

# **Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Submitted to:  
**Oregon Department of Energy**

**August 19, 2022**  
**Revised November 18, 2022**  
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## Acronyms and Abbreviations

BPA	Bonneville Power Administration
Council	Oregon Energy Facility Siting Council
CTG	Combustion Turbine Generator
dBA	A-weighted decibels
Department	Oregon Department of Energy
DEQ	Oregon Department of Environmental Quality
DOGAMI	Oregon Department of Geology and Mineral Industries
GCZO	Gilliam County Zoning Ordinance
HMA	Habitat Mitigation Area
kV	Kilovolt
MS Facility Site Certificate	Montague Solar Facility Site Certificate
MW	Megawatt
MWP Facility Site Certificate	Montague Wind Power Facility Site Certificate
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
ORS	Oregon Revised Statutes
OTS Facility Site Certificate	Oregon Trail Solar Facility Site Certificate
PGE	Portland General Electric Company
RFP	Request for Proposal
WPCF	Water Pollution Control Facility

## 1.0 Introduction

Oregon Trail Solar, LLC (Certificate Holder), a wholly owned subsidiary of Avangrid Renewables, LLC, holds the Site Certificate for the Oregon Trail Solar Facility (OTS Facility) to construct and operate the Facility in Gilliam County, Oregon.<sup>1</sup> The OTS Facility is approved to generate up to 41 megawatts (MW) through a combination of up to 16 wind turbines and a solar photovoltaic array on up to 1,228 acres.<sup>2</sup> This is the first Request for Amendment (RFA1 or OTS RFA1) for the OTS Facility.

The Certificate Holder seeks the following changes in this RFA1 that require an amendment pursuant to Oregon Administrative Rule (OAR) 345-027-0350:

- Extend the construction beginning date identified in Condition 24 of the Site Certificate for the OTS Facility from August 30, 2022 to August 30, 2025. This proposed change requires an amendment under OAR 345-027-0350(3). Condition 24 is tied to Condition 25, which details construction completion. Condition 25 in the Site Certificate for the OTS Facility does not specify construction completion dates and instead generally states “the certificate holder shall complete construction of the facility by [3 years of from the date of construction commencement].” The Certificate Holder understands that approval of OTS RFA1 also extends the construction completion date to August 30, 2028, which is consistent with Condition 25 and is 3 years from the amended start of construction date.
- Revise Condition 50(b) to modify the cultural resources monitoring requirement in a manner that is different from the description in the OTS Facility Site Certificate. This proposed change modifies an existing condition related to OTS Facility construction and requires an amendment under OAR 345-027-0350(4)(c).

Consistent with OAR 345-027-0357(3), and because the proposed changes in this OTS RFA1 require amendments under OAR 345-027-0350(3) and (4), the Certificate Holder requests Type B review pursuant to OAR 345-027-0351(3) and demonstrates in Section 1.1 that Type B review is justified under OAR 345-027-0357(8).<sup>3</sup> The proposed changes requiring amendment are further described in Section 3.0.

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<sup>1</sup> Site Certificate for the Oregon Trail Solar Facility. September 25, 2020. Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2020-09-25-OTS-Site-Certificate.pdf>.

<sup>2</sup> Site Certificate for the Oregon Trail Solar Facility. Final Order on Request for Amendment 4 to the Site Certificate. August 13, 2019. Available online at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-09-06-MWP-AMD4-Final-Order.pdf>.

<sup>3</sup> On November 10, 2022, the Oregon Department of Energy provided a determination that Type A review be maintained for OTS RFA1.

The OTS Facility is tied to the procedural history of the Montague Wind Power (MWP) Facility and the Montague Solar (MS) Facility as described in Section I of the Site Certificate for the OTS Facility<sup>4</sup> and summarized below:

- **September 10, 2010 – Montague Wind Power Facility Site Certificate Issued.**<sup>5</sup> The original Montague Wind Power Facility Site Certificate (MWP Facility Site Certificate) was issued for up to 134.7 MW of wind power generation within a site boundary of about 33,485 acres.
- **First Request for Amendment of MWP Facility Site Certificate, December 28, 2012, and First Amended MWP Facility Site Certificate, dated June 21, 2013.**<sup>6</sup> The First Amended MWP Facility Site Certificate extended the deadline for beginning and completing construction and reduced the minimum blade tip clearance.
- **Second Request for Amendment of MWP Facility Site Certificate, March 11, 2015, and Second Amended MWP Facility Site Certificate, dated December 4, 2015.**<sup>7</sup> The Second Amended MWP Facility Site Certificate extended the deadline for beginning and completing construction.
- **Third Request for Amendment of MWP Facility Site Certificate, May 4, 2017, and Third Amended MWP Facility Site Certificate, July 12, 2017.**<sup>8</sup> The Third Amended MWP Facility Site Certificate approved use of a differing turbine model option and increased the individual turbine nameplate capacity.
- **Fourth Request for Amendment of MWP Facility Site Certificate, April 5, 2019, and Fourth Amended MWP Facility Site Certificate, August 23, 2019.**<sup>9</sup> The Fourth Amended MWP Facility Site Certificate added solar power generation and battery storage and

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<sup>4</sup> Site Certificate for the Oregon Trail Solar Facility. Final Order on Request for Amendment 4 to the Site Certificate. August 13, 2019. Available online at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-09-06-MWP-AMD4-Final-Order.pdf>.

<sup>5</sup> Site Certificate for the Montague Wind Power Facility. 2010. Available at: [https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/MWP\\_site\\_certificate\\_091410.pdf](https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/MWP_site_certificate_091410.pdf)

<sup>6</sup> First Amended Site Certificate for the Montague Wind Power Facility. 2013. Available at: [https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/MWP\\_site\\_certificate\\_amend\\_1\\_062813.pdf](https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/MWP_site_certificate_amend_1_062813.pdf)

<sup>7</sup> Second Amended Site Certificate for the Montague Wind Power Facility. 2015. Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/MWPAMD2DocXXX%20Site%20Certificate%202015-12-10.pdf>

<sup>8</sup> Third Amended Site Certificate for the Montague Wind Power Facility. 2017. Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/MWPAMD3%20Amended%20Site%20Certificate%202017-07-24.pdf>

<sup>9</sup> Fourth Amended Site Certificate for the Montague Wind Power Facility. 2019. Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-09-06-MWP-AMD4-Site-Certificate.pdf>

expanded the site boundary and micrositing corridor. The Fourth Amended MWP Facility Site Certificate also phased development, creating Phase 1 (all wind) and Phase 2 (wind and solar).

- **Fifth Request for Amendment of MWP Facility Site Certificate, April 27, 2020, and Fifth Amended MWP Facility Site Certificate, September 25, 2020.**<sup>10</sup> The Fifth Amended MWP Facility Site Certificate redefined the site boundary encompassing approximately 29,607 acres for Phase 1 and allocated facility components of Phase 2 into two new site certificates: MS Facility Site Certificate and the OTS Facility Site Certificate. Each of these site certificates share the common parent company, Avangrid Renewables, LLC.

Accordingly, the Certificate Holder will rely on this procedural history to support RFA1 along with new information presented in the following sections.

## 1.1 Amendment Determination Request, Type B Review – OAR 345-027-0357

### *OAR 345-027-0357 Amendment Determination Request*

*(3) For any request for amendment described under OAR 345-027-0350(3) or (4), the certificate holder may submit an amendment determination request to the Department for a written determination of whether a request for amendment justifies review under the type B review process described in OAR 345-027-0351(3).*

**Response:** The Certificate Holder requests review of this OTS RFA1 as a Type B Review as provided under OAR 345-027-0051(3) and OAR 345-027-0357(3).

*(4) A request described in section (1), (2), or (3) of this rule must be submitted in writing to the Department and must include:*

*(a) A narrative description of the proposed change;*

**Response:** See Section 1.0 and 3.0 of this OTS RFA1.

*(b) Maps and/or geospatial data layers representing the effects and/or location of the proposed change;*

**Response:** There are no proposed changes to the approved OTS Facility components, related or supporting facilities, site boundary, micrositing corridor, or solar micrositing area. Figures 1 and 2 depict the approved OTS Facility site boundary and area subject to this OTS RFA1, respectively. The Certificate Holder also submits related geospatial data layers for Figures 1 and 2 to the Oregon Department of Energy (ODOE) concurrently with this amendment request. Figure 3 shows geological and seismic data, Figure 4 shows soil data, Figure 5 shows land use data, and Figure 6 shows protected areas in the vicinity of the Facility. Figure 7 shows habitat information. Figures 8

<sup>10</sup> Fifth Amended Site Certificate for the Montague Wind Power Facility. 2020. Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2020-10-08-MWP-Fifth-Amended-Site-Certificate.pdf>.

and 9 respectively show scenic resources and recreational areas in the vicinity of the Facility. Figure 10 shows data on noise sensitive receptors within the vicinity of the Facility.

*(c) The certificate holder's evaluation of the determinations it is requesting under sections (1), (2), or (3) of this rule; and*

**Response:** The Certificate Holder's request for a Type B review process is provided in this section in response to OAR 345-027-0357(8) below, along with analysis that justifies why a Type B review is appropriate for this amendment request.

*(d) Any additional information the certificate holder believes will assist the Department's evaluation.*

**Response:** A detailed analysis of how the OTS Facility continues to comply with relevant standards is provided in Sections 2 through 8 of this amendment request.

*(8) In determining whether a request for amendment justifies review under the type B review process described in OAR 345-027-0351(3), the Department and the Council may consider factors including, but not limited to:*

**Response:** The Certificate Holder requests a Type B review process for this amendment request and analyzes the factors set forth in OAR 345-027-0057(8) below to justify a Type B review:

*(a) The complexity of the proposed change;*

**Response:** This OTS RFA1 has two proposed changes:

1. To amend OTS Facility Site Certificate Condition 24 to extend the start date of construction deadline for the OTS Facility and its related or supporting facilities as defined in the OTS Facility Site Certificate.
2. To amend OTS Facility Site Certificate Condition 50(b) to revise the cultural monitoring requirement in coordination with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR).

This OTS RFA1 does not change the OTS Facility site boundary, micrositing corridor, or solar micrositing area approved in the OTS Facility Site Certificate, as shown on Figure 1. This OTS RFA1 makes no changes to OTS Facility components, its related or supporting facilities, or the permanent or temporary disturbance areas identified in the Fifth Amended MWP Facility Site Certificate. The two proposed changes are administrative in nature, particularly considering Montague Solar, LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, coordinated previously with the CTUIR to reach mutual agreement on modifying the same monitoring requirements in Condition 50(b) of the MS Facility Site Certificate that applies to the adjacent MS Facility. The modifications agreed to by CTUIR and Montague Solar, LLC are substantively the same as those proposed by the Certificate Holder in this OTS RFA1 and are documented for reference in Attachment 1. In the same manner, the Certificate Holder has engaged with the CTUIR on this amendment request and received their concurrence with this proposed change to Condition 50(b).



The Council previously concluded that the OTS Facility, as proposed, complied with the applicable Council standards when it issued the OTS Facility Site Certificate.<sup>11</sup> The Certificate Holder has reviewed applicable land use plans, environmental conditions of the site, and Council standards and concludes there have been no substantive changes in fact or circumstances (see Sections 2.0 through 8.0) and that nothing in this amendment request would affect Council's prior findings under the applicable EFSC standards. The proposed changes to the construction deadline and cultural monitoring requirement do not affect the Certificate Holder's ability to comply with any of the OTS Facility Site Certificate Conditions, with exception of Conditions 24 and 50(b) that Certificate Holder seeks to amend. Therefore, Certificate Holder maintains that the proposed changes are not complex.

*(b) The anticipated level of public interest in the proposed change;*

**Response:** Certificate holder does not anticipate that this amendment request will generate much public interest given the administrative nature of the proposed changes and the level of public interest in prior amendments. RFA5 to the MWP Facility, which resulted in the approved OTS Facility Site Certificate, received two comments from the general public.<sup>12</sup> As a means of comparison, RFA5 to the MWP Facility included more complex changes (see Section 1.0), was processed through Type A review, and received the two limited comments from the general public that are identified above. The changes proposed in this OTS RFA1 are not complex and seek only to extend the start date of construction and revise the existing cultural monitoring requirement in coordination with the CTUIR. Montague Solar, LLC, a wholly owned subsidiary of Avangrid Renewables, coordinated previously with the CTUIR to reach mutual agreement on modifying the monitoring requirements in Condition 50(b) of the MS Facility Site Certificate. The modifications agreed to by CTUIR and Montague Solar, LLC are substantively the same as those proposed by the Certificate Holder in this OTS RFA1 and are documented for reference in Attachment 1. The Certificate Holder has engaged with the CTUIR on this amendment request and received their concurrence with this proposed change to Condition 50(b). For these reasons, the anticipated level of public interest in this OTS RFA1 is low and is not expected to exceed the low level of public interest received on MWP RFA5 for a comparatively more complex request.

*(c) The anticipated level of interest by reviewing agencies;*

**Response:** Given the administrative nature of the proposed changes, and the ongoing consultation with the CTUIR, Certificate Holder would expect minimal interest from any reviewing agency on OTA RFA1.

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<sup>11</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 37-97 (September 2020). Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2020-09-25-MWP-AMD5-Final-Order-on-RFA5.pdf>.

<sup>12</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 19 (September 2020). Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2020-09-25-MWP-AMD5-Final-Order-on-RFA5.pdf>.

The Certificate Holder contacted the Gilliam County Planning Department (Attachment 2), Oregon Department of Fish and Wildlife, CTUIR (Attachment 1), and local service providers (Gilliam County Fire Services and the Gilliam County Sheriff's Office; Attachment 3) prior to submittal of this OTS RFA1, to identify the proposed amendment, seek input on the request, and answer any questions or concerns raised. The level of interest from reviewing agencies on this amendment request was low because the change is not complex, there is no change to resource impacts resulting from the extension to construction deadlines, and there is no substantive changes to applicable rules and standards addressed by the reviewing agencies. In addition, the Certificate Holder's parent company coordinated previously with the CTUIR to reach agreement in modifying the monitoring requirements in Condition 50(b) of the MS Facility Site Certificate. The modifications agreed to by CTUIR and Montague Solar, LLC are substantively the same as those proposed in this OTS RFA1 and are documented for reference in Attachment 1. The Certificate Holder has engaged with the CTUIR on this amendment request and received their concurrence with this proposed change to Condition 50(b) (see Section 3.0). For these reasons, the anticipated level of interest by reviewing agencies in this OTS RFA1 is anticipated to be low.

*(d) The likelihood of significant adverse impact; and*

**Response:** This OTS RFA1 does not seek to enlarge the existing OTS Facility site boundary, change the micrositing corridor or solar micrositing area, or add different physical components to the OTS Facility. All temporary and permanent impacts previously evaluated in MWP RFA4 and RFA5 will remain the same. Following initial coordination with agencies and service providers (listed above), there were no changes identified from extending the start date of construction and revising the cultural monitoring requirement for the Facility that would alter the Council's previous evaluation and determination of impacts. Therefore, there is little to no likelihood of significant adverse impacts related to this request.

*(e) The type and amount of mitigation, if any.*

**Response:** There is no mitigation resulting from this OTS RFA1 because there are no new impacts that will occur as a result of the construction deadline extension or modification to the cultural resources monitoring requirement that will occur in coordination with the CTUIR. All previously imposed conditions and plans related to mitigation apply to OTS RFA1. There will be no changes to the conditions or plans, resulting from the proposed change to extend the OTS Facility construction deadlines and the OTS Facility does not affect the Certificate Holder's ability to comply with any of the other previously imposed site conditions or plans related to mitigation. Following initial coordination with the agencies and service providers listed above, there were no changes identified that would alter the council's previous evaluation and determination of impacts. The Certificate Holder's proposed revision to Condition 50(b) does not change the type of mitigation, nor does it remove the cultural resource monitoring requirement, but rather, provides greater discretion to the cultural resources monitoring team, including CTUIR, on determining when the requirements can be reduced. Therefore, there is no changes to the type and amount of mitigation related to the request to extend the construction deadline.

## 1.2 Need for Amendment – OAR 345-027-0385

### *OAR 345-027-0385 Request for Amendment to Extend Construction Deadlines*

*(1) The certificate holder may request an amendment to the Site Certificate to extend the deadlines for beginning or completing construction of the Facility, or portion/phase of the Facility, that the Council has approved in a Site Certificate or an amended Site Certificate by submitting a preliminary request for amendment in accordance with OAR 345-027-0360. The preliminary request for amendment must include an explanation of the need for an extension and must be submitted to the Department before the applicable construction deadline, but no earlier than the date twelve months before the applicable construction deadline.*

**Response:** The Certificate Holder needs an extension to the construction deadline because the OTS Facility has not reached commercial readiness for construction. In order for a utility -scale renewable energy facility to be constructed it must obtain a long-term contract (i.e., Power Purchase Agreement) for the sale of the energy generated by the facility to a regional utility or other off-taker.<sup>13</sup> In this case, Oregon Trail was submitted into Portland General Electric Company's (PGE) 2021 All Source RFP<sup>14</sup> and Puget Sound Energy's 2021 All Source RFP<sup>15</sup> which are both in process but have not reached final project selection. PGE seeks to procure approximately 150 average MW of renewable energy resources to be online by the end of 2024, and 1,669 GWh from project online by 2025. Therefore, the Certificate Holder requests an extension to the construction deadline in the Site Certificate to align with PGE's and Puget Sound Electric's procurement timelines.

The Certificate Holder has taken steps to advance the commercial readiness of the project by performing geotechnical and topographic surveys, selecting equipment, advancing engineering, and preparing bid documents for Engineering Procurement Construction contractors. If Oregon Trail is selected by PGE, or another off-taker, the Certificate Holder will be in the position to move forward with the project and begin construction within the revised construction time between August 30, 2025 and August 30, 2028 (three years from the date of construction commencement).

Supply chain issues and solar tariffs have also curtailed the advancement of new solar projects over the last 2 years. Across the U.S., solar projects have been delayed because of the constrained supply of solar modules due to uncertainties around tariffs, shortages of raw material, and factories

<sup>13</sup> Renewables Northwest provided a presentation at the April 22, 2022 Energy Facility Siting Council Meeting that discusses development drivers, permitting, and timing tied to Power Purchase Agreements, the interconnection process, and securing offtake. The presentation is Item G on the meeting agenda available here: <https://www.oregon.gov/energy/facilities-safety/facilities/Council%20Meetings/2022-04-22-Combined-Meeting-PowerPoint.pdf>.

<sup>14</sup> <https://portlandgenerallrpf2021.com/wp-content/uploads/2021/12/2021-All-Source-RFP-Main-Documents-12.16.2021.pdf>.

<sup>15</sup> <https://www.pse.com/en/pages/energy-supply/acquiring-energy#2021all>.

shutting down during the global pandemic<sup>16</sup>. These industry-wide issues also provide reasons for the Certificate Holder's need to delay the construction timelines.

The Certificate Holder's explanation of the need for the extension is provided throughout Section 1.2. The Certificate Holder is submitting this OTS RFA1 in accordance with OAR 345-027-0360 before the applicable construction deadline of (August 30, 2022) and no earlier than 12 months before the applicable construction deadline.

*(2) A preliminary request for amendment received by the Department within the time allowed under section (1) of this rule to extend the deadlines for beginning and completing construction suspends expiration of the Site Certificate or amended Site Certificate until the Council acts on the request for amendment. If the Council denies the extension request after the applicable construction deadline, the Site Certificate is deemed expired as of the applicable construction deadline specified in the Site Certificate or amended Site Certificate.*

**Response:** The Certificate Holder understands and acknowledges this rule.

*(3) If the Council grants an amendment under this rule, the Council must specify new deadlines for beginning or completing construction that are the later of:*

*(a) Three years from the deadlines in effect before the Council grants the amendment;  
or*

*(b) Following a contested case proceeding conducted pursuant to OAR 345-027-0371, two years from the date the Council grants the amendment.*

**Response:** The Certificate Holder requests that the new deadline for the start of construction be August 30, 2025, and the new deadline for completing construction be August 30, 2028. These dates are 3 years from the deadlines currently in effect under the OTS Facility Site Certificate. The Certificate Holder recognizes, however, that if there is a contested case on this OTS RFA1, the Council must select the later of the two dates under OAR 345-027-0385(3).

*(4) For requests for amendment to the Site Certificate received under this rule to extend construction deadlines for facilities or portions of the Facility the Council may not grant more than two amendments to extend the deadline for beginning construction of a Facility or a phase of a Facility.*

**Response:** This is the first request to extend the deadline for beginning construction of the OTS Facility.

*(5) For requests for an amendment to the Site Certificate to extend construction deadlines for facilities, or portions/phases of facilities, not yet in construction, but already approved for construction in the Site Certificate or amended Site Certificate prior to October 24, 2017:*

**Response:** The construction deadlines in effect for the OTS Facility under the OTS Facility Site Certificate were originally approved in August 2019 under the Fourth Amended MWP Facility Site

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<sup>16</sup> <https://pv-magazine-usa.com/2022/03/16/making-sense-of-solar-supply-chain-issues/>.

Certificate, of which the Facility components were included within Phase 2. Therefore, OAR 345-027-0385(5) does not apply.

## **2.0 Certificate Holder Information – OAR 345-027-0360(1)(a)**

*OAR 345-027-0360(1)(a) – The name of the Facility, the name and mailing address of the certificate holder, and the name, mailing address, email address and phone number of the individual responsible for submitting the request;*

### **Response:**

#### **2.1 Name of the Facility**

Oregon Trail Solar Facility

#### **2.2 Name and Mailing Address of Certificate Holder**

Oregon Trail Solar, LLC  
2701 NW Vaughn St, Suite 300  
Portland, OR 97210

#### **2.3 Name and Address of Individual Responsible for Submitting Request**

Kristen Goland  
Director, Development Permitting and Environmental  
Avangrid Renewables, LLC  
2701 NW Vaughn St, Suite 300  
Portland, OR 97210  
508-397-6130  
[Kristen.Goland@Avangrid.com](mailto:Kristen.Goland@Avangrid.com)

## **3.0 Description of Proposed Change – OAR 345-027-0360(1)(b)**

*OAR 345-027-0360 Preliminary Request for Amendment*

*(1) To request an amendment to the Site Certificate required by OAR 345-027-0350(3) and (4), the certificate holder shall submit a written preliminary request for amendment to the Department of Energy that includes the following:*

*(b) A detailed description of the proposed change, including:*

**Response:**

- Proposed Change: Extension of Facility Construction Start and Completion Deadlines:**  
 The current deadline for the start of construction for the OTS Facility is August 30, 2022. The Certificate Holder requests the Council amend Condition 24 to extend construction start and completion deadlines by three years, respectively.
- Proposed Change: Revise Cultural Monitoring Requirement:** The Certificate Holder also requests the Council amend Condition 50(b) to revise the cultural monitoring requirement. Condition 50(b) requires monitoring of ground disturbance at depths of 12 inches or greater. This same condition was applied to the OTS and MS Facility Site Certificates. At the MS Facility, this condition meant that Tetra Tech and CTUIR cultural resource monitors were on-site for 108 days of monitoring between March 17, 2021 and December 15, 2021 at the MS Facility with discovery of one isolated find that was determined not eligible for listing on the NRHP. Monitoring at the MS Facility occurred where soils throughout the area were observed to be extensively disturbed from historic land use, evidenced by a lack of stratigraphy and observed mixing of soils. Based on these observations, the archaeological sensitivity of the area where construction occurred was assessed to be low by Tetra Tech's and CTUIR's qualified Project Archaeologists and cultural resource monitors (Attachment 1). In response to these observed conditions, Montague Solar, LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, coordinated with the CTUIR to reach mutual agreement on modifying the monitoring requirements in Condition 50(b) of the MS Facility Site Certificate. Montague Solar, LLC developed a Construction Monitoring Plan for the Montague Solar Project that detailed an approach to apply professional judgement and reduce monitoring (Attachment 1). The CTUIR found the changes acceptable and the Certificate Holder seeks to follow the same approach moving forward at the adjacent OTS Facility.

Currently, Condition 50(b) states that a cultural monitor be present during "ground disturbance at depths 12 inches or greater" but this condition language was difficult to implement during MS Facility construction because it practically applied to all construction activities. Based on this experience, the Certificate Holder seeks to modify Condition 50(b) revised from "*Ground disturbance at depths 12 inches or greater*" to "*Ground disturbance at depths 12 inches or greater during grading, trenching, or drilling activities*"<sup>17</sup> as a way to limit monitoring efforts to only those activities most likely to inadvertently discover buried cultural resources. The proposed revision to Condition 50(b) is identified in Section 5.0. The Certificate Holder's proposed revision to Condition 50(b) does not change the type of mitigation, nor does it remove the cultural resource monitoring requirement, but rather, provides greater discretion to the cultural resources monitor team, including the CTUIR, on determining when the requirements can be reduced. The change to Condition 50(b) also

<sup>17</sup> Initial disturbance at any depth between 12 inches below ground surface and C horizon. The C horizon is defined as the stratigraphic layer immediately above the bedrock, consisting chiefly of weathered, partially decomposed rock. Archaeological resources are not considered likely to occur within or below this depth.

incorporates the following addition, *“The Certificate Holder may modify the cultural monitoring plan in consultation with the CTUIR and notification to the Department.”*

The OTS Facility is in a similar setting and context (rural agricultural fields, low archaeological site density, low level of historic activity, same soils, topography, and deposition) as the MS Facility which suggests a similarly low level of archaeological sensitivity. As described above, the modifications agreed to by CTUIR and Montague Solar, LLC are substantively the same as those proposed by the Certificate Holder in this OTS RFA1 and are documented for reference in Attachment 1. The Certificate Holder has engaged with the CTUIR on this amendment request and received their concurrence with this proposed change to Condition 50(b).

### **3.1 Effect of Proposed Changes on the Facility – OAR 345-027-0360(1)(b)(A)**

*(A) a description of how the proposed change affects the Facility,*

**Response:** This request does not change the OTS Facility as described in the OTS Facility Site Certificate. It seeks to change the OTS Facility construction start deadline from August 30, 2022 to August 30, 2025 while maintaining the construction completion timeline as 3 years from the date of construction commencement. In addition, it seeks to revise the cultural monitoring requirement in Condition 50(b) in coordination with the CTUIR (Attachment 1). An explanation of the need for the extension is described in Section 1.2. This OTS RFA1 does not involve any change or increase in temporary or permanent impacts previously approved by Council.

### **3.2 How Proposed Change Affects Protected Resources– OAR 345-027-0360(1)(b)(B)**

*(B) a description of how the proposed change affects those resources or interests protected by applicable laws and Council standards, and*

**Response:** The changes proposed in this OTS RFA1 will not create significant new impacts affecting those resources protected by the Council’s siting standards and will not alter the basis of the Council’s previous findings that the OTS Facility complies with all applicable laws and standards. To the extent that the proposed change could affect protected resources, the Certificate Holder demonstrates that the OTS Facility will continue to comply with all applicable laws and Council standards in Sections 4 through 7 of this amendment request.

### **3.3 Location of the Proposed Change – OAR 345-027-0060(1)(b)(C)**

*(C) the specific location of the proposed change, and any updated maps and/or geospatial data layers relevant to the proposed change.*

**Response:** The extension of the construction deadlines and revision to the cultural monitoring requirement will not alter the approved OTS Facility site boundary (Figure 1), approved micrositing corridor, or approved solar micrositing area. As such, no change to the OTS Facility site boundary or micrositing corridor is proposed as part of OTS RFA1. For the purpose of this OTS RFA1, the Certificate Holder evaluates the portion of the site boundary that excludes the already

constructed 230 kV transmission line from the operating MWP Facility substation to Bonneville Power Administration's (BPA) Slatt Substation (Figure 2). The existing 230-kV transmission line is excluded because there are no changes proposed in this OTS RFA1 related to the existing shared 230-kV transmission line. ODOE approved the analysis area and property owner notification area for this OTS RFA1 in a letter dated June 16, 2022 (Attachment 4). Temporary and permanent disturbance areas associated with the OTS Facility solar and wind layouts are provided in Attachment 5. As previously evaluated in MWP RFA4 and RFA5, the estimated disturbance areas are based on preliminary design and the exact location and dimensions of the components may be revised at final design within the approved wind and solar micro-siting areas. The area subject to OTS RFA1, as depicted on Figure 2, is the basis of analysis for regulatory compliance provided in this amendment request and is used for noticing requirements (see Section 8). Geospatial data layers for the area subject to OTS RFA1 boundary have been provided to ODOE concurrently with submittal of this OTS RFA1.

## 4.0 Applicable Division 21 Requirements – OAR 345- 027-0360(1)(c)

### *OAR 345-027-0360 Preliminary Request for Amendment*

*(1) To request an amendment to the Site Certificate required by OAR 345-027-0350(3) and (4), the certificate holder shall submit a written preliminary request for amendment to the Department of Energy that includes the following:*

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*(c) References to any specific Division 21 information that may be required for the Department to make its findings.*

**Response:** Given the limited nature of the proposed changes, the Certificate Holder maintains that new Division 21 exhibits are not necessary for this OTS RFA1.<sup>18</sup>

The Certificate Holder incorporates by reference the Division 21 exhibits provided in MWP RFA4. The MWP RFA5 addressed the applicable Division 21 requirements in a consolidated narrative format. In MWP RFA4, the Council approved modifications referred to as Phase 2, which included new wind and solar facility components that ultimately became the Facility when MWP RFA5 split the Fourth Amended MWP Facility Site Certificate into the MWP Facility Site Certificate, MS Facility Site Certificate, and the OTS Facility Site Certificate.<sup>19</sup> MWP RFA5 occurred within the approved site boundary previously evaluated with MWP RFA4 and therefore relied on the previous analysis provided in MWP RFA4 to demonstrate how proposed changes comply with applicable laws and

<sup>18</sup> OAR 345-021-0010 was amended again in October 2019 with administrative changes such as reducing the number of printed copies of materials that an applicant or Certificate Holder must submit and aligning property owner listing requirements with local government practices (State of Oregon 2019).

<sup>19</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 1



Council standards. This OTS RFA1 proposes two minor changes that do not enlarge the existing OTS Facility site boundary, change the micrositeing corridor or solar micrositeing area, add different physical components to the OTS Facility, or involve new or different temporary or permanent impacts. With the exception of the OAR 345-022-0115 Wildfire Prevention and Risk Mitigation addressed in Section 6.14, the Council standards have not changed since Council issued the Fourth and Fifth Amended MWP Site Certificate. Therefore, Council may rely on the same findings of fact and conclusions of law that served as the basis for approving the Fourth and Fifth Amended MWP Facility Site Certificates. Accordingly, the Certificate Holder incorporates by reference the Division 21 exhibits from MWP RFA4 to support this OTS RFA1. MWP RFA5 reduced the approved site boundary from 47,056 acres to 42,946 acres and expanded the solar micrositeing area, which includes the OTS solar micrositeing area, from 1,189 to 2,275 acres.<sup>20</sup>

## 5.0 Site Certificate Revisions – OAR 345-027-0360(1)(d)

*OAR 345-027-0360(1)(d) The specific language of the Site Certificate, including conditions, that the certificate holder proposes to change, add or delete through the amendment.*

**Response:** Attachment 6 provides a redlined version of the Oregon Trail Site Certificate to incorporate the revisions proposed by this OTS RFA1. The proposed substantive changes to the Site Certificate are identified with strikethrough and underlined text as follows:

### Amended Condition 24

*The certificate holder shall begin construction of the facility by August 30, ~~2022~~2025. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027-0385 or any successor rule in effect at the time the request for extension is submitted. [AMD5, Sept 2020]*

### Amended Condition 50(b):

*During construction, the certificate holder shall:*

- (b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater during grading, trenching, or drilling activities. The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. ~~Ground disturbance at depths 12 inches or greater shall not occur without the presence of the approved cultural resources monitor.~~ If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment H of the Final Order on Amendment 5 should be*

<sup>20</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 14

followed. The Certificate Holder may modify the cultural monitoring plan in consultation with the CTUIR and notification to the Department. The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor. [AMD5, Sept 2020]

## 6.0 Analysis of Council Standards and Other Laws

*OAR 345-027-0360(1)(e) A list of the Council standards and all other laws, including statutes, rules and ordinances, applicable to the proposed change, and an analysis of whether the Facility, with the proposed change, would comply with those applicable laws and Council standards. For the purpose of this rule, a law or Council standard is “applicable” if the Council would apply or consider the law or Council standard under OAR 345-027-0375(2); and*

**Response:** The Council standards that are relevant to the changes proposed in this OTS RFA1 are presented in Sections 6 and 7 together with a response from the Certificate Holder that provides analysis of compliance with those standards. Where applicable, supporting information from prior MWP Facility reviews are provided or incorporated by reference.

### 6.1 OAR 345-022-0000 General Standard of Review

*(1) To issue a Site Certificate for a proposed Facility or to amend a Site Certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:*

*(a) The Facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to 469.501 or the overall public benefits of the Facility outweigh any adverse effects on a resource or interest protected by the applicable standards the Facility does not meet as described in section (2);*

*(b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council, the Facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a Site Certificate for the proposed Facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.*

**Response:** The Council previously found that the Facility complies with the General Standard of Review under OAR 345-022-0000.<sup>21</sup> The standards under OAR 345-022-0000 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). The Council also previously found that the Facility, as modified with MWP RFA5, complies with the General Standard of Review under OAR 345-022-0000.<sup>22</sup> In this amendment request, the requirements of OAR 345-022-0000 are addressed in the findings, analysis, and conclusions discussed in the following Sections 6.0 and 7.0, as previously incorporated into the exhibits of MWP RFA4, and as previously determined in the Council's findings of fact and conclusions of law in the MWP Final Order on Amendment 4. In particular, Exhibit E to MWP RFA4 identified the new permits and associated standards required for amending Phase 2 (the phase that includes the OTS Facility) of the MWP Facility.<sup>23</sup> Exhibit E Tables E-1 through E-5 list federal permits required for construction and operation, state permits not federally delegated, state permits federally delegated, local permits, and third-party state permits. This OTS RFA1 to extend the construction start and completion deadlines and modify the cultural monitoring condition does not change the permits needed for construction and operation of the Facility and does not require any new permits, nor any new conditions for permits, which were not previously considered by the Council.

Under this standard, the Council previously adopted Conditions 24 and 25 to establish construction beginning and completion dates for the Facility in accordance with OAR 345-025-0006(4).<sup>24</sup> The Council acknowledged in the Final Order on Amendment 4 to the MWP Facility that there are unforeseen factors that can delay a certificate holder's commencement and completion of construction which may include but are not limited to financial, economic, and technological changes.<sup>25</sup> The Certificate Holder's need for this amendment is provided in Section 1.2 and is consistent with these factors previously identified by the Council. The Certificate Holder does not propose to add any new conditions, rather proposes updates to Conditions 24 and 50(b) to reflect the changes proposed in this amendment request.

In addition, the sections below demonstrate that this OTS RFA1 does not change the Facility's ability to comply with requirements of the siting statutes and standards adopted by the Council and imposed in the OTS Facility Site Certificate. This amendment request also demonstrates how the Facility complies with relevant Oregon statutes and administrative rules including those identified in the Final Orders on Amendments 4 and 5 to the MWP Facility, including the Historic, Cultural, and Archaeological Resources Standard in OAR 345-022-0090, as discussed further in Section 6.11.

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<sup>21</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 36

<sup>22</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 30

<sup>23</sup> Montague Wind Power Facility Request for Amendment 4, Exhibit E (March 2019). Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-04-05-MWP-AMD-4-Exhibits-A-E.pdf>

<sup>24</sup> Montague Wind Power Facility Fourth Amended Site Certificate, p. 10-11

<sup>25</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 16

Therefore, the Council may find that the Facility, as amended by this OTS RFA1, will continue to comply with OAR 345-022-0000.

## 6.2 OAR 345-022-0010 Organizational Expertise

### *OAR 345-022-0010 Organizational Expertise*

*(1) To issue a Site Certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed Facility in compliance with Council standards and conditions of the Site Certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed Facility in compliance with Site Certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.*

**Response:** The Council previously found that the parent company for the MWP Facility Certificate Holder, MS Facility Certificate Holder, and OTS Facility Certificate Holder, Avangrid Renewables, LLC, has the ability to design, construct, operate, and retire the Facility, in compliance with all Council standards and conditions, as required by the Organizational Expertise standard.<sup>26</sup> The standards under OAR 345-022-0010 have not changed since MWP RFA5 was submitted on April 27, 2020 (State of Oregon 2022). The Council also previously found that the Facility, as modified with MWP RFA5, complies with the General Standard of Review under OAR 345-022-0010.<sup>27</sup>

Avangrid Renewables has operated renewable energy projects in Oregon since 2001. At the time of MWP RFA4 Avangrid Renewables owned more than 1,483 MW of utility-scale wind and solar generation in the state and was the parent company backing the certificate holders of four Council-jurisdictional facilities (Klamath Cogeneration Project, Klondike III Wind Project, Leaning Juniper IIA Wind Power Facility, and Leaning Juniper IIB Wind Power Facility), and one of Oregon's largest operating photovoltaic solar facilities, the Gala Solar Project in Crook County. The Council found that no regulatory citations had been issued by the Oregon Department of Energy (the Department) for any Council-jurisdictional Avangrid-operated facility.<sup>28</sup> The Oregon Department of Environmental Quality (ODEQ) issued two notices to Golden Hills Wind, LLC (an Avangrid Renewables subsidiary) related to erosion control issues during the construction of the Golden Hills Wind Project in Sherman County, but the issues were promptly addressed and no enforcement action or penalty was imposed by ODEQ. Therefore, the Certificate Holder confirms that its parent company has not received any regulatory citations in Oregon over the last 5 years.

<sup>26</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 25

<sup>27</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 36

<sup>28</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 25

In addition, the Council amended Condition 29 with MWP RFA4 to specify a reporting requirement to the Department if a compliance issue or violation is cited by another agency for the identified third-party permits to provide the Department enforcement oversight on the certificate holder if third-party entities demonstrate compliance violations.<sup>29</sup> The Council introduced a new condition 118 with MWP RFA5 to authorize shared use of related or supporting facilities between Montague Wind, Montague Solar, and Oregon Trail Solar (the Facility).<sup>30</sup>

The proposed amendment to Conditions 24 and 50(b) does not alter the organizational expertise needed for the Certificate Holder to comply with Council standards and conditions of the Oregon Trail Site Certificate. The Articles of Incorporation for the Certificate Holder appear in Attachment 7. Oregon Trail Solar, LLC was formed by the Oregon Secretary of State on March 24, 2020, with Avangrid Renewables, LLC (Avangrid Renewables) as the sole member of the company. Oregon Trail Solar, LLC filed amended annual reports with the Oregon Secretary of State in 2021 and 2022 that reaffirmed Avangrid Renewables as the sole member of the company (Attachment 7). Therefore, there has been no change in ownership structure of the Certificate Holder since 2020.

According to its Articles of Incorporation, Oregon Trail Solar, LLC is a “Member-Managed Limited Liability Company” with Avangrid Renewables, LLC as the sole member (Attachment 7). ORS 63.001 defines “Member” as “a person with both an ownership interest in a limited liability company and all the rights and obligations of a member specified under this chapter,” and ORS 63.130(1)(a) states that members of a limited liability company have “equal rights in the management and conduct of the limited liability’s business.” In this case, Avangrid Renewables has the control of the management and conduct of Oregon Trail Solar, LLC because Avangrid Renewables is the sole member of the company. Avangrid Renewables is directing Oregon Trail Solar, LLC, in its capacity as the Certificate Holder, to permit, design, construct, and operate a renewable energy facility.

Since 2020, Avangrid has fully funded and directed Oregon Trail Solar, LLC – under the powers granted by ORS 63.077(2) – to enter to real estate transactions for the site control of wind and solar assets, hire qualified environmental consultants to perform environmental due diligence, fund interconnection agreements with Bonneville Power Administration, obtain a site certificate from EFSC, and enter into negotiations for the sale of power generated by the facility. These activities were carried out by the Oregon Trail Solar, LLC but relied on the capital investment, expertise, and direction of Avangrid to implement development of the project. For example, in 2020 Avangrid directed Oregon Trail Solar, LLC to execute the Site Certificate for the Oregon Trail Solar Facility which obligated Oregon Trail Solar, LLC to certain guarantees, obligations, and liabilities under the terms of the Site Certificate. In doing so, Oregon Trail Solar, LLC relied on the technical expertise of Avangrid Renewables, LLC in permitting, engineering, real estate, and construction to determine if Oregon Trail Solar, LLC could fulfill its obligations under the Site Certificate. Avangrid Renewables will continue to manage and control the business activities of Oregon Trail Solar, LLC because it

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<sup>29</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 24

<sup>30</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 33

remains the sole member of the company (see 2022 Amended Annual Report in Attachment 7); and there are no changes in facts or law since 2020 that would alter this arrangement.

