

**EXHIBIT T**  
**RECREATIONAL FACILITIES AND OPPORTUNITIES**  
OAR 345-021-0010(1)(t)

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- T-1 Recreational Opportunities within 5 miles of the Facility Site Boundary
- T-2 Potential Visibility and Photo Survey Points within 5 miles of the Facility Site Boundary



This Exhibit provides an assessment of potential impacts on recreational opportunities within 5 miles of the Madras Solar Energy Facility (Facility) site boundary that are deemed important in accordance with Oregon Administrative Rule (OAR) 345-022-0100. No recreational opportunities are located within 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:** To issue a site certificate for a proposed energy facility, OAR 345-022-0100(1) states 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.” As defined in OAR 345-001-0010(59)(d), the analysis area for impacts on recreational opportunities is the area within 5 miles of the Facility site boundary. Further, OAR 345-022-0100 provides factors that the Council will consider in judging the importance of a recreational opportunity. Specifically, OAR 345-022-0100 provides the following:

*(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:*

- (a) Any special designation or management of the location;*
- (b) The degree of demand;*
- (c) Outstanding or unusual qualities;*
- (d) Availability or rareness;*
- (e) Irreplaceability or irretrievability of the opportunity.*

Madras PV1, LLC (Applicant) provides the following information to demonstrate that the Facility, taking into account mitigation, will not result in significant adverse impacts on any important recreational opportunities in the 5-mile analysis area.

## **T.1 RECREATIONAL OPPORTUNITIES IN THE ANALYSIS AREA**

**OAR 345-021-0010(1)(t)(A)** *A description of the recreational opportunities in the analysis area that includes information on the factors listed in OAR 345-022-0100(1) as a basis for identifying important recreational opportunities.*

**Response:** The analysis area used to assess potential impacts on recreational opportunities includes the area within the Facility site boundary and extends 5 miles beyond the Facility site boundary, as shown on Figure T-1. Recreational opportunities were identified through a review of existing geographic information system (GIS) data and maps, as well as, federal, state, and local management plans. As shown on Figure T-1 and identified in Table T-1 (located at the end of this section), a total of 21 recreational opportunities were identified within the 5-mile analysis area. In general, recreational activities within the analysis area include wildlife viewing, camping, boating, hiking, fishing, and hunting. No recreational opportunities occur within the Facility site boundary.

OAR 345-022-0100 prescribes criteria used to evaluate a recreational opportunity's relative importance: any special designation or management, degree of demand, outstanding or unusual qualities, availability or rareness, and irreplaceability or irretrievability of the opportunity. Because criteria to evaluate these factors are not defined in OAR 345-022-0100(1) or under the standard for OAR 345-021-0010(1)(t), the Applicant uses Table T-1 as a qualitative assessment tool to balance available information specific to each factor and derive conclusions based on proxy criteria for considering the relative importance of a recreational opportunity. For example, the degree of demand for a recreational opportunity is one factor in determining importance [OAR 345-022-0100(1)(b)]. The Applicant assigned qualitative proxy measures of demand according to a rating of High, Moderate, or Low for each recreational opportunity. In most cases, attendance records are not available to determine a scale for demand. Therefore, recreational opportunities such as Sun Drive Park, that have no attendance or visitor use records, and no recreational amenities or access signage, are assumed to have a “Low” degree of demand as reflected in Table T-1. Alternatively, the Round Butte Overlook Park is a developed site with an observation building and interpretive

displays. The park is both open to the public and reservable with a picnic capacity of 200 people and is therefore assumed to have a “Moderate” degree of demand in Table T-1. In contrast, the Cove Palisades State Park is a recreational destination with an estimated 459,000 annual day use visitors, which accounts for a “High” degree of demand in Table T-1.

Rating the irreplaceability or irretrievability of a recreational opportunity is another factor in determining importance [OAR 345-022-0100(1)(e)]. Similar to the discussion above regarding demand, factors determining irreplaceability or irretrievability are not defined in OAR 345-022-0100(1) or under the standard for OAR 345-021-0010(1)(t). Accordingly, this analysis assigns proxy ratings of “Irreplaceable” and “Replaceable” to address this factor based on the ability to replace an identified recreational opportunity.<sup>1</sup> In general, opportunities based on inherent natural resource characteristics such as the Willow Creek Canyon Trail, which follows the contours of the Willow Creek Canyon and cannot feasibly be recreated in the same place or at another reasonably nearby location, are considered “Irreplaceable.” In contrast, city parks, typical campgrounds, and opportunities like typical wildlife viewing areas, such as Pelton Wildlife Overlook, could feasibly be replaced or relocated to an area with a similar use, landscape, or habitat and are therefore considered “Replaceable.”

A balanced consideration of proxy criteria was used to evaluate each of the five factors under OAR 345-022-0100(1) and provide an overall assessment of importance for each recreational opportunity. Based on this evaluation, seven important recreational opportunities have been identified in the analysis area, while 14 identified recreational opportunities do not meet the criteria of important. The seven important recreational opportunities are listed and evaluated in Section T.2. Table T-1 provides a summary of the analysis in accordance with the criteria outlined in OAR 345-022-0100. The following subsections provide a description of each recreational opportunity within the 5-mile analysis area.

### **T.1.1 Crooked River National Grassland**

Crooked River National Grassland shown on Figure T-1 is one of 20 National Grasslands and the only National Grassland in Oregon. The grassland encompasses over 173,600 acres and contains two National Wild and Scenic Rivers: the Deschutes River and Crooked River. The Crooked River National Grassland is administered as a Ranger District of the Ochoco National Forest and managed by the United States Forest Service (USFS) under the *Crooked River National Grassland Land and Resource Management Plan* (USFS, 1989). Therefore, Ochoco National Forest is not identified as a separate recreational opportunity in this analysis. The majority of the grassland (approximately 65 percent) is owned by USFS and the remaining land is privately-owned or administered by the Bureau of Land Management (BLM), State of Oregon, or Jefferson County. Nearly 85 percent of the grassland is managed for general forage and deer and antelope winter range, and less than two percent of the grassland within the 5-mile analysis area is managed for recreation (USFS, 1989).

As estimated in the *Crooked River National Grassland Land and Resource Management Plan*, recreational trips to the Crooked River National Grassland total over 100,000 recreation visitor days annually (USFS, 1989). Recreational activities inside the grassland include biking, camping, fishing, hiking, horseback riding, wildlife viewing, off-highway vehicle riding, and water activities (USFS, 2019a). The primary recreational opportunity associated with the grassland and designated within the 5-mile analysis area is the Cove Palisades State Park (Figure T-1). This park is managed separately by the State of Oregon and discussed below in Section T.1.6.

The northwest corner of the Crooked River National Grassland boundary abuts the west side of the Facility site boundary (Figure T-1). This area of the grassland is within the general forage management area, which focuses on maintaining range productivity with livestock. Based on the proximity of the general forage management designation, the grassland area immediately adjacent to and within approximately 3.5 miles of the Facility site boundary is not used for recreational purposes and public access is not identified. With the exception of the Cove Palisades State Park, there are no identified recreational amenities for the grassland within the 5-mile analysis area (USFS, 1989; USFS, 2019a).

<sup>1</sup> While OAR 345-022-0100(1)(e) does not explain the terms “irreplaceability or irretrievability” for the purpose of this rule, within its context, the Applicant believes that the rule asks whether there are other comparable recreational opportunities that provide similar services to the surrounding population in the event that a specific recreation facility is closed or otherwise inaccessible.



As explained in Table T-1, Crooked River National Grassland is considered an important recreational opportunity per OAR 345-022-0100(1)(t) due primarily to the presence of the Cove Palisades State Park and based on factors such as special designation, demand, outstanding quality, rareness, and irreplaceability.

