

# EXHIBIT T

## RECREATIONAL OPPORTUNITIES

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## Introduction

This Exhibit addresses important recreational opportunities in the study area, providing evidence to support an EFSC finding as required by OAR 345-022-0100. For this Exhibit the study area described in OAR 345-001-0010(2) and the study area described in OAR 345-01-0010(57) refer to the same areas and are defined as the area within the Facility site boundary and 5 miles from the Facility site boundary.

**OAR 345-021-0010(1)(t)** *Information about the impacts the proposed facility would have on important recreational opportunities in the analysis area, providing evidence to support a finding by the Council as required by OAR 345-022-0100, including:*

### **RESPONSE**

OAR 345-021-0010(1)(t) requires that the proposed wind energy Facility application for a site certificate address important recreational opportunities.

Additionally, **OAR 345-022-0100(1)** provides that:

*“...the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in significant adverse impact to important recreational opportunities in the analysis area as described in the project order.”*

This Exhibit is organized according to OAR 345-021-0010(1)(t) application requirements. In response to the requirements of OAR 345-021-0010(1)(t), this exhibit addresses impacts the proposed Facility will have on important recreational opportunities in the study area and provides evidence to support an EFSC finding as required by OAR 345-022-0100.

## **T.1 Important Recreational Opportunities in the Study Area**

**OAR 345-021-0010(1)(t)(A)** *A description of important recreational opportunities in the analysis area considering the criteria in OAR 345-022-0100 including information on the factors listed in OAR 345-022-0100(1).*

### **RESPONSE**

Figure T1 shows the study area for potential impacts on recreational opportunities. The following sections consider potential recreational opportunities both within Facility site boundary study area.

There are no county or state designated recreation lands or recreational facilities located within the Facility site boundary. The only designated recreational opportunity within the Facility site boundary is the federally designated ONHT, portions of which are located within the northern area of the Facility site boundary.

Recreational activities in the study area include, but are not limited to, camping, hiking, bicycling, hunting, swimming, boating, fishing, birding, wildlife observation, nature photography, sightseeing, and off-highway vehicle (OHV) use. The recreational opportunities within the 5-mile study area are listed in Table T1, shown in Figure T1, and discussed in the following subsections.

**Table T1: Recreational Opportunities within the 5-Mile Study Area**

Recreational Opportunity*	Approximate Distance from the Facility Site Boundary (miles)	Direction from the Proposed Facility**	Considered Important per Criteria in OAR 345-022-0100
<b>Waterbodies</b>			
John Day River	4	W	Yes
Rock Creek	<1	SW	No
<b>Park Facilities</b>			
John Day Hilderbrand State Park	5	W	No
Rock Creek Day-Use Area	4	W	No
<b>Wildlife Areas</b>			
Horn Butte ACEC	5	NE	Yes
John Day Wildlife Refuge	4	W	Yes
<b>Trails, Interpretive Sites, and Monuments</b>			
ONHT	0 (crosses through the Facility site boundary)	Northern portion of Facility site boundary	No
McDonald Crossing and John Day Crossing Interpretive Site	4	W	Yes
Fourmile Canyon and Interpretive Site	4	NE	Yes
OR 19 Monument	1	E	No
<b>Other BLM-administered Land</b>			
Other BLM-administered Land	<1	E	No

\*The Lewis and Clark National Historic Trail and Cottonwood Canyon State Park are not addressed in this Exhibit as they are not located within the required 5-mile study area per OAR 345-001-0010(57)(d).

\*\* W = west, SW = southwest, NE = northeast, E = east

**T.1.1 Waterbodies**

**T.1.1.1 John Day River**

A 7-mile segment of the 281-mile long John Day River is located within the 5-mile study area. Recreational opportunities associated with the John Day River include boating, riverside camping, hunting, and fishing for bass, steelhead, and trout.