Avangrid respects the duties and standard of conduct of member-managed limited liability companies outlined in ORS 63.155 and is acting in good faith to meet its fiduciary responsibilities as the sole member of Oregon Trail Solar, LLC. For example, Avangrid Renewables will carefully evaluate the financial commitments, potential revenues, legal obligations, and market risk – among other factors – before allowing Oregon Trail Solar, LLC to enter into a long-term power purchase agreement, or contracts to purchase equipment. Avangrid Renewables has decades of experience providing reliable, renewable energy to dozens of counterparties using identical corporate structure, including Northwest investor-own utilities Portland General Electric, Puget Sound Energy, and Avista, and Avangrid Renewables will use this experience for guiding the business activities of Oregon Trail Solar. For example, Avangrid Renewables’ wholly-owned subsidiary Montague Solar, LLC contracted with Portland General Electric to service its Green Future program (Attachment 7<sup>31</sup>) from energy generated from the Montague Solar Project (adjacent to Oregon Trail Solar) under the same limited liability company to parent company arrangement as the Certificate Holder. This deal required Avangrid Renewables, and its subsidiary Montague Solar, LLC, to meet PGE’s technical qualifications for financing, technology, credit rating, site control, permitting, interconnection, transmission, and labor standards. The full list of qualification requirements are available on PGE’s website and provided in Attachment 7<sup>32</sup>. This example demonstrates how Avangrid has the technical experience to develop a qualifying project to serve regional utilities as a member of a limited liability company, and it is one of 13 similar projects which are currently operating and supplying power within the state of Oregon.

For the design of the OTS Facility, Avangrid would direct Oregon Trail Solar, LLC to hire Oregon licensed and bonded engineers and contractors to design the Facility to applicable engineering standards, including:

- American National Standards Institute (ANSI)
- Institute of Electrical and Electronics Engineers (IEEE)
- Insulated Cable Engineers Association (ICEA)
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- American Welding Society (AWS)
- National Electric Code (NEC)
- National Electrical Safety Code (NESC)

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<sup>31</sup> <https://portlandgeneral.com/energy-choices/renewable-power/green-future-impact>.

<sup>32</sup> <https://assets.ctfassets.net/416ywc1laqmd/73Tcc2QuKZlmxdmZA3qfQJ/b8f6a0262fe4f7a9124a2ba6de5064fd/gfi-ppa-requirements-full.pdf>.

- National Electrical Manufacturers Association (NEMA)
- North American Electric Reliability Corporation (NERC)
- National Fire Protection Association (NFPA)
- Underwriters Laboratories (UL)
- American Concrete Institute (ACI)
- American Iron and Steel Institute (AISI)
- American Institute of Steel Construction (AISC)
- ASTM International (ASTM)
- International Code Council (ICC)
- International Building Code (IBC)
- American Association of Highway and Transportation Officials (AASHTO)
- ASCE 7 Minimum Design Loads for Buildings and Other Structures
- Federal Occupational Safety and Health Administration (OSHA)
- Concrete Reinforcing Steel Instituted (CRSI)
- Avian Power Line Interaction Committee (APLIC)
- Uniform Building Code (UBC)

Similarly, Avangrid Renewables will direct Oregon Trail Solar, LLC to hire qualified contractors to build the project that can meet the minimum standards for insurance coverage, safety programs, environmental programs, and labor standards. For example, all contractors working for Oregon Trail Solar, LLC will be required have a “A” or “B” grade with ISNetworld, which is a clearinghouse for construction safety incidents (available at <https://www.isnetworld.com/en/>).

During operations, Oregon Trail Solar, LLC will own the installed Facility which will likely exceed approximately \$65 million in value and will generate revenue from a power purchase agreement or from selling power into the wholesale spot market to operate the Facility consisted with the Site Certificate. In addition, Avangrid’s National Control Center will monitor the performance and operation of the facility including the following activities:

- Satisfying North American Electric Reliability Corporation (NERC) cyber and physical security standards
- Maintaining compliance with NERC operations standards, including generation and voltage set points, maintaining required communications, and data systems
- Supports safe operations in the field, by notifying field personnel in advance of severe weather such as lightning so that workers may safely remove themselves from turbines.
- Acts as a point of contact and information flow when emergencies occur in the field.

- Fulfill required Federal Aviation Administration notifications
- Provides field services to remotely operate and reset wind turbines in compliance with proscribed protocols.
- Handles planned and unplanned outages.

For retirement of the Facility, Oregon Trail Solar, LLC would submit a retirement plan for EFSC's approval and, similar to construction of the project. Avangrid Renewables would direct Oregon Trail Solar, LLC to hire qualified contractors to decommission and remove the Facility per the approved retirement plan, including security for ensuring decommissioning will be sufficiently secured with a bond or other guaranty.

Furthermore, the Certificate Holder's parent company has implemented habitat mitigation and historic resource mitigation for other EFSC-jurisdictional projects, as confirmed by the letter from Oregon State Historic Preservation Office (SHPO Case No. 10-0378) to address an adverse effect on a historic barn associated with the Montague Solar Facility and as provided in the Deschutes Land Trust email correspondence provided in Attachment 8.

Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0010.

### 6.3 OAR 345-022-0020 Structural Standard

*(1) Except for facilities described in sections (2) and (3), to issue a Site Certificate, the Council must find that:*

*(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site; and*

*(b) The applicant can design, engineer, and construct the Facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a);*

*(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed Facility; and*

*(d) The applicant can design, engineer and construct the Facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).*

**Response:** The Council previously found that the OTS Facility complies with the Structural Standard under OAR 345-022-0020.<sup>33</sup> In MWP RFA5, the Council found the Structural Standard to

<sup>33</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 31



be among the standards not likely to be impacted by the request for amendment.<sup>34</sup> Based on the evidence provided in MWP RFA4, the Council also previously found that with existing and amended Site Certificate conditions imposed in Amendment 4, Montague Wind Power Facility, LLC (a subsidiary of Avangrid Renewables, LLC) has the ability to design, engineer, and construct the Facility in a manner that avoids danger to human safety presented by identified hazards.<sup>35</sup>

Prior to the Final Order on Amendment 4, Montague Wind Power Facility, LLC submitted a revised MWP RFA4 Facility Exhibit H in January 2019<sup>36</sup> that provided responses and analysis pursuant to OAR 345-021-0010(1)(h) as last substantively amended October 18, 2017. As of this OTS RFA1 submittal, the Exhibit H requirements under OAR 345-021-0010(1)(h) have not changed since October 18, 2017. Minor corrections to spelling were amended to OAR 345-022-0020 in April 2019 (State of Oregon 2022), but these corrections did not substantively change the standards considered and approved by the Council in Amendment 1 under this Structural Standard.

OAR 345-021-0010(h)(F)(i) and OAR 345-021-0010(h)(F)(ii) were updated between RFA3 and RFA4 to the MWP Facility to require a discussion of disaster resilience, and ability to withstand impacts that may arise from future climate conditions. As part of the rule change, the Council amended its mandatory condition requirements at OAR 345-025-0006(12),(13), and (14) and amended Conditions 12, 13, and 14 to be consistent with the mandatory language.<sup>37</sup> The Council also previously amended the rule citations included in the previously imposed mandatory and site-specific conditions to be consistent with the mandatory condition language required in the Council's October 2017 rule change for OAR 345-025-0006.

Based on preliminary geotechnical studies provided with MWP RFA4, Montague Wind Power Facility, LLC determined there are no potentially active faults within the proposed amended Facility site boundary. Condition 53 requires the Certificate Holder to design and construct the facility in accordance with the requirements of the current Oregon Structural Specialty Code, and International Building Code. OTS Facility components will be designed for the Maximum Considered Earthquake event, according to the 2012 International Building Code as amended by the Oregon Structural Specialty Code.<sup>38</sup>

The Council also imposed Condition 52, which requires a pre-construction geotechnical report be conducted, conforming to the most current DOGAMI guidelines for conducting such studies to account for the possibility that DOGAMI revises or updates its guidelines prior to the construction of the OTS Facility. Furthermore, Montague Wind Power Facility, LLC evaluated future climate

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<sup>34</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 115

<sup>35</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 31

<sup>36</sup> Montague Wind Power Facility Request for Amendment 4, Exhibit H (March 2019). Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-04-05-MWP-AMD-4-Exhibits-F-I.pdf>

<sup>37</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 26

<sup>38</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 29

change conditions, and indicated that future climate change conditions should not have a major impact on the geologic, geotechnical, and seismic conditions at the facility, with OTS components. Montague Wind Power Facility, LLC explains in Exhibit H of the MWP RFA4 that, in general, increased rainfall intensity and long-term precipitation increases could lead to an increase in soil erosion compared to historical erosion and that existing ancient landslides could become reactivated by saturation that occurs as a result of increased annual precipitation. However, no ancient landslides were observed at the site during the preliminary geotechnical reconnaissance and studies, and in accordance with Condition 52, a pre-construction geotechnical investigation will be required prior to OTS Facility construction.<sup>39</sup> Condition 92 also requires the Certificate Holder to revegetate areas of temporary impact to prevent future drought conditions and any associated loss of vegetation could increase the potential for dust storms.<sup>40</sup>

The Certificate Holder has verified that no potentially active faults cross the OTS Facility site boundary. The previous amendment, RFA 5 of the MWP Facility, used 2020 data from the US Geological Survey Earthquake Catalogue and 2017 data from the US Geological Survey Fault and Fold Database to identify historical earthquakes (up to 6.0 magnitude) and quaternary faults/associated folds within the 50-mile analysis area of its subject site boundary.

The seismic hazard assessment was reviewed anew in 2022 for this OTS RFA1. Figure 3A depicts historical earthquakes recorded in the vicinity of the OTS Facility and reflects ongoing and current seismicity that has been recorded in the region since MWP RFA5. No earthquakes were recorded near the OTS Facility in the last two years according to the USGS Earthquake Catalog.

In addition, the new data was reviewed from the DOGAMI HazVu online seismic resources for seismic risk (Figures 3A and 3B). The nearest seismic risk from a Cascadia Earthquake is mapped approximately 5 miles to the south (Figure 3B). The DOGAMI map indicates the entire OTS Facility site boundary is within a moderate hazard. There has been no change in DOGAMI's assessment of seismic risk of the area subject to OTS RFA1 in the last two years. These findings do not change the prior evaluation results.

The OTS Facility remains on a plateau -like landform and there has been no change in hydrology. There are no floodways, 100-year floodplains, or 500-year floodplains mapped within the area subject to OTS RFA1 (Figure 3C; FEMA 2021). No mapped known landslides are located in the area subject to OTS RFA1 (Figure 3D); however, areas of moderate to high landslide hazard are mapped within large portions of the area subject to OTS RFA1. These findings do not change the prior evaluation results.

Figure 3A depicts historical earthquakes and quaternary faults near the OTS Facility based on the latest US Geological Survey Earthquake catalogue and US Geological Survey Fault and Fold Database. According to this data, there have been no earthquakes within 50 miles of the OTS Facility in the last two years. The most recent earthquakes occurred in 2011 in Klickitat County, WA

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<sup>39</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 30

<sup>40</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 31

and Wasco County, OR. The review found the seismic hazard assessment to still be accurate in characterizing the OTS Facility site's seismic design parameters. Overall, the area subject to OTS RFA1 is defined as a flat, stable plateau surface covered by a loess mantle and no additional seismic hazards such as liquefaction or ground shaking, landslides, or slope instability were identified from USGS or DOMAGI sources. As previously described in RFA 4 Exhibit H and RFA5 for the area within the approved MWP site boundary, the potential for collapse and swell of loess soils is anticipated to be minimal. This finding continues to apply to the area subject to OTS RFA1.

The extension of the construction deadlines and revision to the cultural monitoring requirement does not affect the Council's previous finding that the construction and operation of the Facility will be consistent with the requirements of the Council's Structural Standard. The proposed amendment makes no changes to the Facility or Site Certificate conditions related to the Structural Standard, and any potential change in site risks will be identified prior to construction in compliance with the existing Site Certificate Conditions noted above. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0020.

#### 6.4 OAR 345-022-0022 Soil Protection

*To issue a Site Certificate, the Council must find that the design, construction and operation of the Facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.*

**Response:** The Council previously found that the Facility complies with the Soil Protection standard.<sup>41</sup> The Soil Protection standard requires the Council to find that the design, construction, and operation of the Facility, taking into account mitigation, are not likely to result in significant adverse impacts to soils. The standards under OAR 345-022-0022 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). Montague Wind Power Facility, LLC identified existing soil conditions within the analysis area for the Facility (identified in MWP RFA4 as part of Phase 2) and its related or supporting components in MWP RFA4 Exhibit I would permanently disturb up to 1,207.6 acres.<sup>42</sup> The main soil types within the Facility are the Ritzville Silt Loam, Warden Silt Loam, and Willis Silt Loam.

The Council imposed Conditions 44, and 92 which require the Site Certificate Holder to control and mitigate potential adverse impacts to soils and to also mitigate any risk of soil contamination during facility construction and operation.<sup>43</sup> The Council also amended Condition 87, to include the washing of solar panels during facility operation, subject to the DEQ recommended restrictions, as an acceptable practice. WPCF permits are state-issued permits and would be under control of an Council-issued Site Certificate; however, Montague Wind Power Facility, LLC stated in RFA4 to the MWP Facility Exhibit E that if a WPCF permit is necessary, it would be secured by a third-party

<sup>41</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 42

<sup>42</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 32

<sup>43</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 32

contractor, which is allowed in accordance with OAR 345-022-022-0110(3) and (4).<sup>44</sup> Condition 114 was imposed by the Council to require the Certificate Holder to conduct and documents inspections of the battery storage systems, in accordance with manufacturer specifications.<sup>45</sup>

MWP RFA5 expanded the solar microsite area from 1,189 to 2,275 acres to include Solar Microsite Area 3 which is now OTS solar microsite area. The OTS solar microsite area consists primarily of Ritzville Silt Loam on slopes ranging from zero to 12 percent and a small portion of Willis Silt Loam on 5 to 12 percent slopes. The previously imposed Condition 80 requires compliance with erosion control measures required by the Facility's NPDES 1200-C construction permit. As such, the Council found the Facility would minimize soil impacts.<sup>46</sup> The same condition applies to OTS Facility.

The Certificate Holder reviewed the Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database and verified that the soils underlying the area subject to OTS RFA1, the approved wind microsite corridor, and the Facility solar microsite area and its related or supporting components have not changed since the approval of MWP RFA5 (NRCS 2022).

MWP RFA5 used 2020 NRCS data to evaluate soil types within the expanded solar microsite areas 2 and 3 (of which microsite area 3 is now referred to as the OTS Facility solar microsite area). The soil type breakdown within expanded solar microsite area 3 (OTS Facility solar microsite area) was 67.3 percent Ritzville silt loam (0 to 2 percent slopes), 19.9 percent Ritzville silt loam (2 to 7 percent slopes), 7.5 percent Ritzville silt loam (7 to 12 percent slopes), 4.8 percent Ritzville silt loam (5 to 12 percent slopes), 0.4 percent Olex gravelly silt loam (20 to 40 percent slopes), and 0.1 percent Ritzville silt loam (12 to 20 percent slopes). Using 2022 NRCS data, the Certificate Holder found the OTS Facility solar microsite area contained the same soils and percentage of soils within the same boundary (expanded solar microsite area 3) used with MWP RFA5.

Figure 4 is an updated NRCS soil type map covering the area subject to OTS RFA1, the approved wind microsite corridor, and the solar microsite area, and further demonstrates that the 2022 NRCS soils match the soil types previously assessed with MWP RFA4 and RFA5.

The extension of the construction deadlines and revision to the cultural monitoring requirement does not affect the Council's previous finding that the construction and operation of the Facility will be consistent with the requirements of the Council's Soil Protection standard. The proposed amendment makes no changes to the Facility, its related or supporting components, or the associated permanent and temporary impact areas (detailed as Design Scenario C, which included the OTS Facility solar microsite area)<sup>47</sup> or Site Certificate conditions related to the Structural Standard, and any potential change in site risks will be identified prior to construction in

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<sup>44</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 34

<sup>45</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 35

<sup>46</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 36

<sup>47</sup> Montague Wind Power Facility Request for Amendment 4, Exhibit C, Tables C-6 and C-7, and Figures C-6 and C-10 (March 2019)

compliance with the existing Site Certificate Conditions noted above. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0022.

## 6.5 OAR 345-022-0030 Land Use

*(1) To issue a Site Certificate, the Council must find that the proposed Facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.*

*(2) The Council shall find that a proposed Facility complies with section (1) if:*

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*(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:*

*(A) The proposed Facility complies with applicable substantive criteria as described in section*

*(3) and the Facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the Facility under ORS 197.646(3);*

*(B) For a proposed Facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the Facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or*

*(C) For a proposed Facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed Facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).*

**Response:** The Council previously found that the Facility complies with the Land Use Standard.<sup>48</sup> The Certificate Holder elected to have the Council make the land use determination for the Facility, under ORS 469.504(1)(b) and OAR 345-022-0030(2)(b). The following sections describe how the Facility remains consistent with statewide planning goals and the applicable comprehensive plan and zoning ordinances of Gilliam County.

### 6.5.1 Gilliam County Applicable Substantive Criteria

The Council previously concluded that the Facility described in MWP RFA4 complied with the applicable substantive criteria of Gilliam County's comprehensive plan and zoning ordinance.<sup>49</sup> The Council again found the Facility described in MWP RFA5 complied with the applicable substantive

<sup>48</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 97

<sup>49</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 45-78

criteria of Gilliam County's comprehensive plan and zoning ordinance.<sup>50</sup> The Certificate Holder has reviewed and confirmed there have been no changes to Gilliam County's applicable substantive criteria from its comprehensive plan and zoning ordinance since MWP RFA5.<sup>51</sup>

The Council previously found that the Facility would be consistent with applicable criteria of the GCZO and the proposed change to extend construction deadlines and revision to the cultural monitoring requirement does not affect the findings provided in the Final Order on Amendment 4 and 5 and summarized in Table 1.

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<sup>50</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 41-72

<sup>51</sup> The Certificate Holder submitted the preliminary MWP RFA4 on January 15, 2019 and submitted the preliminary MWP RFA5 on April 27, 2020. The Gilliam County Planning Department verified in a Pre-Application meeting on June 14, 2022, between the Certificate Holder and ODOE, that there have been no substantive modifications to the Gilliam County Zoning Ordinance (GCZO; Gilliam County 2017a) or to the Gilliam County Comprehensive Plan (GCCP; Gilliam County 2017b) that were reviewed in MWP RFA4 Exhibit K and approved by the Council.

Table 1. Gilliam County Applicable Substantive Criteria

Section/Subsection	Name	Effect of Proposed Changes
<b>Gilliam County Zoning Ordinance (GCZO)</b>		
<i>Article 4 – Use Zones</i>		
Section 4.020	Exclusive Farm Use	<b>No change.</b> The Facility is a commercial utility facility for the purpose of generating power for public use by sale, which is permitted as a conditional use in the EFU zone. MWP RFA4 and RFA5 addressed applicable substantive criteria of Section 4.020. The proposed change to construction dates and revision to the cultural monitoring requirement does not affect compliance with standards of the EFU Zone.
Section A	High-Value Farmland	<b>No change.</b> The Facility is located within the Columbia Valley AVA and therefore contains high-value farmland. MWP RFA4 addressed the applicable substantive criteria of GCZO Section 4.020(B) – (G). MWP RFA45 updated evaluation of compliance with applicable OAR 660-030-0130 provisions. The proposed change to construction dates and revision to the cultural monitoring requirement with OTS RFA1 does not affect the Council’s previous determination that MWP RFA4 and RFA5 comply with Section 4.020(A).
Section C	Planning Director Review	<p><b>No change.</b> GCZO Section 4.020(C)(24) identifies utility facilities “necessary” for public service as a permissible use on high value farmland within EFU zoned land, subject to Planning Director Review. Pursuant to 215.283(1)(c)(B), a transmission line is a utility necessary for public service if it is an associated transmission as defined in ORS 215.274. The Council found that the 230-kV transmission line is a utility facility necessary for public service and that it is a permitted use in EFU-zoned land, subject to the evaluation criteria of ORS 215.274. The 230-kV transmission line is not subject to analysis with this proposed OTS RFA1.</p> <p>OTS RFA1 does not propose to change the transportation improvements or utility facilities approved with MWP RFA4 and RFA5. Therefore, the Council’s previous determination that MWP RFA4 and RFA5 complies with Section 4.020(C) applies to OTS RFA1.</p>
Section D	Conditional Uses Permitted	<b>No change.</b> GCZO Section 4.020(D)(11) identifies “commercial utility facilities for the purposes of generating power for public use by sale” (commercial utility facilities) as a permitted conditional use in an EFU zone subject to compliance with GCZO Section 4.020(H) and Section 7.010 review criteria. Development of the Facility exceeds the acreage limitation for high-value farmland under 4.020(D)(11), thus a Goal 3 exception was requested and approved with MWP RFA45. The proposed change to construction dates and revision to the cultural monitoring

Section/Subsection	Name	Effect of Proposed Changes
		requirement with OTS RFA1 does not affect Council's previous determination that MWP RFA4 and RFA5 comply with Section 4.020(D) and that an exception to Goal 3 is justified.
Section H	Specific Review Criteria	<p><b>No change.</b> GCZO Section 4.020(H) establishes review criteria for specific conditional uses within EFU zoned land, including commercial utility facilities. Development of previously approved facility components within the solar micro-siting area does not change the findings to GCZO 4.020(H) provided in MWP RFA 4 Exhibit K.</p> <p>The site boundary, which establishes the analysis area, would not change as a result of the proposed changes to construction dates and revision to the cultural monitoring requirement, so the Certificate Holder requests the Council find that there are no substantive changes to the evaluation of GCZO Section 4.020(H) from Council's review of MWP RFA4 and approval of the Final Order on RFA4 to the MWP Facility in September 2019, and concurrence with approval of Final Order on RFA5 to the MWP Facility in September 2020.</p> <p>The Council previously imposed several conditions (38, 39, 43, 73, 74, 80, 81, 82, and 92) that would minimize potential impacts to accepted farm practices within the surrounding area. Condition 38 and 39, were amended with MWP RFA5 to remove reference to Phase 1 and Phase 2, in the amended Montague Wind Power Facility Site Certificate and proposed new Site Certificates for the Montague Solar Facility and Oregon Trail Solar Facility. The Certificate Holder affirms the Facility will satisfy the existing conditions imposed by the Council to minimize potential impacts to accepted farm practices within the surrounding area.</p>
Section J	Property Development Standards	<p><b>No change.</b> The Council previously imposed Condition 42, which is consistent with the requirements of GCZO 4.02(J)(1-2). The Certificate Holder affirms that the Facility would be designed to satisfy the property development standards established in Condition 42. Therefore, the Council's previous determination that MWP RFA4 and RFA5 complies with Section 4.020(J) applies to OTS RFA1.</p>
<i>Article 7 – Conditional Uses</i>		
Section 7.010	Authorization to Grant or Deny Conditional Uses	<p><b>No change.</b> GCZO Section 7.010 establishes general approval criteria and conditions that may be applied to conditional uses, regardless of the zone. The proposed change to construction dates and revision to the cultural monitoring requirement with OTS RFA1 does not change the use of the Facility, a photovoltaic solar power generation facility that was previously evaluated</p>



Section/Subsection	Name	Effect of Proposed Changes
		and approved by the Council in MWP RFA4 and RFA5. Therefore, the Council's previous determination that MWP RFA4 and RFA5 complies with Section 7.010 applies to OTS RFA1.
Section A	General Approval Criteria	<b>No change.</b> OTS RFA1 does not result in changes to the Council's findings of compliance with MWP RFA4 and RFA5 under GCZO 7.010(A)(1) and (2). Therefore, the Council's previous determination that MWP RFA4 and RFA5 complies with Section 7.010(A) applies to OTS RFA1.
Section 7.020	Standards Governing Conditional Uses	<b>No change.</b> OTS RFA1 does not result in changes to the Council's previous findings of compliance with the County's standards governing conditional uses. Therefore, the Council's previous determination that MWP RFA4 and RFA5 complies with Section 7.020 applies to OTS RFA1.
Section A	Conditional Uses, Generally	<b>No effect.</b> The County's property development standards (including setbacks) are implemented in the amended Condition 42 of the Site Certificate. Therefore, the Council's previous determination that MWP RFA4 and RFA5 complies with Section 4.020(J) also applies to Section 7.020(A) for OTS RFA1.
Section Q	Conditional Uses in Exclusive Farm Use Zones	<b>No change.</b> See response under Section 4.020(H) which is also applicable to Section 7.020(Q).
Section T	Wind Power Generation Facility Siting Requirements	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility, a photovoltaic solar power generation facility, are not applicable to the Wind Power Generation Facility Siting Requirements of Section 7.020(T).
<i>Article 8 – Supplementary Provisions</i>		
Section 8.030	Clear Vision Areas	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not impact the ability for solar arrays to be constructed to maintain clear vision areas at access locations from Bottemiller Lane and Weatherford Road. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.030.
Section 8.040	Outdoor Lighting Standards	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not impact outdoor lighting. Condition 104 outlines the requirements for outdoor lighting in accordance with Section 8.040. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.040.
Section 8.050	Sign Regulations	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not impact signage. Condition 119 outlines the requirements for outdoor signs in accordance with Section 8.050. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.050.

Section/Subsection	Name	Effect of Proposed Changes
Section 8.100	Off-Street Parking Requirements	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not impact off-street parking. Condition 28 outlines the requirements to obtain building/zoning permit prior to construction. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.100.
Section A	Number of Spaces Required	<b>No change.</b> Montague Wind Power Facility, LLC previously confirmed that Facility components would be designed to comply with parking requirements imposed by GCZO 8.100(A)(1). Condition 28, which remains applicable to the OTS Facility, outlines the requirements to obtain necessary local permits or approvals for construction. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.100(A)(1).
Section 8.140	Site Plan Review	<b>No change.</b> The RFA5 to the MWP Facility modifications to increase the solar micrositing area required Site Plan review. The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140.
Section A	Purpose	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(A).
Section E	Detailed Plan	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(E). The Facility will not include landscaping.
Section F	Outdoor Storage and Activities, if Permitted in the Zone	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(F).
Section G	Topographic Information	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(G).
Section H	Drainage Plan	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components.

Section/Subsection	Name	Effect of Proposed Changes
		Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(H).
Section I	Identification of Proposed Trash Storage Locations	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(I).
Section J	Location of All Existing and Proposed Utilities	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(J).
Section K	Elevation Drawings	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(K).
Section L	Approval Standards	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(L).
Section M	The Development Will Not Result In Traffic Volumes that Will Reduce the Performance Standard	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(M).
Section N	The Development Will Not Adversely Affect Agricultural or Forestry Uses	<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement for the Facility does not involve changes in layout of solar facility components. Therefore, OTS RFA1 does not change the Council's previous determination of compliance with Section 8.140(N).
<b>Gilliam County Comprehensive Plan (GCCP)</b>		
(Goal 2) Land Use Planning – Policy 7		<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council's previous determination of consistency with Land Use Planning Policy 7.

Section/Subsection	Name	Effect of Proposed Changes
(Goal 3) Agricultural Lands – Policy 3		<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council's previous determination of consistency with this policy and Goal Exception approved with MWP RFA45.
(Goal 5) Natural Resources – Policies 2 and 12		<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council's previous determination of consistency with these policies. Site Certificate Conditions 91 through 101 also require further ODFW consultation to maintain consistency with these policies.
(Goal 6) Air, Water, and Land Resources Quality – Policies 6 and 7		<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council's previous determination of consistency with these policies. Site Certificate Conditions 80 (implementation of an Erosion and Sediment Control Plan) and 106 through 108 (compliance with noise standards) also require further ODFW consultation to maintain consistency with these policies.
(Goal 8) Recreation – Policy 3		<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council's previous determination of consistency with this policy.
(Goal 12) Transportation – Policies 10 and 14		<b>No change.</b> OTS RFA1 does not change the Council's previous determination of consistency with these policies. Site Certificate Conditions 71 and 75 also implement consistency with these policies.
(Goal 13) Energy Conservation – Policy 3		<b>No change.</b> The proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council's previous determination of consistency with this policy.

### **6.5.2     *Directly Applicable Statutes and Administrative Rules***

#### **OAR 660-033-0130 Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses**

The Council previously determined in MWP RFA5 that the Facility satisfied the requirements of OAR 660-033-0130 and warranted a Goal 3 exception under ORS 469.504<sup>52</sup>. OTS RFA1 does not propose to increase the size of the Facility solar micrositing corridor or propose changes that would undermine the Council’s previous findings justifying a Goal 3 exception. However, there have been two changes to federal and state laws since 2020 that provide additional reasons justifying a Goal 3 exception for the Facility.

First, the federal Investment Reduction Act (IRA) passed in 2022 provides incentives for locating renewable energy projects in “Energy Communities,” which are areas economically affected by the retirement of coal and natural gas generation plants and the transition to renewable energy. Gilliam County is classified as an “Energy Community” under the IRA due to its proximity (i.e., adjacent census tract) to the retired Boardman Coal Plant. The Energy Community where Oregon Trail Solar will be located is one of 2,800 Energy Communities in the United States (and one of three in Oregon). This special designation that is unique to the project’s location can be used an additional reason for supporting the Goal 3 exception.

Second, in 2021 Oregon DEQ adopted rule making for its Clean Fuel Program that is intended to reduce the carbon emissions from transportation fuels. A key strategy of the Clean Fuel Program is widespread transition to electrical vehicles and decarbonization of the electrical utility grid used to charge electrical vehicles. To achieve this goal, Oregon DEQ created a program that uses Renewable Energy Credits (RECs) to show incremental reduction in carbon intensity as compared to the current mix of utility carbon intensity<sup>53</sup>. The Clean Fuel Standards establishes a limit on carbon intensity of transportation fuels that declines overtime and Oregon DEQ administers a carbon credit program for fuel providers. To stay within the defined carbon intensity limits, fuel providers can acquire RECs from qualified renewable power generation facilities, and then retire the RECs to show incremental reduction of carbon intensity for their fuel operations. The Oregon Trail Solar Project will qualify to generate RECs during its operation, and the project could participate in the Oregon Clean Fuel program. Overall, the Oregon Clean Fuels program assumes that there will be a growing supply of RECs in the marketplace for fuel providers to use to reach their carbon intensity reduction targets. Because Oregon Trail Solar is a project that could support this statewide policy to reduce carbon emissions from transportation fuel, a Goal 3 exception is justified for the project.

Notwithstanding these two new reasons, the proposed change to construction dates and revision to the cultural monitoring requirement does not affect the Council’s previous finding that an exception

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<sup>52</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 78-90

<sup>53</sup> See <https://www.oregon.gov/deq/ghgp/Documents/cfpRetiringRECs.pdf>

to Goal 3 is justified. As shown on Figure 5A, the area subject to OTS RFA1 remains entirely within the Gilliam County EFU (Farm Use) zone. Figure 5B shows the area subject to OTS RFA1, 0.5-mile land use analysis area, high-value farmland per ORS 195.300(10)(f)(c), and NRCS non-irrigated soil capability classes based on 2022 NRCS data. Figure 5B, consistent with findings provided in Section 6.4, demonstrates there have been no substantive changes to underlying soil classifications or high-value farmland within the area subject to OTS RFA1 since MWP RFA4 and RFA5. Recent aerial photos confirm that most of the OTS solar and wind microsites remain cultivated as dry-land wheat.<sup>54</sup> The area adjacent to the OTS Facility is under construction for Montague Solar.

The Oregon Trail Solar 2022 Habitat and Rare Plants Survey Report (Attachment 9) confirmed that the condition of the OTS solar microsites area, west of Weatherford Road, remains category 6 Dryland Wheat, with some areas under active cultivation and limited areas of bare, fallow fields. The Survey Report included photos (Photo 1 and Photo 2 on page 3 of Attachment 9) to further demonstrate this finding.

Therefore, accepted farm practices within the OTS Facility site boundary are the same as those previously analyzed, including soil preparation in the spring and fall, sowing of seed, fertilizing, pest and weed management, and harvesting.

Attachment 10 provides the recorded memorandum of solar leases with the landowners for the proposed solar array along with correspondence with the landowners regarding their review of the site plan prior to construction. The Certificate Holder has considered landowner feedback on drainage patterns and fence placement into the design the solar facility. Attachment 10 also provides a map of the OTS Facility site boundary with parcel boundaries, landowner names, and lease statuses. There are portions of the area subject to OTS RFA1 where wind leases have expired or are held by another Avangrid subsidiary, and development on these properties would not be allowed unless the leases are renewed or granted to Oregon Trail Solar, LLC.

Proposed wind turbines would minimize farming impacts by locating access roads and temporary construction laydown and staging areas to minimize disturbance of farming practices and, wherever feasible, shall place turbines and transmission interconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations as stated in MWP Facility condition 39.

The OTS Site Certificate already contains conditions to ensure the OTS Facility avoids, minimizes, or mitigates for potential adverse impacts. The OTS Facility would minimize farm impacts by only siting solar facilities within the solar microsites area. The Certificate Holder also provides updated evidence showing that the OTS Facility will provide various local economic benefits while minimizing impacts to agriculture and that the Council may continue to rely on its prior finding to affirm the Goal 3 exception for the OTS Facility (Attachment 11). Finally, Certificate Holder will meet the requirements OAR 660-033-0130(37) and/or OAR 660-033-0130(38), as applicable, to ensure that potential impacts to agricultural operations are minimized to the extent practicable. See

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<sup>54</sup> Link to drone photos of solar microsites corridor from August 2022: [DroneDeploy](#).

OTS Site Certificate Conditions 37 and 38. These proposed changes do not require an exception to the goal; therefore, the Facility will continue to comply with the standard if the Council approves the proposed OTS RFA1.

### **6.5.3 Conclusions and Compliance with Existing Site Certificate Conditions**

OTS RFA1 does not propose modifications to existing conditions or require new conditions associated with land use. Therefore, the extension of the construction deadlines and revision to cultural monitoring requirement proposed in this OTS RFA1 will not alter the Council's basis for its previous findings that the Facility, as amended in OTS RFA1, will continue to comply with OAR 345-022-0030.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

*Coastal Oregon Marine Experiment Station, Astoria.*

*Mid-Columbia Agriculture Research and Extension Center, Hood River.  
Agriculture Research and Extension Center, Hermiston.*

*Columbia Basin Agriculture Research Center, Pendleton. Columbia Basin  
Agriculture Research Center, Moro.*

*North Willamette Research and Extension Center, Aurora. East Oregon  
Agriculture Research Center, Union.*

*Malheur Experiment Station, Ontario.*

*Eastern Oregon Agriculture Research Center, Burns. Eastern Oregon  
Agriculture Research Center, Squaw Butte. Central Oregon Experiment Station,  
Madras.*

*Central Oregon Experiment Station, Powell Butte. Central Oregon Experiment  
Station, Redmond.*

*Central Station, Corvallis.*

*Coastal Oregon Marine Experiment Station, Newport. Southern Oregon  
Experiment Station, Medford.*

*Klamath Experiment Station, Klamath Falls.*



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

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

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

**Response:** The Council previously found that the Facility complies with the Protected Areas standard.<sup>55</sup> In MWP RFA5, the Council found the Protected Areas standard to be among the standards not likely to be impacted by the request for amendment.<sup>56</sup> The Protected Areas standard requires the Council to find that, taking into account mitigation, the design, construction, and operation of a facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040. The standards under OAR 345-022-0040 have not changed since May 15, 2007 (Oregon Secretary of State 2022). Per Exhibit L of MWP RFA4, there are 12<sup>57,58</sup> protected areas within the 20-mile analysis area (per OAR 345-001-0010(59)(e)). The Certificate Holder seeks to retain the wind option for the OTS Facility but does not propose to change the number or type of turbines previously evaluated. Based on the Certificate Holder's review of protected areas listed in OAR 345-022-0040(1), there are no new protected areas located within the 20 mile analysis area from the area subject to OTS RFA1 (Table 2, Figure 6A). Note that two previously identified protected areas, the John Day (Hilderbrand) State Park and Arlington State Park, are no longer designated by the Oregon Parks and Recreation Department (OPRD 2022a). A summary of databases and references used to review Protected Areas that occur within the 20-mile analysis area from the area subject to OTS RFA1 is provided in Table 2.

<sup>55</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 113

<sup>56</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 116

<sup>57</sup> Note that the Council removed the non-Oregon state park (Crow Butte State Park) for consideration under the Protected Areas standard (Montague Wind Power Facility Final Order on Request for Amendment 4, p. 105).

<sup>58</sup> Note that the Lewis and Clark National Historic Trail and Oregon National Historic Trail were previously reviewed by the Council under OAR 345-022-0080, OAR 345-022-0090, and OAR 345-022-0100 for they were deemed to not qualify as a protected area under OAR 345-022-0040(1) (Montague Wind Power Facility Final Order on Request for Amendment 4, p. 141-165; Montague Wind Power Facility Final Order on Request for Amendment 5, p. 100-103).

Table 2. Protected Areas Databases Review

OAR 345-022-0040	Protected Area	References
<i>(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;</i>	No protected area identified	NPS 2022a, USGS 2020a
<i>(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;</i>	No protected area identified	NPS 2022a, USGS 2020a
<i>(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;</i>	No protected area identified	USFS 2022, USGS 2020a
<i>(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;</i>	John Day Wildlife Refuge	USFWS 2022, USGS 2020a
<i>(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;</i>	No protected area identified	USGS 2020a
<i>(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;</i>	No protected area identified	ODFW 2022a, USFWS 2022
<i>(g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;</i>	No protected area identified	USGS 2020a
<i>(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;</i>	Arlington State Park <sup>1</sup> , Cottonwood Canyon State Park, John Day, Hilderbrand State Park <sup>1</sup>	The state parks identified here were previously evaluated in MWP RFA4 and RFA5. However, based on rule changes to OAR 345-022-0040, the Department requested that the Certificate Holder remove these state parks from analysis in this OTS RFA1. OPRD 2022a, USGS 2020a

OAR 345-022-0040	Protected Area	References
<i>(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;</i>	No protected area identified <sup>2</sup>	OSU 2015, USGS 2020a
<i>(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR chapter 142;</i>	No protected area identified	DSL 2022
<i>(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;</i>	John Day Wild and Scenic River, John Day Scenic Waterway	NPS 2022b, OPRD 2022b
<i>(l) Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;</i>	No protected area identified	OSU 2022a
<i>(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to:</i>	No protected area identified	OSU 2022a
<i>(n) Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;</i>	No protected area identified	OSU 2022b
<i>(o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;</i>	Ferry Canyon ACEC, Horn Butte ACEC, Boardman Research Natural Area	BLM 2022a, BLM 2022b, USGS 2020a
<i>(p) State wildlife areas and management areas identified in OAR chapter 635, division 8.</i>	Willow Creek Wildlife Area	ODFW 2022b, USGS 2020a
<p>1. The Oregon Parks and Recreation Department (OPRD) does not list Arlington State Park or John Day, Hilderbrand State Park within its State Parks database (OPRD, phone conversation, October 25, 2022). However, the John Day, Hilderbrand protected area was previously identified and is within the John Day River Wildlife Refuge approximately 5-miles west of the Facility site boundary.</p> <p>The Arlington State Park was not previously identified/evaluated because it is an undeveloped wayside on a 219-acre parcel of land owned by the OPRD. The parcel is located between the Columbia River and I-84, approximately 2 miles east of Arlington and approximately 12 miles north of the area subject to OTS RFA1. At this distance, the Facility would not introduce noise, visual, traffic, water use, and wastewater disposal to the Arlington State Park, which is not operational.</p> <p>2. The previously identified Lindsay Prairie Preserve is beyond the 20-mile analysis area of RFA1.</p>		

Montague Wind Power Facility, LLC previously analyzed the potential for impacts to protected areas from visual viewshed alteration, noise, traffic, water use and wastewater in MWP RFA4, Exhibit L. Based on input from the Department, state parks were removed from the protected areas analysis area that were previously evaluated in MWP RFA4 (Figure 6A). The following previously identified and evaluated protected areas are identified in the 20-mile analysis area shown on Figure 6A:

- Horn Butte ACEC;
- Ferry Canyon ACEC;
- Boardman Research Natural Area;
- Willow Creek Wildlife Area;
- John Day Wildlife Refuge;
- John Day Wild and Scenic River; and
- John Day State Scenic Waterway.

The changes proposed in OTS RFA1 will not contribute any additional impacts to those already reviewed and approved by the Council.<sup>59</sup> Findings that address potential impacts are summarized below with supporting evidence provided on Figure 6B (Protected Areas: Transportation Routes) and Figure 6C (Protected Areas: Potential Visibility):

- **Visual:** The Council previously found that while Phase 2 MWP Facility components (which include the OTS Facility) will result in a change to the existing viewshed of the protected areas within the analysis area, the visual impacts of construction and operation of the Facility will not likely result in a significant adverse impact to any protected area due to the low impact to users (namely protected areas designated for strictly wildlife habitat preservation), distance from the Facility, topographic obstructions, and the presence of similar structures within the existing viewshed.<sup>60</sup> Figure 6C shows the worst-case zone of visual influence (ZVI) analysis from MWP RFA4 for the 57 previously evaluated turbine locations that can be used to site 16 turbines within the OTS Facility Site Boundary. The range of potential visibility of the turbine locations is summarized in Table 3 below and is consistent with analysis previously evaluated in Figure L-1 of Exhibit L to MWP RFA4. Figure 6C and Table 3 demonstrate that there are no substantive changes to the visual analysis and resulting conclusions identified for the MWP Facility and OTS Facility. The ZVI analysis is further summarized in Section 6.10. Implementation of Site Certificate Conditions 102 (reduction of visual impacts), 103 (maintenance of character of similar buildings in the area/ usage of low-reflective, neutral colors), and 104 (reduction of exterior nighttime lighting) will continue to ensure that visual impacts are minimized at protected

<sup>59</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 106-113

<sup>60</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 109-113

areas. For these reasons, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse visual impact on protected areas and that OTS RFA1 complies with the Council's Protected Area standard.

