

# Exhibit L

## Protected Areas

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**Bakeoven Solar Project  
November 2019**

**Prepared for**



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**Prepared by**



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## Acronyms and Abbreviations

Applicant	Bakeoven Solar, LLC
Maupin Substation	Bonneville Power Administration Maupin Interconnection Substation
Facility	Bakeoven Solar Project
kV	kilovolt
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
US	U.S. Highway
ZVI	zone of visual influence

## 1.0 Introduction

Bakeoven Solar, LLC (Applicant) proposes to construct and operate a solar energy generation facility and related or supporting facilities in Wasco County, Oregon. Exhibit L provides an analysis of the Bakeoven Solar Project's (Facility) impacts to protected areas, as required to meet the submittal requirements of Oregon Administrative Rule (OAR) 345-021-0010 (1)(I) paragraphs (A) through (C). Exhibit L demonstrates that the Facility can comply with the approval standard in OAR 345-022-0040:

### ***OAR 345-022-0040 Protected Areas***

*(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:*

- (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;*

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

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

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

*(p) State wildlife areas and management areas identified in OAR chapter 635, division 8.*

## 2.0 Analysis Area

The analysis area for protected areas includes the area within the proposed site boundary, as well as 20 miles from the site boundary, as defined in OAR 345-001-0010(59)(e). The site boundary is described in detail in Exhibits B and C. The analysis area is shown on Figure L-1.

## 3.0 Protected Areas Inventory

*OAR 345-021-0010(1)(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:*

*(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).*

*(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.*

Table L-1 provides an inventory of the 13 protected areas within the analysis area and indicates the proximity and direction of each protected area relative to the proposed site boundary. No protected areas are located within the site boundary. The inventory of protected areas was based on review of best available Geographic Information System data, maps, and the most current information for the categories of protected areas listed in OAR 345-022-0040(1). These protected areas are identified by name on Figure L-1.

**Table L-1. Protected Areas Inventory, Visual and Noise Assessment Results**

Protected Areas within 20 Miles of Site Boundary		Distance to Site Boundary (miles)		Direction from Facility	Facility Potentially Visible?		Visual Analysis Results	Operational Noise Potentially Audible?
Type	Area Name	T-Line	Solar Array		T-Line	Solar Array		
National Parks OAR 345-022-0040(1)(a)	None	N/A		N/A	N/A		N/A	N/A
National Monuments OAR 345-022-0040(1)(b)	None	N/A		N/A	N/A		N/A	N/A
Wilderness Areas OAR 345-022-0040(1)(c)	Badger Creek Wilderness (including National Recreation Trail)	16.8	23.9	Northwest	Yes	Yes	The transmission line and solar arrays might be visible from limited locations at a far background distance where the Facility will be difficult to discern in the landscape. Facility components will likely be screened by vegetation. If visible, the Facility components will be seen within the context of existing development that includes other electrical infrastructure. Therefore, no significant impact.	No
	Lower White River Wilderness	15.7	21.9	West	Yes	Yes	The transmission line and solar arrays might be visible from limited locations at a far background distance where the Facility will be difficult to discern in the landscape. Facility components will likely be screened by vegetation. If visible, the Facility components will be seen within the context of existing development that includes other electrical infrastructure. No visibility at river level where users are likely to be present. Therefore, no significant impact.	No
National & State Wildlife Refuges OAR 345-022-0040(1)(d)	None	N/A		N/A	N/A		N/A	N/A
National Coordination Areas OAR 345-022-0040(1)(e)	None	N/A		N/A	N/A		N/A	N/A
Fish Hatcheries OAR 345-022-0040(1)(f)	Oak Springs Fish Hatchery, Oregon Department of Fish and Wildlife (ODFW)	2.9	9.9	Northwest	No	No	No impact.	No
National Recreation and Scenic Areas OAR 345-022-0040(1)(g)	Mount Hood National Recreation Area	19.6	26.4	Northwest	Yes	Yes	The transmission line and solar arrays might be visible from a very limited corner of the protected area just south of Fifteen Mile Creek. If visible, this view will be from a far background distance where the Facility would be difficult to discern in the landscape. Facility components will likely be screened by vegetation. Any potential views will be within the context of existing development, including other electrical infrastructure. Therefore, no significant impact.	No
State Parks & Waysides OAR 345-022-0040(1)(h)	Deschutes-Oregon Wildlife Heritage Foundation	19.6	19.7	North	No	No	No impact.	No
	White River Falls State Park	3.5	10.1	Northwest	No	No	No impact.	No
State Natural Heritage Areas OAR 345-022-0040(1)(i)	Tygh Valley State Natural Area	4.0	10.7	Northwest	No	No	No impact.	No
State Estuarine Sanctuaries OAR 345-022-0040(1)(j)	None	N/A		N/A	N/A		N/A	N/A