The lower John Day River mainstem from Tumwater Falls upstream to Service Creek is designated as Wild and Scenic and classified as “Recreational”. Additionally, John Day River mainstem from Tumwater Falls upstream to Parrish Creek is designated as a State Scenic Waterway. The program is administered by the Oregon Parks and Recreation Department. Exhibit L provides further discussion on the John Day River designations.

Large portions of the river corridor of the lower John Day River mainstem are managed by the BLM. BLM’s management of the river corridor is guided by the 2000 John Day River

Management Plan (BLM, 2000) and BLM land in the greater John Day River Basin is guided by the 2008 John Day Basin Resource Management Plan (BLM, 2008).

#### **T.1.1.2 Rock Creek**

Rock Creek is an 82-mile tributary of the John Day River. There are public access points along the creek. The recreational opportunity associated with Rock Creek is fishing.

#### **T.1.2 Summary of Facility Effects on Waterbodies**

The John Day River meets the criteria set forth in OAR 345-022-0100 as “important.” However, the Facility is 4 miles from the Facility site boundary and will have no significant adverse construction or operation impacts on the John Day River recreational opportunities listed above. As discussed in Exhibits L and R, Facility turbines will be visible from the John Day River. However, as indicated in Exhibit R, there will be limited views of the Facility from isolated areas and the impact is determined to not be substantial. The Facility is therefore not expected to have significant adverse visual impacts to the river or associated recreational opportunities. In accordance with OAR 345-022-0100(1), the Facility can be designed, constructed, and operated to have no significant adverse impacts to the John Day River.

The Facility is not expected to have any impact to the fish populations of this creek and therefore there will be no impacts to this recreational use. Regardless, while Rock Creek provides a fishing recreational opportunity, the recreational opportunity is common and replaceable, as similar fishing opportunities exist on other streams in the area, such as Thirtymile Creek, and on the John Day River, and does not meet the criteria set forth in OAR 345-022-0100 as “important.” Therefore, further evaluation of Rock Creek in this exhibit is not necessary to demonstrate that the Facility will not result in significant adverse impacts to important recreational opportunities within the study area.

#### **T.1.3 Park Facilities**

##### **T.1.3.1 John Day Hilderbrand State Park**

The John Day Hilderbrand State Park is an undeveloped property along the John Day River Scenic Waterway. It is open to the public, but only accessible by the river as the park is otherwise landlocked by private property. There is no management plan for this park. The park’s recreational opportunities include boating access and potential sightseeing.

##### **T.1.3.2 Rock Creek Day-Use Area**

Rock Creek day-use area is a small picnic site with boating access located near McDonald Crossing on the east side of the mainstem of the John Day River. The recreational opportunities include picnic use and boating access.

##### **T.1.3.3 Summary of Facility Effects on Park Facilities**

While these two park facilities provide unique recreational sites, demand usage is low, and they offer no outstanding or unusual qualities. Accordingly, the parks do not provide an “important” recreational opportunity per the criteria set forth in OAR 345-022-0100.

These two parks were included in the ZVI analysis (Exhibit R), and it was determined that the Facility turbines will not be visible from either park. Even though analysis of these two parks is not required under Exhibit R, and further evaluation is not required as a part of this exhibit (because these parks do not meet the criteria set forth in OAR 345-022-0100 as “important”), the information provided in this Exhibit demonstrates that the Facility will have no significant adverse impacts on important recreational opportunities within the study area, including John Day Hildebrand State Park and Rock Creek Day-use Area.

## **T.2 Wildlife Areas**

### **T.2.1 Horn Butte ACEC**

The Horn Butte ACEC consists of approximately 6,000 acres of land managed by the BLM. Designated for its long-billed curlew nesting habitat, a management plan was prepared in 1989 proposing land acquisition, livestock management, noxious weed control, and seasonal closure of the area to OHVs (BLM, 2008). Additionally, the Fourmile Canyon segment of the ONHT passes through the ACEC. Access to the Horn Butte ACEC is difficult, and the area is rarely visited by the public. The recreational opportunities associated with the Horn Butte ACEC include wildlife viewing, OHV use, and uses associated with the ONHT.