### **T.1.2 Willow Creek Canyon Trail**

The Willow Creek Canyon Trail is an approximately 6.2-mile-long trail running east to west that begins in the City of Madras and follows the course of Willow Creek to Lake Simtustus (Figure T-1). The portion of the trail within the City of Madras is located within the Willow Creek Greenway and 7th to 9th Street Open Space, which are designated open space areas in the *City of Madras Parks and Open Space Master Plan* (City of Madras, 2004). Within City limits, the paved, lighted trail is used for walking, biking, skateboarding, and for access to nearby schools (City of Madras, 2004).

The trail continues west outside city limits into Willow Creek Canyon where it crosses property owned and managed by the BLM, Prineville District. A BLM management plan specific to the Willow Creek Canyon was not identified. However, the trail is designated by the Oregon Parks and Recreation Department (OPRD) as one of five Oregon Regional Trails (OPRD, 2019a). The portion of the trail within Willow Creek Canyon was previously the railroad grade for the Miller to Metolius line, which was abandoned in 1921 (Harrison, 2019). Compared to the trail sections within the City of Madras, the path is a more rugged dirt track used for running and biking. The trail provides views of Willow Creek Canyon and wildlife viewing opportunities. There are six rock climbing areas along the trail, mostly resulting from cuts used for the railroad grade (Mountain Project, 2019). The Madras Aquatic Center Recreation District (MACRD) organizes the annual Canyon Crawl race, which starts in Madras, continues along the Willow Creek Canyon Trail, and ends at Pelton Park (see Section T.1.4) (MACRD, 2019).

As explained in Table T-1, Willow Creek Canyon Trail is considered an important opportunity per OAR 345-022-0100(1)(t) due to the special designation, moderate demand, outstanding quality, rareness, and irreplaceability.

### **T.1.3 Lake Simtustus Resort & Marina**

Lake Simtustus Resort & Marina is a private RV park with 77 camping hook-ups (Figure T-1). Visitors have direct access to Lake Simtustus and its recreational activities, including wildlife viewing, boating, water sports, and fishing. The resort offers equipment rentals for paddle boarding, kayaking, and other activities. The Willow Creek Canyon Trail (see Section T.1.2) is also accessible for hiking and biking. Most visitors staying at the resort make day trips to other cities or recreational opportunities outside the 5-mile analysis area, such as to Bend or Mt. Hood (Lake Simtustus Resort, 2019).

As explained in Table T-1, Lake Simtustus Resort & Marina provides a common and replaceable opportunity in the region, one of three typical RV or camping sites within the 5-mile analysis area, and therefore, is not an important opportunity per OAR 345-022-0100(1)(t).

### **T.1.4 Pelton Park**

Pelton Park is a camping site managed by Portland General Electric (PGE) on Lake Simtustus with 67 campsites, including yomes (i.e., yurts) and cabins, and a park general store (Figure T-1). Activities include wildlife viewing, hiking, water skiing, paddling, and fishing. An on-site two-mile trail leads up to the ridgeline for views of Lake Simtustus. The park is open for day use year-round, but only open for camping from April through September (PGE, 2019).

As explained in Table T-1, Pelton Park is a common and replaceable opportunity, one of three typical RV or camping sites within the 5-mile analysis area, and therefore, is not an important opportunity per OAR 345-022-0100(1)(t).

### **T.1.5 Madras Mountain Views Scenic Bikeway**

Madras Mountain Views Scenic Bikeway is a 29-mile loop, the shortest of the 17 state-designated scenic bikeways managed by the OPRD. At its nearest point, the Madras Mountain Views Scenic Bikeway route follows SW Belmont Lane approximately 2.5 miles south of the Facility site boundary (Figure T-1). The loop takes riders through high desert ecosystems, past historical

landmarks, through Crooked River National Grassland (see Section T.1.1), and to views of agricultural land, basalt palisades over the Deschutes and Crooked Rivers, Lake Billy Chinook, and all seven major volcanic peaks. The route starts and finishes in Sahalee Park in Madras (see Section T.1.10). The bikeway passes several scenic and wildlife overlooks and short detours connect to Cove Palisades State Park (see Section T.1.6) and Round Butte Overlook Park (see Section T.1.9) (OPRD, 2013).

As explained in Table T-1, Madras Mountain Views Scenic Bikeway is considered an important opportunity per OAR 345-022-0100(1)(t) due to the special designation, outstanding quality, rareness, and irreplaceability.

### **T.1.6 The Cove Palisades State Park**

The majority of the Cove Palisades State Park boundary is located around Lake Billy Chinook and outside the 5-mile analysis area for recreational opportunities. The nearest portion of the Cove Palisades State Park to the Facility site boundary is an isolated 64-acre area located approximately 3.1 miles to the south on the northwest slope of Round Butte (Figure T-1). While shown within the boundary of the Crooked River National Grassland, the park is managed by OPRD in accordance with the *Cove Palisades State Park Master Plan* (OPRD, 2002).

The Cove Palisades State Park is one of the largest of the 54 state parks managed by the OPRD with approximately 5,200 acres on OPRD-owned, OPRD-leased, USFS, or BLM land. The park includes the deep rimrock canyons at the confluence of the Deschutes, Crooked, and Metolius Rivers into Lake Billy Chinook. The Cove Palisades State Park is also one of four similar parks in the Central Oregon region with full service camping facilities. Recreation activities include day use, camping, hiking, picnicking, and wildlife viewing as well as boating, water sports, and fishing on Lake Billy Chinook. Overnight facilities are open 10 months of the year and include three campgrounds totaling over 170 RV sites, as well as additional group areas, cabins, tent sites, and boat moorages. The park attracts approximately 459,000 annual day-use visitors and 83,000 annual overnight visitors, with highest demand during summer (OPRD, 2002).

As explained in Table T-1, Cove Palisades State Park is considered an important opportunity per OAR 345-022-0100(1)(t) due to the special designations, high demand, outstanding quality, rareness, and irreplaceability.

### **T.1.7 Desert Peaks Golf Course**

Desert Peaks Golf Course is a public 9-hole golf course owned by the City of Madras and located approximately 3.4 miles east of the Facility site boundary (Figure T-1). It is open year-round with views of the mountains surrounding Madras. The golf course also has a putting green, pro shop, and clubhouse (City of Madras, 2019).

As explained in Table T-1, Desert Peaks Golf Course Pelton Park is not considered an important opportunity per OAR 345-022-0100(1)(t) due to the lack of special designation, common recreation type, and replaceability.

### **T.1.8 Pelton Wildlife Overlook**

Pelton Wildlife Overlook is a day-use area with two wildlife viewing decks just north of Pelton Park and managed by PGE (Figure T-1). The platforms overlook the Pelton Regulating Reservoir. Owing to the fluctuating water levels resulting from hydroelectric operations, the mudflats attract shorebirds and waterfowl (PGE, 2019; USFS, 2019b).

As explained in Table T-1, Pelton Wildlife Overlook is not considered an important opportunity per OAR 345-022-0100(1)(t) due to the lack of special designation, low demand, commonality, and replaceability.

### **T.1.9 Round Butte Overlook Park**

Round Butte Overlook Park is a day-use viewing area open May through September and managed by PGE (Figure T-1). The observation building located on the canyon rim, just north of Cove Palisades State Park, overlooks Round Butte Hydroelectric Dam, Lake Billy Chinook, and Lake Simtustus. Reservable picnic areas are available for day-use with a capacity of 200 people. Because of the prime bird-watching location, Round Butte Overlook Park hosts the annual two-day free Eagle Watch festival each February, which draws hundreds of visitors. Festival activities

include talks with birds of prey experts, presentations by birding groups and management agencies, and dancing and drumming demonstrations by the Confederated Tribes of the Warm Springs Reservation of Oregon (PGE, 2019; USFS, 2019c; OPRD, 2019b).

As explained in Table T-1, Round Butte Overlook Park is considered an important opportunity per OAR 345-022-0100(1)(t) due to the moderate demand and outstanding quality.