- **Noise:** Noise from the Facility was found to be minimal during construction, to inaudible during operations at the closest protected areas.<sup>61</sup> Due to the temporary duration of construction and distance of construction or operations activities and Facility infrastructure from the protected areas, the Council found that the Facility would not likely result in significant adverse noise impacts at any protected area within the analysis area.<sup>62</sup> No additional noise sources or levels from what was already approved by the Council would be required.<sup>63</sup> Continued implementation of Site Certificate Conditions 106 (reduction of construction noise impacts), 107 (adherence with OAR 340-035-0035 noise requirements), and 108 (reduction of operations noise impacts) will ensure that noise impacts to protected areas will remain minimized.
- **Traffic:** Figure 6B identifies the proposed primary and alternate transportation routes evaluated in Exhibit U to MWP RFA4. The transportation routes for the OTS Facility remain the same as those evaluated in MWP RFA4. The Council previously found that Phase 2 components of the MWP Facility (which include the OTS Facility) would not likely result in significant adverse traffic impacts on any protected areas within the analysis area.<sup>64</sup> Facility traffic was found to be minimal during construction due to temporary, short-term usage of local roads and use of a phased construction approach, and negligible during operations from the small amount of permanent, onsite personnel.<sup>65</sup> Additionally, most roads to be used by Facility personnel were found to not pass through or near any protected areas within the analysis area, with the closest road being 2 miles from the nearest protected area. No additional personnel or vehicle trips, or change in construction duration or transportation routes, from what was already approved by the Council would be required for OTS RFA1.<sup>66,67</sup> Implementation of Site Certificate Condition 73 (reduction of construction traffic impacts) will continue to ensure that traffic impacts are minimized at protected areas. Therefore, the Council may continue to find that since construction and operation traffic for MWP Phase 2 components (which include the OTS Facility) will be located on roads that are at least 2 miles from the closest protected area (Horn Butte ACEC),

<sup>61</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 106-108

<sup>62</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 106-108

<sup>63</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 106-108, 113

<sup>64</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 108-109, 113

<sup>65</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 108-109

<sup>66</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 168-169

<sup>67</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 104

potential traffic- related impacts would not likely result in significant adverse impacts on any protected areas.

- Water Use and Wastewater:** The quantities, sources, and disposal methods of water at the Facility were found to not likely result in significant adverse impacts to any protected area within the analysis area.<sup>68</sup> No water used at the Facility would be discharged into streams, wetland or other waterbodies, and the water sources would remain the same, requiring no water from any protected areas. No additional water quantities from what was already approved by the Council would be required<sup>69,70</sup>. Continued implementation of the following Site Certificate Conditions will ensure that water and wastewater use impacts will remain minimized at protected areas: Site Certificate Conditions 29 (water pollution control facilities permit(s) adherence), 80 (NPDES 1200-C permit and ESCP adherence), 82 (application of water on roads), 83 (avoidance of impacts to jurisdictional waters), 84 (avoidance of waters of the state), 85 (maintenance of erosion and sediment control measures), 86 (usage of onsite well during operations), 87 (control of turbine blade and solar panel-washing runoff), 109 (handling of on-site sewage), 110 (handling of sanitary wastewater discharge), and 111 (confinement of concrete wastewater disposal as part of the construction waste management plan).

**Table 3. Protected Areas Range of Potential Turbine Visibility**

Protected Area	Distance to Nearest Turbine (Miles)	Range of Potential Visibility of Turbine Locations <sup>1</sup>
Horn Butte ACEC	5.4	<6 to >50
Ferry Canyon ACEC	16.4	<6
Boardman Research Natural Area	20.8	<6
Willow Creek Wildlife Area	14.4	<6
John Day Wildlife Refuge	5.9	<6 to >50
John Day Wild and Scenic River	5.8	<6 to >50
John Day State Scenic Waterway	5.8	<6 to >50
1. MWP RFA5 reduced the maximum number of turbines from 81 to 16 and the 16 turbines can be positioned using a combination of the 57 previously evaluated turbine locations in the wind micro-siting corridor within the OTS Facility Site Boundary.		

OTS RFA1 does not seek to enlarge the existing approved OTS Facility site boundary or physical components of the Facility. OTS RFA1 will not impact the Facility's ability to comply with existing Site Certificate conditions as they relate to protected areas. No conditions specific to the Protected

<sup>68</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 109

<sup>69</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 166-167

<sup>70</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 104

Areas standard have been applied by the Council<sup>71</sup>. OTS RFA1 makes no changes that alter the basis for the Council's earlier findings.

Therefore, the proposed changes do not affect the Council's previous findings on Protected Areas and the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0040.

## 6.7 OAR 345-022-0050 Retirement and Financial Assurance

*To issue a Site Certificate, the Council must find that:*

- (1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the Facility.*
- (2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.*

**Response:** The Council previously found that the Facility could be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the Facility.<sup>72</sup> The standards under OAR 345-022-0050 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). The Council also previously found that the Facility, as modified with MWP RFA5, complies with the standards of OAR 345-022-0050.<sup>73</sup> Exhibit W of MWP RFA4 details actions to restore Phase 2 (the phase that includes the OTS Facility) to a useful, non-hazardous condition upon retirement per OAR 345-027-0110.

In MWP RFA4, the Certificate Holder described the tasks and actions necessary to restore the site of the Facility to a useful, nonhazardous condition and the Council imposed several conditions (Condition 7, 8, 9, 32, and 33) to ensure the Certificate Holder would do so in accordance with the Retirement and Financial Assurances standard. To accommodate the institution of a multi-phase development (Phase 1 and Phase 2), and the integration of new technology components, the Council amended conditions 8 and 32.<sup>74</sup> With MWP RFA5, Montague Wind Power Facility, LLC proposed to allocate facility components approved in Council's Final Order on RFA4 to the MWP Facility into two original Site Certificates, including the OTS Facility. The Council previously imposed Condition 32 requiring that, prior to construction, the Certificate Holder submit to the Department a bond or letter of credit in the amount applicable to number of facility components, based on the approved decommissioning estimate methodology. Condition 32 was amended in each Site Certificate to accurately reflect the decommissioning amount applicable to the allocation of

<sup>71</sup> Oregon Trail Solar Facility Site Certificate. 2020. Available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2020-09-25-OTS-Site-Certificate.pdf>

<sup>72</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 123

<sup>73</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 99

<sup>74</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 120-122

previously approved and proposed related or supporting facilities (\$8.1 million for the MS Facility and \$3.5 million for the OTS Facility).<sup>75</sup> The updated retirement cost estimates for OTS wind and solar components, adjusting for inflation, are detailed in Attachment 12 of this OTS RFA1. The updated financial assurance letter based on the updated cost estimate is included as Attachment 13. The proposed change to construction dates and revision to the cultural monitoring requirement does not change compliance with existing and amended conditions. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0050.

## 6.8 OAR 345-022-0060 Fish and Wildlife Habitat

*To issue a Site Certificate, the Council must find that the design, construction and operation of the Facility, taking into account mitigation, are consistent with:*

*(1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017, and*

*(2) For energy facilities that impact sage-grouse habitat, the sage-grouse specific habitat mitigation requirements of the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-415-0025(7) and OAR 635-140-0000 through -0025 in effect as of February 24, 2017.*

**Response:** The Council previously found that the Facility would comply with the Council's Fish and Wildlife Habitat standard with MWP RFA4 and RFA5.<sup>7677</sup> The standards under OAR 345-022-0060 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). The proposed change to extend the construction deadlines for the Facility does not affect the Certificate Holder's ability to comply with any of the other previously imposed Site Certificate conditions for fish and wildlife habitat.

The Certificate Holder conducted a field survey in May 2022 within the OTS solar micro-siting area (Attachment 9). The objective of the survey was to verify or update habitat within the solar micro-siting area. Habitat in these areas were most recently delineated in 2020 during surveys for habitat, burrowing owls, and Washington ground squirrels (Jacobs 2020).<sup>78</sup> Habitat was mapped and classified per the habitat categories set forth in OAR 635-415-0025, including an assessment of habitat quality. Observations of state-designated noxious weeds, state sensitive, threatened, and endangered wildlife species, and state-threatened, endangered, and candidate vascular plant species were recorded if observed (ODA n.d.; ODA 2020; ODA 2022; ODFW 2021a; ODFW 2021b).

<sup>75</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 98

<sup>76</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p.137

<sup>77</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p.99

<sup>78</sup> Montague Wind (Montague Wind Power Facility, LLC). 2019. Request for Amendment Number 4. April 2019.



The survey confirmed that the condition of the solar microsite area remains Category 6 Dryland Wheat (Attachment 9). Mitigation for permanent impacts to Category 6 Dryland Wheat is not required in the Draft Habitat Mitigation Plan referenced in Condition 93(a) nor in the ODFW Fish and Wildlife Habitat Mitigation Policy (OAR 635-415-0010).<sup>79</sup>

The Certificate Holder reviewed state sensitive wildlife species (ODFW 2021a) and occurrences based on updated Oregon Biodiversity Information Center (ORBIC) data (ORBIC 2022) and did not identify any new information that would modify the characterization of state sensitive fish and wildlife species presented in previous amendments (Attachment 14, provided under separate confidential cover). The Certificate Holder notified Mr. Steve Cherry with the Oregon Department of Fish and Wildlife via email on August 15, 2022 of this OTS RFA1 and provided a copy of the Oregon Trail Solar Facility 2022 Habitat and Rare Plants Survey Report (Attachment 9) for ODFW's review.

The Certificate Holder also prepared additional habitat categorization maps (Figure 7A and 7B) within the area subject to OTS RFA1, 0.5-mile fish and wildlife analysis area, and field survey data layers within the OTS solar microsite area. The updated habitat categorization of the solar microsite area is based on the OTS Facility 2022 Habitat and Rare Plants Survey Report (Attachment 9). The habitat categorization shown within the area subject to OTS RFA1 and 0.5-mile fish and wildlife analysis area was reviewed consistent with current available 2020 aerial imagery (Figure 7C, USGS 2020b). The 2020 aerial imagery was applied under the 2017 mapped habitat categories to demonstrate that these habitat categories within the previously approved wind microsite corridor appear substantively similar to currently available aerial imagery. The Certificate Holder also reviewed the most current USGS National Land Cover Database (2019) and USDA National Agricultural Statistics Service Cropland Data Layer (2021) to confirm cultivate crop areas and idle and winter wheat crop areas, respectively, appear substantively similar to the mapped Category 6 Developed-Dryland Wheat shown on new Figures 7A and 7B. In addition, the Certificate Holder reviewed wildfire perimeter data between 2017 and 2022 (National Interagency Fire Center, Wildfire Perimeter Data 2017 to 2022) and verified that no wildfires occurred in the OTS site boundary subject to RFA1 or within the corresponding 0.5-mile analysis area that would alter previously mapped habitat categories.

As previously noted, the amendment will not change the approved impact areas for the OTS Facility and will not change the approved approach to mitigation. Updated temporary and permanent disturbance calculations for the OTS Facility habitat mitigation area are provided in Table 4 that make minor corrections for calculations in the draft OTS Habitat Mitigation Plan.

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<sup>79</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, Attachment D.

**Table 4. Oregon Trail Solar Facility Habitat Mitigation Area**

Category / Impact Type/ Mitigation Area	Approved Habitat Mitigation Plan Area September 2020 <sup>1</sup>			Updated Habitat Mitigation Plan Area November 2022		
	Wind (acres) <sup>2</sup>	Solar (acres) <sup>3</sup>	Mitigation Requirement <sup>4</sup>	Wind (acres) <sup>5</sup>	Solar (acres) <sup>6</sup>	Mitigation Requirement <sup>4</sup>
Category 2						
Footprint Impacts	2.10	-	(2.10 acres x 2)	1.01 <sup>7</sup>	0.0	(1.01 acres x 2)
Temporary Impacts to SSA	0.20	-	(0.20 acre x 2)	0.20	0.0	(0.20 acre x 2)
Mitigation Area	4.60	-	-	2.42	0.0	-
Category 3						
Footprint Impacts	0.44	-	(0.44 acres x 1)	0.44	0.0	(0.44 acres x 1)
Temporary Impacts to SSA	0.09	-	(0.09 acre x 1)	0.09	0.0	(0.09 acre x 1)
Mitigation Area	0.53	-	-	0.53	0.0	-
Category 4						
Footprint Impacts	0.09	-	(0.09 acre x 1)	0.63 <sup>8</sup>	0.0	(0.63 acre x 1)
Temporary Impacts to SSA	0.0	-	(0.0 acre x 1)	0.0	0.0	(0.0 acre x 1)
Mitigation Area	0.09	-	-	0.63	0.0	-
Total						
Mitigation Area	5.22 (6 - Rounded up to Nearest Whole Acre)			3.58 (4 - Rounded up to Nearest Whole Acre)		
<p>1. Areas of potential impact within each affected habitat category and the corresponding mitigation area for each category for the OTS Facility is identified in Section III of the OTS Facility Habitat Mitigation Plan (Attachment D in the Final Order on RFA5 to the MWP Facility).</p> <p>2. September 2020 impact estimates are based on Table 9 (Temporary and Permanent Disturbance by Habitat Category and Subtype – Phase 2 Design Scenario A (Maximum Wind Layout)) in Attachment P-11 (Avian Use and Habitat Disturbance Supporting Data) of Exhibit P in RFA4 to the MWP Facility.</p> <p>3. The approved OTS solar micrositing area occurs entirely in Category 6 habitat. Accordingly, solar development within the approved OTS solar micrositing area does not require mitigation and is not addressed in the OTS Facility Habitat Mitigation Plan (Attachment D in the Final Order on RFA5 to the MWP Facility).</p> <p>4. Mitigation requirements are identified in Section III of the OTS Facility Habitat Mitigation Plan (Attachment D in the Final Order on RFA5 to the MWP Facility).</p> <p>5. November 2022 impact estimates for approved OTS wind components are based on Table 9 in Attachment P-11 of Exhibit P in RFA4 to the MWP Facility and are supplemented by results from the OTS Facility 2022 Habitat and Rare Plants Survey Report shown on Figures 7A and 7B and described in Attachment 9.</p> <p>6. The OTS Facility 2022 Habitat and Rare Plants Survey Report (Attachment 9) demonstrates no change to Category 6 habitat within the approved OTS solar micrositing area. Accordingly, solar development within the approved OTS solar micrositing area does not require mitigation.</p> <p>7. OTS RFA1 makes a correction to remove 1.1 acre of permanent footprint impacts associated with Category 2 GA Exotic Annual Grassland. This acreage is remnant from Turbines C-1 and C-2 of the Phase 2 Design Scenario A from RFA4 to the MWP Facility. This footprint impact was previously shown in Attachment P-11 of Exhibit P in RFA4 to the MWP Facility. Turbines C-1 and C-2 and associated components were subsequently removed from the OTS Facility with RFA5 to the MWP Facility and are removed from the OTS habitat mitigation area.</p>						

Category / Impact Type/ Mitigation Area	Approved Habitat Mitigation Plan Area September 2020 <sup>1</sup>			Updated Habitat Mitigation Plan Area November 2022		
	Wind (acres) <sup>2</sup>	Solar (acres) <sup>3</sup>	Mitigation Requirement <sup>4</sup>	Wind (acres) <sup>5</sup>	Solar (acres) <sup>6</sup>	Mitigation Requirement <sup>4</sup>
8. OTS RFA1 makes a correction to add 0.20 acre of permanent footprint impact associated with a portion of previously approved access road to Turbine K-9 that crosses Category 4 GA Exotic Annual Grassland. OTS RFA1 also adds 0.34 acre of permanent footprint impact to Category 4 GA Exotic Annual Grassland associated with access road and turbine components between Turbines J5 and J6 (0.1 acre) and for potential OTS wind interconnection upgrades at the Montague Solar substation (0.24 acre). Prior to construction of Montague Solar, the habitat in this overlapping area was category 6 Dryland Wheat. The habitat in this area is now a combination of Category 6 Developed (Montague Solar) and Category 4 GA Exotic Annual Grassland (see Table 1, Photo 2, Figure 1, and Figure 2 in Attachment 9).						

The OTS Facility has access to land within the conservation easement held by the MWP to meet its compensatory habitat mitigation obligation, if any. MWP has an 80-acre conservation easement on land owned by KBC, and the conservation easement agreement allows MWP to assign portions of the conservation easement to other parties. If OTS needs to provide habitat mitigation under its Habitat Mitigation Plan, then MWP would assign a portion of the conservation area to OTS. The total conservation area is 65 acres with 19 acres used by MWP, which leaves 46 acres within the conservation easement that are unassigned. Attachment 15 provides the Declaration of Conservation Easement documents. Attachment 15 also provides a map of the conservation easement with a potential 6-acre mitigation area that could be used by OTS and exceeds the potential OTS habitat mitigation need. Habitat mapping for the conservation area found Habitat 2, 3, and 4 shrub steppe and grassland habitat types. Suitable enhancement actions include annual grass control, shrub plantings, and grazing restrictions. There is at least 0.5 acres available of shrub-plantings. There is a grazing restriction in place for the conservation easement.

All previously imposed Council conditions for fish and wildlife habitat apply to OTS RFA1. There will be no changes to the conditions, and the proposed changes do not affect the Certificate Holder's ability to comply with any of the other previously imposed Site Certificate conditions for fish and wildlife habitat. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0060.

## 6.9 OAR 345-022-0070 Threatened and Endangered Species

*To issue a Site Certificate, the Council, after consultation with appropriate state agencies, must find that:*

*(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed Facility, taking into account mitigation:*

*(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or*

*(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and*

*(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed Facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.*

**Response:** The Council previously found in the Final Order on RFA4 to the MWP Facility that the Facility complies with the Council's Threatened and Endangered Species standards.<sup>80</sup> The Council made no specific findings with respect to OAR 345-022-0070 in the Final Order on RFA5 to the MWP Facility. The standards under OAR 345-022-0070 have not changed since the Final Order on RFA4 to the MWP Facility. Based on compliance with existing Site Certificate conditions, the Council determined the Facility is not likely to cause a significant reduction in the likelihood of survival of any threatened or endangered species. According to the USFWS, the Facility site boundary overlaps with critical habitat for a single federally listed species, the bull trout (*Salvelinus confluentus*) (USFW 2022b), but as noted in Exhibit Q for MWP RFA4, no potential habitat exists within the Facility site boundary.

The IPaC resource list is included with this OTS RFA1 as Attachment 16. ODFW's list of threatened and endangered species (ODFW 2021b) includes 52 species. The site boundary contains potentially suitable habitat for one species, Washington ground squirrel (state endangered)<sup>73</sup>. There has been no update to ODFW list of threatened and endangered species since October, 2021 and the Certificate Holder has evaluated current habitat conditions in the site boundary (Tetra Tech 2022) and data on species range and occurrence (ORBIC 2022) to reconfirm that no state listed species, other than Washington ground squirrels, are likely to occur in the site boundary.

Oregon Department of Agriculture (ODA) currently lists 59 plant species as threatened or endangered (ODA 2022a). The site boundary contains potentially suitable habitat for one of these species, Laurent's milk-vetch (*Astragalus collinus* var. *laurentii*). There has been no update to the ODA list of threatened and endangered species since October 12, 2018, and the Certificate Holder has evaluated current habitat conditions in the OTS site boundary (Tetra Tech 2022) and data on species range ranges (ODA 2022b, ORBIC 2022) to reconfirm that no state listed species, other than Laurent's milk-vetch, are likely to occur in the site boundary. OTS RFA1 is proposing an extension of the original construction deadlines and change to cultural resources monitoring requirement. As previously noted in Section 6.8, the Certificate Holder conducted a field site reconnaissance survey in May 2022 within the solar micrositing area (Attachment 9; Tetra Tech 2022). Habitat was assessed specifically to determine suitability for the following threatened, endangered, and

<sup>80</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p.138

candidate species previously identified (Jacobs 2020)<sup>81</sup> as having the potential to occur at the Facility: the state-endangered Washington ground squirrel (*Urocitellus washingtoni*; WGS), the state-threatened plant species, Laurent's milk-vetch (*Astragalus collinus* var. *laurentii*), and the state candidate plant species, sessile mousetail (*Myosurus sessilis*). The survey confirmed that the condition of the OTS solar microsite area remains Category 6 Dryland Wheat, with some areas under active cultivation and limited areas of bare, fallow fields. The Certificate Holder notified Mr. Steve Cherry with the Oregon Department of Fish and Wildlife via email on August 15, 2022 of this OTS RFA1 and provided a copy of the Oregon Trail Solar Facility 2022 Habitat and Rare Plants Survey Report (Attachment 9) for ODFW's review.

WGS can occur within Category 4 Exotic Annual Grassland habitat (see Figure 2 of Attachment 9); however, these areas of Category 4 Exotic Annual Grassland are bounded on all sides by barriers to the dispersal for this species: Category 6 Dryland Wheat to the north and west, an asphalt road to the east, and a Category 6 Developed-Other solar facility to the south that was recently converted from Category 6 Dryland Wheat, which makes WGS movement into this area of marginal habitat since its conversion from Category 6 Dryland Wheat in 2021 unlikely (Tetra Tech 2022). Montague Solar is an active construction site and as such is unsuitable habitat for WGS. Protocol-level surveys were conducted in 2020 for WGS in a survey area that encompassed the entirety of the OTS solar microsite area.<sup>49</sup> The results of WGS surveys are considered valid by ODFW for 3 years; therefore, these results are considered valid for the purposes of OTS RFA1. No WGS were detected in 2020.<sup>49</sup> No WGS were detected incidentally during the 2022 survey.

The Certificate Holder has reviewed the ODFW threatened and endangered species list (ODFW 2021b), and updated threatened and endangered species occurrences provided by ORBIC (ORBIC 2022). The Certificate Holder did not identify any new information that would modify the characterization of threatened and endangered species presented in MWP RFA4 or RFA5. No additional surveys or conditions regarding future surveys are required for the proposed amendment to extend the completion date of the OTS Facility or change the cultural resources monitoring requirement. Additionally, the Draft Wildlife Monitoring and Mitigation Plan (WMMP) for the Facility requires post-construction monitoring and reporting of WGS in areas of the OTS Facility site boundary near identified colonies.

The Certificate Holder has reviewed the ODA threatened and endangered plant species list (ODA 2022) and the updated threatened and endangered species occurrences provided by ORBIC (ORBIC 2022). The Certificate Holder did not identify any new information that would modify the characterization of threatened and endangered species presented in MWP RFA4 or RFA5. Existing Site Certificate Condition 95(b) requires that the Certificate Holder conduct a pre-construction field survey for threatened and endangered plant species which includes Laurent's milk-vetch.

The current ORBIC report (June 2022) shows no new records within the project boundary of the state-endangered Washington ground squirrel (*Urocitellus washingtoni*) or the state-threatened

<sup>81</sup> Montague Wind (Montague Wind Power Facility, LLC). 2019. Request for Amendment Number 4. April 2019.

plant species, Laurent's milk-vetch (*Astragalus collinus* var. *laurentii*) since 2017 (Attachment 14, provided under separate confidential cover). In addition, the National Marine Fisheries Service lists Rock Creek as supporting the federally-threatened steelhead from the Middle Columbia River DPS. The 5-mile buffer from the OTS site boundary subject to RFA1 overlaps Rock Creek but no facilities are proposed in this area. All previously imposed Site Certificate conditions for threatened and endangered species apply to OTS RFA1. There will be no changes to the conditions, and the changes proposed in OTS RFA1 do not affect the Certificate Holder's ability to comply with any of the other previously imposed Site Certificate conditions for threatened and endangered species. OTS RFA1 will not alter the basis for the Council's previous findings. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0070.

## 6.10 OAR 345-022-0080 Scenic Resources

*(1) Except for facilities described in section (2), to issue a Site Certificate, the Council must find that the design, construction and operation of the Facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.*

**Response:** The Council previously found that the Facility would comply with the Council's Scenic Resources standard.<sup>82</sup> In MWP RFA5, the Council found Scenic Resources to be among the standards not likely to be impacted by the request for amendment.<sup>83</sup> The standards under OAR 345-022-0080 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022).

The site conditions have not changed. For instance, the Oregon Community Wildlife Planning Tool uses wildland fire perimeter data up to 2022 and demonstrates there have been no fires within the area subject to OTS RFA1 between 2017 and 2022 (NIFC 2022). Site reconnaissance (Attachment 9) and drone imagery provided in Section 6.5 shows the approved solar micrositing area is still farmed for dry-land wheat. OTS RFA1 does not seek to enlarge the existing site boundary or change physical components of the Facility.

In Exhibit R of MWP RFA4, Montague Wind Power Facility, LLC evaluated the land use and management plans listed below to determine whether scenic resources were identified as significant or important. The Certificate Holder did not identify any new or previously unevaluated land use management plans in the 10-mile analysis area subject to OTS RFA1. None of the land use management plans evaluated with MWP RFA4 and RFA5 have been amended or changed prior to the submission of OTS RFA1. These plans and their sources are listed below and are identified in the references included in Section 10:

<sup>82</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 148

<sup>83</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 119

- Gilliam County Comprehensive Plan and County Zoning and Land Development Ordinance (Gilliam County 2017). As stated on the Gilliam County website, “the Gilliam County Comprehensive Plan and Land Development Ordinance was most recently amended by the Gilliam County Court on May 3, 2017 when marijuana business regulations were adopted.” As detailed in Attachment 2, there have been no Comprehensive Plan changes that will affect the project.
- Morrow County Comprehensive Land Use Plan (Morrow County 2016). No changed or amended versions of the Morrow County Comprehensive Plan were identified during desktop review prior to submittal of RFA1. According to the adopted Department of Land Conservation and Development (DLCD) Post-Acknowledgement Plan Amendments (PAPA), there have been no amendments to the Morrow County Comprehensive Plan since 2016.
- Sherman County Comprehensive Land Use Plan (Sherman County 2007). No changed or amended versions of the Sherman County Comprehensive Plan were identified during desktop review prior to submittal of RFA1. According to the DLCD PAPA adoptions, there have been no amendments to the Sherman County Comprehensive Plan since 2015.
- Klickitat County Comprehensive Plan (Klickitat County 1979). No changed or amended versions of the Klickitat County Comprehensive Plan were identified during desktop review prior to submittal of RFA1. The Klickitat County Municipal Code lists codified ordinances dating back to 1963. According to the codified ordinances list, the Klickitat County Comprehensive Plan has not been amended since 2007.
- Klickitat County Energy Overlay Zone Ordinance: Natural Resources/Energy Comprehensive Plan (Klickitat County 2005). Natural Resources/Energy Comprehensive Plan (Klickitat County 2005); No changed or amended versions of the Klickitat County Energy Overlay Zone (EOZ) were identified during desktop review prior to submittal of RFA1. The Klickitat County EOZ Ordinance was adopted in 2005 as Klickitat County Municipal Code Chapter 19.39, which details in the “editor’s note” in the beginning of the chapter that the last amendment occurred in 2010.
- Roosevelt Community Subarea Plan (Klickitat County 1990). Klickitat County staff provided the most current version of the Roosevelt Community Subarea Plan, which has not been amended since adopted in 1990.
- City of Arlington Comprehensive Plan, June 2003 (City of Arlington 2015). No changed or amended versions of the City of Arlington Comprehensive Plan were identified during desktop review prior to submittal of RFA1. According to the DLCD PAPA adoptions, there have been no amendments to the Arlington Comprehensive Plan since 2015.
- City of Ione Comprehensive Plan (City of Ione 1987). No changed or amended versions of the City of Ione Comprehensive Plan were identified during desktop review prior to submittal of RFA1. According to the DLCD PAPA adoptions, there have been no amendments to the Ione Comprehensive Plan.

- Cottonwood Canyon State Park Comprehensive Plan (OPRD 2011). No changed or amended versions of the Cottonwood Canyon State Park Comprehensive Plan were identified during desktop review prior to submittal of RFA1. The current version of the plan is available on the OPRD website.
- Columbia Basin Wildlife Areas Management Plan (ODFW 2008). According to a desktop search of the Washington Department of Fish and Wildlife, the Columbia Basin Wildlife Area Management Plan was not updated prior to submission of RFA1. The current version of the plan is available on the ODFW website.
- Omnibus Oregon Wild and Scenic Rivers Act of 1988 (United States Congress, 1988); Public Law 100-557, 102 STAT. 2782; 16 United States Code 1271. The Oregon Wild and Scenic Rivers Act is still public law and was last amended in 1988.
- John Day River Basin Record of Decision and Resource Management Plan (BLM 2015). No changed or amended versions of John Day Basin Resource Management Plan were identified during desktop review prior to submittal of RFA1.
- Oregon Trail Comprehensive and Management Use Plan, Oregon National Historic Trail (NPS 1999). According to a desktop search of the NPS, the Oregon Trail Comprehensive Management and Use Plan was not updated prior to submission of RFA1 and is still in use.
- Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use (NPS, 1982). The Lewis and Clark National Historic Trail Comprehensive Management and Use Plan was not updated prior to submission of RFA1 and is still in use.

After assessing the 14 applicable land use plans and federal land management plans (listed above) that pertained to lands within the analysis area, the following scenic and aesthetic areas were identified as shown on Figure R-1 of MWP RFA4:

- Willow Creek Wildlife Area;
- Fourmile Canyon;
- Cottonwood Canyon State Park/Recreation Area;
- John Day Wild and Scenic River/Waterway;
- John Day Wildlife Refuge;
- McDonald Crossing;
- Oregon National Historic Trail (ONHT);
- Lewis and Clark National Historic Trail (potential sites); and
- BLM-managed land.

No changes are proposed to the Facility (aside from construction start/completion dates and the cultural monitoring requirement). Based on the Certificate Holder's review of scenic resources listed in OAR 345-022-0080, there are no new scenic resources located within the 10-mile analysis



area for OTS RFA1 that were not previously evaluated in MWP RFA4 and RFA5 (Figure 8A). The 10-mile analysis area for this amendment request applies to the area subject to OTS RFA1 (Figure 2) and incorporates the same jurisdictions and plans identified above. None of the previously evaluated land use management plans (listed above) have been amended or changed since MWP Facility, LLC's submission of revised MWP RFA5 in April 2020. The Certificate Holder seeks to retain the wind option for the OTS Facility but does not propose to change the number of turbines previously evaluated. The Certificate Holder has not identified any new or previously unevaluated land use management plans in the 10-mile analysis area for the area subject to OTS RFA1. Accordingly, no new resources are identified or discussed as a result of this amendment request.

Figure 8A shows the previously identified and evaluated significant and important scenic resources within the 10-mile analysis area from the area subject to OTS RFA1. The scenic resources identified on Figure 8A include a portion of the John Day Wild and Scenic River and two resources associated with the Oregon National Historic Trail (ONHT), including the Fourmile Canyon Interpretive Site and the McDonald/John Day River Crossing. These three resources were previously evaluated in MWP RFA4.<sup>84</sup> The Council found in the Final Order on MWP RFA4 that the design, construction, and operation of the solar and wind components that are now approved under the OTS Facility Site Certificate are not likely to result in significant adverse impacts on the John Day Wild and Scenic River, the Fourmile Canyon Interpretive Site, or the McDonald/John Day River Crossing.<sup>85</sup>

Zone of Visual Influence (ZVI) analysis was prepared for MWP RFA4 to assess the potential visibility of wind components from the significant and important scenic resources identified above. The MWP RFA4 ZVI analysis used the layout for MWP Phase 2 Design Scenario A (81 turbines) with the turbine height of Design Scenario B (597 feet [182 meters]) to represent the most and tallest turbines over the largest area (i.e. worst-case) within the wind micrositing corridor. As described in MWP RFA5, the OTS Facility wind layout is a reduction of the previously evaluated and approved Phase 2 layout from MWP RFA4. Specifically, MWP RFA5 reduced the maximum number of turbines from 81 to 16 turbines which can be positioned using a combination of the 57 previously evaluated turbine locations remaining in the wind micrositing corridor within the OTS Facility Site Boundary. Accordingly, Figure 8B shows the worst-case ZVI analysis from MWP RFA4 for the 57 previously evaluated turbine locations that can be used to site the 16 turbines within the OTS Facility Site Boundary. Potential visibility is summarized below:

#### John Day Wild and Scenic River

- The John Day River and associated river canyon are approximately 5.8 miles from the nearest OTS Facility wind turbine location (Figure 8A).
- Based on the ZVI analysis shown on Figure 8B, no Facility components will be visible from the river or the majority of the John Day Wild and Scenic River area within the canyon along the river.

<sup>84</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 146 through 148

<sup>85</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 148

- Consistent with previous analysis evaluated in MWP RFA4, the ZVI analysis on Figure 8B suggests it is possible that small, limited areas along the river canyon wall and rim may have some visibility of the OTS turbine locations, but these areas of potential visibility are distant from the OTS Facility, and not readily accessible by the public. As such, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse impact on the John Day Wild and Scenic River.

#### Fourmile Canyon Interpretive Site

- The Fourmile Canyon Interpretive Site is approximately 6.8 miles from the nearest OTS Facility wind turbine location (Figure 8A).
- Based on the ZVI analysis shown on Figure 8B, between 6 and 15 of the 57 previously evaluated and approved turbine locations in the OTS Facility Site Boundary may be visible from the Fourmile Canyon Interpretive Site. Consistent with previous analysis evaluated in MWP RFA4, the site directs viewers towards the southernmost trail segment extending up an adjacent foothill located to the west. The Council previously imposed Condition 105 in the MWP Site Certificate which restricted the Certificate Holder's ability to site turbine and meteorological towers within 1,000 feet of the centerline of the line-of-sight of the Fourmile Canyon Interpretive Site. However, the Council administratively removed Condition 105 from the OTS Facility Site Certificate because the distance from the interpretive site to the wind micositing corridor well exceeded 1,000 feet.<sup>86</sup> At a distance of 6.8 miles, the OTS Facility wind components will not be closer to the Fourmile Canyon Interpretive Site than previously evaluated. For these reasons, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse impact on the Fourmile Canyon Interpretive Site.

#### McDonald/John Day River Crossing

- The McDonald/John Day River Crossing is approximately 8.2 miles from the nearest OTS Facility wind turbine location (Figure 8A).
- As previously evaluated in MWP RFA4 and shown on Figure 8B, the McDonald/John Day River Crossing is located within the John Day River canyon, and the OTS Facility will not be visible at the McDonald/John Day River Crossing. For this reason, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse impact on the McDonald/John Day River Crossing.

As previously described in Exhibit R to MWP RFA4, the visibility pattern that the ZVI analysis presents does not take into account the screening role of vegetation, trees, and other structures. In some areas where visibility is indicated, views of the turbines will be screened by trees, vegetation, or other structures in the foreground. In addition, the ZVI model is a line-of-sight model that does not account for attenuating factors such as distance, haze, humidity, background landscape, or

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<sup>86</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 119

weather, which will make the OTS Facility invisible or barely visible from certain locations under many atmospheric or weather conditions. The ZVI is conservative in that the actual visibility of the OTS Facility wind components will be less than indicated on Figure 8B.

OTS RFA1 does not seek to enlarge the existing site boundary or physical components of the Facility. There are no proposed changes to the previously approved facilities, phasing or resources, such as roads, water, or construction resources. Temporary vegetation loss would be restored through the Certificate Holder's implementation of a final Habitat Mitigation and Revegetation Plan, to be reviewed and approved by the Department prior to construction, and in accordance with previously imposed Condition 93. In order to reduce potential visual impacts, including impacts to Scenic Resources, the Council also previously imposed Conditions 102 through 104; these conditions will continue to apply to the Facility. The OTS RFA1 does not change the ability of the OTS Facility to comply with conditions imposed to reduce visual impacts. Therefore, the Council may continue to find that OTS Facility design, construction, and operation is not likely to result in significant adverse impacts to the John Day Wild and Scenic River, the Fourmile Canyon Interpretive Site, or the McDonald/John Day River Crossing and that OTS RFA1 complies with the Council's Scenic Resources standard.

### 6.11 OAR 345-022-0090 Historic, Cultural and Archaeological Resources

*(1) Except for facilities described in sections (2) and (3), to issue a Site Certificate, the Council must find that the construction and operation of the Facility, taking into account mitigation, are not likely to result in significant adverse impacts to:*

*(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;*

*(b) For a Facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in 358.905(1)(c); and*

*(c) For a Facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).*

**Response:** The Council previously found that the Facility would comply with the Council's Historic, Cultural, and Archaeological Resources standard with MWP RFA 4 and RFA 5.<sup>87,88</sup> The standards under OAR 345-022-0090 have not received substantive changes since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). Nor has the Oregon State Preservation Office updated ORS 358.905 or its policies (State of Oregon 2021).

The OTS solar micrositings area was surveyed between 2010 and 2018. The results of the cultural resources surveys are documented in the confidential cultural resources survey reports provided as MWP RFA4 Attachments S-1 through S-7. Five built environment resources and one historical archaeological resource were identified within the analysis area. One built environment resource

<sup>87</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 159

<sup>88</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 103

(Weatherford Barn) was previously determined eligible for listing on the NRHP; however, the historic Weatherford Barn is no longer present as it was deconstructed and removed by the landowner. Of the other four built environment resources identified in MWP RFA4 Attachment S-1 (Sheldon et al., 2017) 68040 Highway 19, 69180 Weatherford Road, and 69064 Weatherford Road have been determined by SHPO as not eligible for listing on the NRHP, and 69398 Berthold Road is determined eligible for listing on the NRHP. The single archaeological resource (35GM306) was documented as a part of the Baseline Survey (Ragsdale et al., 2011) and SHPO determined it was not eligible for listing on the NRHP. The Certificate Holder reviewed SHPO's databases on October 18, 2022 and confirmed there have been no new NRHP-eligible resources identified within the site boundary.

The NRHP eligible farmstead complex located at 69398 Berthold Road consists of a collection of farm buildings, including a residence, a detached garage, a grain elevator and silo, an outbuilding, a barn, and a shed. The property was originally documented in 2010 as a part of the Baseline Facility surveys (Ragsdale et al., 2011). In a March 1, 2019 comment letter on MWP RFA4, SHPO recommended that the 69398 Berthold Road farmstead be considered likely NRHP-eligible.<sup>89</sup> However, the Final Order on MWP RFA4 clarifies that the MWP Phase 2 facility components (which include the OTS Facility wind components subject to this OTS RFA1) would not have a significant adverse impact on the 69398 Berthold Road farmstead complex based on component location and distance to the built environment property (69398 Berthold Road).<sup>90</sup> The OTS Facility solar microsite area was approved with MWP RFA5. The Final Order on MWP RFA5 also concluded that with the RFA5 modifications (which included the OTS Facility solar microsite area), the OTS Facility would not be likely to result in significant adverse impacts on resources protected by the Council's Historic, Cultural and Archaeological Resources standard.<sup>91</sup>

The Certificate Holder affirms that the previously evaluated and approved OTS Facility wind components and solar microsite area do not change as a result of OTS RFA1. At its nearest point, the approved OTS Facility solar microsite area is approximately 1 mile southeast of the 69398 Berthold Road farmstead complex. The OTS Facility wind layout proximity to the built environment property (69398 Berthold Road) is the same as approved in MWP RFA4 and does not change SHPO or the Council's previous finding that the OTS Facility would not be likely to result in significant adverse impacts on the 69398 Berthold Road farmstead complex.

The Certificate Holder affirms that the OTS Facility wind layout shown on Figure 9A identifies the turbine locations for the worst-case wind layout considered for the OTS Facility. As described in MWP RFA5, the OTS Facility wind layout is a reduction of the previously evaluated and approved Phase 2 layout from MWP RFA4. Specifically, MWP RFA5 reduced the maximum number of turbines

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<sup>89</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 153

<sup>90</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 153

<sup>91</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 103

from 81 to 16, which can be positioned using a combination of the 57 previously evaluated turbine locations remaining in the wind micrositing corridor within the OTS Facility Site Boundary.

The ONHT trail route shown on Figure 9A is over 0.5 miles (approximately 2,750 feet) north of the nearest OTS Facility wind turbine. At this distance, the OTS Facility wind layout exceeds the 30 meter avoidance buffer specified in Condition 48(d). In addition, no OTS Facility components will be located on visible remnants of the ONHT pursuant to Condition 48(a) or on existing marked segments of the ONHT pursuant to Condition 48(b). The Certificate Holder will comply with Condition 48(c) to provide SHPO and the Department with presumed ONHT alignments in the OTS Facility Site Boundary if identified prior to beginning construction.

For additional context, the Council previously imposed Condition 105 in the MWP Site Certificate which restricted the Certificate Holder's ability to site turbine and meteorological towers within 1,000 feet of the centerline of the line-of-sight of the ONHT Fourmile Canyon Interpretive Site. The Council previously concluded that, with the adopted Condition 105, the MWP Facility would not have a significant adverse effect on the view of the ONHT ruts. However, the Council administratively removed Condition 105 from the OTS Facility Site Certificate because the distance from the interpretive site to the OTS wind micrositing corridor well exceeded 1,000 feet.<sup>92</sup> As described above, the ONHT trail route shown on Figure 9A is over 0.5-miles (approximately 2,750 feet) north of the nearest OTS Facility wind turbine. At this distance, the OTS Facility will not result in significant adverse direct or indirect impacts on the ONHT. For these reasons, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse impact on the ONHT.