Protected Areas within 20 Miles of Site Boundary		Distance to Site Boundary (miles)		Direction from Facility	Facility Potentially Visible?		Visual Analysis Results	Operational Noise Potentially Audible?
Type	Area Name	T-Line	Solar Array		T-Line	Solar Array		
Scenic Waterways/ Wild & Scenic Rivers OAR 345-022-0040(1)(k)	Deschutes River – Federal Wild and Scenic River and Oregon Scenic Waterway	1.9	8.5	West	Yes	No	The transmission line might be visible from limited, higher-elevation locations within the protected area. No visibility of the solar arrays. No visibility or impact at river level where users are likely to be present; therefore, no significant impact.	No
	Fifteenmile Creek Wild and Scenic River	19.7	26.4	Northwest	No	No	No impact.	No
	White Wild and Scenic River	3.1	9.7	Northwest	Yes	Yes	Potential visibility of the transmission line and solar arrays from limited, higher-elevation locations; however, potential visibility is from approximately 5 or more miles from the site boundary. The portions of the protected area less than 5 miles from the boundary will not have views of the transmission line or solar arrays. No visibility or impact at river level where users are likely to be present; therefore, no significant impact.	No
	John Day River - Federal Wild and Scenic River and Oregon Scenic Waterway	16.8	16.2	East	No	No	No impact.	No
Experimental Areas (Rangeland Resources Program) OAR 345-022-0040(1)(l)	None	N/A		N/A	N/A		N/A	N/A
Agricultural Experimental Stations OAR 345-022-0040(1)(m)	None	N/A		N/A	N/A		N/A	N/A
Research Forests OAR 345-022-0040(1)(n)	None	N/A		N/A	N/A		N/A	N/A
Bureau of Land Management Areas of Critical Environmental Concern OAR 345-022-0040(1)(o)	None	N/A		N/A	N/A		N/A	N/A
Bureau of Land Management Research Natural Areas and Outstanding Natural Areas OAR 345-022-0040(1)(o)	None	N/A		N/A	N/A		N/A	N/A
State Wildlife Areas and Management Areas OAR 345-022-0040(1)(p)	Lower Deschutes ODFW Wildlife Area	18.0	18.0	North	Yes	Yes	The transmission line and solar arrays might be visible from limited locations at a far background distance where the Facility will be difficult to discern in the landscape. Facility components will likely be screened by vegetation and existing development, including transmission lines and existing energy generation facilities. Therefore, no significant impact.	No
	White River ODFW Wildlife Area	9.2	16.2	Northwest	Yes	Yes	The transmission line and solar arrays might be visible from limited locations at a background distance where the Facility will be difficult to discern in the landscape. Facility components will likely be screened by vegetation. If visible, the Facility will be seen within the context of existing development that includes other electrical infrastructure. Therefore, no significant impact.	No

## 4.0 Potential Impacts

*OAR 3450-021-0010(1)(l)(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:*

### 4.1 Noise Impacts

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

Exhibit X provides an assessment of the existing acoustical environment and anticipated Facility sound levels; the methodology for noise modeling is discussed in detail in that exhibit. Construction activities associated with the Facility have the potential for localized noise on a temporary basis as construction activities progress through certain locations within the site boundary. Based on sound levels of the anticipated equipment for Facility construction, and given the closest protected area is approximately 2 miles away, construction noise will not likely be discernible from background noise levels at any protected area.

There will be no significant operational noise from the solar modules themselves. However, there will be some limited noise from associated facilities, including cooling equipment associated with the battery storage system and electrical equipment. Based on the results of acoustic modeling, as detailed in Exhibit X, operational noise will attenuate to be indistinguishable from the background noise level (less than 20 decibels) within 2 miles or less from the eastern side of the site boundary where the solar arrays are located, and within 0.5 mile or less from the western end of the site boundary where the 230-kilovolt (kV) transmission line connects with the Bonneville Power Administration Maupin Interconnection Substation (Maupin Substation; see Exhibit X, Figure X-1). All protected areas are located more than 2 miles from the eastern side of the site boundary and more than 0.5 mile from the western end of the site boundary, where noise from the Facility will be indistinguishable from the background noise level. Therefore, no significant noise impacts are expected from construction or operation.