#### **T.1.10 Madras City Parks (Sun Drive Park, Bike and Skate Park, Kenwood Park, Friendship Park, Pocket Park, Sunshine Corner, Sahalee Park, 7th to 9th Street Open Space, Oak Street Park, and Cowden Park)**

The City of Madras owns and maintains multiple parks as part of the City's park system. City parks within the 5-mile analysis area include: Sun Drive Park, Bike and Skate Park, Kenwood Park, Friendship Park, Pocket Park, Sunshine Corner, Sahalee Park, 7th to 9th Street Open Space, Oak Street Park, and Cowden Park (Figure T-1). The nearest city park to the Facility site boundary is the undeveloped Sun Drive Park located approximately 4.1 miles to the east. The parks range in size and amenities from the small 3,600-square-foot Sunshine Corner with trees and bench, to the almost 2-acre Sahalee Park with basketball courts, play structures, water features, picnic areas, and room for local community events and festivals. The parks are located within the Madras city limits and are intended to provide recreational opportunities primarily to the local residents (City of Madras, 2004; City of Madras, 2019).

As explained in Table T-1, the Madras city parks including Sun Drive Park, Bike and Skate Park, Kenwood Park, Friendship Park, Pocket Park, Sunshine Corner, Sahalee Park, 7th to 9th Street Open Space, Oak Street Park, and Cowden Park are not considered an important opportunity per OAR 345-022-0100(1)(t) due to the lack of special designation, commonality, and replaceability.

#### **T.1.11 Lower Deschutes Wild and Scenic River**

Lower Deschutes Wild and Scenic River is a designated Federal Wild and Scenic River and State Scenic Waterway, managed by the BLM Prineville District. The nearest portion of the management area boundary for the Lower Deschutes Wild and Scenic River is located approximately 4.2 miles north of the Facility site boundary (Figure T-1). The 100 miles of Lower Deschutes River is classified recreational. The reach from Pelton Dam downstream to the north Jefferson County line travels through rimrock canyon, high quality trout fishery, and diverse plant communities. With limited rapids in this reach and a restriction on motorized watercraft, fishing is the main recreational activity, along with camping, hiking, wildlife viewing, biking, and hunting. Three campgrounds are along this reach with over 200 developed and primitive/undeveloped camp sites; however, all are outside the 5-mile analysis area. Whitewater rafting is more popular further downstream with increased rapids. While thousands of people visit Lower Deschutes Wild and Scenic River each year, the southern reach from Pelton Dam is quieter and managed to maintain a moderate degree of demand, primarily for day use fishing (BLM, 1993 and 2019; National Wild and Scenic Rivers System, 2019).

As explained in Table T-1, Lower Deschutes Wild and Scenic River is considered an important opportunity per OAR 345-022-0100(1)(t) due to the special designation, moderate demand, outstanding quality, and irreplaceability.

#### **T.1.12 Jefferson County Fairgrounds**

Jefferson County Fairgrounds is located approximately 4.6 miles from the Facility site boundary (Figure T-1). The county fairgrounds include over 50 acres of land, 15 buildings and indoor facilities, and a youth fishing pond. The Jefferson County Youth Fishing Pond is a fishing pond for children up to 17 years of age and disabled adults with valid disabled angler's permit. Over 90,000 people visit the fairgrounds each year to attend one of the 80 hosted events. Major events occur each month with the Jefferson County Fair and Rodeo being the largest event of the year. The fairgrounds can also be rented out for private events such as weddings or reunions. Deschutes and Crook County Fairgrounds, located in Redmond and Prineville, respectively, are the next closest fairgrounds (Jefferson County, 2019).

As explained in Table T-1, Jefferson County Fairgrounds is considered an important opportunity per OAR 345-022-0100(1)(t) due to the high demand, outstanding quality, and rareness.

**Table T-1. Summary of Recreational Importance Evaluation**

Recreational Opportunity	Distance <sup>a</sup> (miles)	Recreational Importance Evaluation Criteria					Recreational Importance Determination
		Special Designation Management	Degree of Demand	Outstanding Unusual Quality	Availability Rareness	Irreplaceability Irretrievability	
Crooked River National Grassland	0	National Grassland administered as a Ranger District of the Ochoco National Forest/USFS, BLM, State of Oregon, and Jefferson County	High; estimated over 100,000 recreation visitor days in 1989 to entire opportunity area	Only National Grassland in Oregon and provides scenic views, camping, hiking, hunting, off-highway vehicle use, and other recreation amenities; four "special areas" inside the grassland are managed separately and include Cove Palisades State Park (evaluated separately below)	Rare; one of 20 National Grasslands, one of three that are not in/near the Great Plains, and the only one in Oregon	Irreplaceable	Important; due to designation, demand, outstanding quality, rareness, and irreplaceability
	0.3	State-designated Regional Trail/BLM and USFS	Assumed Moderate; based on designation and capacity	Approximately 6-mile-long greenway and trail from Madras to Lake Simtustus, mostly on BLM land with views of Willow Creek Canyon	Somewhat Uncommon; one of 5 designated regional trails, with a large greenway connected directly to population center	Irreplaceable	Important; due to designation, outstanding quality, rareness, and irreplaceability
Lake Simtustus Resort & Marina	0.4	None/Private	Moderate; based on capacity	77 RV camping hook-ups with access to Lake Simtustus and Willow Creek Canyon Trail, open year round	Common; two other campgrounds within 5-mile buffer	Replaceable	Unimportant; due to lack of designation, common opportunity, and replaceability
Pelton Park	1.1	None/Portland General Electric	Moderate; based on capacity	67 campsites with lake access open 5 months of the year with day use fishing and wildlife viewing open year round	Common; two other campgrounds within 5-mile buffer	Replaceable	Unimportant; due to lack of designation, common opportunity, and replaceability
Madras Mountain Views Scenic Bikeway	2.5	State-designated scenic bikeway/OPRD	Assumed Moderate; based on designation and capacity	29-mile loop of moderate difficulty that passes by historical landmarks and features views of agricultural land, basalt palisades, Lake Billy Chinook, and all seven major volcanic peaks in Oregon	Somewhat Uncommon; one of 17 State scenic bikeways	Irreplaceable	Important; due to designation, outstanding quality, rareness, and irreplaceability

**Table T-1. Summary of Recreational Importance Evaluation**

Recreational Opportunity	Distance <sup>a</sup> (miles)	Recreational Importance Evaluation Criteria					Recreational Importance Determination
		Special Designation Management	Degree of Demand	Outstanding Unusual Quality	Availability Rareness	Irreplaceability Irretrievability	
The Cove Palisades State Park	3.1	Oregon State Park and additional special designations for resources within the park/OPRD	High; approximately 459,000 annual day-use visitors and 83,000 annual overnight visitors	Two campgrounds totaling over 170 RV sites, as well as cabins, tent sites, boat moorages providing access to the lake, amphitheaters, picnic areas, 10 miles of hiking trails, wildlife lookouts, and other opportunities; open for camping 10 months of the year, open for day use year round; park includes ecologically pristine site, known as The Island	Somewhat Uncommon; 4 similar state parks in region and many smaller campgrounds, day-use areas, and scenic resources nearby	Irreplaceable	Important; due to high demand, outstanding quality, rareness, and irreplaceability.
Desert Peaks Golf Course	3.4	None/City of Madras	Moderate; assumed based on capacity	Public 9-hole course with putting green open year-round	Common; only golf course in Madras, but many in the region	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Pelton Wildlife Overlook	3.8	None/Portland General Electric	Assumed Low; based on capacity	Two viewing decks for day use wildlife viewing, open year-round	Common; other wildlife viewing day use recreation opportunities in the area	Replaceable	Unimportant; due lack of special designation, low demand, commonality, and replaceability
Round Butte Overlook Park	4.0	None/Portland General Electric	Moderate; annual event brings hundreds of visitors; picnic area has capacity of 200 people	Wildlife viewing overlook with picnic areas, trail, and interpretive center open May through September	Common; other wildlife viewing day use recreation opportunities in the area	Replaceable	Important; due to demand and outstanding quality
Sun Drive Park	4.1	None/City of Madras	Assumed Low; based on lack of amenities	Undeveloped city neighborhood park with native vegetation and no amenities	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation and amenities, commonality, and replaceability
Lower Deschutes Wild and Scenic River	4.2	Federal Wild and Scenic River and State Scenic Waterway, Classified Recreational/BLM and USDA Forest Service	Moderate; several thousand annual visitors to river, moderate demand for southern reach	Designated scenic river through rimrock canyon, rapids, diverse plant communities, with high quality trout fishery. Popular for boating, fishing, hunting, biking, hiking, and camping.	Somewhat Uncommon; over 50 designated rivers in Oregon, with White, Metolius, Crooked, and John Day Rivers nearby	Irreplaceable	Important; due to designation, moderate demand, outstanding quality, and irreplaceability