### **T.2.2 John Day Wildlife Refuge**

ODFW manages the John Day Wildlife Refuge located along the lower mainstem of the John Day River, from Columbia River about 84 miles to Thirtymile Creek. The refuge includes a 0.25-mile corridor on each side of the river, measured from the mean high water line. Recreational opportunities associated with the wildlife refuge include hunting, hiking, and wildlife viewing. The primary purpose of the John Day Wildlife Refuge is to protect wintering and nesting waterfowl. The refuge provides a resting area for ducks and geese and provides habitat for various raptor species and other wildlife. The area is also open to hunting of deer and upland game birds during authorized seasons, but this hunting on private lands within the refuge requires landowner permission.

### **T.2.3 Summary of Facility Effects on Wildlife Areas**

The Horn Butte ACEC and John Day Wildlife Refuge do not provide unique recreational sites and do not offer outstanding or unusual qualities; however, these protected areas have a special designation and management, are not common and replaceable, and demand is high for the John Day River Wildlife Refuge (low for Horn Butte ACEC). Therefore, these wildlife areas provide an “important” recreational opportunity.

However, as the Facility is 5 miles from Horn Butte ACEC and 4 miles from John Day Wildlife Refuge, it will have no significant adverse construction or operation impacts on the associated recreational opportunities listed above. As discussed in Exhibits L and R, the ZVI analysis (Exhibit R) shows that Facility turbines will be visible from the Horn Butte ACEC and John Day Wildlife Refuge; however, the Facility is not expected to have significant adverse visual impacts to these wildlife areas or associated recreational opportunities. In accordance with OAR 345-022-0100(1), the Facility can be designed, constructed, and operated to have no significant adverse impacts to the Horn Butte ACEC or John Day Wildlife Refuge.

### **T.3 Trails, Interpretive Sites, and Monuments**

#### **T.3.1 Oregon National Historic Trail**

The Facility site boundary and extended 5-mile study area includes ONHT sites and segments. As shown in Figure T1, the approximate route of the ONHT route runs east-west through the northern portion of the study area.

The ONHT received federal designation as a “historic trail” under the NTSA in 1978. The purpose of the historic trail designation on federal lands is to identify, preserve, and interpret the sites, route and history of the Oregon Trail. Visible trail remnants are present; however, the ONHT was never a clearly defined trail and traces of the route have been obliterated by agricultural practices, road construction, and urban development. Exhibits R and S further discuss the ONHT.

As discussed in Exhibit R, the U.S. Department of Interior, National Park Service Oregon National Historic Trial Management Plan identifies “high-potential” sites and segments. These high-potential sites are described as locations that provided opportunity to interpret the historic significance of the trail during its major use. Two high-potential sites are identified to be located within the study area: McDonald Crossing and Fourmile Canyon Interpretive Site, both of which are outside of the Facility site boundary (U.S. National Park Service, 1999).

##### **T.3.1.1 Within Site Boundary**

The designated route of the ONHT crosses the northern portion of the Facility site boundary. There are two noncontiguous, visible remnants of the ONHT, which are located on private land within the Facility site boundary and inaccessible to the public for recreational opportunities (Iberdrola Renewables, Inc., 2010). These remnants are located within a portion of the Facility site boundary that overlaps with the Iberdrola Renewables, Inc. Montague Wind Power Facility site boundary. These remnants are not visible from publicly accessible viewing areas (Iberdrola Renewables, Inc., 2010). Because there is no public opportunity to view visible remnants of the trail, demand is low, and this segment of the ONHT is not a high-potential segment, it does not provide an “important” recreational opportunity. Additionally, as discussed in Exhibit S, intact segments of the ONHT were not identified within the micro-siting corridor.

##### **T.3.1.2 Outside Facility Site Boundary and Within Study Area**

Potential ONHT recreational opportunities located outside the Facility site boundary, but within the study area include: (1) McDonald Crossing (e.g., John Day River Crossing) and John Day Crossing Interpretive Site; (2) Fourmile Canyon Interpretive Site; and (3) OR 19 Monument. These locations are shown in Figure T1 and discussed below.