### 4.2 Traffic Impacts

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

Traffic impacts are addressed in greater detail in Exhibit U, which provides additional information on anticipated traffic volumes, peak construction traffic times, potential delays, and mitigation measures that could be implemented to avoid significant traffic impacts. In comments on the Notice of Intent, the City of Maupin noted the town is extremely busy during their peak tourist season from mid-June through early September. The Applicant reached out to the City of Maupin for additional information regarding local traffic (see Exhibit U, Attachment U-4).

The City confirmed that, for much of the year, traffic is not an issue with only approximately 400 people in town. However, during the summer tourist season, the City estimated that Maupin receives over 100,000 visitors, and weekend traffic can be particularly heavy. The City identified

peak traffic times as 9 to 11 AM and 2 to 4 PM, where traffic is still moving but slower and heavier. According to the City, the intersection of U.S. Highway (US) 197 and Bakeoven Road is a pinch point (see Exhibit U, Section 3.4.7).

While construction of the Facility will generate a minimal increase on most road segments along the primary and alternate transportation routes, traffic volume may increase substantially for portions of US 197 and along Bakeoven Road (see Exhibit U). Specifically, US 197 through the city of Maupin could experience short-term traffic delays and congestion because of their hairpin turns, the bridge pinch point crossing the Deschutes River, and numerous access points. During construction of the 230-kV transmission line adjacent to Bakeoven Road (last 3 miles into Maupin Substation), short segments of one lane of traffic on Bakeoven Road may need to be temporarily closed over several weeks to a month to accommodate construction crews and equipment. Flag persons may facilitate two-way traffic on one lane by alternately restricting travel directions. This method will not require detours or reroutes. Both US 197 and Bakeoven Road, particularly an approximately 0.5-mile section of US 197 to Bakeoven Road that connects the southern and northern portions of Deschutes River Road (also known as Lower Deschutes River Back County Byway), provide access to the Deschutes River Federal Wild and Scenic River/Oregon Scenic Waterway.

The majority of construction traffic through the city of Maupin will be workforce commuters in pick-up trucks, indistinguishable from other such vehicles using the roadway. Timing patterns for construction-related traffic and recreational traffic to the Deschutes River will likely differ substantially. Construction traffic will primarily be dispersed throughout the business work week concentrated during commute hours, whereas peak recreational traffic is greatest during the weekend. Although there is potential for intermittent short-term traffic delays when traveling to the Deschutes River protected area, it is not anticipated that visitors will experience major delays in accessing or using the Deschutes River because of Facility construction traffic.

Although there will be no major traffic impacts to protected areas, given the potential temporary impact of construction traffic on visitors to the Deschutes River protected area as well as other recreation uses (see Exhibit T), the Applicant has developed a series of avoidance and minimization measures. These include measures recommended by the City of Maupin to avoid traffic issues during their peak summer tourist season. Among other general traffic measures (see Exhibit U), the Applicant will:

- Maintain at least one travel lane at all times so that roadways will not be closed to traffic due to construction vehicles entering or exiting public roads.
- Avoid peak traffic times identified through consultation with Wasco County and the city of Maupin by adjusting scheduling of workforce shifts or other methods, such as requiring construction workers to check for congestion prior to leaving for the Facility to consider an alternate route. The City of Maupin indicated that traffic issues during peak tourist season, mid-June through early September, are likely avoidable if most construction workers passed through Maupin before 9 AM and after 4 PM (see Exhibit U, Attachment U-4).

- Conduct awareness training for all construction workforce drivers, including appropriate techniques for sharing roads with recreation users (especially cyclists and during peak tourist season mid-June through early September) and proper navigation of tight curves in and near Maupin.

In addition, the Applicant will develop a transportation plan in consultation with the Wasco County Road Master, with input from the City of Maupin, Oregon Department of Transportation, and Bureau of Land Management, to be completed prior to Facility construction. Therefore, with the proposed measures as well as development of a transportation plan, no significant adverse traffic impacts to protected areas are anticipated from construction of the proposed Facility.

Facility operations will not generate amounts of traffic that could adversely impact protected areas. Operation of the Facility is expected to employ 5 to 10 individuals (see Exhibit U). Therefore, there will be no significant impacts to protected areas due to operations traffic.