**Table T-1. Summary of Recreational Importance Evaluation**

Recreational Opportunity	Distance <sup>a</sup> (miles)	Recreational Importance Evaluation Criteria					Recreational Importance Determination
		Special Designation Management	Degree of Demand	Outstanding Unusual Quality	Availability Rareness	Irreplaceability Irretrievability	
Bike and Skate Park	4.3	None/City of Madras	Assumed Moderate; based on capacity and rareness	Skate park with parking, restrooms, and access point for the Willow Creek Canyon Trail	Common; only skate park in Madras, but several in the region	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Kenwood Park	4.3	None/City of Madras	Assumed Low; based on capacity	Undeveloped city pocket park with informal grass lawn and play structure	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Friendship Park	4.4	None/City of Madras	Assumed Moderate; based on capacity and proximity to civic buildings	Landscaped city pocket park within civic center with benches, picnic tables, and historical sites	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Pocket Park	4.6	None/Private	Assumed Low; based on lack of facilities and capacity	City pocket park with trees and a bench on the street corner	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Sunshine Corner	4.6	None/Private	Assumed Low; based on lack of facilities and capacity	City pocket park with trees and a bench on the street corner	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Sahalee Park	4.6	None/City of Madras	Assumed Moderate; based on capacity and amenities	Landscaped neighborhood city park with play structures, basketball courts, benches, picnic areas, and water features. Location of community events and festivals, such as weekly farmers market. Start and end point of Madras Mountain Views Scenic Bikeway	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
7th to 9th Street Open Space	4.6	None/City of Madras	Assumed Low	City greenspace along creek and access to city trails	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability

**Table T-1. Summary of Recreational Importance Evaluation**

Recreational Opportunity	Distance <sup>a</sup> (miles)	Recreational Importance Evaluation Criteria					Recreational Importance Determination
		Special Designation Management	Degree of Demand	Outstanding Unusual Quality	Availability Rareness	Irreplaceability Irretrievability	
Jefferson County Fairgrounds	4.6	None/Jefferson County	High; over 90,000 visitors each year	County fairgrounds on over 50 acres with trails, picnic areas, RV park, and youth fishing pond; host multitude of events and shows throughout the year	Somewhat Uncommon; only fairgrounds in county	Replaceable	Important; due to demand, outstanding quality, and rareness
Oak Street Park	4.6	None/City of Madras	Assumed Low; based on lack of amenities and capacity	City pocket park with large, informal grassy area and a bench	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability
Cowden Park	4.7	None/City of Madras	Assumed Low; based on lack of amenities and capacity	City pocket park with small informal grassy area and a bench	Common; over 10 city parks in Madras	Replaceable	Unimportant; due to lack of special designation, commonality, and replaceability

<sup>a</sup> Approximate distances provided are measured from the Facility site boundary to the nearest point of the recreational opportunity.

## T.2 SIGNIFICANT POTENTIAL ADVERSE IMPACTS

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

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

**Response:** For the purpose of this Exhibit, a direct loss is assumed to occur when the Facility's construction or operation affects an important recreational opportunity by destroying or directly altering the resource so that it no longer exists in its current state (for example, demolishing a park). An indirect loss is assumed to occur when the Facility's construction or operation limits access or otherwise alters a significant aspect of the recreational opportunity in a way that the opportunity may still exist, but that it cannot be enjoyed or used as it has been historically (for example, completely blocking a view from a scenic overlook or imposing such a nuisance impact as to render a recreational area unusable).

As identified in Table T-1, important recreational opportunities within the 5-mile analysis area are as follows:

- Crooked River National Grassland
- Willow Creek Canyon Trail
- Madras Mountain Views Scenic Bikeway
- Cove Palisades State Park
- Round Butte Overlook Park
- Lower Deschutes Wild and Scenic River
- Jefferson County Fairgrounds

The Facility will not occur within the boundaries of any of the important recreational opportunities. As such, no recreational opportunity will be destroyed or directly altered as a result of Facility construction or operation. Therefore, no direct loss related to Facility construction or operation is anticipated.

Assessment of indirect loss is related to potential noise, traffic, and visual impacts. As demonstrated below in response to OARs 345-021-0010(1)(t)(B)(ii) through (iv), significant adverse impacts related to noise, traffic, and visibility of structures from Facility construction and operation are not anticipated at the identified important recreational opportunities. Consequently, the Applicant demonstrates that no indirect loss related to Facility construction or operation is anticipated.

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

**Response:** As described in Exhibit X, projected noise levels resulting from Facility construction and operation will meet requirements contained in Oregon Department of Environmental Quality rules. Construction noise will be temporary in nature, and operational noise will be extremely low, if any. There are very few sources of noise associated with solar facilities and they are generally minor compared to other energy facilities. The primary noise sources are inverters and transformers. In addition, the Facility will use an existing transmission line that intersects the Facility site boundary and a new generation-tie transmission line will not be constructed for the Facility. Given the projected operational noise levels identified in Exhibit X, temporary nature of construction-related noise, and the distance to the recreational opportunities, Facility construction and operational noise will not significantly affect the important recreational opportunities identified within the 5-mile analysis area.

Of the potential important recreational opportunities identified above, only two are located within 2.5 miles from the Facility site boundary. These are the Crooked River National Grassland and the Willow Creek Canyon Trail.

Crooked River National Grassland is the nearest important recreational opportunity to the Facility site boundary. An approximately 0.5-mile-long segment of the northwest corner of the Crooked River National Grassland boundary abuts the west side of the Facility site boundary (Figure T-1). At this distance, portions of the grassland may experience temporary elevated noise levels due to short-term construction. The limited portion of the grassland abutting the Facility site boundary may be susceptible to minor elevations in noise levels during Facility operations associated with



the inverters, transformers, and battery storage. However, as described in Section T.1.1, portions of the grassland within approximately 3.5 miles of the Facility site boundary are generally designated for general forage management and are not managed for recreation. With no marked public access or recreational amenities, users of the Crooked River National Grassland within approximately 3.5 miles of the Facility site boundary are not anticipated to use the area for recreation. The nearest portion of the grassland that is managed for recreation is the Cove Palisades State Park located over 3 miles from the Facility site boundary. At this distance, attenuation related to the presence of structures, trees or vegetation, ground effects, and terrain will reduce both temporary construction and operational related noise so low as to be undetectable. Accordingly, Facility construction and operational noise will not significantly affect recreational use of the Crooked River National Grassland.

At its nearest point, the Willow Creek Canyon Trail is located approximately 0.3 mile from the Facility site boundary. The primary recreational activities associated with this recreational opportunity are biking and jogging, which are noise-sensitive activities. However, this section of the trail is an unpaved road also used occasionally by vehicles and dirt bikes that produce noise that impact noise-sensitive users. Additional existing background noise sources include nearby agricultural operations may also be heard from the trail. Temporary and short-term construction noise will likely still be heard along certain portions of the trail, dependent on specific terrain, wind, and other nearby noise levels. Less than significant impacts are anticipated due to the existing noise sources and temporary nature of construction-related noise, limited to the closest portions of the trail. The sound power levels used to model Facility operational noise are reported in Table X-6 in Exhibit X. At a distance of 400 feet, the sound level one would measure or hear is approximately 44 dBA less than the levels identified in Table X-6. Therefore, at a distance of 0.3 mile or approximately 1,700 feet, Facility operations will meet requirements contained in Oregon Department of Environmental Quality rules and will not significantly affect recreational use of the Willow Creek Canyon Trail.