Since 2018, two additional surveys, within the OTS Solar Micrositing area have been submitted to SHPO. These include an inadvertent discovery investigation for the MS Facility (King 2021) and additional survey of the MS Facility and OTS Facility (Sheldon 2020). While monitoring ground disturbance for the MS Facility, an archaeologist found a historic tractor grill. This inadvertent discovery was not found eligible for listing on the NRHP (King 2021). During the additional survey of the MS Facility and OTS Facility, in 2020, archaeologists surveyed 116 acres within the larger MWP Facility. No cultural resources were identified during this survey (Sheldon 2020). The additional MS Facility and OTS Facility (Sheldon 2020) survey and the inadvertent discovery investigation for the MS Facility (King 2021) are submitted to ODOE under separate confidential cover (Attachment 17). The characteristics of the OTS solar micrositing area have been extensively disturbed from historic land use such as cultivation and the archaeological sensitivity of the area is assessed to be low.

Currently, Condition 50(b) states that a cultural monitor be present during "ground disturbance at depths 12 inches or greater" but this condition language was difficult to implement during MS Facility construction because it practically applied to all construction activities. CTUIR monitors, under contract to Montague Solar, LLC, completed 108 days of monitoring between March 17, 2021 and December 15, 2021 at the MS Facility with discovery of one isolated find that was determined

<sup>92</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 119

not eligible for listing on the NRHP. Monitoring at the MS Facility occurred where soils throughout the area were observed to be extensively disturbed from historic land use, evidenced by a lack of stratigraphy and observed mixing of soils. From these observations, the archaeological sensitivity of the area was assessed to be low by Tetra Tech's and CTUIR's qualified Project Archaeologists and cultural resource monitors (Attachment 1). In response to these observed conditions, Montague Solar, LLC, developed a Construction Monitoring Plan for the MS Facility that detailed a plan to apply professional judgement and reduce monitoring (Attachment 1). CTUIR found the changes acceptable for the MS Facility and the Certificate Holder seeks to follow the same approach at the OTS Facility. Based on this experience, the Certificate Holder seeks to modify Condition 50(b) revised from "*Ground disturbance at depths 12 inches or greater*" to "*Ground disturbance at depths 12 inches or greater during grading, trenching, or drilling activities*"<sup>93</sup> as a way to limit monitoring efforts to only those activities most likely to inadvertently discover buried cultural resources.

As identified in Section 4 of the MS Facility Construction Monitoring Plan (Attachment 1), OTS Facility cultural resources construction monitoring is proposed to occur only while soils above the C horizon are being disturbed. (The C horizon is defined as the stratigraphic layer immediately above the bedrock, consisting chiefly of weathered, partially decomposed rock. Archaeological resources are not considered likely to occur within or below this depth.) Cultural resource monitoring will not be required once all surface and subsurface ground disturbance for the collection lines is completed, when disturbance extends beneath the C horizon, or in areas where bedrock is present at the ground surface. Monitoring is not required for routine travel on existing roads; however, additional excavations at a depth beyond the previously disturbed area and above the C horizon will be monitored for cultural resources, even within previously excavated areas.

The OTS Facility is in a similar setting and context (rural agricultural fields, low archaeological site density, low level of historic activity, same soils, topography, and deposition) as the MS substation which suggests a similarly low level of archaeological sensitivity. As described in the responses above, the Certificate Holder has engaged with the CTUIR on this amendment request and received their concurrence on this proposed change. The Certificate Holder's proposed revision to Condition 50(b) does not change the type of mitigation, nor does it remove the cultural resource monitoring requirement, but rather, provides greater discretion to the cultural resources monitor team, including the CTUIR, on determining when the requirements can be reduced. For example, the change to Condition 50(b) also incorporates the following addition, "*The Certificate Holder may modify the cultural monitoring plan in consultation with the CTUIR and notification to the Department.*"

The Certificate Holder does not propose to add any new or amended conditions other than the updates to Conditions 50(b) to reflect the changes proposed in this amendment request. The Certificate Holder does not propose changes to the balance of conditions in the Fifth Amended Site

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<sup>93</sup> Initial disturbance at any depth between 12 inches below ground surface and C horizon. The C horizon is defined as the stratigraphic layer immediately above the bedrock, consisting chiefly of weathered, partially decomposed rock. Archaeological resources are not considered likely to occur within or below this depth.

Certificate. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, is not likely to result in significant adverse impacts on resources protected by the Council's Historic, Cultural and Archaeological Resources standard and will continue to comply with OAR 345-022-0090.

## 6.12 OAR 345-022-0100 Recreation

*(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.*

**Response:** The Council previously found that the Facility complies with the Council's Recreation standard.<sup>94</sup> In MWP RFA5, the Council found the Recreation standard to be among the standards not likely to be impacted by the request for amendment.<sup>95</sup> The standards under OAR 345-022-0100 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). The Final Order on Amendment 4 identifies recreational opportunities previously evaluated within 5 miles from the approved site boundary. Based on the Certificate Holder's review, there are no new recreational opportunities located within the 5 mile analysis area for this OTS RFA1 (Figure 9).

The site conditions have not changed. For instance, the Oregon Community Wildlife Planning Tool uses wildland fire perimeter data up to 2022 and demonstrates there have been no fires within the area subject to OTS RFA1 between 2017 and 2022 (NIFC 2022). Site reconnaissance (Attachment 9) and drone imagery provided in Section 6.5 shows the approved solar micrositing area is still farmed for dry-land wheat. OTS RFA1 does not seek to enlarge the existing site boundary or change physical components of the Facility.

Table T-1 in MWP RFA4 provided an inventory of recreational resources in the analysis area, which included:

- Port of Arlington Park and Marina
- Earl Snell Memorial Park

<sup>94</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 165

<sup>95</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 115

- Alkali Park
- City Park
- China Creek Golf Course
- Arlington State Park
- Roosevelt Park
- Horn Butte Wildlife Area
- John Day Wildlife Refuge Area
- Lewis and Clark National Historic Trail
- Oregon National Historic Trail (ONHT)
- ONHT McDonald and John Day Crossing Interpretive Site
- ONHT Fourmile Canyon Interpretive Site
- ONHT Historical Markers (Oregon Highway 19 and Oregon Highway 74)
- Blue Mountain Scenic Byway
- Lewis and Clark Trail Scenic Byway
- BLM-administered lands

The Certificate Holder examined recreational opportunities within the 5 mile analysis area for this OTS RFA1 and did not find any new recreational opportunities that were not previously identified with MWP RFA4 and RFA5.

The Certificate Holder performed the same analysis prior to submittal of OTS RFA1 and did not identify any new or previously unevaluated recreational opportunities in the 5-mile analysis area subject to OTS RFA1. Recreational opportunities previously determined by the Council to be important and within the 5-mile analysis area subject to OTS RFA1 are shown on Figure 9A and include the following (OPRD 2022a):<sup>96</sup>

- ONHT Fourmile Canyon Interpretive Site (NPS 1999); and
- Cottonwood Canyon State Park (OPRD 2011).

These recreational resources were previously identified on prior amendments. Many of the recreation areas listed in Table T-1 in MWP RFA4 (i.e., Blue Mountain Scenic Byway, Rock Creek, and Oregon Trail John Day Crossing) are beyond the 5-mile analysis area subject to OTS RFA1 and no new resources were identified. Note: Arlington State Park, is no longer designated by the Oregon Parks and Recreation Department (OPRD 2022a). In addition, the following recreational

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<sup>96</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, Table 8, p. 160 and 161



opportunities within the 5-mile analysis area from the OTS area subject to RFA1 were previously evaluated under MWP RFA4 and determined not to be important recreational opportunities:<sup>97</sup>

- Oregon National Historic Trail and ONHT Historical Markers. The ONHT and associated historical markers are not important recreational opportunities but are maintained on Figure 9A to provide context for the location of the trail route and proximity to the Fourmile Canyon Interpretive Site.
- Horn Butte Wildlife Area (ACEC). The Horn Butte Wildlife Area ACEC occurs on the perimeter of the 5-mile analysis area from the OTS area subject to RFA1. The Horn Butte Wildlife Area ACEC is not an important recreational opportunity but is maintained on Figure 9A because it provides access to the ONHT and Fourmile Canyon Interpretive Site.
- Public BLM-administered lands.

OTS RFA1 does not seek to enlarge the existing site boundary or physical components of the Facility. There are no proposed changes to the previously approved facilities, phasing or resources, such as roads, water, or construction resources. OTS RFA1 will not impact the Facility's ability to comply with existing Site Certificate conditions as they relate to recreation. Findings that address potential impacts are summarized below with supporting evidence provided on Figure 9B (Recreational Opportunities: Transportation Routes) and Figure 9C (Recreational Opportunities: Potential Visibility):

Figure 9B identifies the proposed primary and alternate transportation routes evaluated in Exhibit U to MWP RFA4. The transportation routes for the OTS Facility remain the same as those evaluated in MWP RFA4:

#### ONHT Fourmile Canyon Interpretive Site

- The ONHT Fourmile Canyon Interpretive Site can be accessed from I-84 to OR 19 to Fourmile Road or from I-84 to OR 74 to Fairview Lane (Figure 9B). While construction-related traffic may cause brief traffic delays along primary and alternate transportation routes, it is not anticipated that these delays will adversely affect the previously assessed low demand of the remote ONHT Fourmile Canyon Interpretive Site. In addition, Conditions 73, 74, 75, and 81 were applied to mitigate traffic impacts from the Facility.<sup>98</sup>

#### Cottonwood Canyon State Park

- The Cottonwood Canyon State Park is accessed primarily from portions of the Wasco-Heppner Highway (OR 206) located outside of the analysis area. Construction and operation related traffic will not impede access to this important recreational opportunity.

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<sup>97</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, Table 8, p. 160 and 161

<sup>98</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 164

For these reasons, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in significant adverse impacts on traffic safety associated with important recreational opportunities.

Figure 9C shows the worst-case ZVI analysis from MWP RFA4 for the 57 previously evaluated turbine locations that can be used to site 16 turbines within the OTS Facility Site Boundary.

Potential visibility is summarized below:

ONHT Fourmile Canyon Interpretive Site

- The Fourmile Canyon Interpretive Site is approximately 6.8 miles from the nearest OTS Facility wind turbine location (Figure 9C).
- Based on the ZVI analysis shown on Figure 9C, between 6 and 15 of the 57 previously evaluated and approved turbine locations in the OTS Facility Site Boundary may be visible from the Fourmile Canyon Interpretive Site. Consistent with previous analysis evaluated in MWP RFA4, the site directs viewers towards the southernmost trail segment extending up an adjacent foothill located to the west. The Council previously imposed Condition 105 in the MWP Site Certificate which restricted the Certificate Holder's ability to site turbine and meteorological towers within 1,000 feet of the centerline of the line-of-sight of the Fourmile Canyon Interpretive Site. However, the Council administratively removed Condition 105 from the OTS Facility Site Certificate because the distance from the interpretive site to the OTS wind micro-siting corridor well exceeded 1,000 feet. At a distance of 6.8 miles, the OTS Facility wind components will not be closer to the Fourmile Canyon Interpretive Site than previously evaluated. For these reasons, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse impact on the Fourmile Canyon Interpretive Site.

Cottonwood Canyon State Park

- Cottonwood Canyon State Park is approximately 5.7 miles from the nearest OTS Facility wind turbine location (Figure 9C).
- Figure 9C shows that a small portion of Cottonwood Canyon State Park is located within the 5-mile analysis area for recreational opportunities. The ZVI analysis indicates that 0 to 5 OTS Facility wind turbines could potentially be visible from the small corner of the park within the analysis area. For most of the park, including the area along the John Day River, which is the park's most important use area, no turbines will be visible. For these reasons, the Council may continue to find that the design, construction, and operation of the OTS Facility is not likely to result in a significant adverse impact on the Cottonwood Canyon State Park.

Because OTS RFA1 will not change the proposed construction and operation of facility components approved with MWP RFA4, it does not change the discussion of potential impacts to previously evaluated recreational opportunities. Therefore, the Council may conclude that the Facility as

amended by OTS RFA1 is not likely to result in a significant adverse impact on important recreational opportunities and will continue to comply with OAR 345-022-0100.

### **6.13 OAR 345-022-0110 Public Services**

*(1) Except for facilities described in sections (2) and (3), to issue a Site Certificate, the Council must find that the construction and operation of the Facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.*

**Response:** The Council previously found that the OTS Facility would comply with the Council's Public Services Resources standard.<sup>99</sup> The standards under OAR 345-022-0110 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). The proposed changes in this OTS RFA1 do not alter the OTS Facility's construction, use, or reliance on sewers and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, or schools, and there are no other circumstances that would alter the basis for the Council's earlier determination. The Final Order on RFA5 stated that the amendment would not result in increased water use or wastewater disposal, or waste generation. In addition, the Final Order on RFA5 noted the proposed amendment would not result in changes to the previous assumptions related to maximum number of workers at the site, or daily vehicle miles travelled to and from the site. As such, the Council previously found that MWP RFA5 was not likely to change the previous findings that Facility construction and operation would not result in significant adverse impacts on the ability of providers of sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police, health care, or schools, to provide service.<sup>100</sup> To address fire protection, the Council amended Condition 60, requiring that the fire safety plan specifically address worker training requirements, inspections (type and frequency), vegetation management, fire prevention and response equipment, and agreements for mutual assistance in fire response to MWP RFA5's expanded solar micrositing area.<sup>101</sup>

This OTS RFA1 is submitted to extend construction deadline and revise the cultural monitoring requirement. OTS RFA1 does not seek to enlarge the existing site boundary or physical components of the Facility. There are no proposed changes to the previously approved facilities, phasing or resources, such as roads, water, or construction resources. OTS RFA1 will not impact the Facility's ability to comply with existing Site Certificate conditions as they relate to public services.

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<sup>99</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 172

<sup>100</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 104

<sup>101</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 105

The following service providers were contacted to confirm the proposed amendment would not impact current service/supply levels:

- City of Arlington: As detailed in the updated service provider letter (Attachment 3), the Public Works Superintendent, Shanna Gronquist, said she anticipates the City of Arlington will still have the means to meet Facility demands.
- Gilliam County Sheriff's Office: As detailed in the updated service provider letter (Attachment 3), Sheriff Gary Bettencourt said the amendment does not change the ability or the commitment of the Gilliam County Sheriff's Office in responding appropriately and as necessary to all complaints that come from the project.
- Gilliam County Fire Services: As detailed in the updated service provider letter (Attachment 3), the Gilliam County Fire Services Coordinator reviewed the request and had no concerns with the construction deadline amendment as it should not impact our county fire services.

Condition 64 requires the Certificate Holder to submit a Notice of Proposed Construction or Alteration to the Federal Aviation Administration and the Oregon Department of Aviation identifying the proposed final locations of turbine towers and meteorological towers to determine if the structure(s) are a hazard to air navigation and aviation safety. RFA1 will not impact the Facility's ability to comply with this condition.

The current Gilliam County Transportation System Plan (Gilliam County 2015) identified energy as an important industrial activity for which intermodal connections must be maintained. The TSP includes specific goals and objectives to promote a transportation network that supports wind turbine industry. Condition 73 requires the Certificate Holder to implement measures prior to construction that reduce traffic impacts. RFA1 will not impact the Facility's ability to comply with this condition. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0110.

## 6.14 OAR 345-022-0115 Wildfire Prevention and Risk Mitigation

*(1) To issue a site certificate, the Council must find that:*

*(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:*

**Response:** This section demonstrates that the design, construction, and operation of the OTS Facility, taking into account mitigation, is not likely to result in significant adverse impacts on areas subject to a heightened risk of wildfire or high-fire consequence areas addressed under OAR 345-022-0115. This section provides an overview of potential wildfire risks from the OTS Facility and outlines recommended steps to mitigate the potential risk. The Certificate Holder prepared the OTS Facility's Wildfire Mitigation Plan (WMP), provided as Attachment 18, to meet OAR 345-022-0115(1)(b).

The OTS site certificate includes any combination of previously approved wind and solar facility components within previously approved site boundary area (13,867 acres), the 9,424-acre wind

micrositing corridor, and the 1,228-acre solar micrositing area. In this section, the applicant provides an overview of potential wildfire risks within the solar micrositing area, the area subject to OTS RFA1 (13,734 acres) which excludes the operational 230-kV line from the previously approved site boundary, and the wildfire analysis area. The wildfire analysis area is approximately 28,959 acres within a 0.5 mile buffer of the area subject to OTS RFA1.

### 6.14.1 Baseline Fire Risk

*(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;*

#### Response:

The baseline wildfire risk within the solar micrositing area subject to OTS RFA1 and wildfire analysis area is low to moderate. This is based on the relatively flat topography of the area with a few steeper areas along roads and canyons, few existing structures, low-density infrastructure, cultivated crops as the primary land cover, and a semi-arid climate.

#### Topography

The area subject to OTS RFA1 and surrounding wildfire analysis area are located in the Columbia Plateau, which consists of a large plateau underlain by a series of basalt flows. The top of the plateau tends to be relatively flat to gently rolling, but streams have dissected the plateau into steep-sided canyons. Elevations at the site range from approximately 600 feet above mean sea level in Alkali Canyon in the north and Rock Creek in the west, to 1,200 feet above mean sea level on the plateau under the south side of the site. The majority of the area within the area subject to OTS RFA1 and surrounding wildfire analysis area have less than a 25-degree slope, with the above-mentioned canyon areas in the area subject to OTS RFA1 having a few steeper slopes (>25 degrees) in the north and southwest (Table 5; Figure 10A). Potential wildfires would travel quicker on steeper slopes and slower on the flatter portions of land within the wildfire analysis area. The wildfire analysis area has primarily flat topography but has areas of steeper topography including in Alkali Canyon in the north along Cedar Springs Lane, Cow Canyon in the east, and along Rock Creek to the west and south which runs parallel to Middle Rock Creek Lane.

**Table 5. Slope**

<b>Slope (degrees)</b>	<b>OTS Solar Micrositing Area</b>	<b>Area Subject to OTS RFA1</b>	<b>Wildfire Analysis Area</b>
0-25	100.0%	99.8%	99.7%
25-50	0.0%	0.2%	0.3%
50-75	0.0%	0.0%	0.0%
<b>Total Acreage</b>	<b>100% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>

### Vegetation

As discussed in the Final Order on MWP RFA 4, MWP RFA5, and above in this OTS RFA1, the majority of the habitat classification within the area subject to OTS RFA1 and the micrositng areas are category 6 habitat because the area is considered developed agricultural lands. The broad fuel model groups (vegetation type) are derived from data from the Oregon CWPP Planning Tool. The fuel model data indicates that the majority of the vegetation within the solar micrositng area is low load dry climate grass (Fuel Model 102) and agricultural fields (Fuel Model 93) (Table 6; Figure 10B).

**Table 6. Fuel Models**

<b>Fuel Model #</b>	<b>OTS Solar Micrositing Area</b>	<b>Area Subject to OTS RFA1</b>	<b>Wildfire Analysis Area</b>
91	2.0%	2.5%	2.5%
93	47.7%	33.1%	29.4%
99	0.0%	1.8%	4.1%
101	0.8%	0.8%	0.8%
102	49.3%	58.4%	57.1%
121	0.1%	0.3%	0.4%
122	0.1%	3.1%	5.5%
<b>Total Acreage</b>	<b>100% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>

Fuel model groups describe the fire-carrying fuel type of the surface fuels. The groups are broad categories (grass, shrub, timber, timber litter, timber understory, and slash/blowdown.) of burnable fuels based on descriptions of live and dead vegetation that represent distinct fuel types, size classes, and load distributions (amounts). The primary carrier of fire for Fuel Model 102 is grass where the fuelbed is more continuous (NWCG 2021). The agricultural field (Fuel Model 93) is land maintained in a non-burnable condition such as irrigated annual cropland (NWCG 2021). The primary carrier of fire for Fuel Model 102 is grass whereas the primary carrier of fire for Fuel Model 122, which is nearly 6 percent of the wildfire analysis area, is grass and shrubs where the spread rate is high and flame length is moderate (NWCG 2021). Typical fire regimes in grassland and steppes of the Columbia River Plateau are characterized by a fire return interval (the number of years expected between fires) of 40 to 81 years. A further discussion of Fuel Model Groups and Fuel Models which describe the composition and characteristics of fire fuels is provided below under the evaluation of Seasonal Wildfire Risk.

### Existing Infrastructure

The existing infrastructure in the solar micrositng area includes a distribution line and a residence along Bottemiller Lane. The existing infrastructure within the area subject to OTS RFA1 includes a distribution line, residences, and agricultural structures along Weatherford Road and John Day Highway (Highway 19) running north to south in the middle as well as a distribution line along

Bottemiller Lane. In between Weatherford Road and John Day Highway in the north are additional agricultural properties. There is also a distribution line along North Tree Road in the north that runs east to west. In the eastern corner, there is a distribution line over a road in a slight canyon connecting areas of wind turbines. In the southwest corner just east of Middle Rock Creek Lane there is a distribution line. Existing structures outside of the area subject to OTS RFA1 but within the wildfire analysis area to the north in Alkali Canyon along Cedar Springs Lane include distribution lines, and the Palouse River & Coulee City railroad mainline and yard. Also in the north within the wildfire analysis area are wind turbines that run parallel and across to Weatherford Road. Along the west down south within the wildfire analysis area includes residences, agricultural properties, and distribution lines along Middle Rock Creek Lane to where it meets John Day Highway to the south. Also in the south, the wildfire analysis area includes residences and distribution lines following Baseline/Ione Road. To the east outside of the area subject to OTS RFA1 but within the wildfire analysis area, are existing infrastructure including wind turbines. The roads throughout the wildfire analysis area would act as firebreaks. These include Bottemiller, Weatherford Road, John Day Highway, North Tree Road, Middle Rock Creek Lane, Cedar Springs Lane, and Baseline Lane/Ione Road.

### Climate

The area has a cooler, semi-arid climate. Based on available monthly normals of climate data between 1991 and 2020 for the Condon station approximately 18 miles south of the area subject to OTS RFA1, the driest months on average are July, August, and September which average 0.39, 0.38, and 0.47 inches per month, respectively (Table 7; NOAA 2022). These three summer months are also the hottest months with average daily max temperatures of 84.1°F, 83.9°F, and 75.0°F, respectively (Table 7; NOAA 2022). The total average annual precipitation for the area is 14 inches per year which is indicative of a semi-arid climate (NOAA 2022). Additionally, the area receives approximately 25 inches of snow in the winter months with the coldest month, December, having approximately 10 inches of snowfall, an average daily maximum temperature of 39°F, and an average daily minimum temperature of 25°F (Table 7; NOAA 2022).

**Table 7. Summary of Monthly Normal Temperature and Precipitation at Condon Station (1991 - 2020)**

Month	Max Temp (°F)	Avg Temp (°F)	Precipitation (inches)
January	40.2	33	1.81
February	44.2	35.7	1.26
March	51.5	41.3	1.2
April	57.9	46.3	1.3
May	66.7	54.2	1.65
June	73.4	60	1.11
July	84.1	68.3	0.39
August	83.9	68.1	0.38
September	75	60.5	0.47

Month	Max Temp (°F)	Avg Temp (°F)	Precipitation (inches)
October	61.2	49.3	1.17
November	48	39.3	1.51
December	39	32.1	1.82
Source: Condon Station, OR US USC00351765 (NOAA 2022).			

### Burn Probability

Burn probability is the likelihood of a wildfire greater than 250 acres burning a given location, based on wildfire simulation modeling. This is an annual burn probability, adjusted to be consistent with the historical annual area burned. The burn probability classes range from nonburnable (a majority of non-burnable fuel types such as water, agriculture, or urban) to very high burn probability, which indicates a greater than 1-in-50 chance of a acres in a single year. The solar micrositeing area, area subject to OTS RFA1, and wildfire analysis area all have burn probabilities consisting of primarily zero (agricultural areas) or high probability (1-in-500 to 1-in-100) (Table 8; Figure 10C). However there is also an area of higher burn probability (1-in-100 to 1-in-50) south of the area subject to OTS RFA1, but within the wildfire analysis area between Upper Rock Creek Road and Baseline Lane.

**Table 8. Burn Probability**

Burn Probability	OTS Solar Micrositeing Area	Area Subject to OTS RFA1	Wildfire Analysis Area
0	49.9%	37.8%	36.5%
<b>Low</b> (<= 1-in-10,000)	0.0%	0.0%	0.0%
<b>Low</b> (1-in-10,000 to 1-in-5,000)	0.0%	0.1%	0.1%
<b>Moderate</b> (1-in-5,000 to 1-in-1,000)	0.3%	0.2%	0.2%
<b>Moderate</b> (1-in-1,000 to 1-in-500)	1.0%	0.7%	0.7%
<b>High</b> (1-in-500 to 1-in-100)	48.7%	61.1%	62.1%
<b>High</b> (1-in-100 to 1-in-50)	0.0%	0.1%	0.4%
<b>Very High</b> (1-in-50 to 1-in-25)	0.0%	0.0%	0.0%
<b>Total Acreage</b>	<b>100% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>

### **6.14.2 Seasonal Fire Risk**

*(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;*

**Response:** The applicant evaluated seasonal wildfire risk using factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including cumulative annual and monthly precipitation, weather advisories which include fuel moisture content data, and an



evaluation of Average Flame Length which is the average length of flames expected during a fire, given local fuel and weather conditions. There are no historic or active fire locations or perimeters within the wildfire analysis area (CWPP 2018; NIFC 2019, 2020, 2021a, 2021b, 2022b).

The seasonal wildfire risk within the area subject to OTS RFA1 and wildfire analysis area is moderate based on the seasonally dry climate, potential for a high rate of fire spread based on Average Flame Length, and low average rainfall during the summer months.

#### Precipitation

Based on available climate data for the Condon station approximately 18 miles south of the area subject to OTS RFA1, the driest months on average based on the monthly normals of precipitation between 1991 and 2020 are July, August, and September with averages of 0.39, 0.38, and 0.47 inches per month, respectively as described above in Table 8 in baseline fire risk (NOAA 2022). All other months average between 1 and 2 inches of precipitation per month. These three summer months are also the hottest months with average daily max temperatures of 84.1°F, 83.9°F, and 75.0°F, respectively (Table 7; NOAA 2022). The total average annual precipitation for the area is 14 inches per year, which is indicative of a semi-arid climate (Table 7; NPS 2019; NOAA 2022).

#### Fuel Moisture Content

Fuel moisture content varies depending on changes in weather (both seasonally and during short periods) and determination of exact fuel-moisture values at any time is complicated by both the nature of the fuels and their responses to the environment. The higher the fuel moisture content, the more difficult it is for fires to ignite and propagate. Living plants and dead fuels respond differently to weather changes; the drying and wetting processes of dead fuels are such that the moisture content of these fuels is strongly affected by weather changes. These moisture contents are influenced by precipitation, air moisture, air and surface temperatures, wind, cloudiness, as well as by fuel factors such as surface-to-volume ratio, compactness, and arrangement. Fuel moisture content is dynamic throughout the year and throughout the day (USFS 1970). Therefore, current conditions such as precipitation to-date, current fuel moisture data, and local weather may increase or decrease seasonal fire risk. The Northwest Interagency Coordination Center (NWCC) Predictive Services group provides fire weather advisories (such as Red Flag Warnings) and fuel and fire behavior advisories (including fuel status reports and fuel moisture content predictions) for each predictive service area (PSA) in the northwest. The area subject to OTS RFA1 is located within PSA E3 (NIFC 2022a). During construction and operation, fire danger forecasts would be monitored, and facility activities and mitigation measures would be adjusted based on their annual variations under the methods and measures identified in the Emergency Management Plan and Wildfire Mitigation Plan (WMP), discussed further below.

Fuel moisture for types of vegetation varies. For example, annual grasses may reach a highly flammable stage while broadleaf vegetation is still in prime growth and not in a peak flammable stage (USFS 1970). Additionally, living foliage of evergreen trees and shrubs can burn even with moisture contents over 100 percent. Typical fire regimes in grasslands and steppes of the Columbia River Plateau are characterized by a fire return interval (the number of years expected between

fires) of 40 to 81 years and expected severity (the net ecological effect of the fire after is has burned) of replacement greater than 75 percent kill or top-kill of the upper canopy layer (USFS 2012). Fires in the Columbia River Plateau burn in fuel types that are best described as moderate load, dry climate grass-shrub (Fuel Model 122), and low load, dry climate grass (Fuel Model 102). Fuel Models describe the types of vegetation that are responsible for fire spread and are used in fire behavior modeling. In Fuel Model 122, fire is carried by grasses and shrubs. In Fuel Model 102, the primary fuel is grass, with shrub cover not contributing to the flaming front. The wildfire analysis area is primarily irrigated agriculture (Fuel Model 93) and grassland (Fuel Model 102) as described above in baseline fire risk (Table 8).

The western edge of the wildfire analysis area outside of the area subject to OTS RFA1 and a discrete portion of the eastern edge of the wildfire analysis area have more herbaceous and shrub/scrub vegetation. These areas outside of the area subject to OTS RFA1 but inside the wildfire analysis area would behave similar to Fuel Models 122 and 102, as they have more herbaceous shrubs vegetation (Figure 10B).

#### Flame Length

Average Flame Length shows the average length of flames expected, given local fuel and weather conditions (CWPP 2018). Flame lengths have potential to exceed the mapped values shown, even under normal weather conditions. Flame length is commonly used as a direct visual indication of fire intensity and is a primary factor to consider for firefighter safety and for gauging potential impacts to resources and assets. A majority of the solar micrositing area has a modeled average flame length of 0 feet (49.9 percent) followed by 0 to 4 feet (43.4 percent) (Table 9; CWPP 2018). The area subject to OTS RFA1 has more areas of 4 to 8 feet (22.1 percent) of average flame length including the entire eastern half (Table 9; CWPP 2018). The average flame length modeled throughout the wildfire analysis area ranges from 0 to 8 feet (Figure 10D; Table 9; CWPP 2018), and the rate of fire spread can be high. The areas of 4 to 8 feet of average flame length are along Middle Rock Creek Lane in the west and south and along local roads throughout (Figure 10D).

**Table 9. Average Flame Length**

<b>Average Flame Length (feet)</b>	<b>OTS Solar Micrositing Area</b>	<b>Area Subject to OTS RFA1</b>	<b>Wildfire Analysis Area</b>
0	49.9%	37.8%	36.5%
>0-4	43.4%	39.0%	36.7%
4-8	6.4%	22.1%	25.6%
8-11	0.3%	0.9%	1.1%
>11	0.0%	0.2%	0.2%
<b>Total Acreage</b>	<b>100% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>

### 6.14.3 Areas of Heightened Risk

*(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;*

**Response:** Areas of heightened risk are described using the CWPP Wildfire Risk to Assets (Figure 10E), potential impacts to people and property (Figure 10F), and potential impacts to infrastructure datasets (Figure 10G). Risk to assets includes likelihood and consequences of wildfire on mapped highly valued assets including critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, and historic structures (CBI 2020). People and property data take into account housing density based on Where People Live and USFS private inholdings (Gilbertson et al. 2018). Infrastructure includes critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, and historic structures (Gilbertson et al. 2018).

The solar microsite area does not have any wildfire risk to assets. Anytime assets are added to a landscape, wildfire risk will increase. With the addition of infrastructure that will result from OTS Facility construction, it is expected that more of the area would fall into the Moderate category for Wildfire Risk to Assets.

The areas with moderate risk to assets in both the area subject to OTS RFA1 and wildfire analysis area include lands along John Day Highway in the middle, on the southern edge along Middle Rock Creek Lane, and near the intersection of Bottemiller Lane and Middle Rock Creek Lane on the western edge of the area subject to OTS RFA1. Middle Rock Creek Lane, Berthold Road, and John Day Highway are the main corridors where pockets of moderate to high overall risk were modeled in the area subject to OTS RFA1 with higher densities of existing infrastructure and assets such as distribution lines, residential structures, and agricultural properties.

The CWPP data on potential impact to people and property (Figure 10F) and potential impact to infrastructure (Figure 10G) are also used to identify areas of heightened risk. Potential impacts to people and property and to infrastructure throughout the solar microsite area subject to OTS RFA1 and the Analysis Area are summarized in Table 10. These data do not include the likelihood of a pixel burning, only potential impact to characterize risk exposure. There are a few pockets of low, moderate, and high potential impact for people and property centered around farm and ranch buildings and infrastructure along Middle Rock Creek Lane in the west and south and John Day Highway running north to south through the middle (Figure 10F).

**Table 10. Areas of Heightened Risk (Potential Impacts to People, Property, and Infrastructure)**

Asset	Potential Impact	OTS Solar Micrositing Area	Area Subject to OTS RFA1	Wildfire Analysis Area
People and Property	Very High	0.0%	0.0%	0.0%
	High	0.0%	0.0%	0.0%
	Moderate	0.0%	0.2%	0.8%

Asset	Potential Impact	OTS Solar Micrositing Area	Area Subject to OTS RFA1	Wildfire Analysis Area
	Low	0.0%	0.3%	0.5%
	No Data <sup>1</sup>	100.0%	99.5%	98.8%
	<b>Total</b>	<b>100.0% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>
Infrastructure	Very High	0.0%	0.0%	0.0%
	High	0.0%	0.0%	0.1%
	Moderate	0.0%	0.0%	0.3%
	Low	0.0%	1.1%	1.2%
	No Data <sup>1</sup>	100.0%	98.9%	98.4%
	<b>Total</b>	<b>100.0% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>
1. There are no highly valued resources or assets (such as critical infrastructure, developed recreation, or housing unit density) mapped in the area, or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel (Gilbertson et al. 2018; CWPP 2018).				

Within the area subject to OTS RFA1, there are low impacts to infrastructure along John Day Highway (Figure 10G). Outside of the area subject to OTS RFA1 but within the wildfire analysis area there are a couple of pockets of potential impacts to infrastructure to the north including high potential impacts along Cedar Spring Lane and the Palouse River & Coulee City railroad mainline yard and one small area of very high potential west of Weatherford Road which appears to be a wireless telecommunication tower on aerial imagery (Figure 10G).

There are pockets of existing infrastructure throughout the wildfire analysis area that are considered areas of heightened risk for wildfire. If a wildfire were ignited onsite, the areas subject to heightened risk would be the areas associated with these structures. The distribution line poles, residences, and farming structures may be considered areas of heightened risk as they have potential for high fire hazard. More specifically, the existing infrastructure in the solar micrositing area includes a distribution line and a residence along Bottemiller Lane. The existing infrastructure within the area subject to OTS RFA1 includes a distribution line, residences and an agricultural structure along Weatherford Road and John Day Highway running north to south in the middle as well as a distribution line along Bottemiller Lane. In between Weatherford Road and John Day Highway in the north are additional agricultural properties. There is also a distribution line along North Tree Road that runs east to west in the north. In the eastern corner, there is a distribution line over a road in a slight canyon connecting areas of wind turbines. In the southwest corner just east of Middle Rock Creek Lane there is a distribution line. Existing structures outside of the area subject to OTS RFA1 but within the wildfire analysis area to the north in Alkali Canyon along Cedar Springs Lane include distribution lines and the Palouse River & Coulee City railroad mainline and yard. Also in the north within the wildfire analysis area are wind turbines that run parallel and across to Weatherford Road. Along the west down south within the wildfire analysis area are residences, agricultural properties, and distribution lines along Middle Rock Creek Lane to where it

meets John Day Highway to the south. Also in the south within the wildfire analysis area are residences and distribution lines following Baseline/Ione Road. To the east, outside of the area subject to OTS RFA1 but within the wildfire analysis area, are existing infrastructure including wind turbines. The roads throughout the wildfire analysis area would act as firebreaks. These include Bottemiller, Weatherford Road, John Day Highway, North Tree Road, Middle Rock Creek Lane, Cedar Springs Lane, and Baseline Lane/Ione Road.

The Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan describes a county-wide risk assessment of wildfire as “high” probability and describes many areas in the county as “conducive for large and fast-moving wildfires” due to high winds typical for the region, dry conditions, and terrain. The plan identifies risk factors for starting wildfires in the county including highways, railroads, lighting, power lines, debris burning, and equipment (Gilliam County 2018).

#### 6.14.4 High-Fire Consequence Areas

*(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and*

**Response:** The CWPP data on overall wildfire risk (Figure 10H) is used to identify high-fire consequence areas (CWPP 2018). Based on the Layer Descriptions and Values spreadsheet attached to the PNRA report, overall wildfire risk is the product of the likelihood and consequence of wildfire on all mapped highly valued resources and assets combined: critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and terrestrial and aquatic wildlife habitat (CBI 2020). Risk ratings range from very high wherein many resources are vulnerable, to beneficial, where fires may improve resources such as timber stands or wildlife habitat (CBI 2020). The percent of the area subject to OTS RFA1 that falls into each Fire Risk Rating is identified in Table 11 and displayed on Figure 10H. High and Moderate risk areas are centered around the few steep slopes as described in baseline fire risk with shrub/scrub or herbaceous vegetation, farming structures, and infrastructure. Middle Rock Creek Lane, Berthold Road, and John Day Highway are the main corridors where pockets of moderate to high overall wildfire risk were modeled in the area subject to OTS RFA1.

**Table 11. Overall Fire Risk Rating**

Overall Fire Risk Rating	OTS Solar Micrositing Area	Area Subject to OTS RFA1	Wildfire Analysis Area
Very High	0.0%	0.1%	0.6%
High	0.0%	1.1%	1.9%
Moderate	0.7%	1.1%	1.4%
Low	17.2%	9.5%	9.7%
Low Benefit	0.0%	0.1%	0.9%
Benefit	0.0%	0.0%	0.2%

Overall Fire Risk Rating	OTS Solar Micrositing Area	Area Subject to OTS RFA1	Wildfire Analysis Area
No Data <sup>1</sup>	82.1%	88.1%	85.3%
<b>Total</b>	<b>100% (1,228 acres)</b>	<b>100% (13,734 acres)</b>	<b>100% (28,959 acres)</b>
1. There are no highly valued resources or assets (such as critical infrastructure, developed recreation, or housing unit density) mapped in the area, or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel (Gilbertson et al. 2018; CWPP 2018).			

The western and eastern edges of the area subject to OTS RFA1 have moderate wildfire risk with more shrub/scrub vegetation. The area within the wildfire analysis area and outside of the area subject to OTS RFA1 has a few areas of steeper topography and densities of infrastructure and residences and therefore increased overall wildfire risk. These areas include in the north along Cedar Springs Lane, Cow Canyon in the east, and along Middle Rock Creek Lane to the west and south.

#### 6.14.5 Data Sources and Methods

*(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.*

**Response:** Data from the CWPP planning tool was used for the analyses provided in response to OAR 345-022-0115(1)(a) (CWPP 2018). The statewide wildfire risk map was developed and will be updated and maintained per requirements under Senate Bill 762 and associated administrative rules. The map shows the assigned risk classification (extreme, high, moderate, low and no risk) for every tax lot in the state. For those tax lots that are both within the wildland-urban interface and classified as high or extreme risk, the owners will receive written notification from Oregon Department of Forestry and may be subject to future changes to defensible space and home building codes. However, as of August 4, 2022, the statewide wildfire risk map (that was released on June 30, 2022, as an outcome of Senate Bill 762) has been temporarily withdrawn for further refinement. The Oregon Explorer's data presented are from the 2018 Quantitative Wildfire Risk Assessment. The CWPP provides a clearinghouse of fire behavior and fire effects data to aid decision makers in charge of reducing wildfire risk in their communities. These data were analyzed within the OTS solar micrositing area, the area subject to OTS RFA1, and within the wildfire analysis area. The following Oregon CWPP 2018 datasets were used to inform this analysis:

- Slope;
- Fuel Models;
- Average Flame Length;
- Burn Probability;
- Wildfire Risk to Assets;
- Potential Impact to People and Property;

- Potential Impact to Infrastructure; and
- Overall Wildfire Risk.

#### **6.14.6 Wildfire Mitigation Plan**

*(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:*

**Response:** The Certificate Holder prepared the attached Draft WMP (Attachment 18) to meet applicable standards under Oregon Administrative Rules (OAR) 345-022-0115(1)(b), which requires the Plan to:

*(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*

**Response:** See section 2.0 of the Draft WMP (Attachment 18).

*(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*

**Response:** See Sections 3.1, 3.2.1, and 3.2.2 of the Draft WMP (Attachment 18).

*(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;*

**Response:** See Section 3.1 of the Draft WMP (Attachment 18).

*(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and*

**Response:** See Sections 3.2, 3.3, and 3.4 of the Draft WMP (Attachment 18).

*(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.*

**Response:** See section 4.0 of the Draft WMP (Attachment 18).

*(2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.*

*(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.*

### **6.14.7 Wildfire Risk Assessment Conclusion**

Per the data reviewed and presented here, wildfire risk and consequences of fire in the area subject to OTS RFA1 are typical for the vegetation type and fire regime encountered in Columbia Basin Plateau. Within the area subject to OTS RFA1, assets that could currently be impacted include residential structures, agricultural areas, and roads. If a wildfire did ignite near those assets, they could be at risk. After construction of the OTS Facility, more assets such as the solar arrays, associated infrastructure, and converted irrigated agriculture vegetation could be in the path of wildfire, and overall risk within the area subject to OTS RFA1 would increase. It is anticipated that due to moderate probability of ignition and moderate expected intensity as measured by average flame length, fuels, weather, and topography, post-construction overall fire risk would be moderate. Therefore, the Council may conclude that the Facility, as amended by OTS RFA1, will comply with OAR 345-022-0115.