### **4.3 Water Use and Wastewater**

#### *(iii) Water use during facility construction or operation;*

No ground or surface water withdrawals will take place in a protected area, and water use will be within permitted levels (see Exhibit O). Therefore, water used during construction and operation will not impact water availability or use at protected areas. Water use for Facility construction and operation is discussed further in Exhibit O.

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

Wastewater, in this context, refers to stormwater runoff and to sanitation wastewater; no industrial wastewater will be produced during construction or operation of the Facility. No stormwater runoff will leave the site boundary (see Exhibit I), and no sanitation wastewater will be discharged in or near a protected area (see Exhibits O and V). Therefore, no protected area will be affected by wastewater from the Facility.

### **4.4 Visual Impacts**

#### *(v) Visual impacts of facility structures or plumes.*

#### **4.4.1 Methodology**

The potential for adverse visual impacts on protected areas is based primarily on the expected visibility of the constructed features of the Facility. The Facility will not generate emissions plumes; therefore, no visual impacts from plumes are expected. Likewise, solar modules are treated with an antiglare coating that nearly eliminates the reflection of sunlight off the module face; therefore, glare is not considered a potential impact on distant protected areas (see Exhibit R for additional glare discussion).

The Applicant conducted a zone of visual influence (ZVI) analysis (also known as visibility or viewshed analysis) to determine if the Facility could be seen from protected areas within the

analysis area. Separate ZVI analyses were performed for the solar arrays and transmission line to distinguish what project features could be visible from protected areas. As addressed in Exhibit B, in July 2019 the last 2.5 miles of the transmission line were realigned 30 feet to the north. This change does not add any new protected areas to the analysis area or warrant a change to the visual impact methodology. The ZVI analysis methodology and overall visual impact assessment approach were the same for protected areas as for scenic resources; additional details are provided in Exhibit R and not repeated in this exhibit. Information from field work in support of Exhibit R, including photos, was applied to the impact discussion for protected areas where applicable (i.e., the Deschutes River).

#### **4.4.2 Visual Assessment Results**

A viewshed map displaying the results of the ZVI analyses shows the extent to which the Facility will potentially be visible from the protected areas identified in Section 3 (Figure L-2). Based on the results of the ZVI analysis, there will be visibility of some portions of the Facility from 7 of the 13 protected areas in the analysis area (see Table L-1 and Figure L-2). Given the distance from protected areas to the Facility, as discussed below, the minor transmission line realignment noted in Section 4.4.1 would not result in an identifiable change in the ZVI results. Therefore, the ZVI analysis was not updated and the assessment results discussed below remain applicable.

For five of the seven protected areas with potential views of the Facility, the visual impact will be negligible, primarily due to their distance of 9 to 20 miles from the site boundary (and often greater distance to the solar array; see Table L-1). These five areas include the Badger Creek Wilderness, Lower White River Wilderness, Mount Hood National Recreation Area, Lower Deschutes ODFW Wildlife Area, and White River ODFW Wildlife Area (Table L-1). From this distance, the views of the Facility structures will be at a background viewing distance, where the apparent size of the Facility is greatly diminished, and the Facility will occupy a limited portion of the total viewshed. Existing views from these protected areas include wind farms, transmission lines, and urban and industrial development; therefore, the Facility will not introduce an unusual feature to the view. In addition, potential Facility views from these distant protected areas will likely be partially to fully screened by vegetation.

For the remaining two protected areas, the White Wild and Scenic River and Deschutes Federal Wild and Scenic River/Oregon Scenic Waterway, visibility can be characterized as limited, meaning that there will be no views of the Facility from a substantial portion of the protected area. Table L-1 provides a summary visual assessment for each protected area within the analysis area.

The closest protected area to the Facility, and the only one with potential visibility less than 5 miles from the site boundary, is the Deschutes Federal Wild and Scenic River/Oregon Scenic Waterway. The full length of the Deschutes River segment within the 20-mile analysis area, from approximately river mile 85 near South Junction to river mile 15 west of Moro, is included under the state and federal designations. This portion of the Deschutes River is part of the Deschutes River Canyon identified by the applicable federal management plan as well as the Wasco County

Comprehensive Plan as an important scenic resource where significant adverse visual impacts should be avoided (see Exhibit R).