The five other important recreational opportunities, Madras Mountain Views Scenic Bikeway, Cove Palisades State Park, Round Butte Overlook Park, Lower Deschutes Wild and Scenic River, and Jefferson County Fairgrounds, are located 2.5 miles or more from the Facility site boundary. At this distance, attenuation related to the presence of structures, trees or vegetation, ground effects, and terrain will reduce both temporary construction and operational related noise so low as to be undetectable. Accordingly, Facility construction and operational noise will not significantly affect the important recreational opportunities identified herein.

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

**Response:** A traffic analysis is presented in Exhibit U.

It is assumed that the primary transportation routes to and from the site will be US Highway 26 from the north and US 97 from the south. Both routes lead directly to the Facility. From US 26, the primary transportation route will enter the City of Madras and continue south to the intersection with US 97. The route will continue due south on US 97 for approximately 0.95 mile to SW Belmont Lane, where it turns west and continues for approximately 5.7 miles to SW Elk Drive. From SW Belmont Lane, the route then turns north on SW Elk Drive and extends for approximately 2.8 miles to a new site access road that will be constructed to accommodate construction and operation of the Facility.

Facility access will be accomplished almost entirely on existing roads. As the primary transportation route will be US Highways 26 and 97, and the state highway system is constructed to design, safety, and load-bearing standards, minimal impacts are anticipated from potential construction and operational traffic on traffic safety or road maintenance. Impacts related to temporary construction traffic on US Highways 26 and 97 will be inconsequential, as construction vehicles will constitute just a fraction of the daily traffic typical on US Highways 26 and 97. Any increase to traffic on US Highways 26 and 97 attributable to the Facility will be minimal and, in terms of additional traffic noise, will be undetectable. SW Belmont Lane and SW Elk Drive are used primarily for local traffic. These streets may be temporarily affected by traffic increases as a result of construction vehicles accessing the site. However, construction is not expected to cause an increase in the potential for traffic safety impacts on surrounding roadways, because construction traffic will be managed to minimize impacts as described in Section U.4.7 of Exhibit U.

As no designated public access points to Crooked River National Grassland exist along the Facility's primary transportation route, Facility construction and operations are not anticipated to cause any traffic impacts to the recreational opportunity.

Willow Creek Canyon Trail is located across Willow Creek Canyon from the Facility site boundary. There is no direct connection across Willow Creek Canyon to the trail. Therefore, Facility construction and operations are not anticipated to cause any traffic impacts to the recreational opportunity.

Madras Mountain Views Scenic Bikeway uses SW J Street/SW Belmont Lane for a portion of the route. Approximately 5.5 miles (19 percent of the overall 29-mile route) overlap with the Facility's primary transportation route along SW J Street/SW Belmont Lane, which is a narrow two-lane local road. Outside city limits, road shoulders are not paved, so bikeway users would share lanes with vehicle traffic. Increased presence of construction-related truck traffic may temporarily impact bikeway users. However, construction is not expected to cause an increase in the potential for traffic safety impacts on these roadways because construction traffic will be managed to address safety concerns and minimize potential impacts as described in Section U.4.7 of Exhibit U. To mitigate concerns about oversized loads, any oversized components will be transported by oversized transportation trucks, legal loads, and trucks. Additional oversized vehicles will transport large construction operating equipment (e.g., cranes, bulldozers). Owing to the temporary nature of construction traffic, and with implementation of the traffic management practices in Section U.4.7 of Exhibit U, traffic resulting from Facility construction will not significantly affect the Madras Mountain Views Scenic Bikeway. As described in Exhibit U, traffic impacts during Facility operation are not anticipated. Operational trips will be largely restricted to SW Belmont Lane and SW Elk Drive in the form of visits from offsite technicians deployed in light-duty trucks on an as-needed basis for maintenance and repairs. Delivery trucks may also access the site on occasion, but are not anticipated to occur daily. Therefore, the Applicant anticipates no significant adverse impacts to the Madras Mountain Views Scenic Bikeway during Facility operation.

Visitors to Cove Palisades State Park and Round Butte Overlook Park would mainly access the recreational opportunities from the south, outside the Facility's primary transportation route. However, both sites can be accessed from the north along SW Belmont Lane to SW Mountain View Drive. The few visitors accessing these recreational opportunities may experience minor delays due to construction traffic. Less than significant traffic impacts to Cove Palisades State Park and Round Butte Overlook Park are anticipated due to few visitors using the Facility's transportation route and the temporary nature of construction traffic.

The two remaining important recreational opportunities, Lower Deschutes Wild and Scenic River and Jefferson County Fairgrounds, are not located along and do not use the Facility's primary transportation route for access. Therefore, no construction-related traffic impacts are anticipated.

Long-term operational traffic will be limited to a small number of workers and occasional light duty trucks associated with periodic maintenance. Hence, impacts on traffic related to Facility operations will be negligible for all recreational opportunities.

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

**Response:** This section provides analysis of potential adverse impacts that may result from construction and operation of the Facility on the seven important recreational opportunities shown on Figure T-1 and listed in Table T-1. Visual impacts to recreation resources were evaluated using the methodology developed for Exhibit R. Figure T-2 shows the ZVI viewshed analysis and locations where photographs were taken from the identified important recreational opportunities toward the Facility site boundary. Attachment T-1 contains photographs taken from the locations shown on Figure T-2. Each photograph includes a descriptive caption of the viewshed shown and a visual indication (i.e., arrow) of where in the photos the Facility site would be located. The Facility will not generate emissions plumes and no visual impacts from plumes will result from the construction and operation of the Facility.

Exhibit R analyzes visual impacts from the Facility on scenic resources within 10 miles of the Facility site boundary that are identified as significant or important in applicable local, state, tribal, or federal land management plans. The following resources are identified as both significant or important scenic resources in Exhibit R and important recreational opportunities: Madras

Mountain Views Scenic Bikeway, Cove Palisades State Park, and Lower Deschutes Wild and Scenic River. For consistency and completeness, these recreational facilities are evaluated in both Exhibit R and this Exhibit T. Like Exhibit R, the analysis provided below concludes that construction and operation of the Facility will not result in significant adverse impacts on the important recreational opportunities.

The seven important recreational opportunities are analyzed for visual impacts as follows:

- Crooked River National Grassland is identified as an important recreational opportunity within the 5-mile analysis area. Figure T-2 shows that the Facility may be visible to areas within Crooked River National Grassland at a distance up to approximately 3.5 miles. However these areas are managed for general forage, are not used for recreation, and are not associated with the importance attributed to the Cove Palisades State Park, which is addressed below. As described in Exhibit R, the *Crooked River National Forest Land and Resource Management Plan* (USFS, 1989b) (Grassland Plan) guides natural resource management activities and establishes management standards and guidelines for 16 distinct management areas within the Crooked River National Grassland. The Grassland Plan identifies “MA-G13 Lake Billy Chinook View Area” as the only management area with a resource emphasis on “visuals.” The approximately 560-acre MA-G13 Lake Billy Chinook View Area is not located within the 5-mile analysis area for recreational opportunities. Furthermore, the intent of the scenic management area is to retain views facing south toward the canyon slopes viewable from Lake Billy Chinook and away from the Facility site. At water level and facing south, the Facility will not be visible. Therefore, the Facility will not result in significant potential adverse impacts to scenic qualities experienced by recreational users of the Crooked River National Grassland.
- Willow Creek Canyon Trail is identified as an important recreational opportunity within the 5-mile analysis area. Figure T-2 shows that the majority of Willow Creek Canyon Trail is located within the canyon midway up and along the northern canyon wall. Owing to its location in the canyon and below the elevation of the Facility, the Facility is not visible along most of the trail. The ZVI viewshed analysis provided on Figure T-2 shows that the Facility may be visible between the foreground and middleground of views from an approximately 1.9 mile segment of the trail as it approaches NW Pelton Dam Road. From this segment of the trail views towards the Facility are intermittently screened by existing junipers along the canyon rim in the foreground. Trail users travel in an east-west direction and the dominant landscape feature along the route is the canyon topography leading to Lake Simtustus to the west.