### **6.15 OAR 345-022-0120 Waste Minimization**

*(1) Except for facilities described in sections (2) and (3), to issue a Site Certificate, the Council must find that, to the extent reasonably practicable:*

*(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the Facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;*

*(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the Facility are likely to result in minimal adverse impact on surrounding and adjacent areas.*

**Response:** The Council previously found that the Facility complies with the Council's Waste Minimization standard<sup>102</sup>. The Waste Minimization standard requires that the Council find that the accumulation, storage, disposal, and transportation of waste generated by construction and operation of the OTS Facility are not likely to have an adverse impact on surrounding and adjacent areas as defined by OAR 345-022-0120. The standards under OAR 345-022-0120 have not changed since May 15, 2007 (Oregon Secretary of State 2022). Continued implementation of the following Site Certificate Conditions will ensure that waste minimization efforts will remain enforced: Site

<sup>102</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 175



Certificate Conditions 29 (water pollution control facilities permit(s) adherence), 80 (NPDES 1200-C permit and ESCP adherence), 87 (turbine blade and solar panel-washing runoff control), 109 (on-site sewage handling), 110 (sanitary wastewater discharge/handling), 111 (construction waste management plan implementation), 112 (operations waste management plan implementation), and 116 (battery waste disposal).

The changes proposed for OTS RFA1 will not affect the quantities of materials used and removed during OTS Facility construction and operations from what was previously approved by the Council for MWP RFA4 Exhibit V (including the imposition of amended conditions<sup>103</sup>). The OTS RFA1 does not seek to enlarge the existing approved OTS Facility site boundary or physical components of the OTS Facility. There are no proposed changes to the previously approved facilities, phasing or resources from what is authorized in the OTS Facility Site Certificate. The OTS RFA1 will also not impact the OTS Facility's ability to comply with existing OTS Facility Site Certificate conditions for waste management and will not increase the amount of solid waste and wastewater generated by the OTS Facility during construction and operations.

Therefore, the proposed changes do not affect the Council's previous findings on Waste Minimization and the Council may conclude that the OTS Facility, as amended by OTS RFA1, will continue to comply with OAR 345-022-0120.

## 6.16 OAR 345-024-0090 Siting Standards for Transmission Lines

*To issue a Site Certificate for a Facility that includes any transmission line under Council jurisdiction, the Council must find that the applicant:*

*(1) Can design, construct and operate the proposed transmission line so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public;*

*(2) Can design, construct and operate the proposed transmission line so that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.*

**Response:** The Council previously found that the Facility complies with the Siting Standards for Transmission Lines.<sup>104</sup> The Council also previously found that the Facility, as modified with MWP RFA5, would comply with the Siting Standards for Transmission Lines.<sup>105</sup> The standards under OAR 345-024-0090 have not changed since MWP RFA4 was submitted on January 15, 2019 (State of Oregon 2022). The OTS Facility is also authorized to share related and supporting facilities between MWP, MS, and OTS including the constructed and operating 230-kV transmission line between the existing MWP collector substation and BPA's Slatt Substation. This shared 230-kV transmission line is existing and is not subject to this proposed OTS RFA1. OAR 345-024-0090(1) sets a limit for

<sup>103</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 173-175

<sup>104</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 184

<sup>105</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 107

electric fields from transmission lines of not more than 9-kV per meter at one meter above the ground surface in areas that are accessible to the public. Section (2) requires implementation of measures to reduce the risk posed by induced current. Based on Montague Wind Power Facility, LLC's modeling provided in MWP RFA4 Exhibit AA, the Council found that the Facility transmission and collector lines would remain below the 9-kV per meter threshold set forth in OAR 345-024-0090(1).<sup>106</sup> The OTS Facility 34.5 kV collection lines will connect to the existing MS collector substation, and then share the existing 230-kV transmission line to the MWP collector substation, and then to BPA's Slatt Substation. Because OTS will share the high voltage transmission that is already built, the Council can find that OTS RFA1 complies this standard.

In MPW RFA5, the Council amended Condition 89 to remove the provision requiring a 200-foot setback from transmission line structures to residences or other occupied structures because the setback is not required under the standard, is far greater than National Electric Safety Code conductor clearance requirements, and was imposed based on an applicant representation rather than an actual regulatory requirement.<sup>107</sup>

This OTS RFA1 will also not impact the OTS Facility's ability to comply with existing Site Certificate conditions for siting standards for transmission lines and makes no changes that alter the basis for the Council's earlier findings. Therefore, the Council may conclude that the OTS Facility, as amended by OTS RFA1, will continue to comply with OAR 345-024-0090.

## 7.0 Other Applicable Requirements – OAR 345-027-0360(1)(e)

### 7.1 Noise Control Regulations

*OAR 340-035-0035 Noise Control Regulations for Industry and Commerce*

*(1) Standards and Regulations:*

\*\*\*

*(b) New Noise Sources: (A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy Facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.*

<sup>106</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 183

<sup>107</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 106

**Response:** The Council previously found that the Facility satisfies the ODEQ noise control regulations.<sup>108</sup> The Council also previously found that the Facility, as modified with MWP RFA5, would comply with the ODEQ noise control regulations.<sup>109</sup>

Extension of the construction start deadline and revision to cultural monitoring requirement for the Facility as proposed in this OTS RFA1 will not change any of the predicted sound levels from the proposed Facility, and no new residences or other sensitive noise receptors are located closer than the previously analyzed locations in MWP RFA5. Figure 11 (Noise Sensitive Receptors) examined Google Earth and Gilliam County assessor data from August 9, 2022 to show current site conditions and found that two potential new noise sensitive receptors occur within 2 miles of a turbine location described in MWP RFA4. Again, these new noise sensitive receptors are not closer to the OTS solar micro-siting area than the previously analyzed locations in MWP RFA5. The name and tax lots for these two new NSRs are as follows:

- **Rodney H and Lori D McGuire** (Tax Lot 01S21E10AD-01301)
- **Mark Alan Hiatt et al** (Tax Lot 01S21E0000-02900)

The Certificate Holder submits a confidential filing “Oregon Trail Solar Noise Model Input” that depicts the noise contour map for proposed OTS wind turbines. Both of the new NRS (mentioned above) are outside the 50 dBA contour line and one of the NRSs is within the 36 dBA contour lines, and the other is outside the 36 dBA contour lines. The Oregon Trail Solar Noise Model Input is submitted separately under confidential cover (Attachment 19).

The Council previously imposed Condition 107 and 108 requiring the Certificate Holder submit to ODOE, prior to construction, a noise assessment based on final Facility design and layout, using the maximum sound power level for all noise generating equipment and implement a noise complaint program and provide landowners notification of the availability of the Facility noise compliant program.<sup>110</sup> Based on the identified equipment sound levels detailed in MWP RFA5, the Facility (as approved under Conditions 107 and 108) can continue to comply with the DEQ noise regulation. This RFA1 does not proposed changes to the number of inverters or overall equipment and will not impact the Facility’s ability to comply with existing Site Certificate conditions for noise control. Therefore, the Council may conclude that the Facility, as amended by RFA1, will continue to comply with DEQ’s noise control regulations.

## 7.2 Removal-Fill Law

**Response:** A removal-fill permit will not be required because no impacts to waters of the state are expected. As noted in the Final Order on Request for Amendment 5, previous field surveys were incorporated into wetland delineation reports that received concurrence from the Oregon Department of State Lands (DSL) (WD#2017-0111, WD#2011-0364R, WD#2018-0597, and

<sup>108</sup> Montague Wind Power Facility Final Order on Request for Amendment 4, p. 195

<sup>109</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 114

<sup>110</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 114

WD#2018-0660).<sup>111</sup> Based on DSL's concurrence of these field surveys, Montague Wind Power Facility, LLC demonstrated that development within the Facility's solar micrositng area would not impact or be located on or within jurisdictional waters of the state and therefore would not require a removal-fill permit.<sup>112</sup>

Delineated features are identified in the WD reports. Figure 12 identifies the area subject to OTS RFA1, the wind micrositng corridor, and the solar micrositng area with areas previously surveyed for wetlands and waters of the state. The legend to Figure 12 identifies the survey date and associated WD report number that applies to the OTS Facility. A summary of the WD report numbers shown on Figure 12 that apply to the OTS Facility are provided below for reference:

- WD#2011-0364R (Survey conducted in April 2017). Report Dated July 7, 2017; Concurrence Dated February 28, 2019. See Attachment J-3 to Exhibit J in MWP RFA4.
- WD#2017-0111 (Survey conducted in June 2017). Report Dated July 10, 2017; Concurrence Dated October 26, 2017. See Attachments J-1 and J-2 to Exhibit J in MWP RFA4.
- WD#2018-0597 (Survey conducted in May 2018). Report Dated October 2018; Concurrence Dated February 26, 2019. See Attachment J-4 to Exhibit J in MWP RFA4.
- WD#2018-0660 (Survey conducted in October 2018). Report Dated December 2018; Concurrence Dated March 5, 2019. See Attachment J-5 to Exhibit J in MWP RFA4.
- WD#2020-0587 (Survey conducted in August 2020 for OTS and Montague Solar Facilities).
- Pre-2017. (Surveys conducted for the Baseline Facility under WD#2011-0364). Concurrence received in 2012.

Compliance with the previously imposed Condition 83 ensures unsurveyed areas are surveyed prior to construction and that concurrence from DSL is obtained to verify accurate identification of jurisdictional waters, and avoidance unless removal-fill permit is obtained. The Certificate Holder will provide to the Department a map showing the final design locations of all components of the OTS Facility, and the areas that would be disturbed during construction and showing the wetlands and stream channels previously surveyed as described in the Final Order. Figure 12 shows that the entire approved OTS wind micrositng corridor has been field delineated for wetlands and waters of the state. Portions of the OTS wind micrositng corridor that were surveyed as part of the Baseline Facility are identified on Figure 12 as "Pre-2017." Survey areas conducted between 2017 and 2020 are also identified on Figure 12.

Since approval of MWP RFA5, the Certificate Holder conducted a wetlands and waters delineation of the OTS solar micrositng area on April 21, 2022. The results of this delineation are reported in the OTS Facility 2022 Wetlands and Non-wetland Waters Delineation provided in Attachment 20 (Jacobs 2022). The report concludes that no wetlands and one ephemeral drainage were identified

<sup>111</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 114

<sup>112</sup> Montague Wind Power Facility Final Order on Request for Amendment 5, p. 115

in the study area during the wetland field investigation. The one ephemeral drainage is not identified as a jurisdictional water of the state. The OTS Facility 2022 Wetlands and Non-wetland Waters Delineation report was received by DSL on July 11, 2022, assigned DSL file number WD2022-0400, and review for concurrence is pending. The OTS Facility 2022 Wetlands and Non-wetland Waters Delineation report was also submitted to the U.S. Army Corps of Engineers on July 29, 2022 with a request for jurisdictional determination.

This OTS RFA1 does not seek to enlarge the approved OTS Facility site boundary or locate physical components of the OTS Facility on or within jurisdictional waters of the state. There are no proposed changes to the previously approved facilities, phasing, or resources from what is authorized in the OTS Facility Site Certificate. This OTS RFA1 will also not impact the OTS Facility's ability to comply with existing OTS Facility Site Certificate conditions for wetlands and makes no changes that alter the basis for the Council's earlier findings. Therefore, the Council may conclude that the OTS Facility will continue to comply with the Oregon Removal-Fill Law (ORS 196.795 through 196.990) and regulations (OAR 141-085-0500 through 141-085-0785).

### **7.3 Water Rights**

**Response:** The proposed changes detailed in this OTS RFA1 do not increase the quantity of water used and wastewater generated during construction and operations from what was originally authorized in the OTS Facility Site Certificate because no changes to the Facility footprint or construction and operation activities are proposed. Water uses and sources for the OTS Facility will remain the same as described in MWP RFA4 Exhibit O and MWP RFA5. In addition, the City of Arlington issued a letter on August 3, 2022, demonstrating that the City can continue to meet OTS Facility water source supply estimates for construction, operations, and maintenance (Attachment 3).

This OTS RFA1 does not change the Certificate Holder's ability to provide adequate water for construction and operation. With the implementation of Condition 29 and Condition 86, the Council can conclude that this OTS RFA1 will maintain compliance with the State's applicable water rights regulations and will not result in the need for a groundwater permit, surface water permit, or water right transfer.

## **8.0 Property Owners Located within or Adjacent to the Site of the Facility – OAR 345-027-0360(1)(f)**

*(f) A list of the names and mailing addresses of property owners, as described in this rule:*

*(A) The list must include all owners of record, as shown on the most recent property tax assessment roll, of property located:*

*(iii) Within 500 feet of property which is the subject of the request for amendment, where the subject property is within a farm or forest zone; and*

*(B) In addition to incorporating the list in the request for amendment, the applicant must submit the list to the Department in an electronic format acceptable to the Department.*

**Response:** A list of the names and mailing addresses of property owners located within 500 feet of the property underlying the area subject to OTS RFA1 is provided in Attachment 21. A map showing the location of the properties is also shown in Attachment 21 Figures 1 through 1.16. The property owner information provided in Attachment 21 reflects information received from the Gilliam County Assessor on November 17, 2022.

## 9.0 Conclusion

This amendment request demonstrates that the proposed extension to the beginning of construction deadline, and the revised cultural monitoring requirement comply with all applicable laws and Council standards. For the reasons stated above, the Certificate Holder respectfully requests approval of this RFA1.

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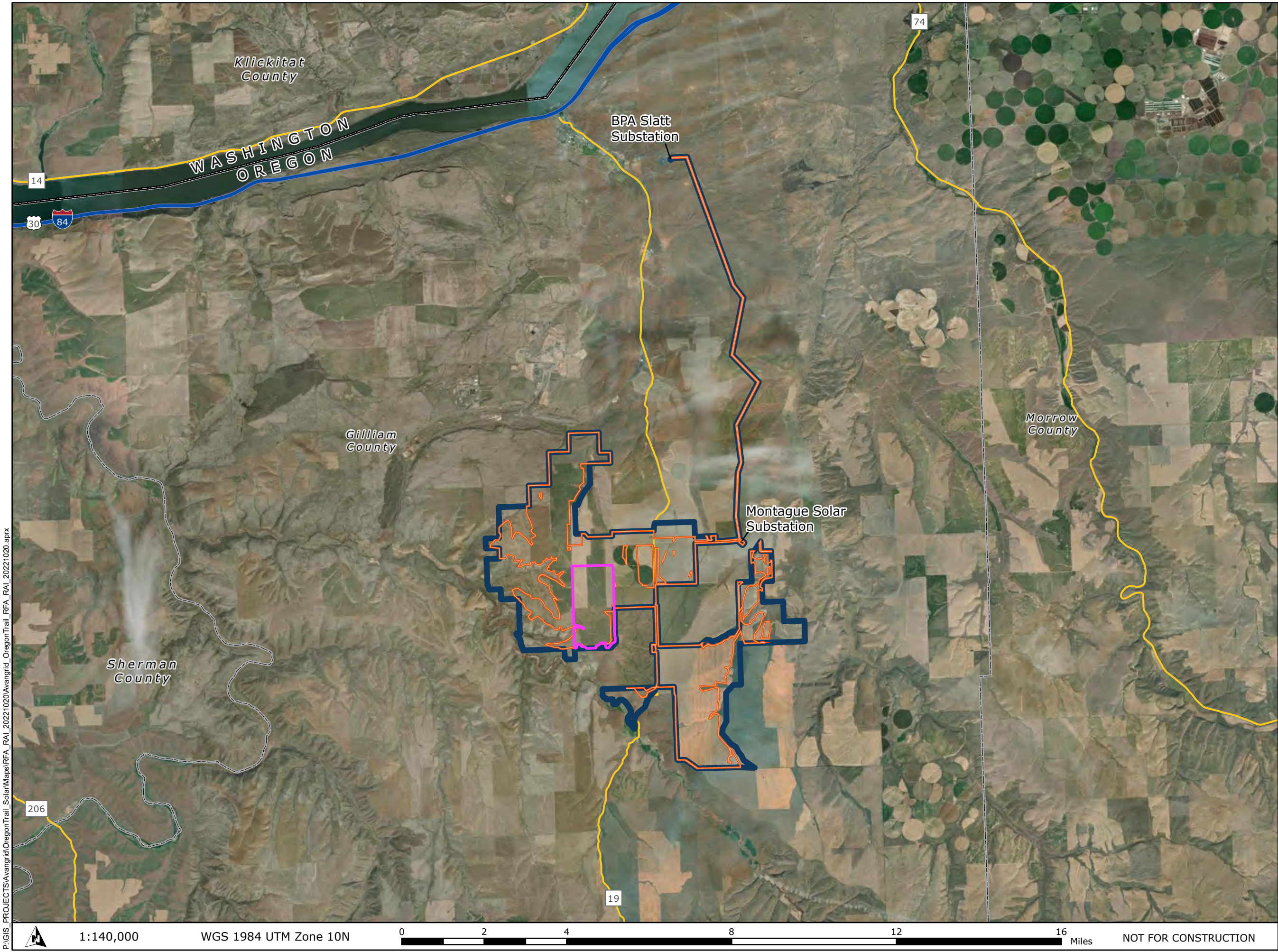
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# Figures





# Oregon Trail Solar Facility

**Figure 1**  
**Facility Site Boundary**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- State Boundary
- Interstate Highway
- US Highway
- State Highway



## Reference Map



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1:140,000

WGS 1984 UTM Zone 10N

0

2

4

8

12

16

Miles

NOT FOR CONSTRUCTION



**Oregon Trail  
Solar Facility**

**Figure 2  
Area Subject to Request  
for Amendment 1**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- State Highway
- Local Roads

Montague Solar Substation



Reference Map



1:80,000

WGS 1984 UTM Zone 10N

0

2

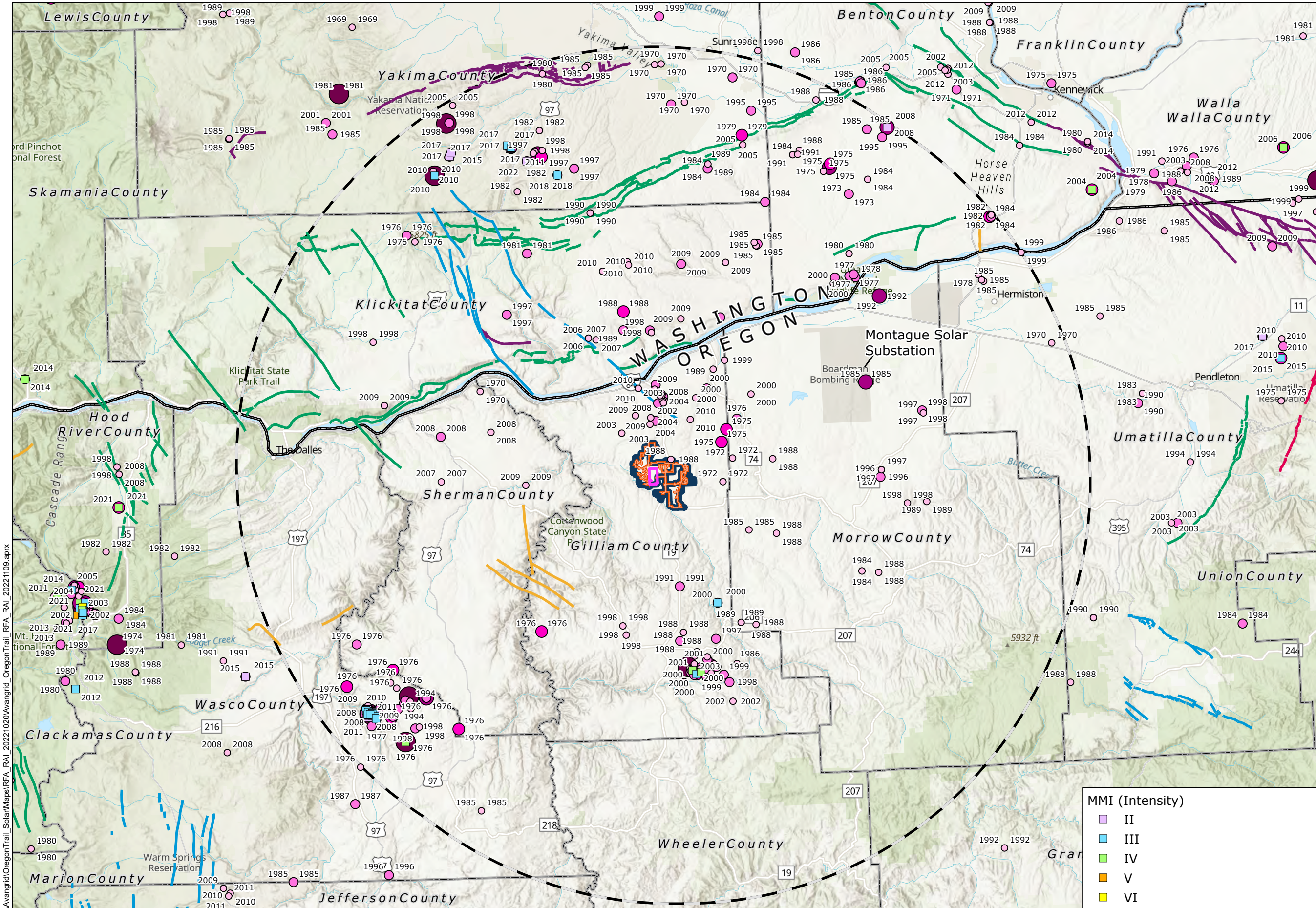
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8

Miles

NOT FOR CONSTRUCTION





# Oregon Trail Solar Facility

## Figure 3A Historical Earthquakes and Faults

GILLIAM COUNTY, OR

Site Boundary Area Subject to Request for Amendment 1

Approved Wind Micrositing Corridor

Approved Solar Micrositing Area

County Boundary

Analysis Area (50-mile Buffer)

Historical Earthquakes

Magnitude

- 2.5 - 2.7
- 2.7 - 3.2
- 3.2 - 3.6
- 3.6 - 3.9
- 3.9 - 6.0

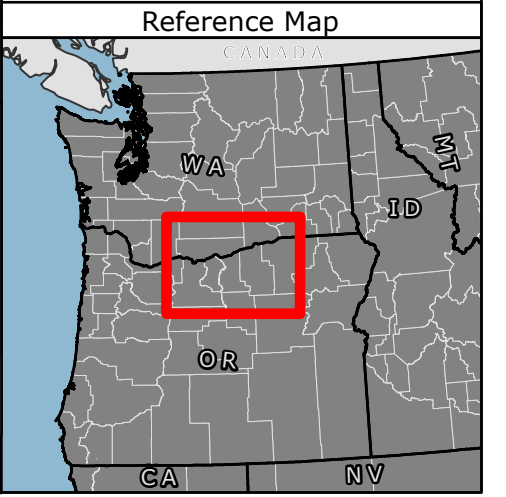
Quaternary Faults and Associated Folds

Age

- Latest Quaternary
- Late Quaternary
- Middle and Late Quaternary
- Undifferentiated Quaternary
- Class B

TETRA TECH

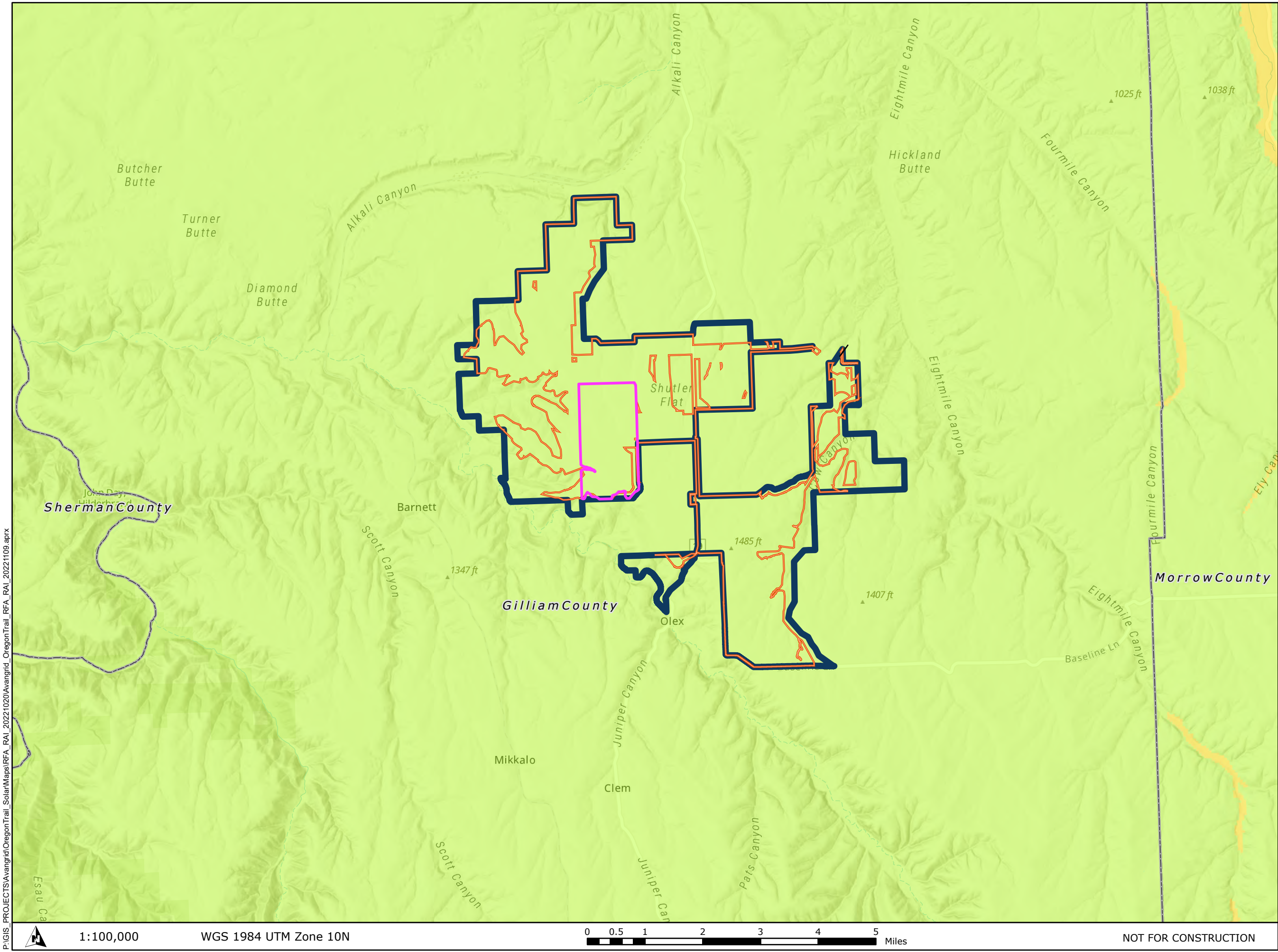
AVANGRID RENEWABLES



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# Oregon Trail Solar Facility

**Figure 3B  
Seismic Risk**

**GILLIAM COUNTY, OR**

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- Cascadia Earthquake Expected Shaking
  - Violent
  - Severe
  - Very Strong
  - Strong
  - Moderate
  - Light



**Reference Map**



1:100,000

WGS 1984 UTM Zone 10N

0 0.5 1 2 3 4 5 Miles

NOT FOR CONSTRUCTION



Oregon Trail  
Solar Facility

Figure 3C  
Flood Hazards

GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain



Reference Map



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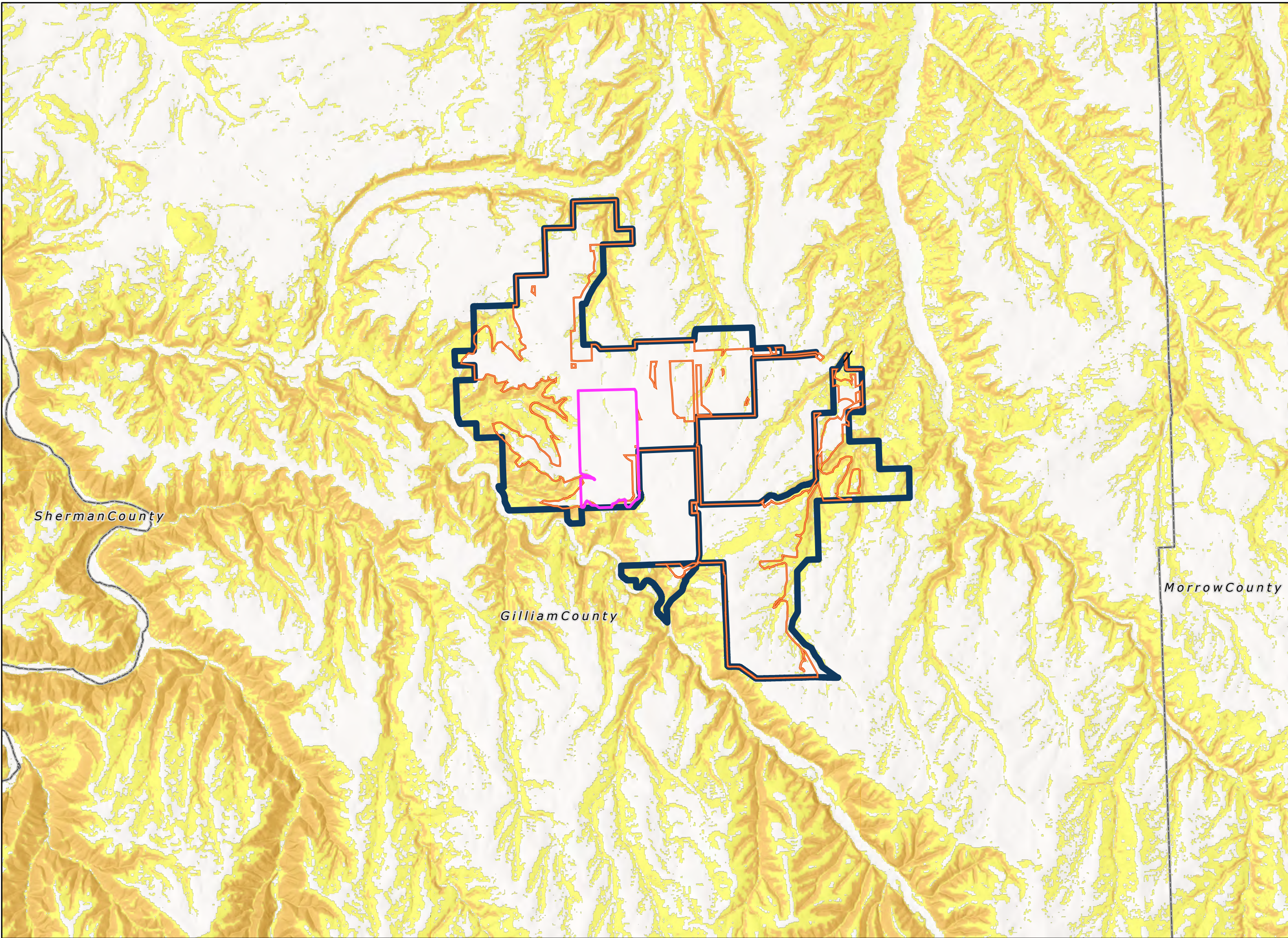
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**Oregon Trail  
Solar Facility**

**Figure 3D  
Landslide  
Hazards**

**GILLIAM COUNTY, OR**

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- Scarp
- Head Scarp
- Deposits
  - Talus-Colluvium
  - Fan
  - Landslide
- Landslide Hazard
  - Low
  - Moderate
  - High



**Reference Map**



1:100,000

WGS 1984 UTM Zone 10N







NOT FOR CONSTRUCTION



Oregon Trail  
Solar Facility

Figure 4  
Soils Legend

GILLIAM COUNTY, OR















-  Site Boundary Area
-  Subject to Request for Amendment 1
-  Approved Wind Micrositing Corridor
-  Approved Solar Micrositing Area

















Reference Map



Mapunit Symbol,Mapunit  
Name

-  11,Hermiston silt loam
-  13,Kimberly fine sandy loam
-  14D,Krebs silt loam, 5 to 20 percent slopes
-  14E,Krebs silt loam, 20 to 40 percent slopes
-  15E,Lickskillet very stony loam, 7 to 40 percent slopes
-  16F,Lickskillet-Rock outcrop complex, 40 to 70 percent slopes
-  17C,Mikkalo silt loam, 7 to 12 percent slopes
-  23B,Olex silt loam, 0 to 5 percent slopes
-  23C,Olex silt loam, 5 to 12 percent slopes
-  24D,Olex gravelly silt loam, 5 to 20 percent slopes
-  24E,Olex gravelly silt loam, 20 to 40 percent slopes
-  26,Powder silt loam
-  32A,Ritzville silt loam, 0 to 2 percent slopes
-  32B,Ritzville silt loam, 2 to 7 percent slopes

-  32C,Ritzville silt loam, 7 to 12 percent slopes
-  32D,Ritzville silt loam, 12 to 20 percent slopes
-  33E,Ritzville silt loam, 20 to 40 percent north slopes
-  34E,Ritzville silt loam, 20 to 40 percent south slopes
-  40B,Sagehill fine sandy loam, 2 to 5 percent slopes
-  40C,Sagehill fine sandy loam, 5 to 12 percent slopes
-  55B,Warden silt loam, 2 to 5 percent slopes
-  55C,Warden silt loam, 5 to 12 percent slopes
-  55D,Warden silt loam, 12 to 20 percent slopes
-  55E,Warden silt loam, 20 to 40 percent slopes
-  56B,Willis silt loam, 2 to 5 percent slopes
-  56C,Willis silt loam, 5 to 12 percent slopes
-  56D,Willis silt loam, 12 to 20 percent slopes
-  56E,Willis silt loam, 20 to 30 percent slopes



Oregon Trail  
Solar Facility

Figure 4  
Soils

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area

Montague Solar Substation



Reference Map



1:55,000

WGS 1984 UTM Zone 10N

0 1 2 4 Miles

NOT FOR CONSTRUCTION



Oregon Trail Solar Facility

Figure 5A  
Zoning

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-Mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Tax Lot Boundary
- Land Use Zone**
  - EFU, Farm Use
  - M-G, Industrial General
  - Rural Unincorporated Community Zone



Reference Map



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WGS 1984 UTM Zone 10N

0 1 2 4 Miles

NOT FOR CONSTRUCTION



Oregon Trail  
Solar Facility

Figure 5B  
Land Use-Soil  
Classifications

GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- State Highway
- Local Roads
- High-Value Farmland Per Oregon Revised Statute (ORS) 195.300(10)(f)(C)
- Water Rights - Groundwater**
  - Point of Diversion
  - Place of Use: Water Right Permit G-15187 (Expired)
- Non-Irrigated Soil Capability Class**
  - Capability Class 2
  - Capability Class 3
  - Capability Class 4
  - Capability Class 6
  - Capability Class 7



Reference Map



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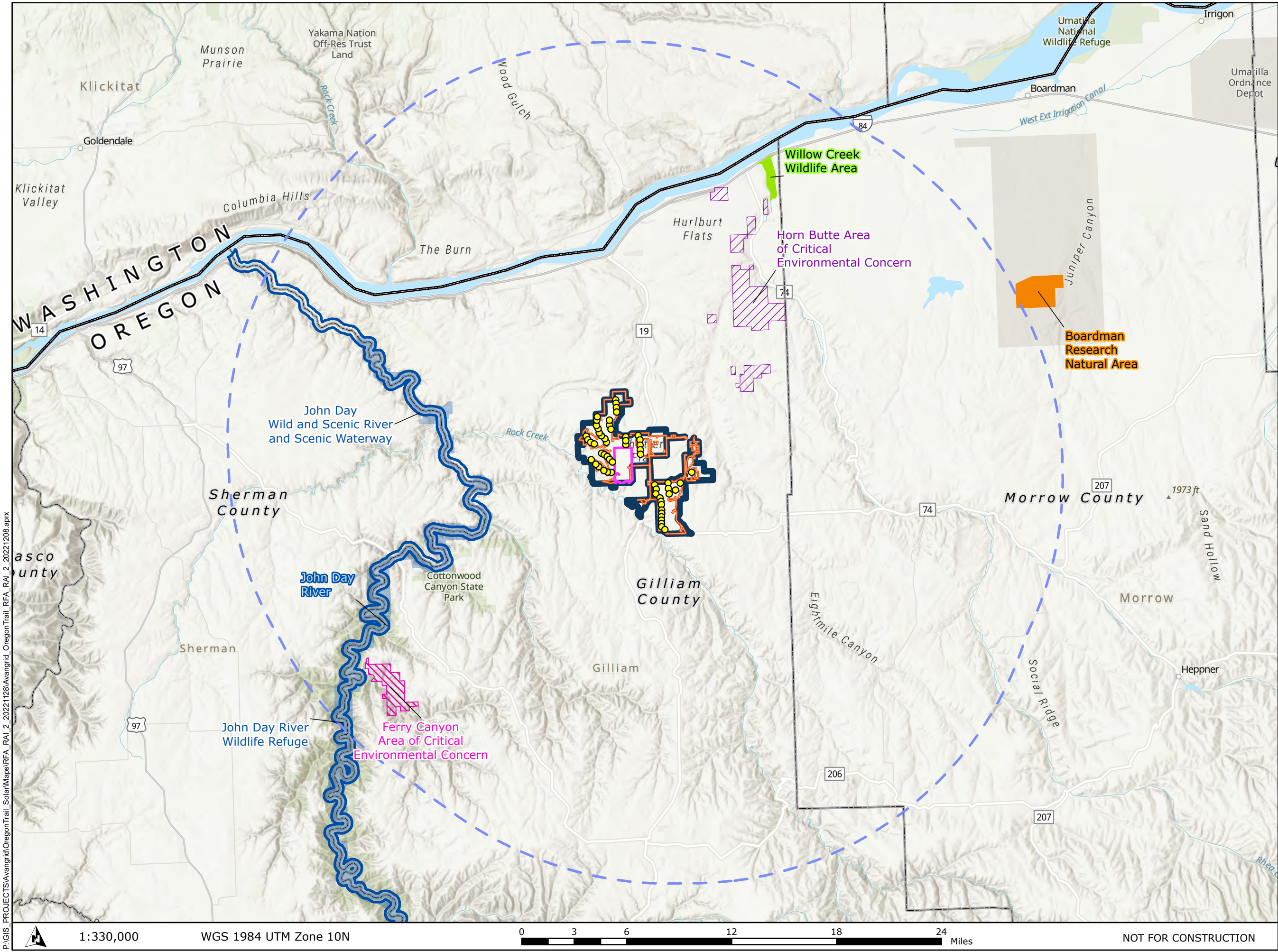
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WGS 1984 UTM Zone 10N

0 1 2 4 Miles

NOT FOR CONSTRUCTION





# Oregon Trail Solar Facility

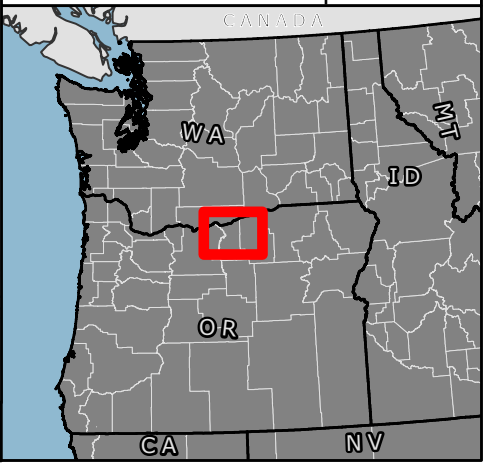
**Figure 6A  
Protected Areas**

**GILLIAM COUNTY, OR**

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- 20 Mile Analysis Area
- Turbine
- County Boundary
- State Boundary
- Ferry Canyon ACEC
- Horn Butte ACEC
- Boardman Research Natural Area
- Willow Creek Wildlife Area
- John Day River Wildlife Refuge
- John Day WSR and Scenic Waterway



## Reference Map



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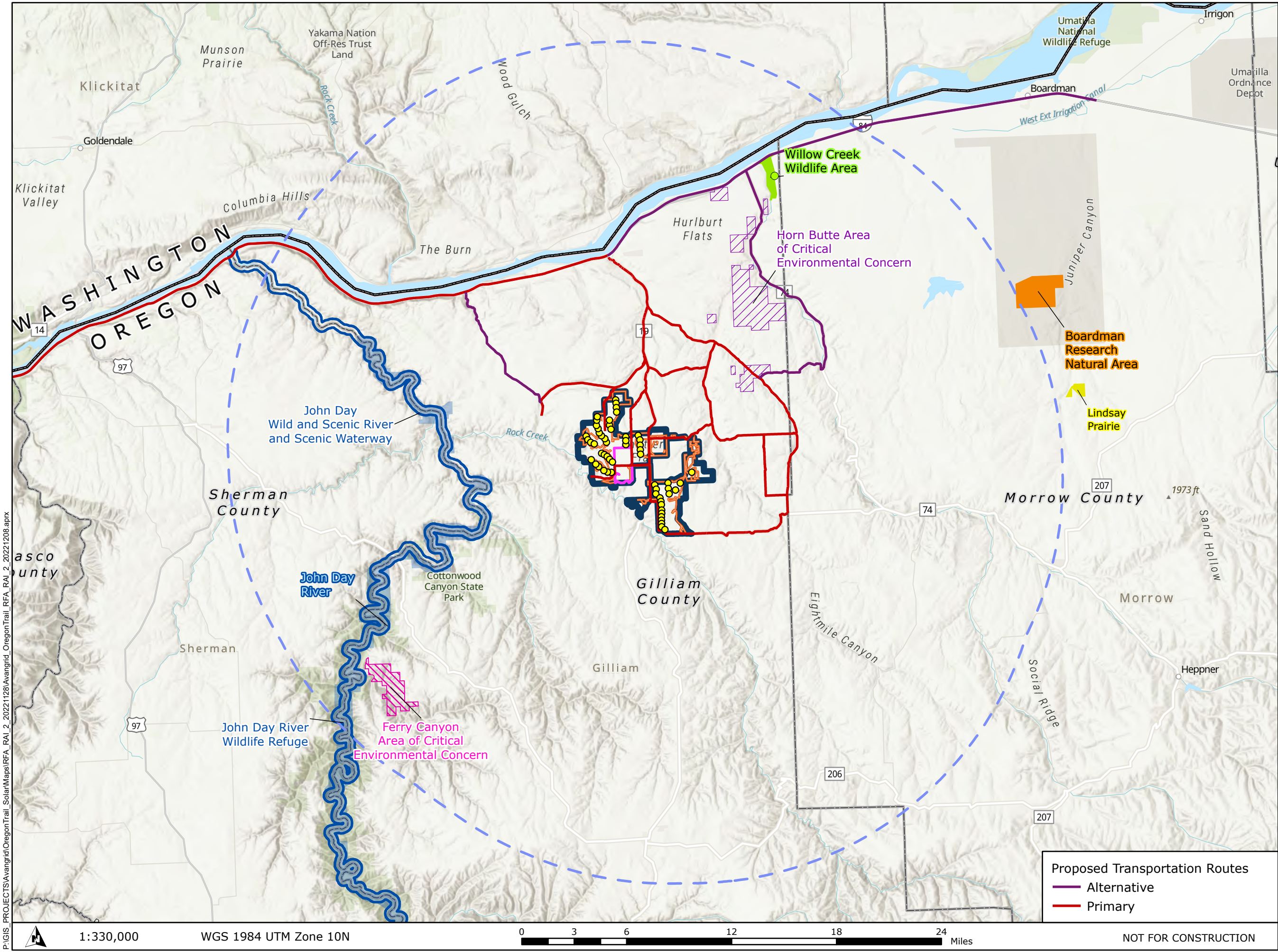
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WGS 1984 UTM Zone 10N