The ZVI analysis indicates that no parts of the Deschutes River will have potential visibility of the solar arrays (see Figure L-2), as the canyon terrain will block outward views toward these structures. The transmission line ZVI analysis (see Figure L-2) indicates that there will be very limited, intermittent potential visibility of the transmission line, particularly along approximately 3 miles of the upper edges of the river canyon, from Maupin (river mile 52) upstream to about Wapinitia Creek (river mile 55). This section of the canyon is oriented in a southwest-northeast direction that allows possible views of the Maupin Substation and the western terminus of the proposed 230-kV transmission line.

To further assess this potential view of the proposed 230-kV transmission line, the Applicant conducted a field review to confirm or modify the results of the ZVI analysis of views from the Deschutes River toward the Facility. The field review demonstrated that the canyon walls effectively block views toward the Facility along the Deschutes River Road throughout this part of the canyon, and there were no locations at which the existing Maupin Substation was visible. Photos are provided in Exhibit R.

It is conceivable that the Facility transmission line might be visible from some elevated points on the canyon walls above river level, particularly on the west side of the river; the field review did not include an attempt to investigate visibility conditions away from the river itself. Most people experience the views of the Deschutes River from the river level or adjacent roads, where recreational uses are located (see Exhibit T). To the extent that the Facility transmission line might be visible from locations on the canyon walls, it will be seen at a middleground distance of approximately 2.5 to 5 miles (the closest potential viewpoint is from the western side of the canyon, therefore greater than the 1.9-mile distance from the eastern edge of the protected area to the site boundary listed in Table L-1). The Maupin Substation is a large connection point for multiple existing transmission lines entering the substation from all directions. Therefore, any current outward views from this part of the Deschutes River towards the Facility already include visual evidence of noticeable electrical infrastructure, in addition to a railroad, roads that enter/exit the canyon, and urbanized development in Maupin.

In summary, the Facility transmission line will not be visible and will have no visual effect from Deschutes River locations that are likely to be frequented by river users. Potential views of the transmission line, if any, will be limited to elevated canyon locations where viewers are unlikely to be present. Based on the middleground viewing distance, or background viewing distance from further up-and downstream within the analysis area, and the degree of existing landscape modification present in the closest reach of the river, the Facility transmission line will create—at most—weak, additional contrast within the current visual context, and that contrast will be seen by few or no viewers. The minor realignment of the transmission line by 30 feet to the north along the last 2.5 miles of the route does not change this assessment. Therefore, the Facility will not have a significant, adverse visual impact on the Deschutes River protected area.

*(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.*

Class I areas, as defined in OAR 340-204-0050, consist of 12 federally-designated wilderness areas in Oregon that were in existence as of August 7, 1977. None of these wilderness areas are located within the analysis area; however, two more recently established wilderness areas within Mount Hood National Forest—Badger Creek and Lower White River—are in the analysis area. The proposed Facility will not generate any emissions plumes, so it will not cause any visual impacts from air emissions. No visual impacts are expected from dust created during construction, which will be similar to existing land uses in the area and minimized by following best management practices for dust control, as detailed in Exhibit O.

#### 4.5 Other Impacts

No other impacts to protected areas are anticipated.

### 5.0 Conclusions

The analysis area contains all or part of 13 protected areas. The Applicant analyzed potential impacts to these areas and concluded as follows:

- **Noise.** Due to the distance between protected areas and the Facility (at least 2 miles), operational and construction noise will not be audible at protected areas. Noise modeling presented in Exhibit X further supports this finding.
- **Traffic.** Facility-related traffic volumes will not be sufficiently high or located such as to significantly impact most protected areas. Construction traffic could cause minor temporary delays and increased congestion along roads used to access the Deschutes River protected area (US 197 and Bakeoven Road in/near the city of Maupin). With implementation of avoidance and minimization measures, as well as development of a transportation plan in consultation with the appropriate agencies, there will be no significant adverse traffic impacts to protected areas resulting from the construction or operation of the Facility.
- **Water.** The Facility will not use water sourced from a protected area. Therefore, there will be no significant impacts to protected areas by water use at the Facility.
- **Wastewater.** The Facility will not discharge waste water to a protected area. Therefore, there will be no significant impacts to protected areas due to wastewater generated at the Facility.
- **Visual.** The Facility will be potentially visible from 7 of the 13 protected areas in the analysis area. However, due to distance from the Facility, topographic obstructions, and other features within view (i.e., wind turbines, transmission lines, and other infrastructure), the Facility will not have a significant visual impact on any protected area.