Photograph T-1a at Photo Survey Point T-1 was taken from a point on Willow Creek Road (which also serves as Willow Creek Canyon Trail) east of the intersection with NW Pelton Dam Road heading approximately 170°S toward the Facility site boundary. From this location potential visibility of the Facility will be limited to the tops of the solar array setback from ridge line. If visible, the solar array modules may appear as a thin dark line along the ridge line. With a maximum anticipated height of 10-feet for Facility components, the Facility will be well under the height of existing juniper forest that appears on the ridge line in Photograph T-1a. The existing transmission lines described in Exhibit R are the visually prominent developed features on the landscape within and adjacent to the Facility site boundary and are a focal point of views toward the Facility. As described in Exhibit K, the Facility will also comply with Section 412 (Scenic and Natural Hazard Rim Setback) of the Jefferson County Zoning Ordinance, which requires a 30-foot setback from the rim edge of steep slopes such as the walls of Willow Creek Canyon located along the northern and eastern perimeter of the Facility site boundary. Compliance with this setback will further obscure views of the Facility and will maintain consistency with County regulations (Jefferson County, 2018).

Photograph T-1b at Photo Survey Point T-1 was taken from a point on Willow Creek Road (which also serves as Willow Creek Canyon Trail) east of the intersection with NW Pelton Dam Road heading approximately 90°E toward the City of Madras. This photograph shows that Willow Creek Road is marked with no trespassing signs where the Willow Creek Canyon Trail begins from the west and shows Portland General Electric’s (PGE) existing 230-kilovolt (kV) Pelton to Round Butte transmission line where it approaches the Facility site from the northeast. The existing transmission line spans the canyon, crossing over the trail. Facility

design will result in limited reflectivity and is unlikely to be a substantial source of glint or glare. Potentially visible Facility structures will not change the landscape character and quality.

As such, the Facility's presence on the plateau above Lake Simtustus will not detract from the existing landscape visible from Willow Creek Canyon Trail. The Facility will not result in significant potential adverse impacts to scenic qualities experienced by recreational users of Willow Creek Canyon Trail.

- Madras Mountain Views Scenic Bikeway is identified as an important recreational opportunity within the 5-mile analysis area. Figure T-2 shows the Facility could be visible to cyclists from intermittent locations along a 1.7-mile section of SW Belmont Lane. This length of SW Belmont Lane is about 6 percent of the overall 30-mile route. The Applicant's visual resource specialist drove the 1.7-section of the route on SW Belmont Lane within the scenic resources analysis area during the visual resources site visit and verified that the Facility may only be visible from intermittent locations along the bikeway. Views towards the Facility are screened by up to 2 miles of existing juniper forest in foreground views from most vantage points on SW Belmont Lane. In addition, cyclists on SW Belmont Lane are traveling in an east-west direction and the dominant landscape feature along the route is Mt. Jefferson to the west. There are no scenic waysides or marked rest locations along this portion of the route.

Photograph T-2 at Photo Survey Point T-2 was taken from the westbound shoulder of SW Belmont Lane along the route of the Madras Mountain Views Scenic Byway facing the Facility site boundary. Photograph R-2 shows a typical view from SW Belmont Lane and existing juniper forest in the foreground that completely screens views of the Facility.

Photograph T-3 at Photo Survey Point T-3 was taken from the intersection of SW Belmont Lane and SW Elk Drive along the route of the Madras Mountain Views Scenic Byway facing the Facility site boundary. Photograph T-3 shows the only view from SW Belmont Lane where the Facility will likely be visible in the middleground in views toward the end of NW Elk Drive. The Facility is only visible for an approximately 80-foot segment of the intersection and is then screened again by juniper forest. At this distance, the solar array may be visible and will appear similar to a dark geometric outline or shadow with a low profile on the landscape. The Facility components will lack definition and detail and will not dominate the existing landscape.

Photograph T-4 at Photo Survey Point T-4 was also taken from the westbound shoulder of SW Belmont Lane along the route of the Madras Mountain Views Scenic Byway facing the Facility site boundary. Photograph T-4 shows another typical view from SW Belmont Lane and existing juniper forest in the foreground that completely or partially screens views of the Facility.

Photographs T-2 through T-4 show a range of views toward the Facility from intermittent locations along the approximately 1.7-mile section of SW Belmont Lane where cyclists will likely have both obstructed and unobstructed views toward the Facility. The existing transmission lines are described in Section R.1 of Exhibit R as the visually prominent developed features of the landscape (USFS, 1989b); however, these transmission lines are not visible in Photographs T-2 through T-4. From these viewpoints, the Facility may be discernible but will not be a substantial or prominent feature within the viewshed.

Furthermore, any potential views of the Facility will be brief in duration and will only occur while looking north toward the Facility site boundary from intermittent locations. Therefore, the Facility will not result in significant potential adverse impacts to scenic qualities experienced by recreational users of the Madras Mountain Views Scenic Byway.

- Cove Palisades State Park is identified as an important recreational opportunity within the 5-mile analysis area. As described in Section T.1.6, the majority of the Cove Palisades State Park boundary located around Lake Billy Chinook and outside the 5-mile analysis area for recreational opportunities. The ZVI viewshed analysis on Figure T-2 shows that the Facility is not visible from areas within the park boundary surrounding Lake Billy Chinook. The Facility is only potentially visible from an isolated 64-acre area of the park located approximately 3.1 miles south of the Facility (Figure T-2). However, this isolated area is not designated as an important viewpoint in the park and is not analyzed further.

Based on Scenic Resource Management Objective A in the Cove Palisades State Park Master Plan (OPRD, 2002), the following viewpoints are considered important: Mountain View Drive Viewpoint 1, Mountain View Drive Viewpoint 2, Café at the Marina, and Peninsula Group Camp. These viewpoints are not located within the 5-mile analysis area for recreational opportunities and are not analyzed further in this exhibit.

Given distance, the nature of the topography of the existing landscape, and the Facility's limited visibility from the park, the Facility will not result in significant potential adverse impacts to scenic qualities experienced by recreational users of Cove Palisades State Park.

- Round Butte Overlook Park is identified as an important recreational opportunity within the 5-mile analysis area. Figure T-2 shows that the Facility is not visible at Round Butte Overlook Park. In addition, Photograph T-5 at Photo Survey Point T-5 was taken from the platform at the Round Butte Overlook Park Interpretive Center facing toward the Facility site boundary. The viewing platform provides views of the canyon walls of the Deschutes River east of Lake Billy Chinook toward the Facility site. The Round Butte Overlook Park Interpretive Center is approximately 4.4 miles southwest of the Facility site boundary and offers the nearest publicly accessible viewing platform of the canyon walls and wildlife. Photograph T-5 shows that views of the canyon walls of the Deschutes River east of Lake Billy Chinook are not obstructed or impacted by the Facility site. The Facility is precluded from view by existing elevation and topography.

Based on the above, the Facility will not result in significant potential adverse impacts to scenic qualities experienced by recreational users of Round Butte Overlook Park or nearby canyon walls of the Deschutes and Crooked Rivers.

- Lower Deschutes Wild and Scenic River is identified as an important recreational opportunity within the 5-mile analysis area. The nearest portion of the management area boundary for the Lower Deschutes Wild and Scenic River is located approximately 4.2 miles north of the Facility site boundary (Figure T-1). The ZVI viewshed analysis provided on Figure T-2 shows that the Facility could only be visible to motorists and boaters from a small area within the Lower Deschutes Wild and Scenic River boundary. The area of potential visibility is approximately 5 miles from the Facility site boundary along an approximately 0.2-mile-long section of BIA Road 24, and along an approximately 400-foot-section of the river at river level. The majority of views from the Lower Deschutes Wild and Scenic River toward the Facility are precluded by the existing elevation and topography of the river canyon.