0 3 6 12 18 24 Miles

NOT FOR CONSTRUCTION





# Oregon Trail Solar Facility

## Figure 6B Protected Areas: Transportation Routes

GILLIAM COUNTY, OR

Site Boundary Area Subject to Request for Amendment 1

Approved Wind Micrositing Corridor

Approved Solar Micrositing Area

20 Mile Analysis Area

Turbine

County Boundary

State Boundary

Ferry Canyon ACEC

Horn Butte ACEC

Boardman Research Natural Area

Willow Creek Wildlife Area

Willow Creek Wildlife Area Entrance

John Day River Wildlife Refuge

John Day WSR and Scenic Waterway

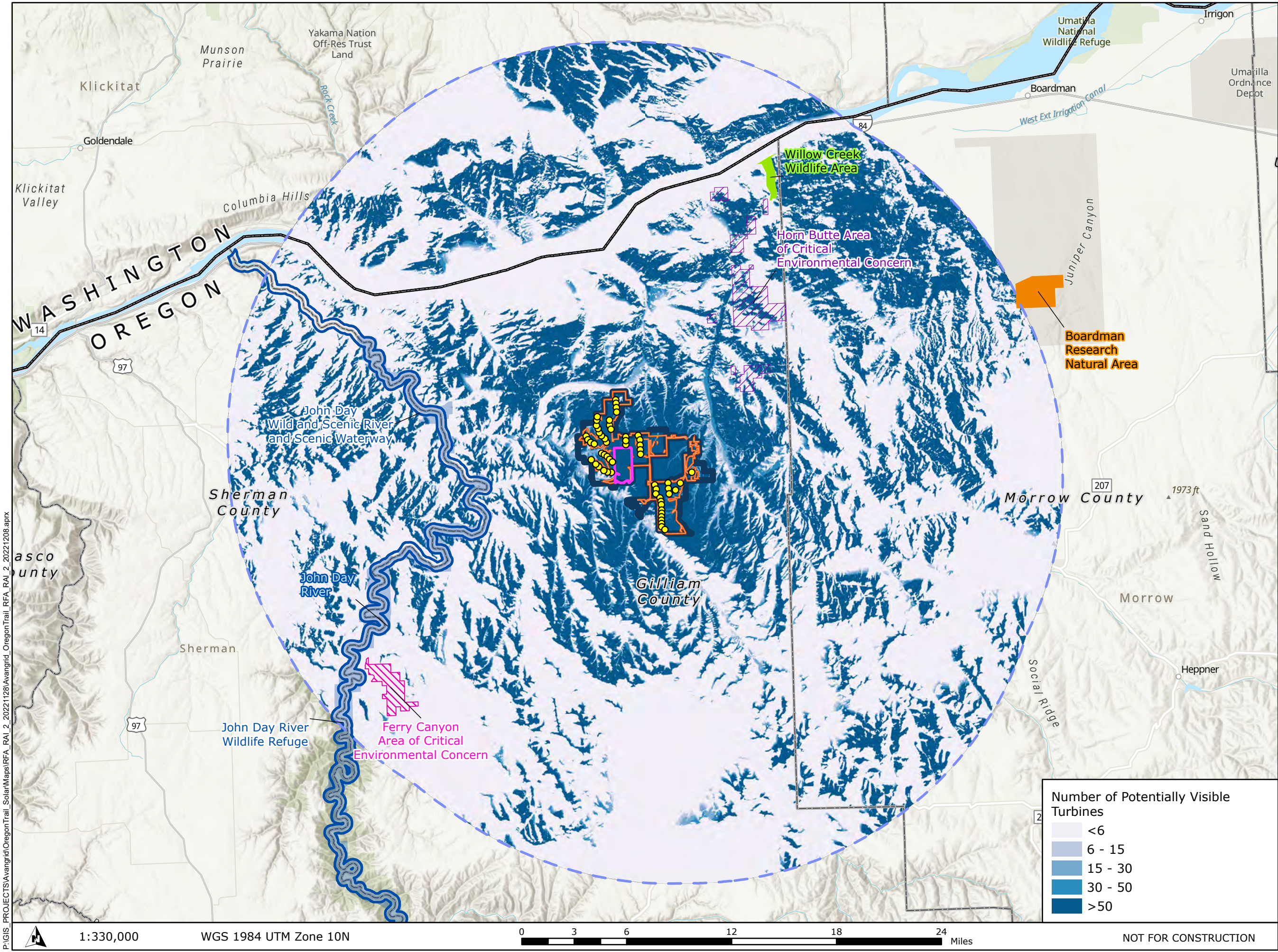
Proposed Transportation Routes

- Alternative
- Primary

Reference Map

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# Oregon Trail Solar Facility

## Figure 6C Protected Areas: Potential Visibility

GILLIAM COUNTY, OR

Site Boundary Area Subject to Request for Amendment 1

Approved Wind Micrositing Corridor

Approved Solar Micrositing Area

20 Mile Analysis Area

Turbine

County Boundary

State Boundary

Ferry Canyon ACEC

Horn Butte ACEC

Boardman Research Natural Area

Willow Creek Wildlife Area

John Day River Wildlife Refuge

John Day WSR and Scenic Waterway

<6

6 - 15

15 - 30

30 - 50

>50

Reference Map

TETRA TECH

AVANGRID RENEWABLES

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**Oregon Trail  
Solar Facility**

**Figure 7A  
2022 Habitat Site  
Reconnaissance Results  
Habitat Types**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- 2022 Survey Area

- Habitat Type**
- Basin Big Sagebrush Shrub-steppe
  - Developed-CRP or Other Planted Grassland
  - Developed-Dryland Wheat
  - Developed-Irrigated Agriculture
  - Developed-Other
  - Developed-Revegetated or Other Planted Grassland
  - Exotic Annual Grassland
  - Juniper Woodland
  - Native Perennial Grassland
  - Rabbitbrush/Snakeweed Shrub-steppe
  - Riparian Woodland



**Reference Map**



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**Oregon Trail  
Solar Facility**

**Figure 7B  
2022 Habitat Site  
Reconnaissance Results  
Habitat Categories**

GILLIAM COUNTY, OR

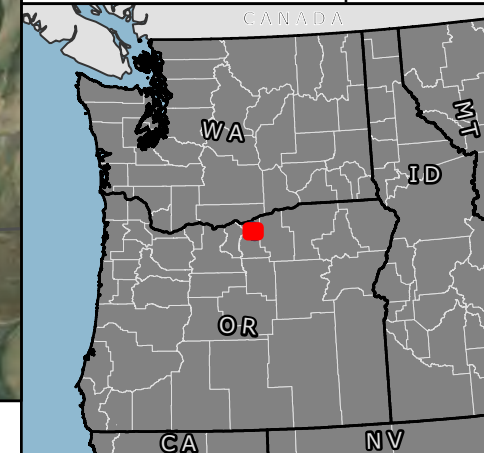
- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- State Highway
- Local Roads
- 2022 Survey Area

**Habitat Categories**

- 1
- 2
- 3
- 4
- 6



**Reference Map**



1:60,000

WGS 1984 UTM Zone 10N

0 1 2 4 Miles

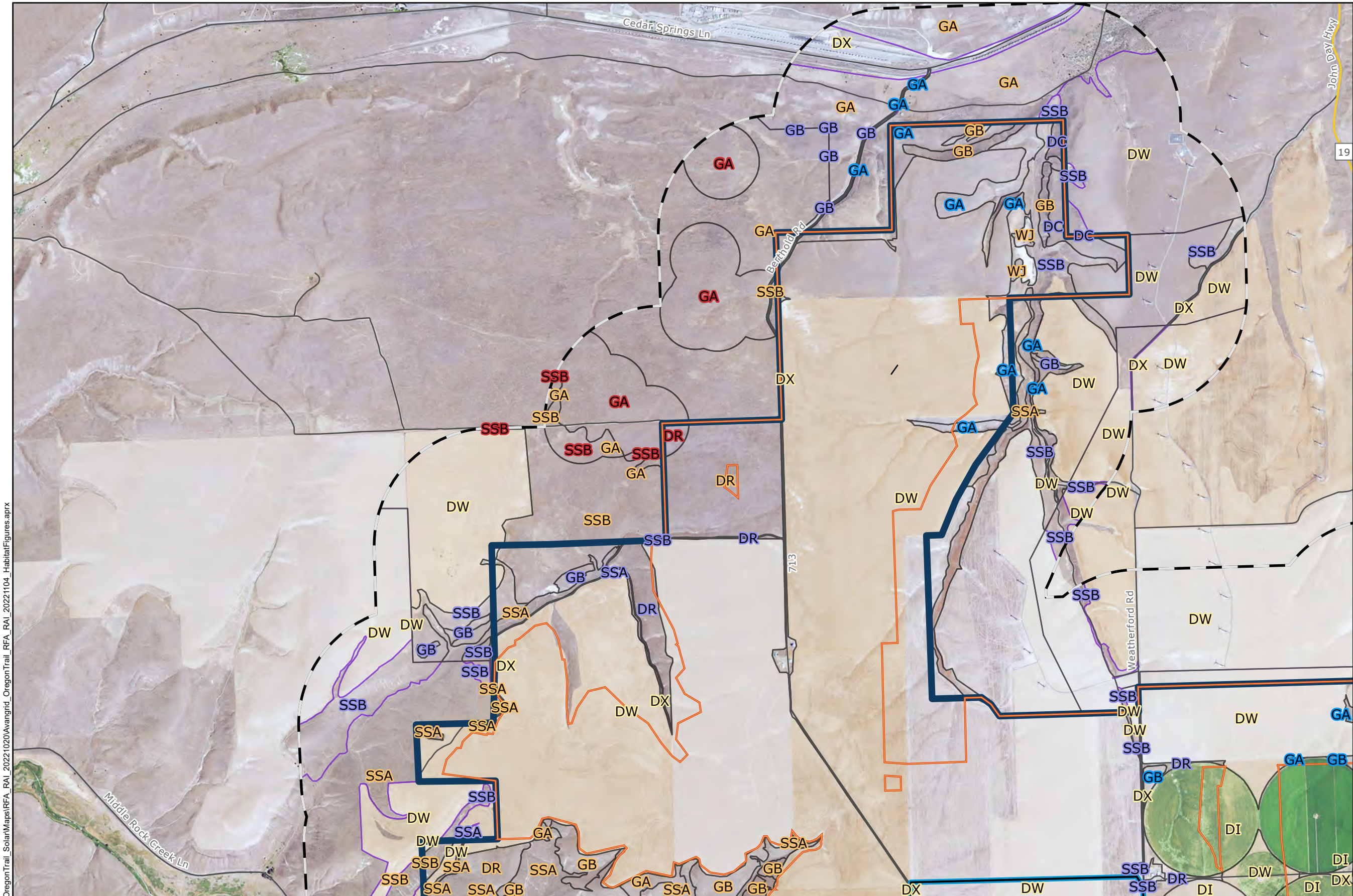
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Earthstar Geographics

19

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# Oregon Trail Solar Facility

**Figure 7C.1  
Habitat Overview**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- Local Roads
- 2022 Survey Area
- 2022 Desktop Review of Analysis Area (0.5 mile Buffer)
- 2017 Habitat Categories

<b>Category 1</b>	<b>Category 4</b>
<b>Category 2</b>	Category 5 (N/A)
<b>Category 3</b>	Category 6

Imagery Source: NAIP, 2020



Reference Map

Figure 11A.1

Figure 11A.2

Figure 11A.3

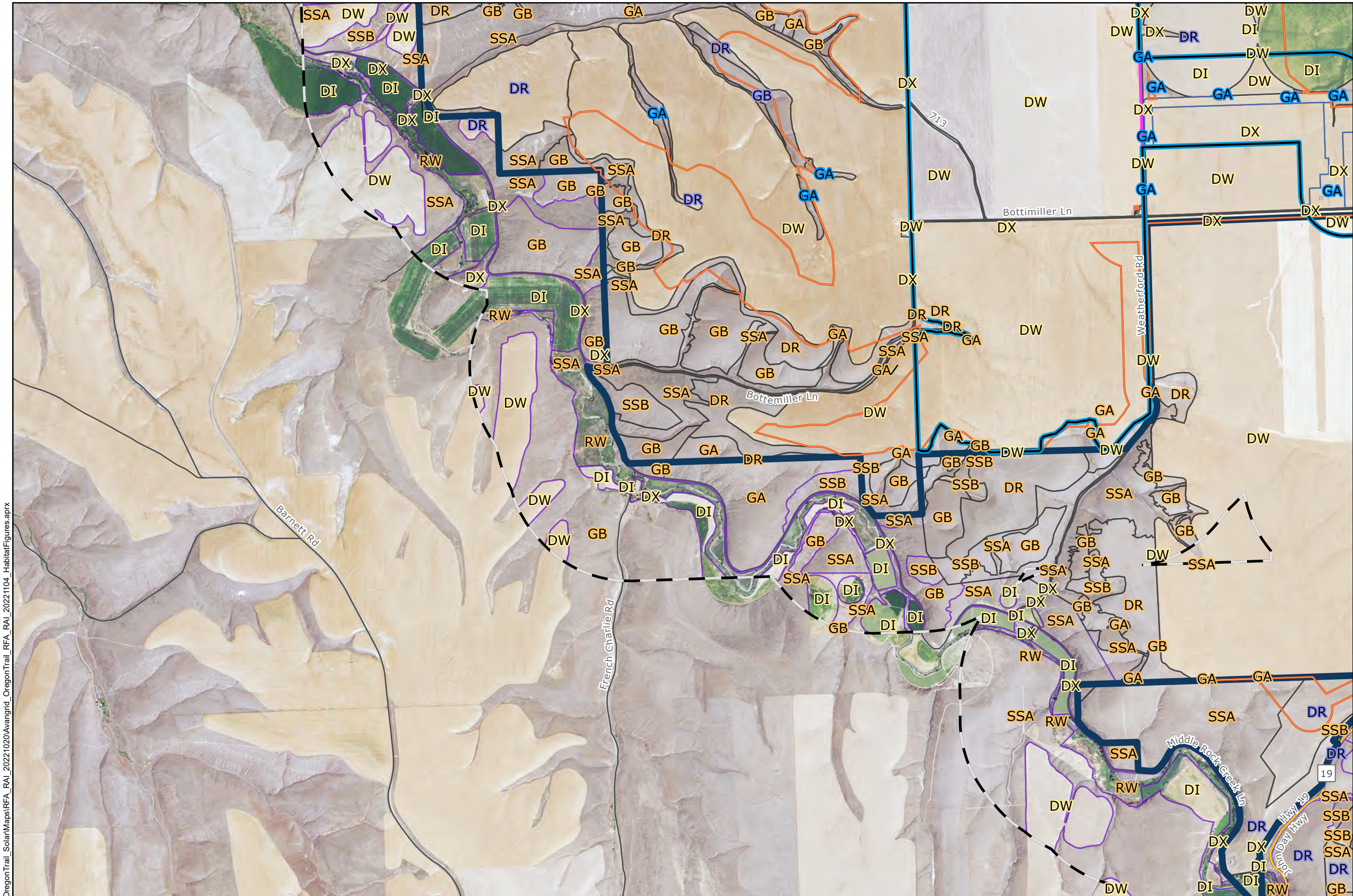
Figure 11A.4

Habitat Code: Habitat Description	DR: Developed-Revegetated or Other Planted Grassland	GA: Exotic Annual Grassland	SSA: Basin Big Sagebrush Shrub-steppe
DC: Developed-CRP or Other Planted Grassland	DW: Developed-Dryland Wheat	GB: Native Perennial Grassland	SSB: Rabbitbrush/Snakeweed Shrub-steppe
DI: Developed-Irrigated Agriculture	DX: Developed-Other	RW: Riparian Woodland	WJ: Juniper Woodland

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# Oregon Trail Solar Facility

**Figure 7C.2  
Habitat Overview**

GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- 2022 Survey Area
- 2022 Habitat Categories
- 2022 Desktop Review of
- Analysis Area (0.5 mile Buffer)
- 2017 Habitat Categories

<b>Category 1</b>	<b>Category 4</b>
<b>Category 2</b>	Category 5 (N/A)
<b>Category 3</b>	Category 6

Imagery Source: NAIP, 2020



Reference Map

Figure 11A.1

Figure 11A.2

OR

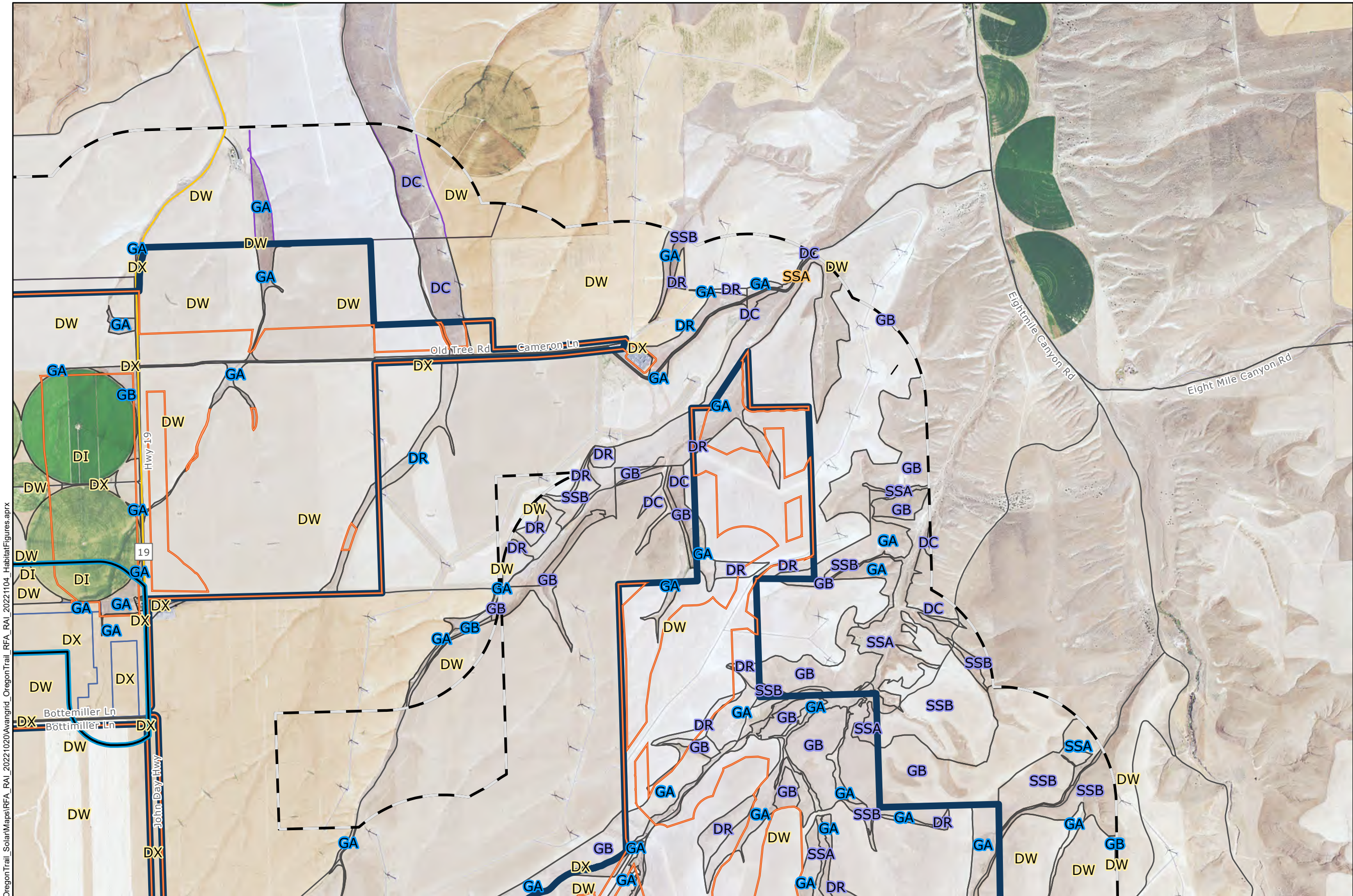
Figure 11A.3

Figure 11A.4

Habitat Code: Habitat Description	DR: Developed-Revegetated or Other Planted Grassland	GA: Exotic Annual Grassland	SSA: Basin Big Sagebrush Shrub-steppe
DC: Developed-CRP or Other Planted Grassland	DW: Developed-Dryland Wheat	GB: Native Perennial Grassland	SSB: Rabbitbrush/Snakeweed Shrub-steppe
DI: Developed-Irrigated Agriculture	DX: Developed-Other	RW: Riparian Woodland	WJ: Juniper Woodland



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**Oregon Trail  
Solar Facility**

**Figure 7C.3  
Habitat Overview**

**GILLIAM COUNTY, OR**

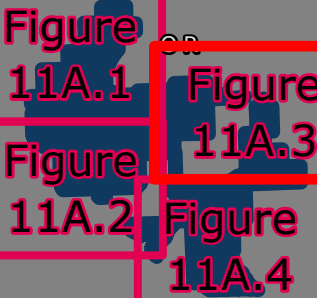
- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- 2022 Survey Area
- 2022 Habitat Categories
- 2022 Desktop Review of Analysis Area (0.5 mile Buffer)
- 2017 Habitat Categories

<b>Category 1</b>	<b>Category 4</b>
<b>Category 2</b>	Category 5 (N/A)
<b>Category 3</b>	<b>Category 6</b>

Imagery Source: NAIP, 2020



Reference Map



Habitat Code: Habitat Description

DC: Developed-CRP or Other Planted Grassland

DI: Developed-Irrigated Agriculture

DR: Developed-Revegetated or Other Planted Grassland

DW: Developed-Dryland Wheat

DX: Developed-Other

GA: Exotic Annual Grassland

GB: Native Perennial Grassland

RW: Riparian Woodland

SSA: Basin Big Sagebrush Shrub-steppe

SSB: Rabbitbrush/Snakeweed Shrub-steppe

WJ: Juniper Woodland



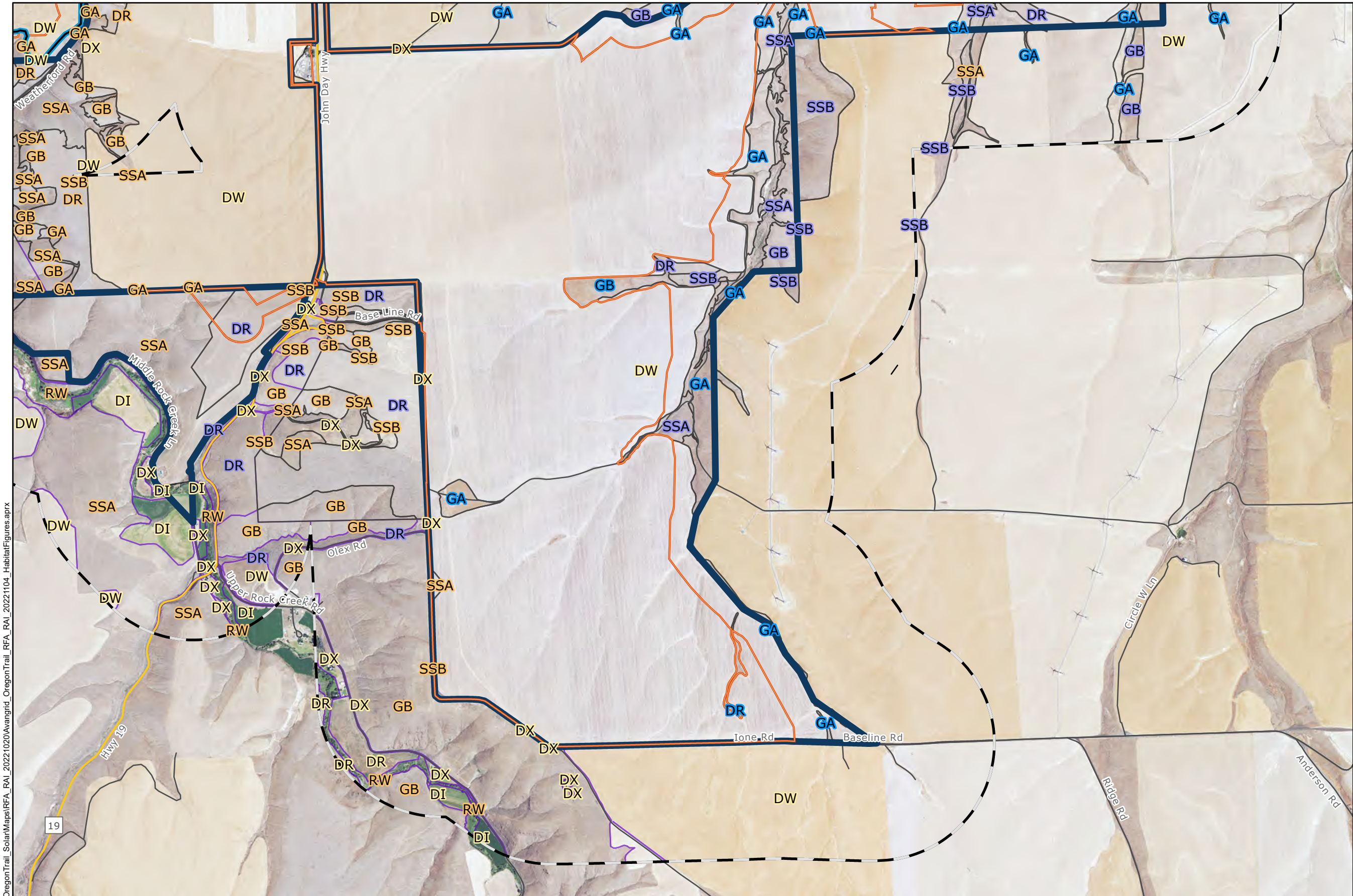
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WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION





Oregon Trail  
Solar Facility

Figure 7C.4  
Habitat Overview

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- 2022 Survey Area
- 2022 Desktop Review of Analysis Area (0.5 mile Buffer)
- 2017 Habitat Categories

Category 1	Category 4
Category 2	Category 5 (N/A)
Category 3	Category 6

Imagery Source: NAIP, 2020



Reference Map

Figure 11A.1 OR Figure 11A.3  
Figure 11A.2 Figure 11A.4

Habitat Code: Habitat Description	DR: Developed-Revegetated or Other Planted Grassland	GA: Exotic Annual Grassland	SSA: Basin Big Sagebrush Shrub-steppe
DC: Developed-CRP or Other Planted Grassland	DW: Developed-Dryland Wheat	GB: Native Perennial Grassland	SSB: Rabbitbrush/Snakeweed Shrub-steppe
DI: Developed-Irrigated Agriculture	DX: Developed-Other	RW: Riparian Woodland	WJ: Juniper Woodland



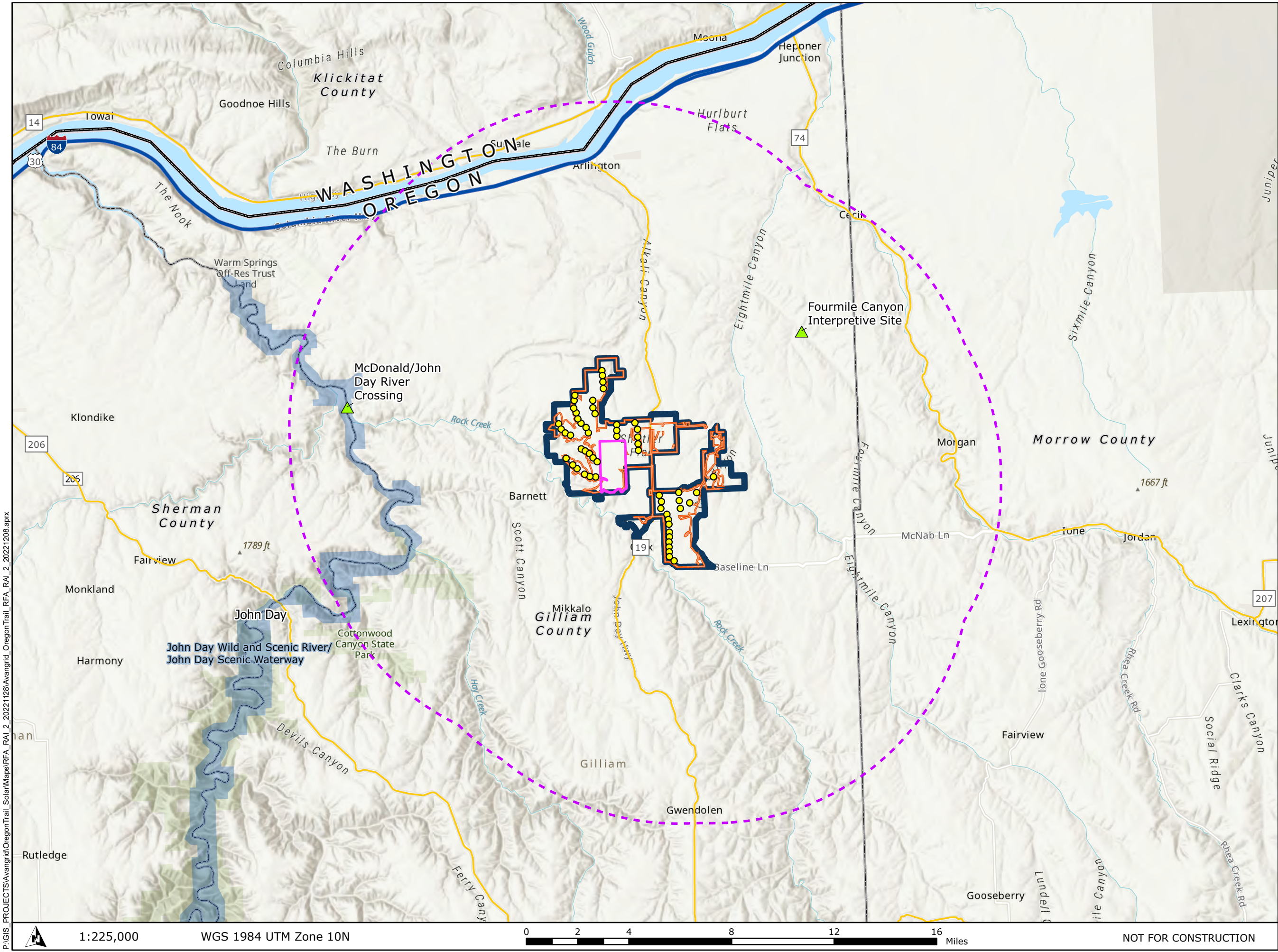
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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION





# Oregon Trail Solar Facility

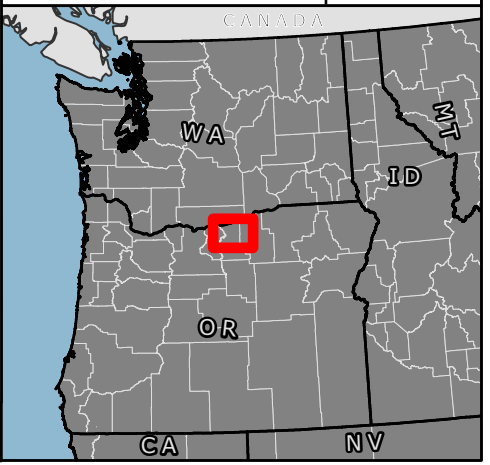
## Figure 8A Scenic Resources

GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- 10 Mile Analysis Area
- Turbine
- State Boundary
- County Boundary
- Interstate Highway
- US Highway
- State Highway
- John Day WSR and Scenic Waterway
- ONHT Site



### Reference Map

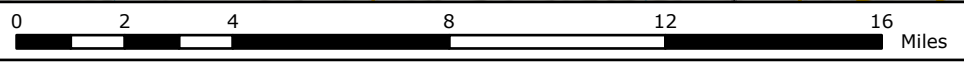


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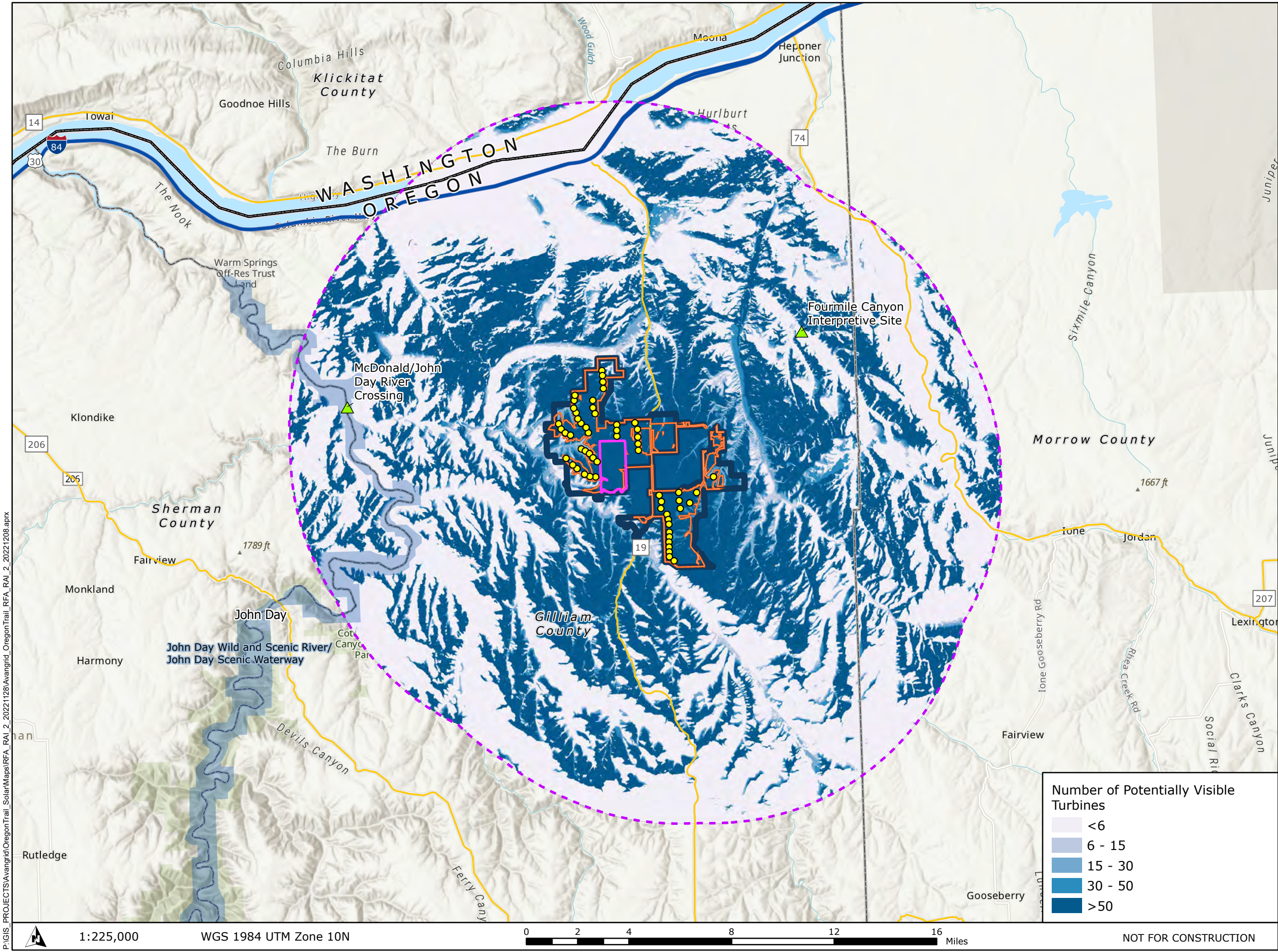
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WGS 1984 UTM Zone 10N



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# Oregon Trail Solar Facility

## Figure 8B Scenic Resources: Potential Visibility

GILLIAM COUNTY, OR

Site Boundary Area Subject to Request for Amendment 1

Approved Wind Micrositing Corridor

Approved Solar Micrositing Area

10 Mile Analysis Area

Turbine

State Boundary

County Boundary

Interstate Highway

US Highway

State Highway

John Day WSR and Scenic Waterway

ONHT Site

<6

6 - 15

15 - 30

30 - 50

>50

Reference Map

TETRA TECH

AVANGRID RENEWABLES

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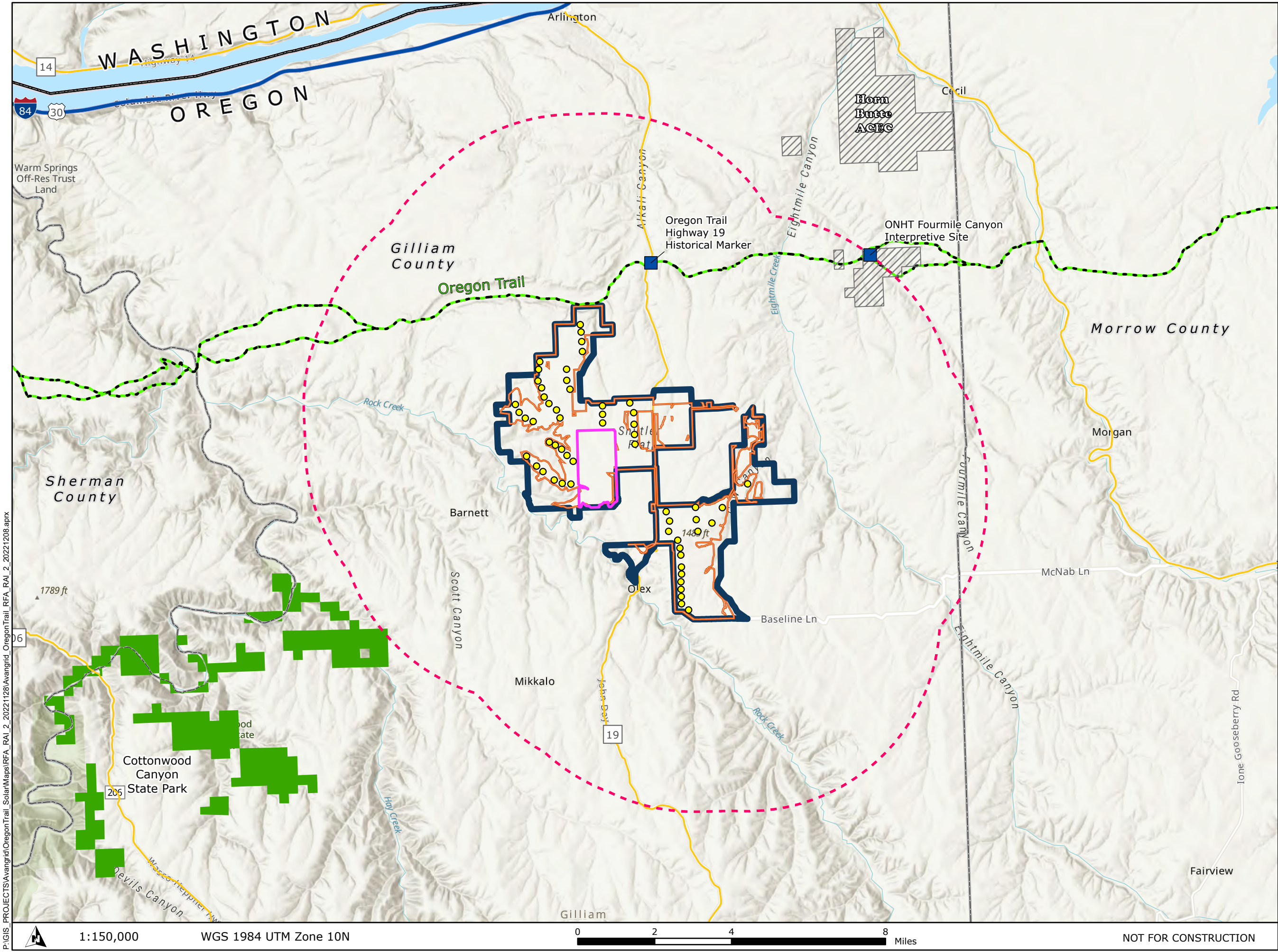
WGS 1984 UTM Zone 10N