## 6.0 Submittal Requirements and Approval Standards

### 6.1 Submittal Requirements

**Table L-2. Submittal Requirements Matrix**

Requirement	Location
OAR 345-021-0010(1)(I) 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:	Sections 2.0 through 5.0
(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).	Section 3.0
(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.	Figure L-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:	Table L-1, Section 4.0, and Section 5.0
(i) Noise resulting from facility construction or operation;	Table L-1 and Section 4.1
(ii) Increased traffic resulting from facility construction or operation;	Section 4.2
(iii) Water use during facility construction or operation;	Section 4.3
(iv) Wastewater disposal resulting from facility construction or operation;	Section 4.3
(v) Visual impacts of facility structures or plumes.	Table L-1, Figure L-2, and Section 4.4
(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.	Section 4.4.2

### 6.2 Approval Standards

**Table L-3. Approval Standard**

Requirement	Location
<b>OAR 345-022-0040 Protected Areas</b>	
(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:	Sections 3.0 through 5.0
(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;	N/A

Requirement	Location
(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;	N/A
(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;	Sections 3.0 through 5.0
(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;	N/A
(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;	N/A
(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;	Sections 3.0 through 5.0
(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;	Sections 3.0 through 5.0
(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;	Sections 3.0 through 5.0
(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;	Sections 3.0 through 5.0
(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR chapter 142;	N/A
(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;	Sections 3.0 through 5.0
(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;	N/A
(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to:	N/A
Coastal Oregon Marine Experiment Station, Astoria	N/A
Mid-Columbia Agriculture Research and Extension Center, Hood River	N/A
Agriculture Research and Extension Center, Hermiston	N/A
Columbia Basin Agriculture Research Center, Pendleton	N/A
Columbia Basin Agriculture Research Center, Moro	N/A
North Willamette Research and Extension Center, Aurora	N/A
East Oregon Agriculture Research Center, Union	N/A
Malheur Experiment Station, Ontario	N/A
Eastern Oregon Agriculture Research Center, Burns	N/A
Eastern Oregon Agriculture Research Center, Squaw Butte	N/A

Requirement	Location
Central Oregon Experiment Station, Madras	N/A
Central Oregon Experiment Station, Powell Butte	N/A
Central Oregon Experiment Station, Redmond	N/A
Central Station, Corvallis	N/A
Coastal Oregon Marine Experiment Station, Newport	N/A
Southern Oregon Experiment Station, Medford	N/A
Klamath Experiment Station, Klamath Falls;	N/A
(n) Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;	N/A
(o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;	N/A
(p) State wildlife areas and management areas identified in OAR chapter 635, division 8.	Sections 3.0 through 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.	N/A
(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.	N/A