###### **McDonald Crossing (e.g., John Day Crossing) and John Day Crossing Interpretive Site**

McDonald Crossing, a high-potential site within the study area, is located along the John Day River, approximately 4 miles west of the proposed Facility site boundary. Although no visible remnants of the Oregon Trail remain at the McDonald Crossing site, trail markers commemorate the trail’s approximate route. The John Day Crossing Interpretive Site is located on the west side of the river on BLM-administered land. The recreational

opportunity at McDonald Crossing and John Day Crossing Interpretive Site includes viewing the historic McDonald ford where the trail crosses the river and viewing the interpretive display. The McDonald Crossing recreational site is unique, although demand is low due to the limited access to the site, and there are no outstanding qualities. Given that the site is unique and a high-potential site, it provides an “important” recreational opportunity.

The design, construction, and operation of the Facility will not result in a significant adverse impact to recreational opportunities at McDonald Crossing or John Day Crossing Interpretive Site. As discussed in Exhibit R, the Facility will be located approximately 4 miles east of the McDonald Crossing and John Day Interpretive Site. According to the ZVI analysis (Exhibit R), no Facility turbines will be visible from this area.

#### Fourmile Canyon Interpretive Site

Fourmile Canyon is a high-potential site for public viewing and interpretation, located approximately 4 miles northeast of the Facility site boundary within the study area. Intact remnants of the Oregon Trail are visible in Fourmile Canyon. The BLM constructed the Fourmile Canyon Interpretive Site, which directs viewers to visibly intact remnant wagon ruts that extend up a hillside on the west side of the Fourmile Road. Potential recreational opportunities at the Fourmile Canyon Interpretive Site include viewing the interpretive display depicting emigrant life on the Oregon Trail, viewing intact remnants of the ONHT, and potential limited hiking on intact remnants of the ONHT located on adjacent public lands. The recreational opportunity is unusual due to the historic significance of the ONHT. Although opportunities to view areas of the presumed trail route are common, opportunities to view visible remnants of the trail in locations accessible to the public are rare and irreplaceable. Demand due to interest in the ONHT is moderate. Given this information, and that Fourmile Canyon Interpretive Site is a high-potential site, it provides an “important” recreational opportunity.

The design, construction and operation of the Facility will not result in a significant adverse impact to recreational opportunities at the Fourmile Canyon Interpretive Site. As discussed in Exhibit R, the Facility will be located approximately 4 miles southwest of the Fourmile Canyon Interpretive Site. The ZVI analysis (Exhibit R) shows that no turbines will be visible from the interpretive site.

#### OR 19 Monument

OR 19 Monument is located within the study area, approximately 1 mile east of the Facility site boundary. The monument is located within the public right-of-way on Oregon Highway 19 and marks the approximate alignment of the ONHT. However, there are no visible remnants of the ONHT at this location. The recreational opportunity includes viewing the monument. Because there is no opportunity to view visible remnants of the trail, demand is low, and the OR 19 Monument is not a high-potential site, it does not provide an “important” recreational opportunity.

### **T.3.1.3 Summary of Facility Effects on Oregon National Historic Trail**

Two ONHT sites within the study area, McDonald Crossing and Fourmile Canyon, meet the criteria set forth in OAR 345-022-0100 as “important.” However, the Facility will have no adverse construction or operation effects on these or any of the ONHT recreational opportunities discussed above. The Facility will not affect the visually intact remnants of the

ONHT within the Facility site boundary, publicly accessible locations where the ONHT may be viewed, high-potential sites, or “important” recreational opportunities. In accordance with OAR 345-022-0100(1), the Facility will be designed, constructed, and operated to have no significant adverse impact to the ONHT.