Photograph T-6 at Photo Survey Point T-6 was taken from the northbound shoulder of BIA Road 24 and shows a view with potential visibility of the Facility from the mapped boundary of the Lower Deschutes Wild and Scenic River (see Attachment T-1). Photograph T-6 shows the Facility location on the plateau that forms the horizon in the background of the viewshed. At this distance, the Facility will appear obscured or may be undetectable in the surrounding landscape. The existing transmission lines are described in Section R.1 as the visually prominent developed features of the landscape (USFS, 1989b); however, these transmission lines are not visible in Photograph T-6. Since the Facility will be well under the height of the existing transmission lines located adjacent to the site and crossing the Facility site boundary, it is unlikely that the solar array will be visible from the Lower Deschutes Wild and Scenic River. Should any portion of the Facility be visible from this location, it will appear blended or muted with surrounding elements in the landscape.

As described in Exhibit K, the Facility will also comply with Section 412 (Scenic and Natural Hazard Rim Setback) of the Jefferson County Zoning Ordinance, which requires a 30-foot setback from the rim edge of steep slopes such as the walls of Willow Creek Canyon located along the northern and eastern perimeter of the Facility site boundary (Jefferson County, 2018). Compliance with this setback will further obscure views of the Facility and will maintain consistency with County regulations. Therefore, the Facility will not result in significant potential adverse impacts to scenic qualities experienced by recreational users of Lower Deschutes Wild and Scenic River.

- Jefferson County Fairgrounds is identified as an important recreational opportunity within the 5-mile analysis area. Figure T-2 shows that the Facility is not visible at Jefferson County Fairgrounds. In addition, Photograph T-7 at Photo Survey Point T-7 was taken from the

parking lot at the entrance of the Jefferson County Fairgrounds heading approximately 310° NW toward the Facility site boundary. Photograph T-7 shows the Facility is precluded from view by existing elevation and topography. Therefore, the Facility will not impact views from Jefferson County Fairgrounds.

This analysis concludes that construction and operation of the Facility will not result in significant adverse visual impacts on the important recreational opportunities listed in Table T-1.

### T.3 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:** No significant adverse impacts on important recreational opportunities will result from Facility design, construction, and operation. Therefore, no measures are proposed to avoid, reduce, or otherwise mitigate Facility impacts.

### T.4 MAP OF ANALYSIS 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:** Figure T-1 shows the analysis area for recreational opportunities and the potentially important recreational opportunities identified pursuant to OAR 345-021-0010(1)(t)(A).

### T.5 MONITORING PROGRAM

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

**Response:** Because there will be no significant impacts on important recreational opportunities, no monitoring program is proposed.

### T.6 SUMMARY

The Facility will have no significant adverse impacts on any important recreational opportunities within the 5-mile analysis area. The Crooked River National Grassland, Willow Creek Canyon Trail, Madras Mountain Views Scenic Bikeway, Cove Palisades State Park, Round Butte Overlook Park, Lower Deschutes Wild and Scenic River, and Jefferson County Fairgrounds will not be significantly affected. Accordingly, the Facility can be designed, constructed, and operated to have no significant adverse impact on important recreational opportunities in the analysis area, in accordance with OAR 345-022-0100(1).

### T.7 REFERENCES

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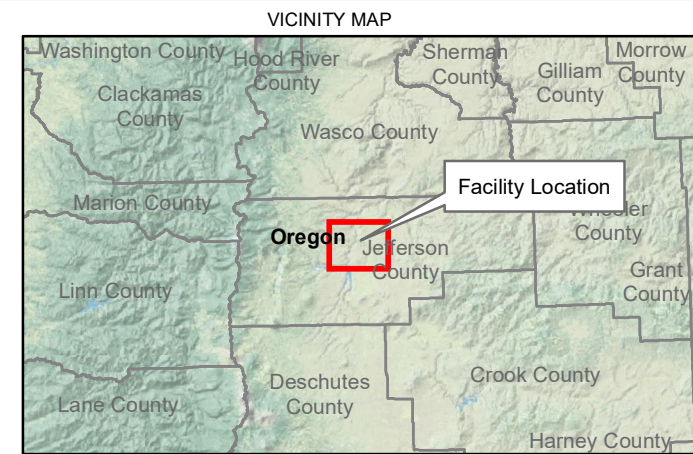
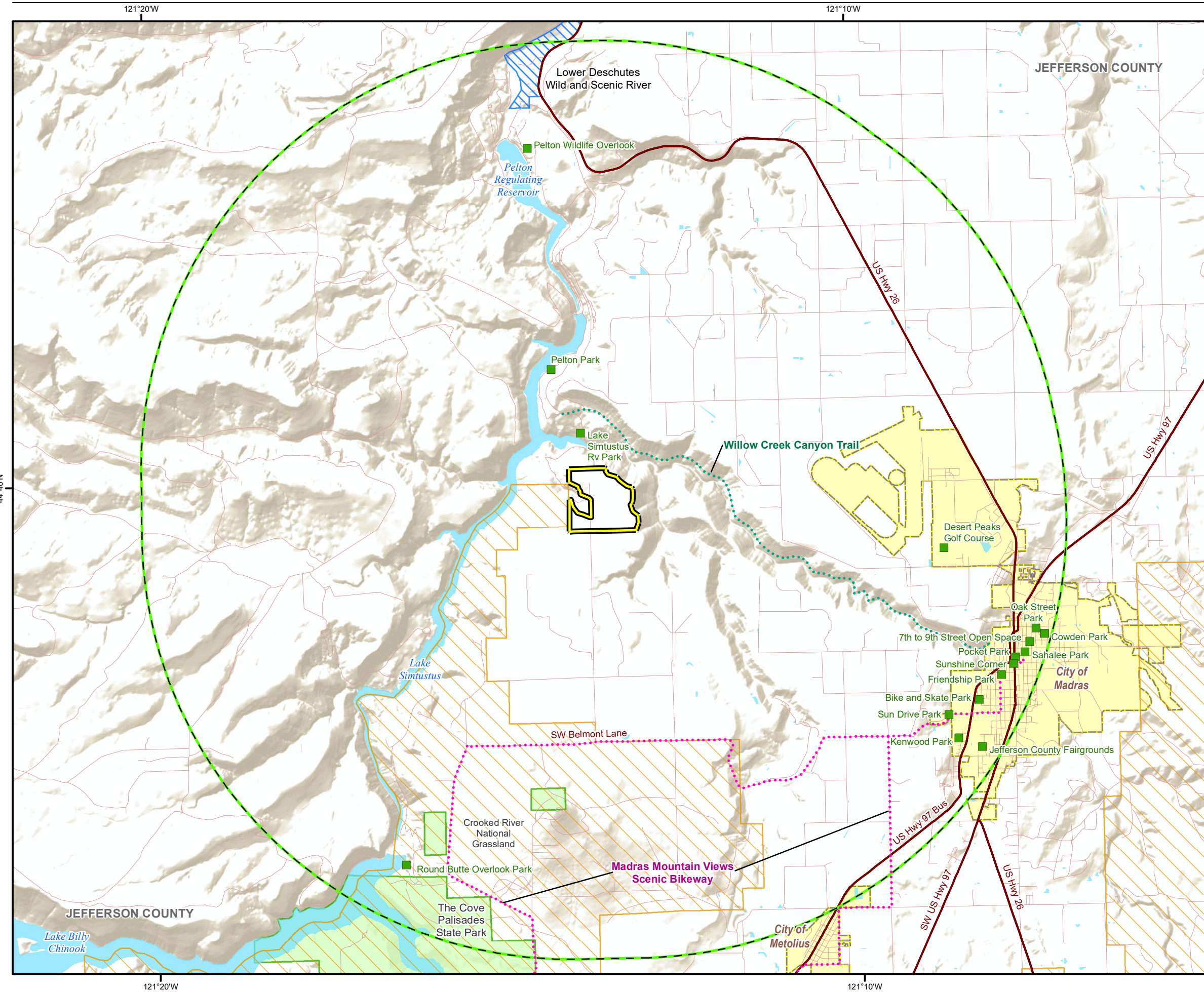
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## Figures