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# Figures

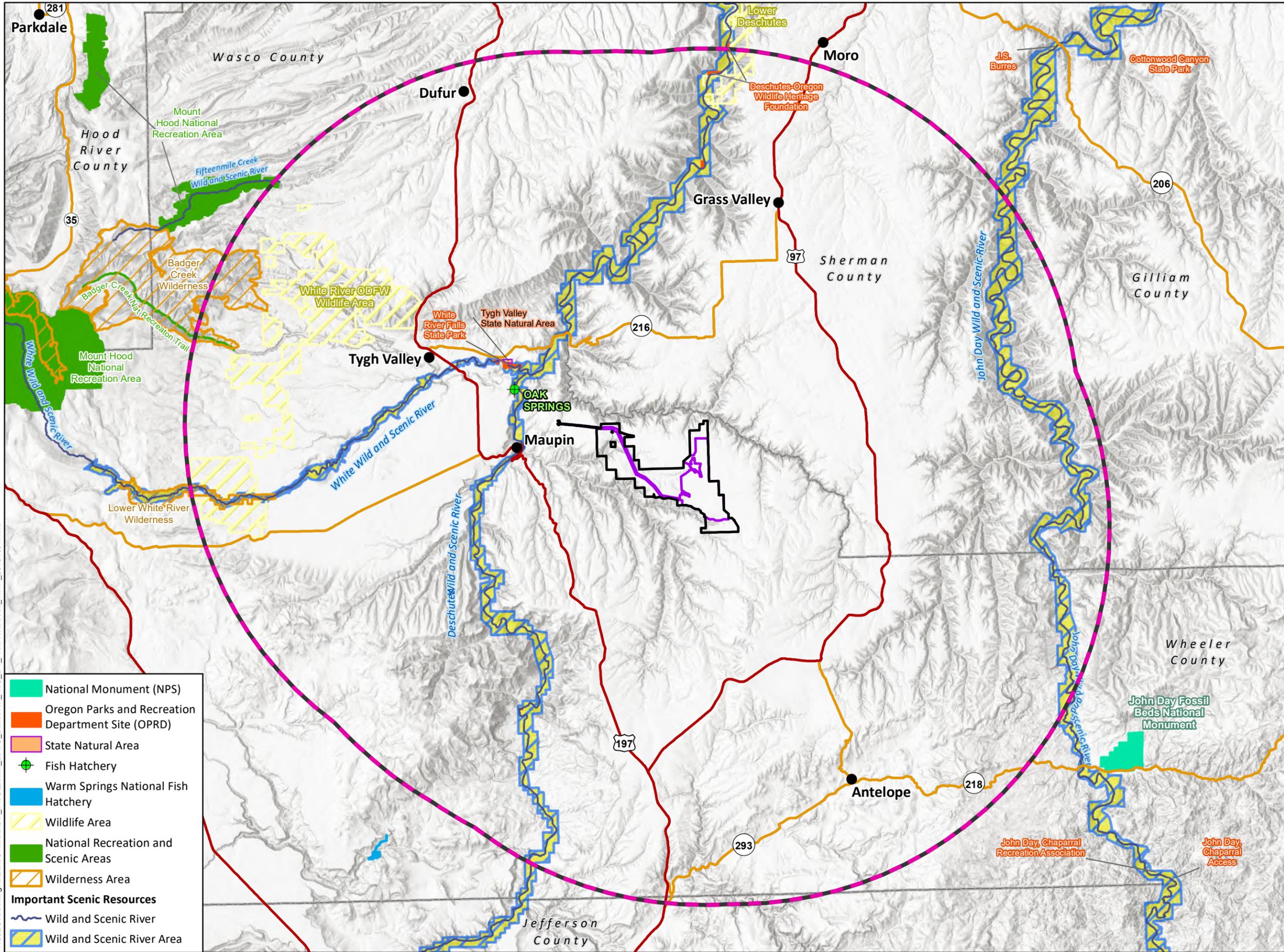
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# Bakeoven Solar Project

Figure L-1  
Protected Areas  
within Analysis Area

WASCO COUNTY, OREGON

-  Proposed Site Boundary
  -  Proposed Micrositing Corridor
  -  Analysis Area (20-mile Buffer)
- Basemap Features**
-  City/Town
  -  US Highway
  -  State Highway
  -  County Boundary



-  National Monument (NPS)
  -  Oregon Parks and Recreation Department Site (OPRD)
  -  State Natural Area
  -  Fish Hatchery
  -  Warm Springs National Fish Hatchery
  -  Wildlife Area
  -  National Recreation and Scenic Areas
  -  Wilderness Area
- Important Scenic Resources**
-  Wild and Scenic River
  -  Wild and Scenic River Area

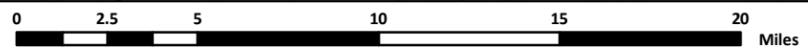


**Data Sources**

Avangrid-Project Infrastructure; USGS-Hillshade; Census Bureau-Tiger Roads; Enterprise-Cities, Counties; NPS-National Monuments; USFS-Wilderness, Wild & Scenic Rivers; OPRD-State Parks & Waysides; State Natural Areas; ODFW-Fish Hatcheries, State Wildlife & Management Areas; USDA Forest Service-National Recreation & Scenic Areas