#### **T.4 Other BLM-Administered Land**

In addition to the John Day River, Horne Butte ACEC, and ONHT sites mentioned above, scattered upland parcels within the study area are also managed by the BLM. Upland parcel recreation opportunities include hunting, sightseeing, horseback riding, hiking, camping, and OHV use.

##### **T.4.1 Summary of Facility Effects on Other BLM-Administered Land**

BLM-administered land in the study area, other than the John Day River, Horne Butte ACEC, and ONHT sites mentioned above, does not meet the criteria set forth in OAR 345-022-0100 as “important.” Although demand is high in easily accessible areas, the upland parcels do not offer unique recreational sites, they are common and replaceable, and they do not offer outstanding or unusual qualities. Therefore, further evaluation in Exhibit T of the other BLM-administered land is not necessary to demonstrate that the Facility will not result in significant adverse impacts to important recreational opportunity within the study area.

The ZVI analysis (Exhibit R) determined that the Facility turbines will be visible from some upland BLM parcels; however, these areas are not specially designated or managed and accordingly do not have designated scenic qualities that will be visually impacted. Additionally, as discussed in Exhibit R, the Facility will not result in development or improvement of any BLM lands; therefore no impacts to BLM lands are identified. This exhibit demonstrates that the Facility will have no significant adverse impacts on important recreational opportunities within the study area, including the other BLM-administered land.

#### **T.5 Significant Potential Adverse Impacts to the Opportunities Identified**

**OAR 345-021-0010(1)(t)(B)** *A description of significant potential adverse impacts to the opportunities identified in (A) including, but not limited to, potential impacts such as:*

- (i) *Direct or indirect loss of an opportunity as a result of construction or operation.*

#### **RESPONSE**

Facility construction and operation will not have an adverse effect on the recreational opportunities discussed in this exhibit. The Facility will not affect visually intact remnants of the ONHT within the Facility site boundary, high potential sites, or any publicly accessible locations where the ONHT may be viewed. In accordance with OAR 345-022-0100(1), the Facility will be designed, constructed, and operated to have no significant adverse impact to the ONHT or any important recreational opportunities within the study area.

(ii) *Noise resulting from facility construction or operation.*

**RESPONSE**

Exhibit X discusses potential noise impacts. Considering projected Facility construction and operation noise levels, the distance from turbine locations to recreational opportunities, and the attenuation of noise due to topography, noise from Facility construction and operation will be perceptible above background noise levels at some recreational areas within 2 miles of the Facility. This may include segments of the ONHT and upland BLM parcels. However, the segments of the ONHT and upland BLM parcels within 2 miles of the Facility are not considered “important” per OAR 345-022-0100.

Additionally, OAR 340-035-0035 sets forth noise standards for noise-sensitive properties. According to OAR 340-035-0035, a noise sensitive property is a property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Recreational areas are not considered noise sensitive and therefore there are no noise impact criteria for recreational land uses.

(iii) *Increased traffic resulting from facility construction or operation.*

**RESPONSE**

As further discussed in Exhibit U, the primary transportation route will originate from the Portland/Vancouver area and continue eastbound along Interstate 84 (I-84) past the cities of Hood River and The Dalles. At the interchange with Oregon Highway 19, the route will proceed southbound to Cedar Springs Lane, Cameron Road/Old Tree Lane, Bottemiller Lane, or Baseline Road to proposed access roads. Other than I-84 and OR 19, all other roads used during Facility construction and operation are county roads. The majority of construction-related heavy- and light-duty equipment and material delivery vehicles, as well as some employee commuter traffic, will utilize the primary route.

Construction-related traffic increases could temporarily affect state and county roadways. Construction of the 1.6-MW layout will require approximately 125 truck trips per turbine, resulting in up to 27,375 heavy- and light-duty truck trips. Construction of the 3.0 MW layout will require approximately 140 truck trips per turbine, resulting in up to 23,240 truck trips heavy- and light-duty truck trips.