0 2 4 8 12 16 Miles

NOT FOR CONSTRUCTION

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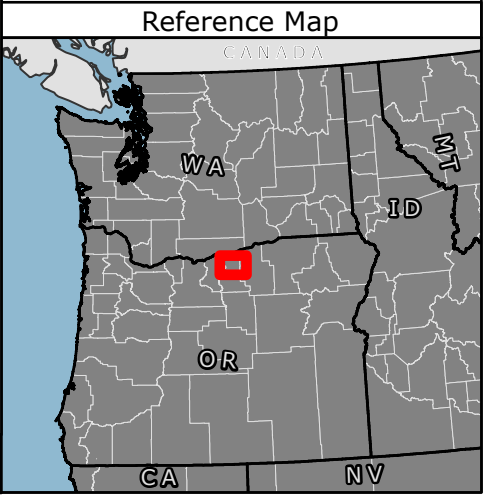


# Oregon Trail Solar Facility

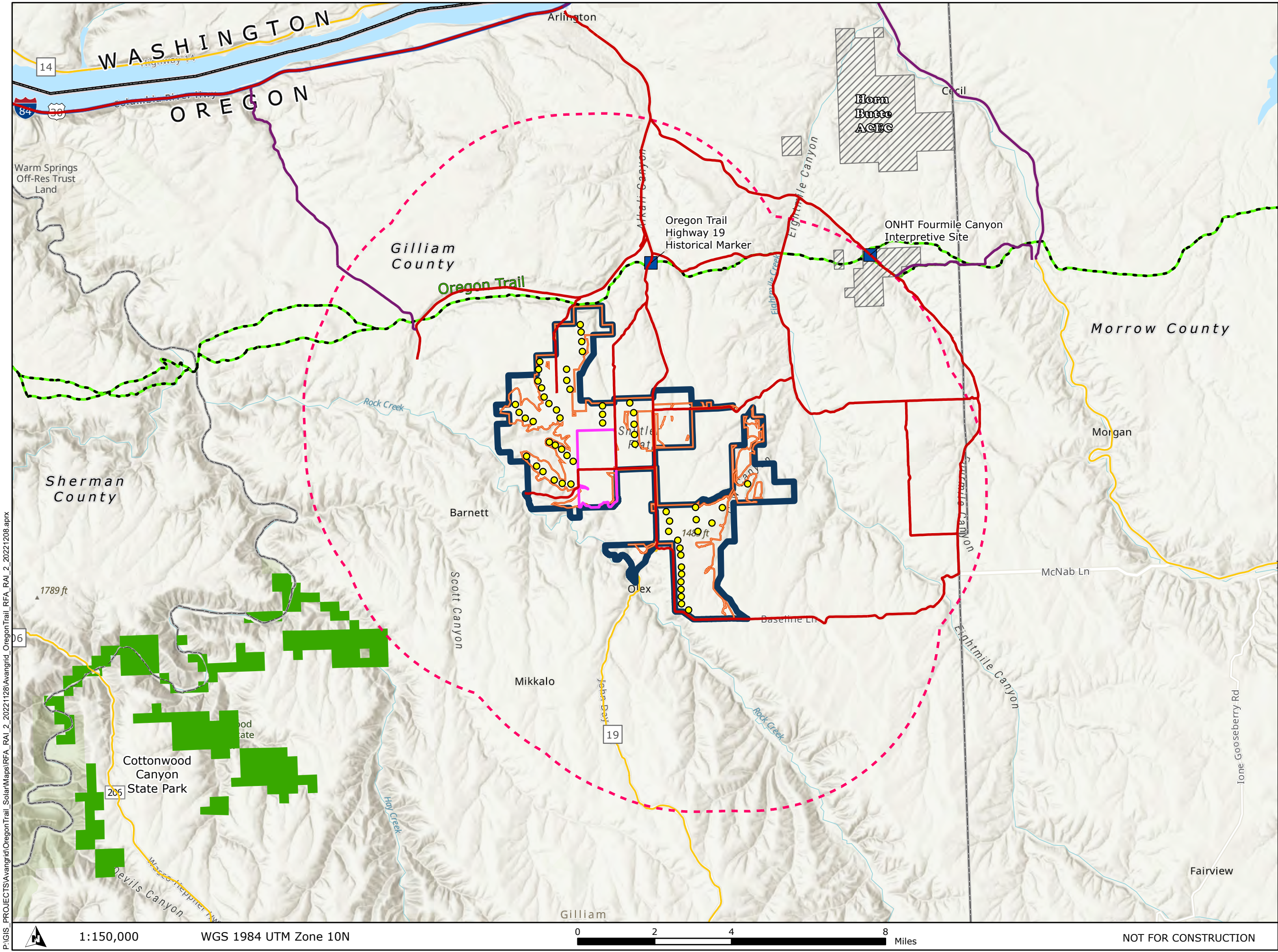
## Figure 9A Recreational Opportunities

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- 5 Mile Analysis Area
- Turbine
- State Boundary
- County Boundary
- Interstate Highway
- US Highway
- State Highway
- Recreation Site
- Oregon Trail (Historic Route)
- Horn Butte ACEC
- Oregon State Parks







# Oregon Trail Solar Facility

## Figure 9B Recreational Opportunities: Transportation Routes

GILLIAM COUNTY, OR

 Site Boundary Area Subject to Request for Amendment 1

 Approved Wind Micrositing Corridor

 Approved Solar Micrositing Area

 5 Mile Analysis Area

 Turbine

 State Boundary

 County Boundary

 Interstate Highway

 US Highway

 State Highway

 Recreation Site

 Oregon Trail (Historic Route)

 Horn Butte ACEC

 Oregon State Parks

Proposed Transportation Routes

 Alternative

 Primary

 TETRA TECH

 AVANGRID RENEWABLES

### Reference Map

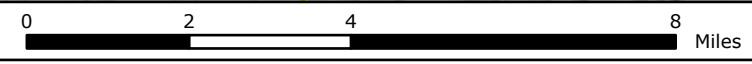


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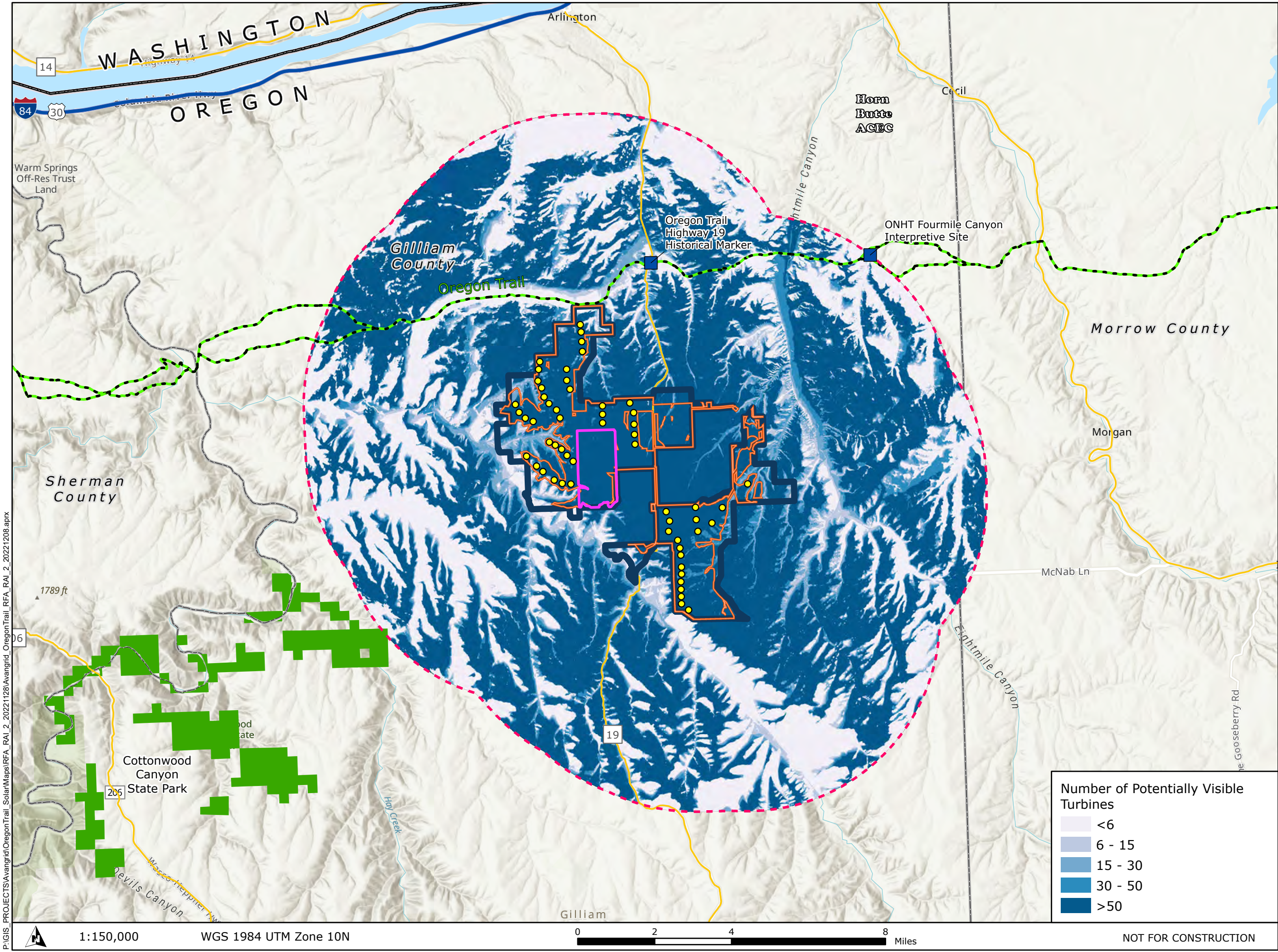
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WGS 1984 UTM Zone 10N



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# Oregon Trail Solar Facility

## Figure 9C Recreational Opportunities: Potential Visibility

GILLIAM COUNTY, OR

Site Boundary Area

Subject to Request for Amendment 1

Approved Wind Micrositing Corridor

Approved Solar Micrositing Area

5 Mile Analysis Area

Turbine

State Boundary

County Boundary

Interstate Highway

US Highway

State Highway

Recreation Site

Oregon Trail (Historic Route)

Oregon State Parks

TETRA TECH

AVANGRID RENEWABLES

### Reference Map

Number of Potentially Visible Turbines

<6

6 - 15

15 - 30

30 - 50

>50

1:150,000

WGS 1984 UTM Zone 10N

0

2

4

8

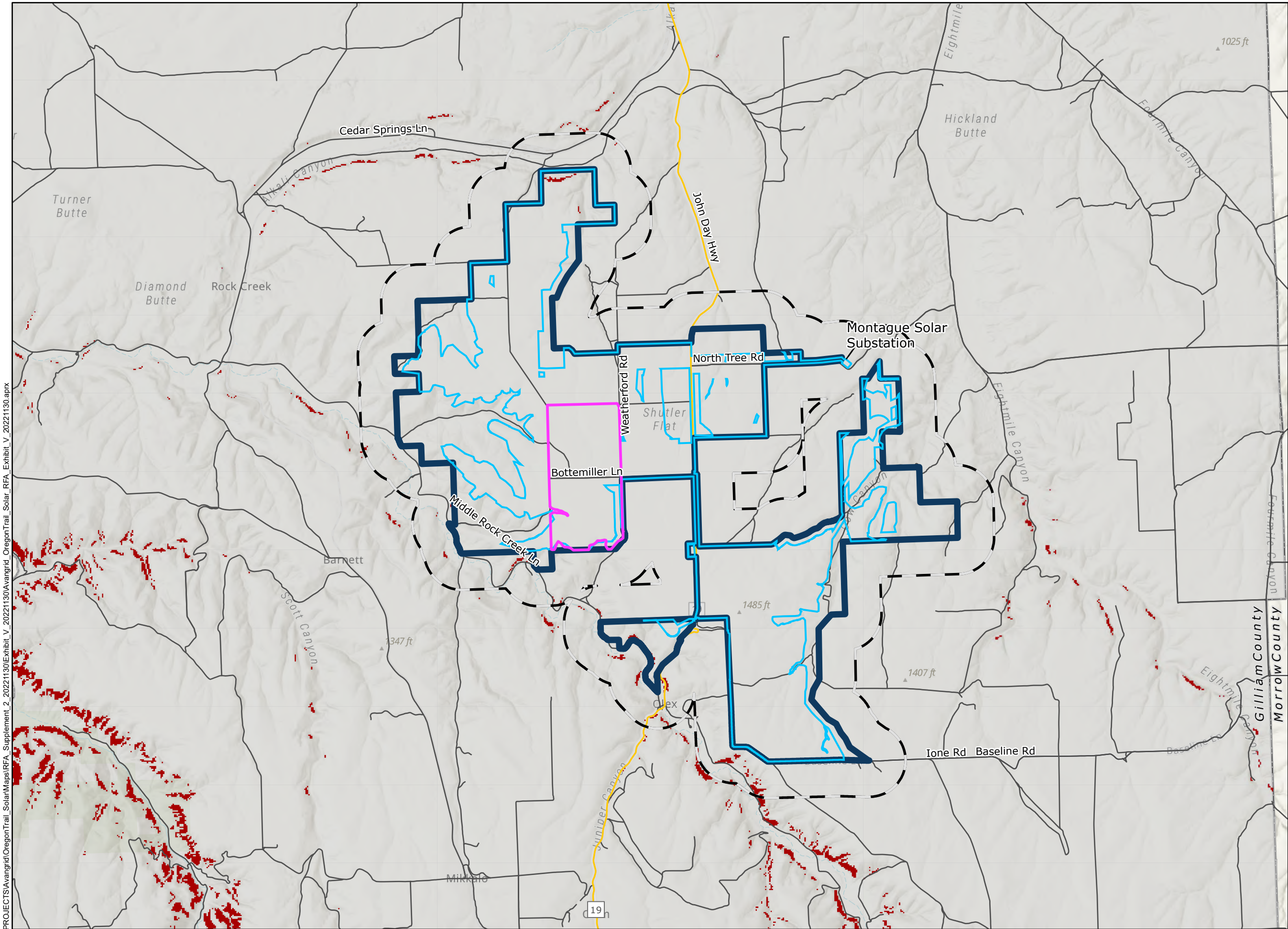
Miles

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# Oregon Trail Solar Facility

Figure 10A  
Slope

GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Slope value
  - 0 - 25 degrees
  - 25-50 degrees

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



Reference Map



1:80,000

WGS 1984 UTM Zone 10N

0 2 4 8 Miles

NOT FOR CONSTRUCTION



Oregon Trail  
Solar Facility

Figure 10B  
Fuel Models

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



Reference Map



Fuel Model	
91	142
93	161
98	162
99	181
101	182
102	183
103	185
121	186
122	188
	189



1:80,000

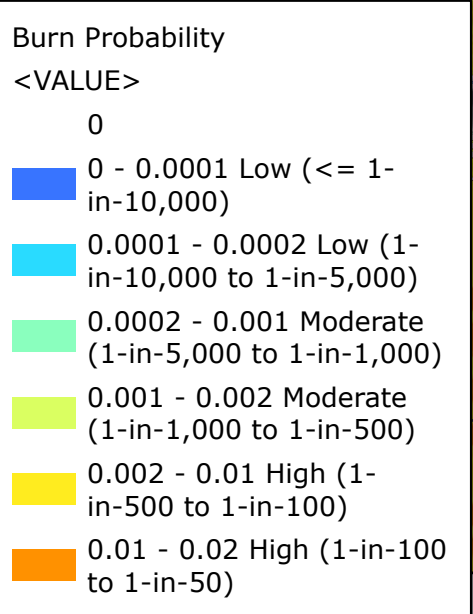
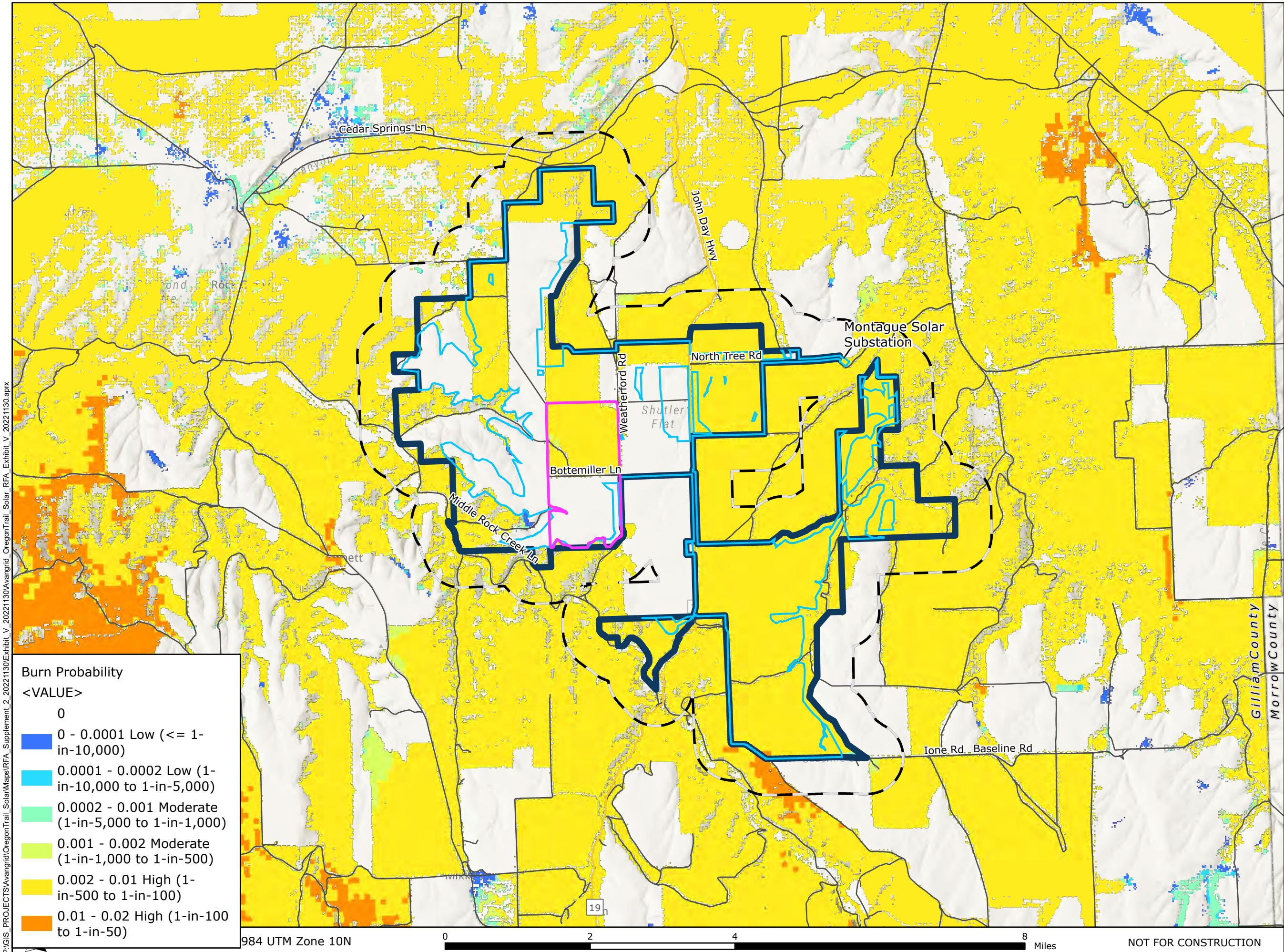
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0 2 4 8 Miles

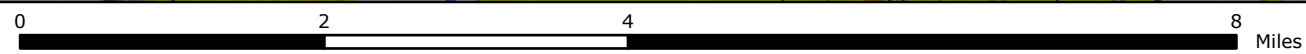
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984 UTM Zone 10N



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# Oregon Trail Solar Facility

## Figure 10C Burn Probability

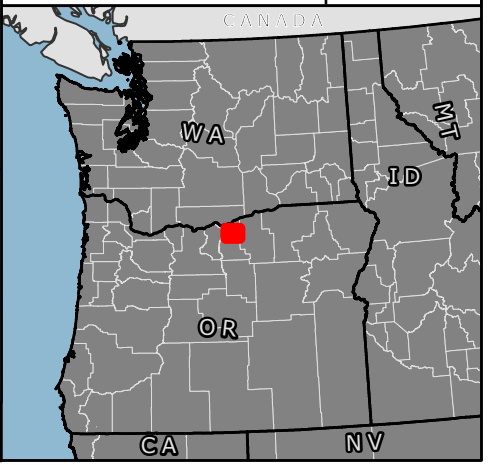
GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.

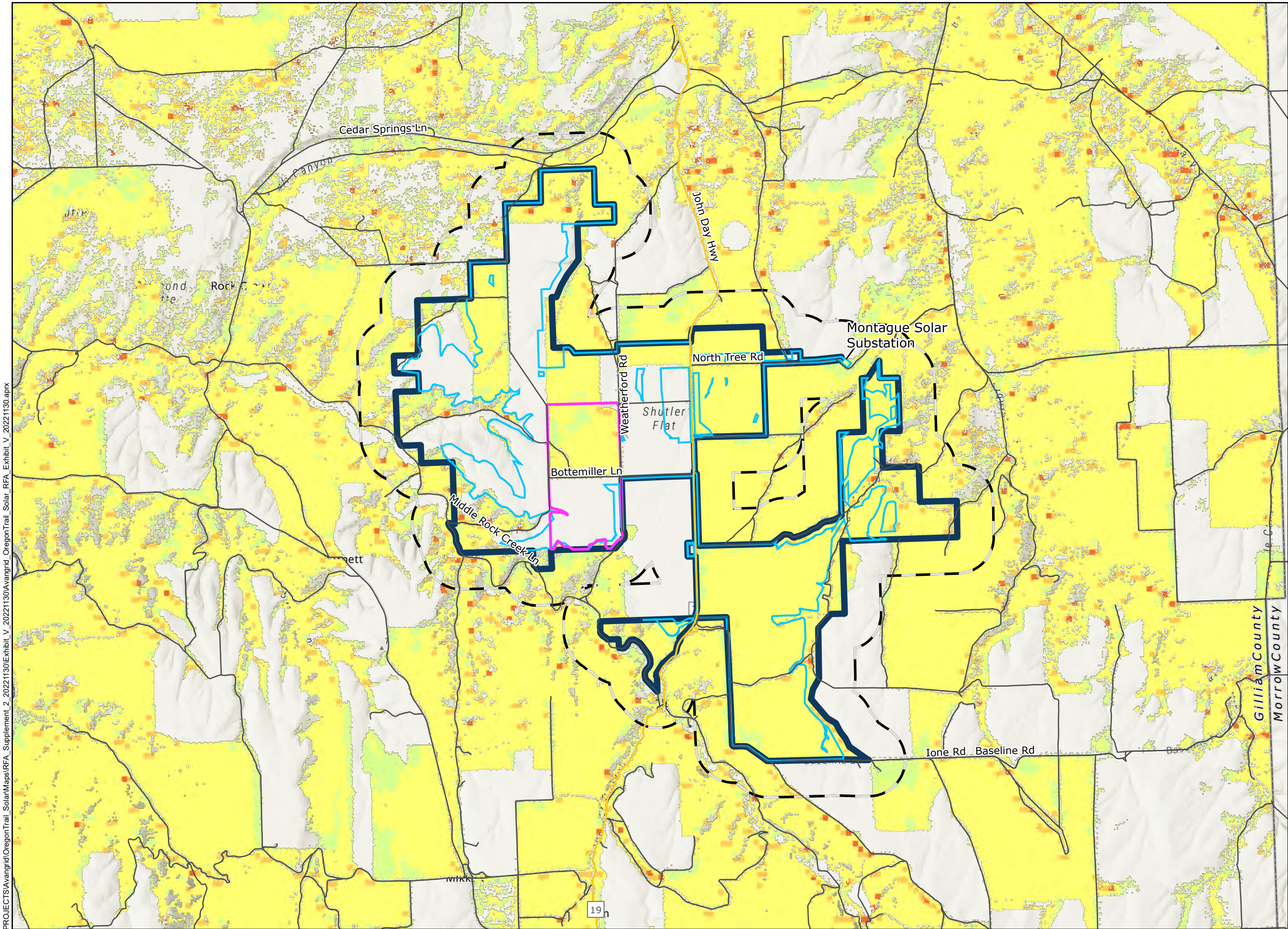


### Reference Map





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# Oregon Trail Solar Facility

**Figure 10D**  
**Average Flame Length**

GILLIAM COUNTY, OR

- Site Boundary Area Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Average Flame Length
  - 0
  - >0 - 4 ft
  - 4 - 8 ft
  - 8 - 11 ft
  - > 11 ft

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



## Reference Map



1:80,000

WGS 1984 UTM Zone 10N

0

2

4

8

Miles

NOT FOR CONSTRUCTION



-  Site Boundary Area
-  Subject to Request for Amendment 1
-  Approved Wind Micrositing Corridor
-  Approved Solar Micrositing Area
-  Analysis Area (0.5-mile Buffer)
-  County Boundary
-  State Highway
-  Local Roads

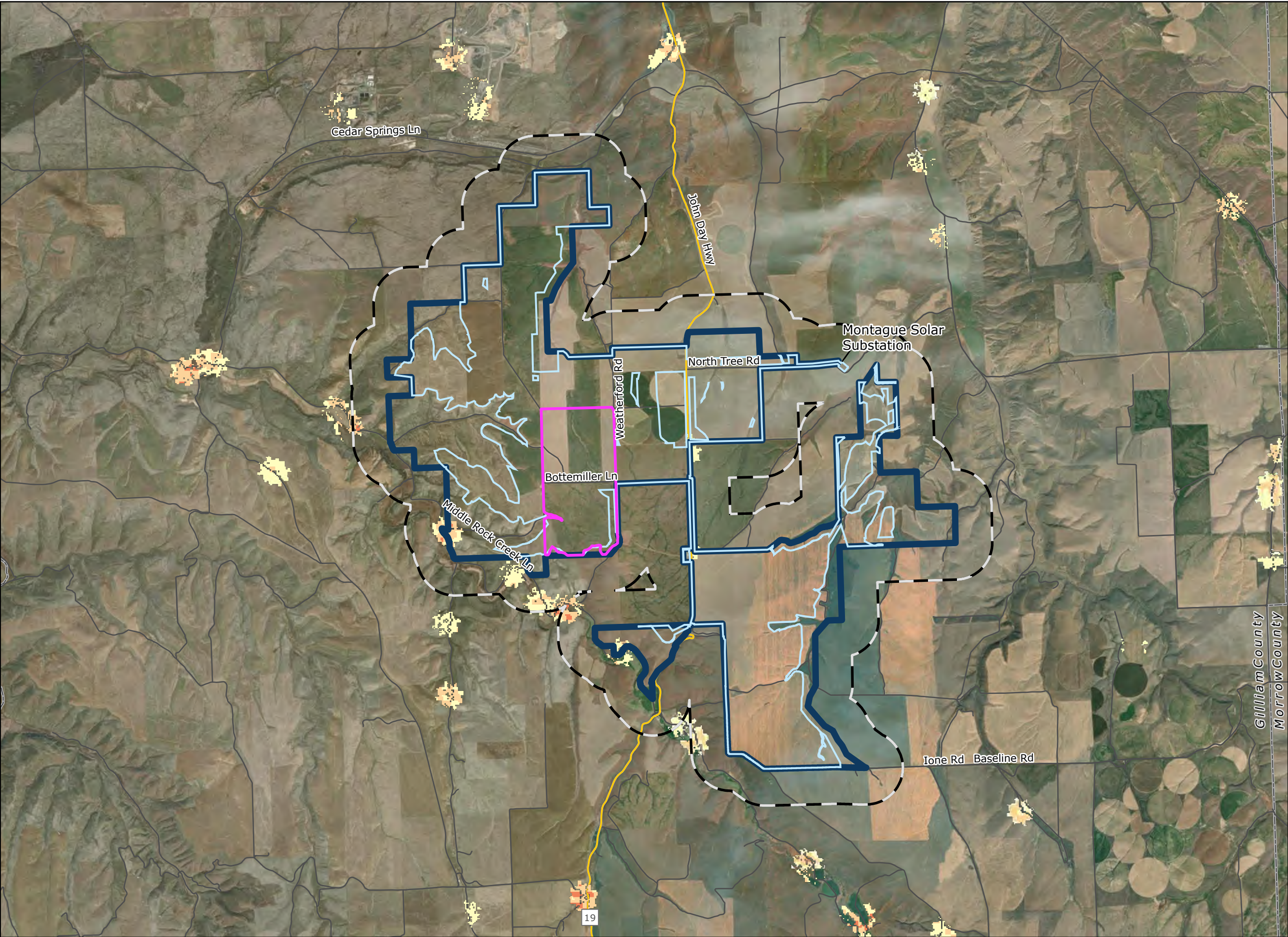
Wildfire Risk to Assets

-  Very High
-  High
-  Moderate
-  Low





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**Oregon Trail  
Solar Facility**

**Figure 10F  
Wildfire Potential  
Impacts to  
People and Property**

**GILLIAM COUNTY, OR**

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Potential Impact to People and Property
  - High
  - Moderate
  - Low

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



**Reference Map**



1:80,000

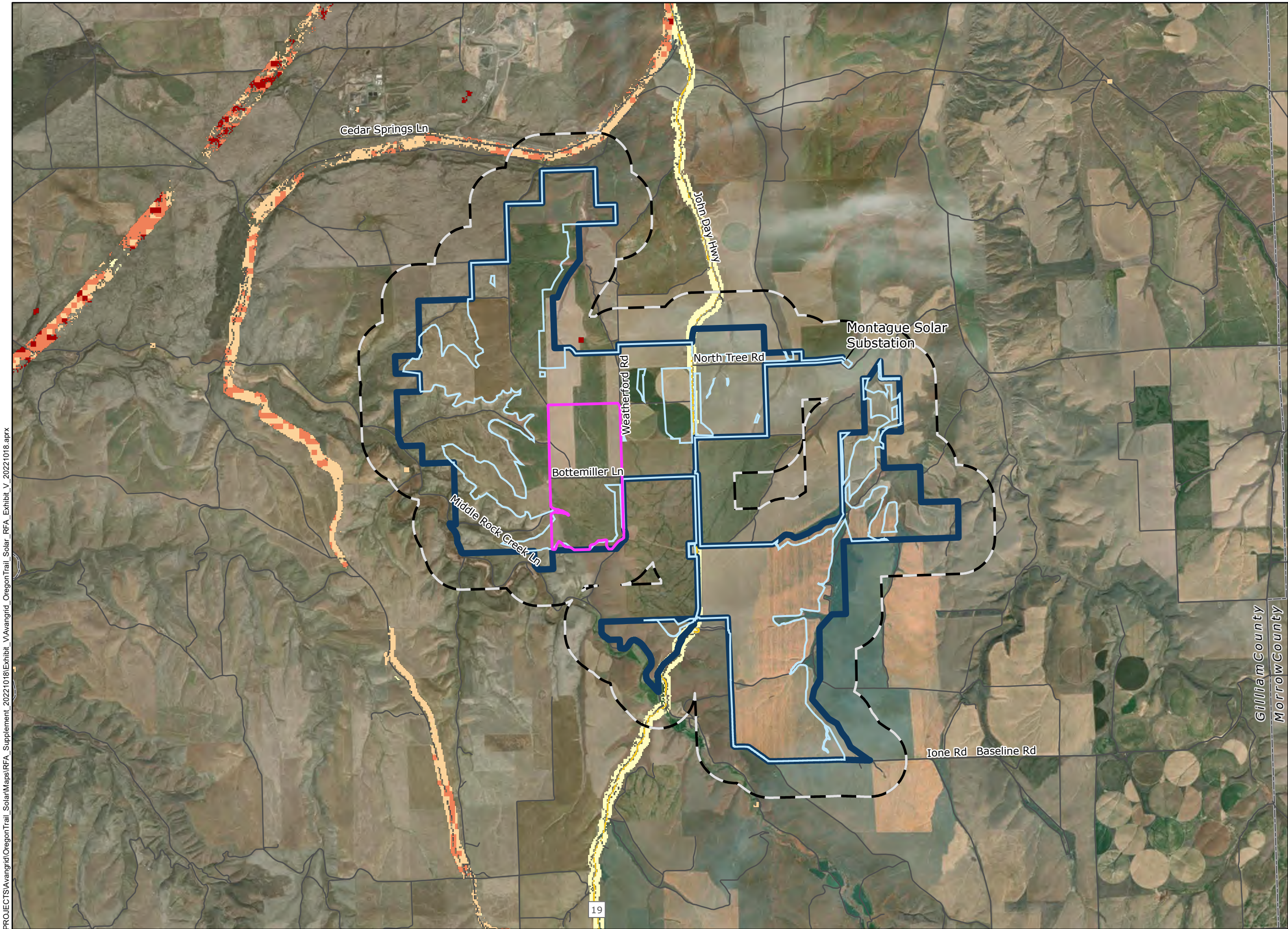
WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION





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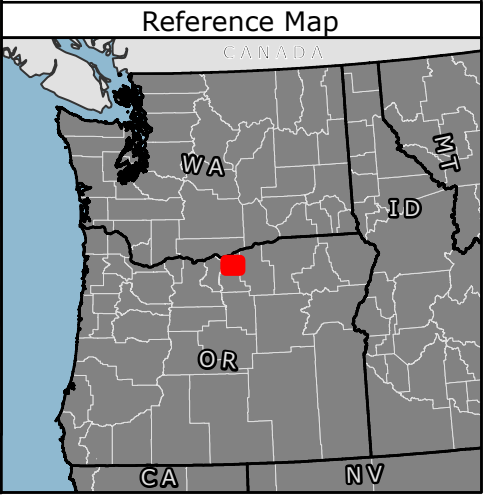


# Oregon Trail Solar Facility

## Figure 10G Wildfire Potential Impacts to Infrastructure

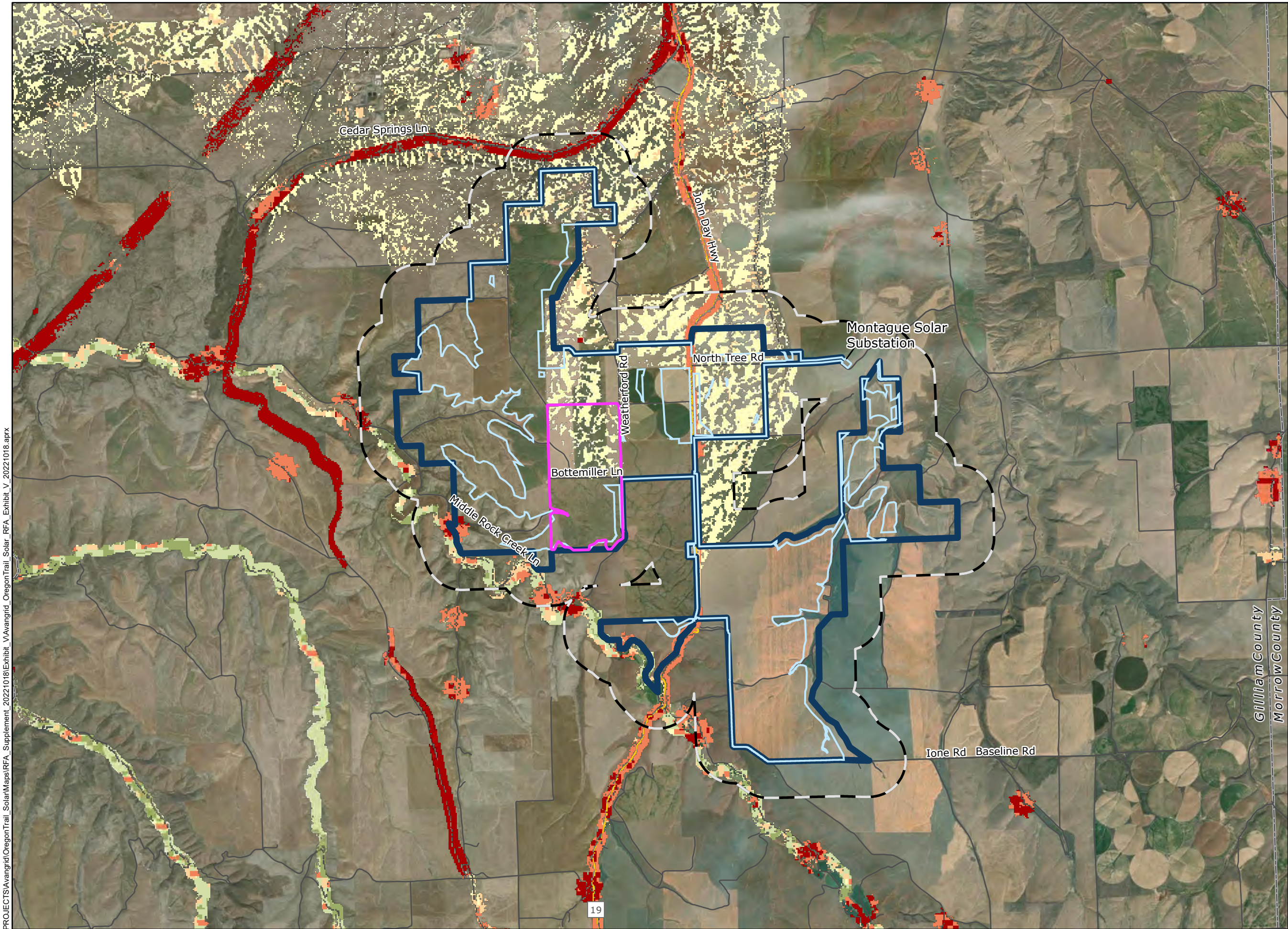
GILLIAM COUNTY, OR

- Site Boundary Area
  - Subject to Request for Amendment 1
  - Approved Wind Micrositing Corridor
  - Approved Solar Micrositing Area
  - Analysis Area (0.5-mile Buffer)
  - County Boundary
  - State Highway
  - Local Roads
- Potential Impact to Infrastructure\*
- Very High
  - High
  - Moderate
  - Low
- \* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.
-  TETRA TECH
-  AVANGRID RENEWABLES





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# Oregon Trail Solar Facility

Figure 10H  
Overall Fire Risk

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Overall Wildfire Risk
  - Very High
  - High
  - Moderate
  - Low
  - Low Benefit
  - Benefit

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



## Reference Map



1:80,000

WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



**Oregon Trail  
Solar Facility**

**Figure 11  
Noise Sensitive  
Receptors**

GILLIAM COUNTY, OR

- Site Boundary Area  
Subject to Request for  
Amendment 1
- Approved Wind Micrositing  
Corridor
- Approved Solar Micrositing  
Area
- Noise-sensitive Receptor
- Noise-sensitive Receptor  
Identified 08/09/2022
- 2-mile Buffer of Turbine  
Locations
- County Boundary
- State Highway
- Local Roads



Reference Map



Gilliam  
County

Montague Solar  
Substation

19



1:80,000

WGS 1984 UTM Zone 10N

0

2

4

8

Miles

NOT FOR CONSTRUCTION



**Oregon Trail  
Solar Facility**

**Figure 12  
Previous Wetlands  
and Waters Surveys**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- County Boundary
- State Highway
- Local Roads

Montague Solar Substation

**Previous Wetland and  
Waterways Surveys**

- April 2017 (WD #2011-0364R)
- June 2017 (WD #2017-0111)
- May 2018 (WD #2018-0597)
- October 2018 (WD #2018-0660)
- August 2020-Oregon Trail (WD #2020-0587)
- August 2020-Montague (WD #2020-0587)
- Pre-2017



**Reference Map**



1:60,000

WGS 1984 UTM Zone 10N

0 1 2 4 Miles

NOT FOR CONSTRUCTION

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# **Attachment 1. Montague Solar Construction Monitoring Plan**



# **Construction Monitoring Plan for the Montague Solar Project, Gilliam County, Oregon**

---

SHPO Case No. 10-0378

**Prepared for**



**Avangrid Renewables**

**Prepared by**



**Tetra Tech, Inc.  
Portland, Oregon**

**Author:**

**Erin King, MA, RPA**

**September 2021  
Minor Revisions February 2022**

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Appendix A. Known Cultural Resources and Project Design (CONFIDENTIAL)

Appendix B. Cultural Resources Monitoring Forms

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## 1.0 Introduction

Avangrid Renewables (Avangrid) is constructing the Montague Solar Project (Project), which is located entirely on private lands south of Arlington, in Gilliam County, Oregon. The Project received an approved site certificate from the Oregon Energy Facility Siting Council (EFSC) on September 25, 2020. The Project is the solar component of Phase 2 of the Montague Wind Power Facility. The solar element of Phase 2 is approved to occupy up to 1,189 acres. Related or supporting facilities include an above and belowground electrical collection system; a SCADA System; one collector substation; an approximately 14-mile, 230-kilovolt transmission line (including the 10-mile, 230-kilovolt transmission line constructed as part of Phase 1); up to 8 permanent meteorological towers; new, temporary and substantially modified access roads; a lithium-ion or flow battery storage system; and temporary laydown areas. The Project design is included in confidential Appendix A. Construction began in March 2021 and is expected to continue through March 2022.

