response to community concerns and requests from the public to maximize the use of public land. The Double Mountain Alternative crosses 6.2 fewer miles of private land; however, the public land that it crosses includes a wilderness characteristic unit. Although the BLM did not select the Double Mountain Alternative as its Agency Preferred Alternative, BLM indicated in a January 30, 2014, meeting that it is still considering the Double Mountain Alternative for ROW authorization. Accordingly, IPC is including the Double Mountain Alternative in the Amended pASC. Table 3.2-3 compares the Double Mountain Alternative to the corresponding portion of the Proposed Route (see Figure 3.2-5).
Figure 3.2-5. Changes in Malheur County Between 2016 and 2017
### Table 3.2-3. Comparison of Constraints Between the Proposed Route and Double Mountain Alternative in Malheur County

<table>
<thead>
<tr>
<th>Resource Group/ Resource Name</th>
<th>Proposed Route</th>
<th>Double Mountain Alternative</th>
</tr>
</thead>
<tbody>
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<td>Length (miles)</td>
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<td>7.4</td>
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<tr>
<td><strong>Fish and Wildlife</strong></td>
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<tr>
<td>Big Game Deer Winter Range (ODFW)</td>
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<td>0.2</td>
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<tr>
<td>Mule Deer Limited Range (USU)</td>
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<td>3.8</td>
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<tr>
<td>Mule Deer Year Round Population (USU)</td>
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</tr>
<tr>
<td><strong>Land Use</strong></td>
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<tr>
<td>Exclusive Farm Use Zone/Multiple Use Range Zone</td>
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<td>7.4</td>
</tr>
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<td>Fire Management Unit (Oregon)</td>
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<td>Fire Management Zone (Oregon)</td>
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<td>Goal 5 Resources</td>
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<td>Military Training Route</td>
<td>5.3</td>
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</tr>
<tr>
<td>Proposed Wilderness Study Area (ONDA)</td>
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<td>SEORMP ROS Rural</td>
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<td>SEORMP ROS Semi-Primitive Motorized</td>
<td>–</td>
<td>4.5</td>
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<tr>
<td>SEORMP ROS Semi-Primitive Non-motorized</td>
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<td>2.9</td>
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<td><strong>Ownership</strong></td>
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<td>Bureau of Land Management</td>
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<tr>
<td>Private</td>
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<td><strong>Visual Resources</strong></td>
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<tr>
<td><strong>Zoning</strong></td>
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</tr>
<tr>
<td>Agriculture</td>
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<td>7.4</td>
</tr>
</tbody>
</table>

ODFW – Oregon Department of Fish and Wildlife
ONDA – Oregon Natural Desert Association
ROS – Recreation Opportunity Spectrum
SEORMP – Southeast Oregon Resource Management Plan
USU – Utah State University
VRM – Visual Resource Management

### 3.2.6 Owyhee County, Idaho

The Proposed Route in Owyhee County is 23.8 miles long, with 19.6 miles located on BLM-managed lands, 2.5 miles on Idaho state lands, and 1.8 miles on privately owned land. The route follows the southwest side of the existing Summer Lake to Midpoint 500-kV line except for the last 2.7 miles. This route had considerable input from Owyhee County, Idaho Department of State Lands, and the local citizens and there has been no need to develop any alternatives along this portion of the route.
ATTACHMENT B-7a
WETLANDS AND WATERS OF THE STATE AREAS OF THE SITE
BOUNDARY WITH COMPLETED SURVEYS
Wetlands and Waters of the State

Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Surveyed Portions of the Site Boundary
Morrow County
Map 7
Surveyed Portions of the Site Boundary
Morrow County

Map 8

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Surveyed Portions of the Site Boundary
Morrow County
Map 9
Map 10

Surveyed Portions of the Site Boundary
Morrow County

EXHIBIT B, ATTACHMENT B-7a
Wetlands and Waters of the State

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Oregon Map

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Morrow County

Map 11

Source(s): IPC, ODOT, USDA, USGS, Vertis, Envi
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Wetlands and Waters of the State

Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Milepoints
  - Mile
  - Tenth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Map 12