Per year of construction, assuming 20 workdays per month (potentially more during peak construction periods), approximately 114 daily trucks and 97 daily trucks will occur for the 1.6-MW and 3.0-MW layouts, respectively. All trucks will be making one inbound trip and one outbound trip per day, resulting in a maximum of 228 trips per day and a minimum of 194 trips per day to the existing daily traffic on transporter routes. Construction-related traffic may cause brief traffic delays; however, it is not anticipated that these delays will adversely affect recreational opportunities.

Operations access is primarily related to travel by operations staff and occasional deliveries. Daily access to the Facility by only approximately 12 to 15 operation staff is not anticipated to adversely affect traffic or recreational opportunities.

Potential state highway (I-84 and OR 19) traffic congestion as a result of Facility construction and operation is anticipated to be insignificant. Construction-generated traffic on I-84 represents a very small percentage of overall average daily trips (ADT) and OR 19

has ample capacity to handle the additional trips created. Because the county roadways experience very little daily traffic, and additional construction-related trips will be spread out over the workday, no traffic congestion or delay impacts are expected along county roadways. Adverse traffic safety impacts are not anticipated from construction of the Facility.

Facility traffic will not affect the public's ability to access intact portions of the ONHT, interpretive sites, or monuments. Existing state and county roadways can safely accommodate Facility construction traffic, with minor improvements as necessary. Additionally, increased traffic resulting from Facility construction will be temporary and no adverse impacts are anticipated. Facility operational traffic will be inconsequential. Further, traffic safety and flow will be monitored during construction. Therefore, Facility construction and operation will not adversely impact important recreational opportunities.

(iv) *Visual impacts of facility structures or plumes.*

### **RESPONSE**

As discussed in Exhibit R, the Facility will not have a significant adverse visual impact to scenic resources and values.

## **T.6 Mitigation Measures**

**OAR 345-021-0010(1)(t)(C)** *A description of any measures the applicant proposes to avoid, reduce or otherwise mitigate the significant adverse impacts identified in (B).*

### **RESPONSE**

As Facility design, construction, and operation will not result in any significant adverse impacts to important recreational opportunities, measures to avoid, reduce, or otherwise mitigate adverse Facility impacts to recreational opportunities are not proposed. Mitigation measures proposed for other purposes, such as use of existing roads and rights-of-way where possible, and the visual design of the turbine towers, will reduce potential impacts to other recreational opportunities, not considered important per OAR 345-022-0100.

## **T.7 Map of Study Area**

**OAR 345-021-0010(1)(t)(D)** *A map of the analysis area showing the locations of important recreational opportunities identified in (A).*

### **RESPONSE**

The study area and locations of important recreational opportunities identified pursuant to OAR 345-021-0010(1)(t)(A) are shown in Figure T1.

**T.8 Monitoring Program**

**OAR 345-021-0010(1)(t)(E)** *The applicant's proposed monitoring program, if any, for impacts to important recreational opportunities.*

**RESPONSE**

A monitoring program is not proposed as Facility design, construction, and operation will not result in any significant adverse impacts to important recreational opportunities.

**T.9 Conclusion**

The Facility will not result in any significant adverse impacts to any important recreational opportunities within the study area. Therefore in accordance with OAR 345-022-0100(1), the Facility can be designed, constructed, and operated so as to not result in significant adverse impact on important recreational opportunities in the study area. Additionally, there are no site certificate conditions required to protect recreational opportunities within the study area.

## **T.10 References**

Bureau of Land Management (BLM). 2000. Final John Day River Management Plan Environmental Impact Statement. BLM/OR/WA/PT-00/048+1792. June, 2000.

Bureau of Land Management (BLM). 2008. Draft John Day Basin Resource Management Plan and Environmental Impact Statement. Prineville District Office. October 2008.

Iberdrola Renewables, Inc. 2010. Montague Wind Power Facility Application for a Site Certificate.

U.S. National Park Service. 1999. Comprehensive Management and Use Plan – Oregon National Historic Trail.



## Figures

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Figure T1: Recreational Facilities and Opportunities