- LEGEND**
- Madras Solar Energy Facility Site Boundary
  - Recreational Opportunities Analysis Area (5 miles)
  - City Limits
  - Major Highway
  - Existing Road
  - Waterbody
  - Recreational Opportunity Area**
  - City/County/Private Park
  - National Wild and Scenic River
  - National Grassland
  - Willow Creek Canyon Trail
  - Madras Mountain Views Scenic Bikeway
  - State Park

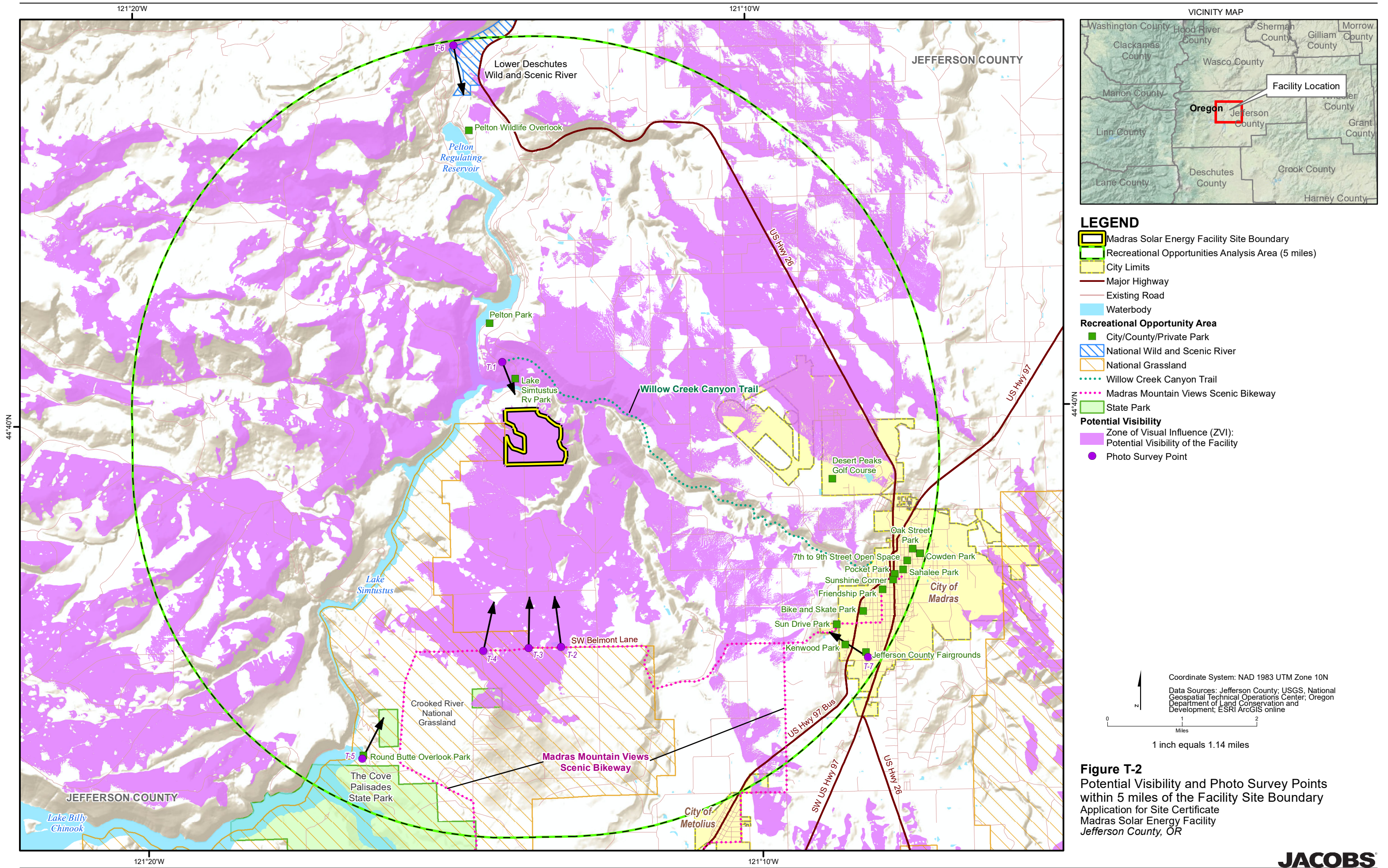
Coordinate System: NAD 1983 UTM Zone 10N  
 Data Sources: Jefferson County; USGS; National Geospatial Technical Operations Center; Oregon Department of Land Conservation and Development; ESRI ArcGIS online

0 1 2  
Miles

1 inch equals 1.14 miles

**Figure T-1**  
 Recreational Opportunities within 5 miles  
 of the Facility Site Boundary  
 Application for Site Certificate  
 Madras Solar Energy Facility  
 Jefferson County, OR







**Attachment T-1**  
**Existing Conditions Photographs**



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<b>Project Title</b>	<b>Madras Solar Energy Facility</b>
<b>Location</b>	Jefferson County, Oregon (see Figure T-2, Potential Visibility and Photo Survey Points within 5 Miles of the Facility Site Boundary)
<b>Date</b>	Photographs taken on July 1 and 2, 2019

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### Willow Creek Canyon Trail



**Photograph T-1a – From Photo Survey Point T-1 on Figure T-2:** View from a point on Willow Creek Road (which also serves as Willow Creek Canyon Trail) east of the intersection with NW Pelton Dam Road heading approximately 170° S toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 0.7 mile south of Photo Survey Point T-1.)



**Photograph T-2b – From Photo Survey Point T-1 on Figure T-2:** View from a point on Willow Creek Road (which also serves as Willow Creek Canyon Trail) east of the intersection with NW Pelton Dam Road heading approximately 90°E toward the City of Madras. (The Facility site is not in the viewshed of this photograph.)



**Madras Mountain Views Scenic Bikeway**



**Photograph T-2 – From Photo Survey Point T-2 on Figure T-2:** View from the westbound shoulder of SW Belmont Lane along the route of the Madras Mountain Views Scenic Byway heading approximately 355° N toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 2.5 miles north of Photo Survey Point T-2.)



**Photograph T-3 – From Photo Survey Point T-3 on Figure T-2:** View from the intersection of SW Belmont Lane and SW Elk Drive along the route of the Madras Mountain Views Scenic Byway heading due north toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 2.5 miles north of Photo Survey Point T-3.)





**Photograph T-4 – From Photo Survey Point T-4 on Figure T-2:** View from the westbound shoulder of SW Belmont Lane along the route of the Madras Mountain Views Scenic Byway heading approximately 15°N toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 2.5 miles north of Photo Survey Point T-4.)

**Round Butte Overlook Park**

**Photograph T-5 – From Photo Survey Point T-5 on Figure T-2:** View from the platform at the Round Butte Overlook Park Interpretive Center heading approximately 25° NE toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 4.4 miles northeast of Photo Survey Point T-5.)



**Lower Deschutes Wild and Scenic River**



**Photograph T-6 – From Photo Survey Point T-6 on Figure T-2:** View from the northbound shoulder of Bureau of Indian Affairs (BIA) Road 24 within the mapped boundary of the Lower Deschutes Wild and Scenic River (north of the Pelton Dam and downstream of the County line) heading approximately 170°S toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 5 miles south of Photo Survey Point T-6.)

## Jefferson County Fairgrounds



**Photograph T-7 – From Photo Survey Point T-7 on Figure T-2:** View from the parking lot at the entrance of the Jefferson County Fairgrounds heading approximately 310° northwest toward the Facility site boundary. (The red arrow indicates the approximate location of the Facility site about 4.6 miles northwest of Photo Survey Point T-7.)