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Morrow County

Morrow County
Little Butter Creek
Carpenter Butte

Map 12
Surveyed Portions of the Site Boundary
Morrow County
Map 14
Surveyed Portions of the Site Boundary
Morrow County

Map 16

Exhibit B, Attachment B-7a
Wetlands and Waters of the State

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveys Portions of the Site Boundary
Morrow County
Map 17
Source(s): IPC, ODOT, USDA, USGS, Vertix, Earth Source
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Morrow County
Map 18
Surveyed Portions of the Site Boundary
Morrow County
Map 20
Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Morrow County
Map 22
Wetlands and Waters of the State

Surveyed Locations
- Not Surveyed

Project Features
- Site Boundary

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Morrow County
Map 23
Wetlands and Waters of the State
Surveyed Locations

Surveyed

Project Features

Site Boundary

Other Features

100-foot Contours
Road
Stream

Source(s): IPC, ODOT, USDA, USGS, Vertis, Enr
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Umatilla County
Map 25
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a

Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Umatilla County

Map 26

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Surveyed Portions of the Site Boundary
Umatilla County
Map 28
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Surveyed Portions of the Site Boundary
Umatilla County
Map 29

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveys Locations
Surveyed
Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Surveyed Portions of the Site Boundary
Umatilla County
Map 34
Proposed Route

Other Features
- 100-foot Contours
- Road
- Stream

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Surveyed Portions of the Site Boundary
Umatilla County
Exhibit B, Attachment B-7a
Wetlands and Waters of the State

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Source(s): IPC, ODOT, USDA, USGS, Veris, ERI
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Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Umatilla County
Map 39
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Umatilla County

Map 40

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Surveyed Portions of the Site Boundary
Umatilla County

Map 41
Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Surveyed Portions of the Site Boundary
Umatilla County
Map 42

[Map showing survey locations and project features]
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Umatilla County

Map 43
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State

Surveyed Portions of the Site Boundary
Umatilla County

Map 44
Wetlands and Waters of the State

Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Interstate
- Road
- Railroad
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Union County
Map 47
Surveyed Portions of the Site Boundary
Union County
Map 50

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Alternative
- Milepost
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream
Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Alternative
- Mile
- Tenth-mile

Other Features
- 10-foot Contours
- Existing Transmission Lines
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Map 54

Title: Exhibit B, Attachment B-7a
Subtitle: Wetlands and Waters of the State

Surveyed Portions of the Site Boundary
Union County

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Alternative
- Milepost
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Union County
Map 55
Surveyed Portions of the Site Boundary
Union County
Map 58
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Union County
Map 59
Surveyed Portions of the Site Boundary
Union County
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Interstate
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Map 61

Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Union County
Map 61
Proposed Route

Morgan Lake Alternative

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Alternative
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Interstate
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Union County
Map 62
Surveyed Portions of the Site Boundary
Union County
Map 66

Source(s): IPC, ODOT, USDA, USGS, Venys, Enr
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Locations
- Site Boundary
- Transmission Centerline
- Miles
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream
Wetlands and Waters of the State
Surveyed Locations
- Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Interstate
- Road
- Stream

Surveyed Portions of the Site Boundary
Union County
Map 68

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Baker County

Location Map (Map #)

Wetlands and Waters of the State

Surveyed Portions of the Site Boundary
Baker County
Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Railroad
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Baker County
Map 71
Surveyed Portions of the Site Boundary
Baker County
Map 72
**Map 73**

Wetlands and Waters of the State

- Surveyed Locations
  - Surveyed
  - Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Map 74

Surveyed Portions of the Site Boundary
Baker County

Wetlands and Waters of the State
Surveyed Locations
- Surveyed

Projected Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream

Source: IPC, ODOT, USDA, USGS, Ventyx, Esri
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Surveyed Portions of the Site Boundary
Baker County

Map 79
Surveyed Portions of the Site Boundary
Baker County

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Map 80

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Baker County

Map 84
Exhibit B, Attachment B-7a

Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Baker County

Map 86

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Proposed Route

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Baker County

Map 88
Surveyed Portions of the Site Boundary
Baker County
Map 89

Source(s): IPC, ODOT, USDA, USGS, Vertis, Enel
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts

Other Features
- 100-foo Contours
- Road
- Stream

Surveyed Portions of the Site Boundary
Baker County
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Map 91
Surveyed Portions of the Site Boundary
Baker County
Map 92

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts

Other Features
- 100-foot Contours
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Exhibit B, Project Information, Wetlands and Waters of the State
Exhibit B-7a Wetlands and Waters of the State
Project Features:
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Other Features:
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline

Other Features
- 100-Feet Contours
- Stream

Surveyed Portions of the Site Boundary
Baker County

Map 94
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Baker County

Map 95
Surveyed Portions of the Site Boundary
Baker County
Surveyed Portions of the Site Boundary
Baker County

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State

Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Interstate
- Road
- Railroad
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Malheur County
Map 102
Surveyed Portions of the Site Boundary
Malheur County

Exhibit B, Attachment B-7a

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Highway
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Malheur County
Map 108
Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Malheur County

Map 110
Surveyed Portions of the Site Boundary
Malheur County
Map 111
Surveyed Portions of the Site Boundary
Malheur County

Map 112
MAP 113

Surveyed Portions of the Site Boundary
Malheur County

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-Foot Contours
- Stream

Source(s): IPC, ODOT, USDA, USGS, Vertix, Envi
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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Malheur County
Map 113
Surveyed Portions of the Site Boundary
Malheur County
Map 114
Wetlands and Waters of the State
Surveyed Locations
Surveyed

Project Features
- Site Boundary

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Railroad
- Stream

Surveyed Portions of the Site Boundary
Malheur County
Map 116

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Wetlands and Waters of the State
Surveyed Locations
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Alternative

Other Features
- 100-foot Contours
- Stream

Map Area

Surveyed Portions of the Site Boundary
Malheur County

Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Map 118
Proposed Route

Double Mountain Alternative

Sec. 35 19S 44E
Sec. 31 19S 43E
Sec. 66 20S 43E
Sec. 239 21S 44E
Sec. 239 20S 44E
Sec. 35 21S 44E

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Alternative
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Malheur County
Map 119

Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Surveys portions of the site boundary in Malheur County, Exhibit B, Attachment B-7a: Wetlands and Waters of the State.
Surveyed Portions of the Site Boundary
Malheur County
Map 126
Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Milepoints
  - Mile
  - Tenth-mile

Other Features
- 100-foott Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Vertix, Esri
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Exhibit B, Attachment B-7a
Wetlands and Waters of the State
Surveyed Portions of the Site Boundary
Malheur County
Map 128
Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- Mile
- Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream

Boardman to Hemingway Transmission Line Project
Application for Site Certificate
Surveyed Portions of the Site Boundary
Malheur County
Map 129
Wetlands and Waters of the State

Surveyed Locations
- Surveyed

Project Features
- Site Boundary

Other Features
- 100-foot Contours
- Road
- Stream

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri

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Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Exhibit B, Attachment B-7a
Wetlands and Waters of the State

Surveyed Portions of the Site Boundary
Malheur County

Map 130
Boardman to Hemingway Transmission Line Project
Application for Site Certificate

Surveyed Portions of the Site Boundary
Malheur County

Map 131

Source(s): IPC, ODOT, USDA, USGS, Vertes, Envi
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Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
  - Mile
  - Tenth-mile

Other Features
- 100-foot Contours
- Existing Transmission Lines
- Road
- Stream
Surveyed Portions of the Site Boundary
Malheur County

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Map 133

Wetlands and Waters of the State
Surveyed Locations
- Surveyed
- Not Surveyed

Project Features
- Site Boundary
- Transmission Centerline
- Mileposts
- \( T \)enth-mile

Other Features
- 100-foot Contours
- Road
- Stream

Surveyed Portions of the Site Boundary
Malheur County

Source(s): IPC, ODOT, USDA, USGS, Ventyx, Esri
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Map of the Boardman to Hemingway Transmission Line Project Application for Site Certificate. The map showcases surveyed portions of the site boundary in Malheur County, with Wetlands and Waters of the State highlighted. The map includes features such as Site Boundary, Transmission Centerline, Mileposts, 100-foot Contours, Existing Transmission Lines, and Streams. The map is sourced from various agencies including IPC, ODOT, USDA, USGS, Ventyx, and Esri.