1:320,000 WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION

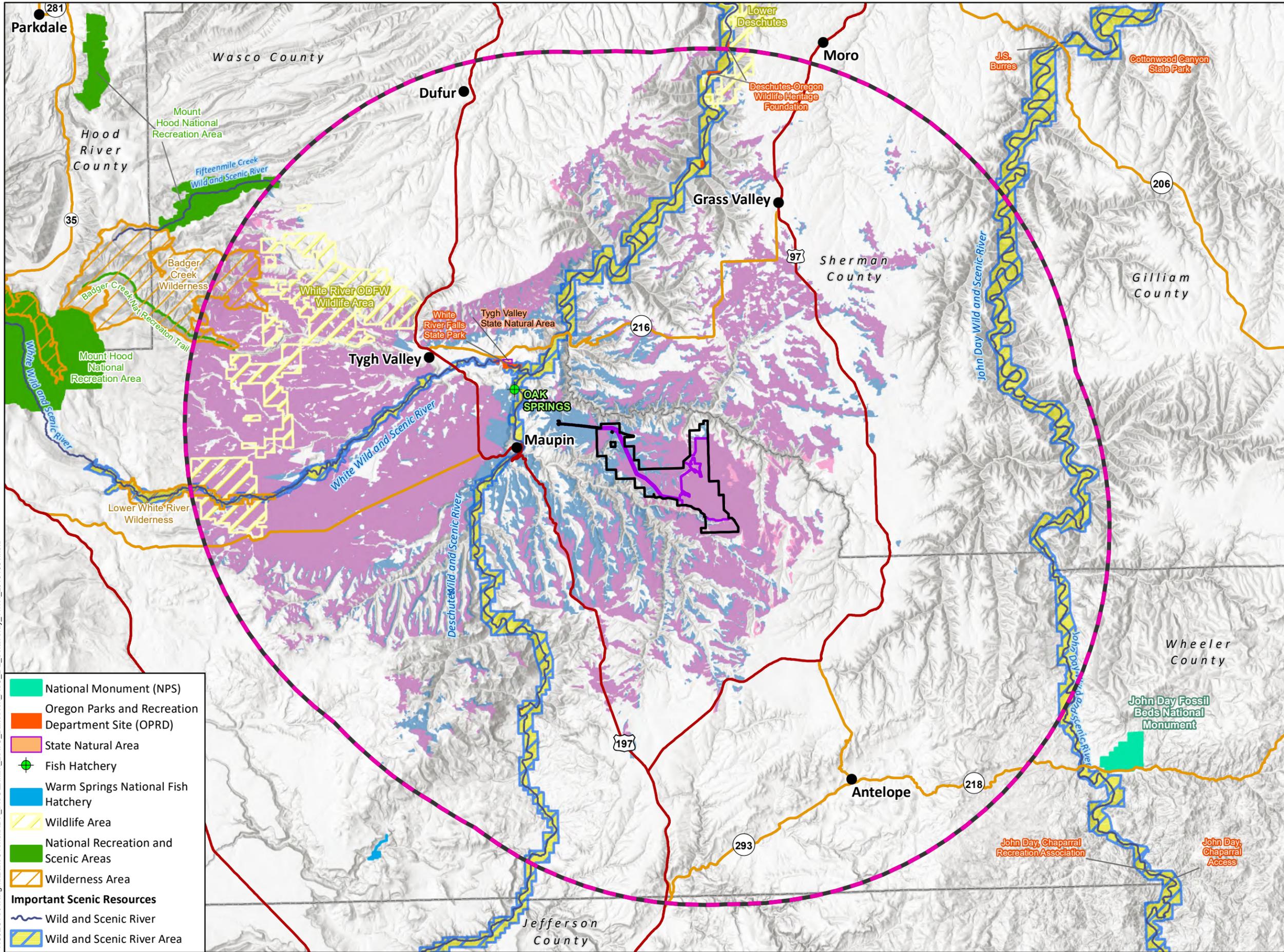
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# Bakeoven Solar Project

Figure L-2  
Viewshed for Solar Facility  
and Transmission Line

WASCO COUNTY, OREGON

- Proposed Site Boundary
  - Proposed Micrositing Corridor
  - Analysis Area (20-mile Buffer)
- Basemap Features**
- City/Town
  - US Highway
  - State Highway
  - County Boundary
- Viewshed Results**
- Not Visible
  - Transmission Line Only Potentially Visible
  - Transmission Line and Solar Facility Potentially Visible
  - Solar Facility Only Potentially Visible



- National Monument (NPS)
  - Oregon Parks and Recreation Department Site (OPRD)
  - State Natural Area
  - Fish Hatchery
  - Warm Springs National Fish Hatchery
  - Wildlife Area
  - National Recreation and Scenic Areas
  - Wilderness Area
- Important Scenic Resources**
- Wild and Scenic River
  - Wild and Scenic River Area

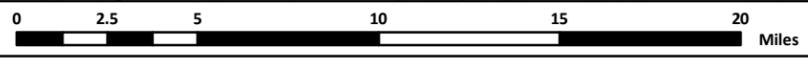


**Data Sources**

Avangrid-Project Infrastructure; USGS-Hillshade; Census Bureau-Tiger Roads; Enterprise-Cities, Counties, NPS-National Monuments; USFS-Wilderness, Wild & Scenic Rivers; OPRD-State Parks & Waysides; State Natural Areas; ODFW-Fish Hatcheries, State Wildlife & Management Areas; USDA Forest Service-National Recreation & Scenic Areas



1:320,000 WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION

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