In Amendments 4 and 5 of the original site certificate, the Oregon Department of Energy (ODOE) imposed Condition 50(b) for archaeological monitoring of construction activities that disturb soils and sediments deeper than 12 inches below ground surface:

*Cultural Resources Condition 50(b) – During construction, the certificate holder shall:*  
*(b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater. The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. Ground disturbance at depths 12 inches or greater shall not occur without the presence of the approved cultural resources monitor. If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment H of the Final Order on Amendment 5 should be followed. The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor.*  
*[AMD4; AMD5]*

To date, archaeological monitoring of open excavations and grading at depths of 12 inches or greater has been conducted on a near-daily basis since March 2021. One inadvertent discovery of an isolated item of historic refuse (MON-ISO-001) occurred on March 24, 2021 in a disturbed context. ODOE and the Oregon State Historic Preservation Office (SHPO) were notified immediately and construction around the find was halted until it could be recorded. The find was documented in the field and reported to ODOE and SHPO in a memo on March 25, 2021 (King 2021). Construction in the area was then allowed to continue. Monitoring has otherwise observed extensively disturbed soils with no indication of cultural resources.

As part of a request by Avangrid to modify the monitoring requirements in Condition 50(b), ODOE has requested a construction monitoring plan (Plan) to detail the altered monitoring requirements. No monitoring plan was required by ODOE as part of the original approval of the Project, nor in the conditions. There is no pre-existing plan. The Plan presented here provides protocols for archaeological monitoring during the remainder of construction. It does not modify the existing approved Inadvertent Discovery Plan (IDP; Avangrid 2020) or Worker Environmental Awareness Program. The Plan is based on the original site certificate condition for archaeological monitoring, observations and results of archaeological monitoring conducted to date, results of pre-construction cultural resources surveys, and discussions between Avangrid, ODOE, and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR).

## **1.1 Regulatory Context**

The Project's regulatory compliance is limited to ODOE and EFSC oversight. Since the Project is located on private land, SHPO guidelines for recording archaeological resources apply. While federal regulations dictate that archaeological resources must be 50 years or older, under the SHPO guidelines resources must be at least 75 years old to be considered a cultural resource.

### **1.1.1 *General Standards for Siting Facilities***

Subsection (1) of the Historic, Cultural, and Archaeological Resources Standard in Oregon Administrative Rules (OAR) 345-022-0090(1) provides that applicants for site certificates must demonstrate that the construction and operation of an energy facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

- 1) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places (NRHP);
- 2) For a facility on private land, archaeological objects, as defined in Oregon Revised Statutes (ORS) 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and
- 3) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).<sup>1</sup>

### **1.1.2 *Applicable Oregon Revised Statutes***

#### **1.1.2.1 *ORS 97.745 Indian Graves and Protected Objects***

ORS 97.745 provides protection for Indian graves and protected objects. It describes acts prohibited in relation to the above resources, the applicability of the statute, and the notification procedures for when suspected Indian human remains are discovered. In summary, the statute states:

- 1) No person shall willfully remove, mutilate, deface, injure or destroy any cairn, burial, human remains, funerary object, sacred object or object of cultural patrimony of any native Indian.

---

<sup>1</sup> Note, the Project does not involve public lands.



Persons disturbing native Indian cairns or burials through inadvertence, including by construction, mining, logging or agricultural activity, shall at their own expense reinter the human remains or funerary object under the supervision of the appropriate Indian tribe.

- 2) Except as authorized by the appropriate Indian tribe, no person shall: Possess any native Indian artifacts, human remains or funerary object having been taken from a native Indian cairn or burial; Publicly display or exhibit any native Indian human remains, funerary object, sacred object or object of cultural patrimony; or Sell any native Indian artifacts, human remains or funerary object having been taken from a native Indian cairn or burial or sell any sacred object or object of cultural patrimony.
- 3) Any discovered human remains suspected to be native Indian shall be reported to the state police, the SHPO, the appropriate Indian tribe, and the Oregon Commission on Indian Services.

#### *1.1.2.2 ORS 358.920: Archaeological Objects and Sites*

ORS 358.920 identifies prohibited acts on public and private lands in Oregon, relative to archaeological resources. It states that disturbances to archaeological sites or objects on public or private lands must be completed under a permit issued under ORS 390.235, and provides direction for disposition of those archaeological materials and any human remains and associated funerary objects. The section is not applicable to the disturbance of Native American cairns, which is covered by the provisions of ORS 97.740 to 97.760 (see ORS 97.745 above). In summary, the statute states:

- 1) A person may not excavate, injure, destroy or alter an archaeological site or object or remove an archaeological object located on public or private lands in Oregon unless that activity is authorized by a permit issued under ORS 390.235.
- 2) A person may not excavate an archaeological site on privately owned property unless that person has the property owner's written permission.
- 3) If human remains are encountered during excavations of an archaeological site on privately owned property, the person shall stop all excavations and report the find to the landowner, the state police, the SHPO and the Oregon Commission on Indian Services. All funerary objects relating to the burial shall be delivered as required by ORS 358.940.
- 4) Violation of the provisions of this section is a Class B misdemeanor.

## **2.0 Results of Pre-Construction Cultural Resources Surveys and Monitoring to Date**

Multiple pre-construction cultural resources surveys were conducted in support of the Project, including Ragsdale et al. (2011), Sheldon, et al. (2017), and Sheldon (2018). Two cultural resources were identified within the Project area by these surveys: Weatherford Barn and 35GM310.

As described in Sheldon, et al. (2017:4-2), the Weatherford Barn is an aboveground historic site consisting of a single structure constructed in 1880, located north of Bottemiller Lane and west of Highway 19 in Section 22 of Township 01 North, Range 21 East. The barn is a one-story structure with a rectangular plan. The barn was originally recorded in 1987 (Startz 1987) and recommended as eligible for listing on the National Register of Historic Places (NRHP). Sheldon, et al. (2017) updated the resource form and agreed with the NRHP-eligible recommendation of 1987. A Historical Resource Mitigation Plan (HRMP) for the barn (Avangrid 2020) was included as Attachment H to Amendment #5. Consistent with the HRMP a 200-foot avoidance buffer has been flagged around the barn during construction and no construction-related activities are allowed to occur within it.

Archaeological site 35GM00310 was documented in Ragsdale, et al. (2011; Temporary Site #1692-206) as a historic domestic artifact scatter in an active agricultural field, [REDACTED]. [REDACTED] The site is also referred to as "The Tree Site." It dates from the late 1870s to the early 1890s and includes over 200 artifacts representing a wide range of domestic refuse. A Gilliam County Historical Society sign marked "The Tree" is located near the site, marking the former location of the "Hale Homestead Tree." This former tree (it is no longer extant) is believed to have marked a ca. 1880 crossroad of the Oregon Trail, though the route Oregon National Historic Trail is nearly 3.75 miles to the north. Ragsdale, et al. (2011) theorized that 35GM00310 may be associated with the tree and later travelers along the Oregon Trail, or with Milton Hale, who was originally granted the land in 1889. The site is unevaluated for listing on the NRHP. In September 2020, a portion of the site was planned to be used as a temporary work space (Mayer and Sheldon 2020). Geotextile matting or timber construction padding would have been placed over the site area in the temporary work space, and work in the area would have been monitored by a cultural resource monitor. Since then, Avangrid determined the temporary work space was not needed, and an alternate, previously surveyed area with no resources was utilized. As such, the area of 35GM310 and monitoring of work within the archaeological site is no longer needed.

As noted above, one isolated find of historic refuse, MON-ISO-01, was identified as an inadvertent discovery during construction monitoring in the vicinity of the Project's substation. MON-ISO-001 was removed by a backhoe at approximately 1.5 to 3 feet subsurface [REDACTED].

[REDACTED] The isolated find consists of a portion of a steel grill from a tractor. The surrounding area had been already exposed by construction and no other artifacts were identified. A 5-meter area around the IF was cordoned off to allow for documentation of the find and notifications consistent with the Project's IDP. The isolated find has been determined not eligible for listing on the NRHP and construction has resumed at the location.

The locations of known cultural resources within the Project area, as well as their relationship with the Project design, are shown in Appendix A.



## 3.0 Cultural Resources Monitoring Team

This is a brief description of cultural resource monitoring personnel and their responsibilities. Monitoring activities are currently being conducted primarily by CTUIR's Cultural Resources Protection Program (CRPP), with additional support from Tetra Tech, Inc. (Tetra Tech). Contact information for team members can be found in Section 3.3.

### 3.1 Project Archaeologists

This role is currently filled by Mr. Shawn Steinmetz at CRPP and Ms. Erin King at Tetra Tech. Mr. Nathan May of CRPP acts as an alternate Project Archaeologist.

**Qualifications:** The Project Archaeologist must meet, at a minimum, the Secretary of the Interior's Professional Qualifications Standards for archaeology, history, or architectural history, as published in Title 36 Code of Federal Regulations part 61, and in addition must have:

1. At least 3 years of archaeological resource mitigation and field experience in the Columbia Plateau; and
2. At least 3 years of experience in a decision-making capacity regarding cultural resources on construction projects, and the appropriate training and experience to knowledgably make recommendations regarding the significance of cultural resources.

**Responsibilities:** The qualified Project Archaeologist, or as necessary, an alternate Project Archaeologist, is the primary point of contact for the Construction Staff regarding cultural resources in the Project Area. The Project Archaeologist is responsible for cultural resource-related notifications and coordination directly with the Cultural Resource Monitors (CRMs), ODOE, CTUIR Tribal Historic Preservation Officer, and Avangrid's Project Manager and on-site Construction Manager(s). The Project Archaeologist is responsible for facilitating efficient testing, probing, or data recovery of inadvertent discoveries, if necessary (see IDP). The Project Archaeologist provides direct supervision of the CRMs and is responsible for the planning, execution, completion, and quality of the cultural resources monitoring tasks and reporting undertaken during Project construction. In addition, the Project Archaeologist is responsible for completing testing or data recovery efforts (as necessary), preparing artifacts for curation (as necessary), transferring curated cultural materials to the approved curation facility or appropriate land owner (if requested), and preparing final reports. A final monitoring report is not required for the Project; however, the Project Archaeologist will provide necessary information to the Project's lead Environmental Monitor to complete monthly reports that are submitted to ODOE.

### 3.2 Cultural Resource Monitor

This role is currently filled by primarily by qualified CRPP staff members, with additional as-needed support by Tetra Tech's archaeologists.

**Qualifications:** A CRM will have traditional Native American cultural and environmental experience within the Project region and/or a Bachelor's degree in anthropology, archaeology, historic archaeology, or a related field. The monitor will also have training, knowledge, and understanding of archaeological practices, including the phases of archaeological investigation.

**Responsibilities:** The CRM will 1) conduct on-site archaeological monitoring of construction ground disturbance, as specified in this plan (see Section 4); 2) provide daily documentation of construction activity and any findings to the Project Archaeologist; and 3) prepare a monitoring log (Appendix B) and submit it daily to the Project Archaeologist via email. If a CRM, or other construction personnel, discover archaeological resources during construction, the CRM will have authority to halt construction in the vicinity of the find and will notify the Project Archaeologist. The CRM is also responsible for preparing the appropriate archaeological resource for any identified resources found during construction.

### 3.3 Points of Contact

The personnel listed in Table 1 have filled the listed positions thus far during monitoring of Project construction. This list is subject to change over the course of construction.

**Table 1. Key Project Contacts**

Position	Name	Organization	Contact Information
Project Archaeologist	Erin King	Tetra Tech	Phone: (916) 502-6044 E-mail: erin.king@tetrattech.com
Project Archaeologist	Nathan May	CTUIR	Phone: (541) 429-7128 E-mail: NathanMay@ctuir.org
Cultural Resource Monitor	Brady Berger	Tetra Tech	Phone: (971) 322-7897 E-mail: brady.berger@tetrattech.com
Cultural Resource Monitor	Bobby VanPelt	CTUIR	Phone: (541) 27-3447
Cultural Resource Monitor	Josh Barkley	CTUIR	Phone: (541) 27-3447
Construction Site Manager	Erasmus Chavira	Avangrid	Phone: (915) 345-6403 E-mail: erasmus.chavira@avangrid.com
Environmental Monitor	Jena Christiansen	Tetra Tech	Phone: (360) 903-9925 E-mail: jena.christiansen@tetrattech.com
Environmental Compliance Project Manager	Matt Hutchinson	Avangrid	Phone: (503) 701-0665 E-mail: matthew.hutchinson@avangrid.com
Environmental Compliance Project Manager	Carrie Konkol	Tetra Tech	Phone: (503) 721-7225 E-mail: carrie.konkol@tetrattech.com



Position	Name	Organization	Contact Information
Siting Analyst	Sarah Esterson	ODOE	Phone: (503) 373-7945 E-mail: Sarah.ESTERSON@energy.oregon.gov
Siting Analyst	Kate Sloan	ODOE	Phone: (971) 701-4913 Email: Kathleen.SLOAN@energy.oregon.gov
State Archaeologist	John Pouley	SHPO	Phone: (503) 480-9164 Email: john.pouley@oregon.gov

## 4.0 Revised Plan and Requirements for Cultural Resource Monitoring

Condition 50(b) requires monitoring of ground disturbance at depths of 12 inches or greater. This has meant that Tetra Tech and CTUIR cultural resource monitors have been on-site near-daily since March 17, 2021, monitoring at the substation area. One isolated find, MON-ISO-01, has been identified and reported to ODOE and SHPO in that time. As of September 2021, construction has been limited to the substation and soils throughout the area have been observed to be extensively disturbed from historic land use, evidenced by a lack of stratigraphy and observed mixing of soils. Based on these observations, the archaeological sensitivity of the substation area has been assessed to be low by Tetra Tech's and CTUIR's qualified Project Archaeologists and CRMs.

For this reason, and given that the remainder of the Project is in a similar setting and context as the substation (suggesting a similarly low level of archaeological sensitivity), **this Plan limits cultural resource monitoring to open ground disturbance associated with collection line trenching in the solar array area only.** Monitoring of other activities will not be required. Monitoring will occur only while soils above the C horizon are being disturbed. (The C horizon is defined as the stratigraphic layer immediately above the bedrock, consisting chiefly of weathered, partially decomposed rock. Archaeological resources are not considered likely to occur within or below this depth.) Cultural resource monitoring will not be required once all surface and subsurface ground disturbance for the collection lines is completed, when disturbance extends beneath the C horizon, or in areas where bedrock is present at the ground surface. Monitoring is not required for routine travel on existing roads; however, additional excavations at a depth beyond the previously disturbed area and above the C horizon will be monitored for cultural resources, even within previously excavated areas. For the purposes of the Plan, archaeological construction monitoring is defined as on-the-ground, close-up observation by a CRM or Tribal Monitor at a safe distance from construction equipment.

The CRM will continue to maintain daily logs of Project-related construction monitoring activities when they occur. Blank monitoring log templates are in Appendix B. The daily monitoring log reflects the monitoring activities observed by each monitor and include:

- Date, time of work, and amount of time spent at a construction monitoring location;
- Area of work (defined by Project features; e.g., solar array block) and soils description for that area;
- Type of work, on-site equipment, and names of the construction crew leaders being monitored;
- Construction activities being performed (e.g., grading, excavation, trenching, etc.) and activities where cultural resource problems, noncompliance activities, or other concerns occur;
- Identification of an inadvertent discovery (if any), steps taken to protect the discovery, and documentation of necessary notifications (name, agency, time, and notes; see Section 5 for inadvertent discovery procedures); and
- Color digital photographs to document construction and monitoring activities, as well as soil profiles, to be submitted with a photo log as attachments to the daily log.

The CRM prepares and provides their monitoring logs daily to the Project Archaeologist. These logs are provided to the Project's Environmental Monitor who provides monthly summary reports on the progress or status of all monitoring-related activities during active construction. This monthly reporting is separate from the immediate notifications of inadvertent discoveries.

**If the Project Archaeologists determine that monitoring of the collection lines results in the same observations and conclusions as reached for the substation area, monitoring requirements will be further reduced.** A sufficient sample (at least one-third) of the collection lines must be monitored in order to make this professional judgment. Requirements for monitoring reduction will include:

- Extensively disturbed soils from prior land use;
- Lack of stratigraphy based on observations of mixed soils; and
- Lack of significant (potentially NRHP-eligible) archaeological deposits.

Reduction in monitoring efforts may include:

- Regular or irregular site visits by a monitor on a schedule determined by the professional judgment of the Project Archaeologists; or
- Responding to inadvertent discoveries on an as-needed basis,
  - If an inadvertent discovery is made, additional monitoring will continue in the vicinity of the find, until NRHP eligibility of the discovery is determined, and in areas of similar archaeological setting, as determined by the Project Archaeologists.



ODOE and SHPO will be notified if such a decision is made. In the meantime, monitoring forms will continue to be completed by the CRM, and Tetra Tech and CTUIR will continue to coordinate and review monitoring observations and results. The remainder of disturbances at the Project will be conducted in compliance with the IDP (Avangrid 2020).

## 5.0 References

Avangrid (Avangrid Renewables)

- 2020 Inadvertent Discovery Plan – Plan and Procedures for the Inadvertent Discovery of Cultural Resources and Human Skeletal Remains for the Montague Wind Power Facility, Gilliam County, Oregon. Attachment H in Final Order on Request for Amendment 5 to the Site Certificate, Montague Wind Power Facility, EFSC.

King, Erin

- 2021 Memo: Montague Solar Project, Gilliam County, Oregon (SHPO Case #10-0378) – Inadvertent Discovery. March 25, 2021. Tetra Tech, Inc., Portland, Oregon. To Matt Hutchinson, Avangrid Renewables. SHPO Survey report #31555.

Mayer, James, and David Sheldon

- 2020 Memo: Montague Solar Project, Gilliam County, OR, The Tree Site (35GM310). November 25, 2020. Jacobs/CH2M Hill Engineers, Inc., Portland, Oregon. Submitted to Sarah Esterson, Oregon Department of Energy, and John Pouley, Oregon State Historic Preservation Office.

Ragsdale, Emily, Jennifer Olander, Frederick Anderson, and James Grant

- 2011 *Cultural Resource Investigations for the Baseline Wind Energy Project, Gilliam County, Oregon*. Historical Research Associates, Inc., Portland, Oregon. Prepared for HDR Engineering. SHPO Survey report #24874.

Sheldon, David

- 2018 *2018 Supplemental Field Investigation Report for Montague Wind Power Facility—Phase 2*. CH2M Hill Engineers, Inc., Portland, Oregon. Submitted to Avangrid Renewables, LLC. SHPO Survey report #30144.

Sheldon, David, Marynell Nolan-Wheatley, and Marcia Montgomery

- 2017 *2017 Field Investigation Report for Montague Wind Power Facility—Phase 2*. CH2M Hill Engineers, Inc., Portland, Oregon. Submitted to Avangrid Renewables, LLC. SHPO Survey report #29532.

Startz, Kathleen

- 1987 Site form for Weatherford Barn. SHPO Inventory #14.

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**Appendix A.**  
**Known Cultural Resources and**  
**Project Design**  
**(CONFIDENTIAL)**

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## **Appendix B.**

# **Cultural Resources Monitoring Forms**

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Project: \_\_\_\_\_

Monitoring Location (attach figure, if appropriate):

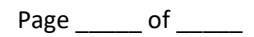
Location Description: \_\_\_\_\_

Construction Equipment Used: \_\_\_\_\_

[illegible]

Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



Project: \_\_\_\_\_

[illegible]



**CULTURAL RESOURCE NON-COMPLIANCE INCIDENT REPORT**

Project: \_\_\_\_\_

Date of Incident: \_\_\_\_\_ Day of Week: \_\_\_\_\_ Time: \_\_\_\_\_

Location of Incident (attach figure, if appropriate):

GPS Coordinates: \_\_\_\_\_

Archaeological Sensitivity Zone: \_\_\_\_\_

Location Description: \_\_\_\_\_

Description/Cause of Incident: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Description of Resource: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Recommendations by Navy/Program Archaeologist to Resolve Non-Compliance: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Any deviation in the cultural resource compliance program requiring the cessation of a particular activity should be documented immediately and transmitted to the OEC and Lead Archaeologist. The OEC will send this report to the PPC within 24 hours of the incident. Incident reports should also be prepared for other deviations.

MONITOR:

Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

LEAD ARCHAEOLOGIST RECEIPT:

Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

OEC RECEIPT:

Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**CULTURAL RESOURCE NON-COMPLIANCE INCIDENT REPORT  
CONTINUED**

Project: \_\_\_\_\_

Location of Incident: \_\_\_\_\_

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Description/Cause of Incident: \_\_\_\_\_

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Description of Resource: \_\_\_\_\_

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Recommendations by Navy/Program Archaeologist to Resolve Non-Compliance: \_\_\_\_\_

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## Site Number

## Project Number

[illegible]





## **Attachment 2. Gilliam County Correspondence**

**From:** [Goland, Kristen](#)  
**To:** [Hawkinson, Eric](#); [Hicks, Paul](#)  
**Subject:** FW: Oregon Trail Solar Facility  
**Date:** Monday, August 15, 2022 4:26:01 PM

---

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Internal Use

---

**From:** Michelle Colby <michelle.colby@co.gilliam.or.us>  
**Sent:** Monday, August 8, 2022 8:26 AM  
**To:** Goland, Kristen <Kristen.Goland@avangrid.com>  
**Subject:** RE: Oregon Trail Solar Facility

---

EXTERNAL SENDER: Be cautious, especially with links and attachments. Report phishing if suspicious.

---

Kristen, good morning.

Gilliam County approved amendments to the Gilliam County Zoning and Land Development Ordinance (GCZLDO) in 2021. The amendments effected Article 1, Article 4, Section 4.020 C. D. H. I do not believe the changes will affect the project, let me know if you need copies.

The changes adopted in 2021 mostly impact process and noticing provisions. There were no specific changes that specifically address solar.

There is a pending amendment to the GCZLDO, the amendment affects and allows for temporary workforce housing associated with permitted renewal energy projects. (The earliest it will go into effect is estimated the end of September or October 2022 as an energy clause has been proposed with the adoption of the Ordinance.)

Let me know if you need copies of anything.

Have a great day.

*Michelle Colby*  
Planning Director  
Gilliam County  
221 S. Oregon St.  
PO Box 427

Condon, OR 97823

Ph. 541-351-9517

[Michelle.colby@co.gilliam.or.us](mailto:Michelle.colby@co.gilliam.or.us)

Planning Dept. Office hours

Monday–Thursday 8:00 am to 5:00 pm

Friday by appointment only

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---

**From:** Goland, Kristen <[Kristen.Goland@avangrid.com](mailto:Kristen.Goland@avangrid.com)>

**Sent:** Thursday, August 4, 2022 3:27 PM

**To:** Michelle Colby <[michelle.colby@co.gilliam.or.us](mailto:michelle.colby@co.gilliam.or.us)>

**Cc:** Goland, Kristen <[Kristen.Goland@avangrid.com](mailto:Kristen.Goland@avangrid.com)>

**Subject:** Oregon Trail Solar Facility

Hi Michelle,

I just left you a rambling voicemail about an e-mail that I see I never sent. Sorry about that. Here is the e-mail that my voice mail referenced. In short, on our call on 6/14 we discussed our Oregon Trail Facility request for amendment (RFA). On the call we talked about code criteria changes since April 27, 2020 that may be applicable to the Facility and your ability to confirm our assumption that there had been no changes that are applicable to the Facility. Would you please be so kind as to review and confirm our assumptions? The original e-mail is below:

\*\*\*\*\*

This email is in follow-up to our call on 6/14 to discuss the Oregon Trail Solar Facility RFA to ODOE. We would like to share the meeting summary (attached), as well as request confirmation no changes have been made to the applicable Gilliam County standards since submittal of the last RFA.

As discussed in the call, the Certificate Holder (Avangrid) will file a RFA to the Oregon Trail Solar Facility seeking approval from the Council to extend the start date of construction and construction completion deadline and alter the cultural resources Condition 50 (b). There are no changes to the previously approved Facility components.

As part of the proposed request to the Oregon Energy Facility Siting Council, the Certificate Holder is seeking coordination with the County to confirm there have been no substantive code criteria changes applicable to the project since the last request for amendment was submitted on April 27.



2020. Applicable sections of the Gilliam County Comprehensive Plan were also included in the previous amendment. The applicable Gilliam County substantive criteria are as follows:

Section/Subsection	Name	Changes Identified
<b>Gilliam County Zoning Ordinance (GCZO)</b>		
<i>Article 4 – Use Zones</i>		
Section 4.02	Exclusive Farm Use,	<b>No change</b>
Section A	High-Value Farmland	<b>No change</b>
Section C	Planning Director Review	<b>No change</b>
Section D	Conditional Uses Permitted	<b>No change</b>
Section H	Specific Review Criteria	<b>No change</b>
Section J	Property Development Standards	<b>No change</b>
<i>Article 7 – Conditional Uses</i>		
Section 7.010	Authorization to Grant or Deny Conditional Uses	<b>No change</b>
Section A	General Approval Criteria	<b>No change</b>
Section 7.020	Standards Governing Conditional Uses	<b>No change</b>
Section A	Conditional Uses, Generally	<b>No change</b>
Section Q	Conditional Uses in Exclusive Farm Use Zones	<b>No change</b>
Section T	Wind Power Generation Facility Siting Requirements	<b>No change</b>
<i>Article 8 – Supplementary Provisions</i>		
Section 8.030	Clear Vision Areas	<b>No change</b>
Section 8.040	Outdoor Lighting Standards	<b>No change</b>
Section 8.050	Sign Regulations	<b>No change</b>
Section 8.070	Projections from Buildings	<b>No change</b>
Section 8.100	Off-Street Parking Requirements	<b>No change</b>
Section A	Number of Spaces Required	<b>No change</b>
Section 8.140	Site Plan Review	<b>No change</b>
Section A	Purpose	<b>No change</b>
Section E	Detailed Plan	<b>No change</b>
Section F	Outdoor Storage and Activities, if Permitted in the Zone	<b>No change</b>
Section G	Topographic Information	<b>No change</b>
Section H	Drainage Plan	<b>No change</b>
Section I	Identification of Proposed Trash Storage Locations	<b>No change</b>
Section J	Location of All Existing and Proposed Utilities	<b>No change</b>
Section K	Elevation Drawings	<b>No change</b>
Section L	Approval Standards	<b>No change</b>
Section M	The Development Will Not Result In Traffic Volumes that Will Reduce the Performance	<b>No change</b>

	Standard	
Section N	The Development Will Not Adversely Affect Agricultural or Forestry Uses	<b>No change</b>
<b>Gilliam County Comprehensive Plan (GCCP)</b>		
(Goal 2) Land Use Planning – Policy 7		<b>No change</b>
(Goal 3) Agricultural Lands – Policy 3		<b>No change</b>
(Goal 5) Natural Resources – Policies 2 and 12		<b>No change</b>
(Goal 6) Air, Water, and Land Resources Quality – Policies 6 and 7		<b>No change</b>
(Goal 8) Recreation – Policy 3		<b>No change</b>
(Goal 12) Transportation – Policies 10 and 14		<b>No change</b>
(Goal 13) Energy Conservation – Policy 3		<b>No change</b>

Please review the table above to confirm our assumption there have not been any substantive code criteria changes since April 27, 2020 that may be applicable to the Facility. We greatly appreciate your assistance on this matter.

Thank you,  
Kristen



Internal Use

**Kristen Goland**  
Director, Development Permitting and Environmental

2701 NW Vaughn St, Suite 300,  
Portland, OR 97210  
Cell 508.397.6130  
[Kristen.Goland@Avangrid.com](mailto:Kristen.Goland@Avangrid.com)

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## **Attachment 3. Updated Service Provider Letters**

**From:** [Goland, Kristen](#)  
**To:** [Hawkinson, Eric](#); [Hicks, Paul](#)  
**Subject:** Fwd: EXTERNAL:RE: Oregon Trail Solar change of construction schedule  
**Date:** Monday, June 20, 2022 10:00:56 AM

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

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**From:** gcfs@ortelco.net <gcfs@ortelco.net>  
**Sent:** Monday, June 20, 2022 12:46 PM  
**To:** Goland, Kristen <Kristen.Goland@avangrid.com>  
**Subject:** EXTERNAL:RE: Oregon Trail Solar change of construction schedule

Kristin,

I am the new Fire Services Coordinator for Gilliam County Fire Services. I have reviewed and have no concerns with the construction deadline amendment as it should not impact our county fire services.

I did speak with Colton at the shutler flats site about fuels mitigations for wildfire and how to reduce the fuels around and in the site.

Casey Zellars

Gilliam County Fire Services Coordinator  
Arlington Office (541) 454-2900 Mon-Tues  
Condon Office (541) 384-5555 Wed-Thur  
Cell (541) 303-3121

---

**From:** Goland, Kristen <Kristen.Goland@avangrid.com>  
**Sent:** Wednesday, June 15, 2022 1:27 AM  
**To:** gcfs@ortelco.net  
**Cc:** Hutchinson, Matthew <matthew.hutchinson@avangrid.com>; Goland, Kristen <Kristen.Goland@avangrid.com>  
**Subject:** Oregon Trail Solar change of construction schedule

Dear Ms. Coppock,

I am the permit manager for Oregon Trail Solar, LLC, a subsidiary of Avangrid Renewables, LLC. We hold a Site Certificate for the Oregon Trail Solar Facility (the Facility). Documentation of the Facility was originally processed as part of the 404 MW Montague Wind Power Facility. On September 25, 2020, the Energy Facility Siting Council approved Request for Amendment 5 of the Montague Wind

Power Facility site certificate, which split previously approved facility components across three site certificates for Montague Wind Power Facility, Montague Solar Facility and Oregon Trail Solar Facility, respectively. As approved, under the Site Certificate issued on September 25, 2020, the Oregon Trail Facility includes any combination of wind and solar facility components not to exceed 41 MW, including up to 16 wind turbines or up to 1,228 acres of solar photovoltaic energy generation equipment.

As part of the original EFSC application, the Gilliam County Fire Services issued a letter on December 12, 2018 indicating the ability for the district to provide service to the Montague Wind Power Facility (attached). The Oregon Trail Solar Facility site boundary is located within the previously approved Montague Wind Power Facility boundary. The Certificate Holder will file a Request for Amendment (RFA1) to the Oregon Trail solar Facility Site Certificate seeking approval from the Council to extend the start date of construction and construction completion deadline and modify a construction monitoring condition.

There are no changes to previously approved project components and the statement quoted in the December 12, 2018 letter remains accurate. As part of the proposed request to the Oregon Energy Facility Siting Council, the Certificate Holder is seeking coordination with the Gilliam County Fire Services to confirm this construction deadline amendment does not impact service to the Facility and that your December 12, 2018 letter remains accurate through the revised construction period extended through August 30, 2028.

Please let me know if you would like to set up a call to discuss the amendment; or, if you have no questions, provide an email or updated letter confirming the change in construction deadlines does not impact service to the Oregon Trail Solar Facility area.

Thank you,  
Kristen



Internal Use

**Kristen Goland**  
Director, Development Permitting and Environmental

2701 NW Vaughn St, Suite 300, Portland, OR 97210 \*NEW  
Cell 508.397.6130  
[Kristen.Goland@Avangrid.com](mailto:Kristen.Goland@Avangrid.com)

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**From:** [Hawkinson, Eric](#)  
**To:** [Hawkinson, Eric](#)  
**Subject:** FW: Oregon Trail Solar change of construction schedule  
**Date:** Monday, July 11, 2022 11:52:55 AM

---

**From:** Gary Bettencourt <[gary.bettencourt@co.gilliam.or.us](mailto:gary.bettencourt@co.gilliam.or.us)>  
**Sent:** Thursday, June 16, 2022 2:57 PM  
**To:** Goland, Kristen <[Kristen.Goland@avangrid.com](mailto:Kristen.Goland@avangrid.com)>  
**Subject:** EXTERNAL:RE: Oregon Trail Solar change of construction schedule

Kristen Goland

The construction extension of the Oregon Trail Solar project to August 30, 2028, does not change the ability or the commitment of the Gilliam County Sheriff's Office in responding appropriately and as necessary to all complaints that come from the project.

Gary Bettencourt, Sheriff  
Gilliam County Sheriff's Office

---

**From:** Goland, Kristen <[Kristen.Goland@avangrid.com](mailto:Kristen.Goland@avangrid.com)>  
**Sent:** Wednesday, June 15, 2022 1:24 AM  
**To:** Gary Bettencourt <[gary.bettencourt@co.gilliam.or.us](mailto:gary.bettencourt@co.gilliam.or.us)>  
**Cc:** Hutchinson, Matthew <[matthew.hutchinson@avangrid.com](mailto:matthew.hutchinson@avangrid.com)>; Goland, Kristen <[Kristen.Goland@avangrid.com](mailto:Kristen.Goland@avangrid.com)>  
**Subject:** Oregon Trail Solar change of construction schedule

Sheriff Bettencourt,

I am the permit manager for Oregon Trail Solar, LLC, a subsidiary of Avangrid Renewables, LLC. We hold a Site Certificate for the Oregon Trail Solar Facility (the Facility). Documentation of the Facility was originally processed as part of the 404 MW Montague Wind Power Facility. On September 25, 2020, the Energy Facility Siting Council approved Request for Amendment 5 of the Montague Wind Power Facility site certificate, which split previously approved facility components across three site certificates for Montague Wind Power Facility, Montague Solar Facility and Oregon Trail Solar Facility, respectively. As approved, under the Site Certificate issued on September 25, 2020, the Oregon Trail Facility includes any combination of wind and solar facility components not to exceed 41 MW, including up to 16 wind turbines or up to 1,228 acres of solar photovoltaic energy generation equipment.

As part of the original EFSC application, the Gilliam County Sheriff's Office issued a letter on December 12, 2018 indicating the ability for the district to provide service to the Montague Wind Power Facility (attached). The Oregon Trail Solar Facility site boundary is located within the previously evaluated Montague Wind Power Facility boundary. The Certificate Holder will file a Request for Amendment (RFA1) to the Oregon Trail solar Facility Site Certificate seeking approval from the Council to extend the start date of construction and construction completion deadline and

modify a construction monitoring condition.

There are no changes to the previously approved Oregon Trail Solar Facility components and the statement quoted in the Sheriff's Office letter remains accurate. As part of the proposed request to the Oregon Energy Facility Siting Council, the Certificate Holder is seeking coordination with the Gilliam County Sheriff's Office to confirm this construction deadline amendment does not impact service to the Facility and that your December 12, 2018 letter remains accurate through the revised construction period extended through August 30, 2028.

Please let me know if you would like to set up a call to discuss the amendment; or, if you have no questions, provide an email or updated letter confirming the change in construction deadlines does not impact service to the Oregon Trail Solar Facility area.

Thank you,  
Kristen Goland



Internal Use

**Kristen Goland**  
Director, Development Permitting and Environmental

2701 NW Vaughn St, Suite 300, Portland, OR 97210 \*NEW  
Cell 508.397.6130  
[Kristen.Goland@Avangrid.com](mailto:Kristen.Goland@Avangrid.com)

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# CITY OF ARLINGTON

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P.O. BOX 68  
ARLINGTON, OR 97812  
PHONE: 541-454-2743  
FAX: 541-454-2753  
TTY: 800-572-0638

August 3, 2022

Kristen Goland  
Oregon Trail Solar, LLC  
2701 NW Vaughn St., Suite 300  
Portland, Oregon 97210

RE: Oregon Trail Solar Facility  
City of Arlington Water Use

Dear Kristen:

The purpose of this letter is to respond to your June 15, 2022, email concerning using the City of Arlington as a water source for construction of your project. Specifically, you requested if our letter dated December 17, 2018 is still accurate.

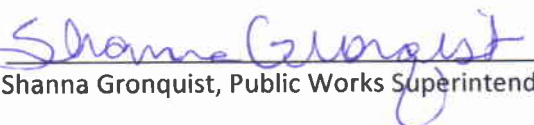
The December 17, 2018 letter stated that the City could provide up to 40 million gallons of water to your project during construction, and up to 500,000 gallons per year of water for maintenance. The City can still meet these demands from our Columbia River water source, which will require the City leasing a temporary pump station/truck fill station. The City is in the process of designing a permanent pump station with a truck fill apparatus, so this will better facilitate filling water trucks for your project.

The City is also considering a water system improvements project that will utilize the Columbia River water source for golf course irrigation and potentially other irrigation needs in the City. The City anticipates getting these improvements built in the next two to three years. Once this system is in place, the primary water use for the Columbia River water source will be the City golf course. While we anticipate still having the means to meet your demands, it is important to note that the City uses will have priority.

Please feel free to give me a call if you have any questions.

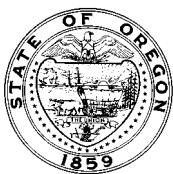
Sincerely,

CITY OF ARLINGTON, OREGON

By:   
Shanna Gronquist, Public Works Superintendent

# **Attachment 4. ODOE Approved Analysis Area and Property Owner Notification Area**





# Oregon

Kate Brown, Governor



550 Capitol St. NE

Salem, OR 97301

Phone: 503-378-4040

Toll Free: 1-800-221-8035

FAX: 503-373-7806

[www.oregon.gov/energy](http://www.oregon.gov/energy)

June 16, 2022

Kristen Goland, Avangird Renewables  
2701 NW Vaughn St, Suite 300 Portland, OR 97210

Sent via email: [Kristen.Goland@avangrid.com](mailto:Kristen.Goland@avangrid.com); [matthew.hutchinson@avangrid.com](mailto:matthew.hutchinson@avangrid.com)

RE: Analysis Area and Property Owner Notification for Request for Amendment 1 for the Oregon Trail Solar Facility

Dear Ms. Goland,

On May 18, 2022, representatives from Oregon Trail Solar, LLC (certificate holder for the Oregon Trail Solar Facility), a wholly owned subsidiary of Avangrid Renewables, LLC (certificate holder owner) and staff at the Oregon Department of Energy (Department) held a pre-amendment conference to discuss the proposed Request for Amendment 1 (RFA1) of the Oregon Trail Solar Facility Site Certificate.

The certificate holder indicates that RFA1 would request to:

- Amend Site Certificate Conditions 24 and 25 to extend the construction deadlines by 3 years from August 30, 2022.
- Amend Site Certificate Condition 50(b) to revise the cultural monitoring requirement.

On June 14, 2022, the certificate holder submitted a request to modify the analysis area for RFA1 under OAR 345-027-0360(3) to remove the areas extending from the existing 230-kV transmission line and to clarify the property owner notification list defined under OAR 345-027-0360(f), to remove property owner notice extending 500-feet from property which the transmission line is located because there are no changes proposed in RFA1 related to the shared 230-kV gen-tie transmission line. The Department reviewed the certificate holders' requests and for the reasons outlined in this letter, approve modified analysis areas for all standards and property owner notice area to exclude the area within and extending from the portions of the site boundary containing the 230 kV transmission line. Because the proposed RFA1 has not yet been submitted, the Department reserves the right to reevaluate this approval if RFA1 includes other substantive changes not discussed on May 18, 2022.

*Under OAR 345-027-0360(3): For any Council standard that requires evaluation of impacts within an analysis area, the analysis area is the larger of either the study areas, as defined in OAR 345-001-0010(59), or the analysis areas described in the project order for the application for site certificate, unless otherwise approved in writing by the Department following a pre-amendment conference. [emphasis added]*

The Department reviewed Figure 1: Site Boundary and 230 kV transmission line corridor (with two route segments) from the Oregon Trail Facility Site Certificate and the Oregon Trail Solar Facility Proposed RFA1 Analysis Area submitted with its request to modify the analysis area and confirmed that the approved site boundary and micrositing area for the Oregon Trail Solar Facility is the same and that removing the existing transmission line from the analysis area would be appropriate for the scope of the proposed RFA1 extending construction deadlines because the proposed RFA1 would make no changes to the shared 230-kV gen-tie transmission line operating within the Oregon Trail Solar Facility Site Boundary.

OAR 345-027-0360(1)(f) addresses adjacent property owners that must be included in a notice of a preliminary request for amendment (pRFA), where the applicable subsection (A)(iii) states: The list must include all owners of record, as shown on the most recent property tax assessment roll, of property located...Within 500 feet of *property which is the subject of the request for amendment*, where the subject property is within a farm or forest zone...[emphasis added]

The proposed RFA1 would be specific to extending the construction deadlines and clarifying the extent of construction monitoring for cultural resources. OAR 345-027-0360(1)(f)(A)(iii) establishes that property owner notification be based on the “property which is the subject of the request for amendment.” The subject of the amendment is the portions of the site boundary containing facility components not yet constructed. Therefore, the property owner list does not need to include property owners within 500 feet of the subject properties associated with the existing, operational 230 kV transmission line.

If you have any questions, please do not hesitate to call or email.



Kellen Tardaewether, Senior Siting Analyst  
Oregon Department of Energy 550 Capitol St N.E., 1st Floor  
Salem, OR 97301  
Mobile: 503-586-6551; Email: Kellen.TARDAEWETHER@energy.oregon.gov

CC (via e-mail): Todd Cornett, Oregon Department of Energy  
Sarah Esterson, Oregon Department of Energy

Attached:  
Certificate Holder Requests via Email  
Oregon Trail Solar Proposed RFA1 Analysis Area  
Copy of Figure 1: Site Boundary and 230 kV transmission line corridor (with two route segments)  
from Oregon Trail Solar Site Certificate

## TARDAEWETHER Kellen \* ODOE

---

**From:** Goland, Kristen <Kristen.Goland@avangrid.com>  
**Sent:** Tuesday, June 14, 2022 11:58 AM  
**To:** TARDAEWETHER Kellen \* ODOE  
**Cc:** Hutchinson, Matthew; sarah.esterson@state.or.us  
**Subject:** Oregon Trail Solar Proposed RFA 1 Analysis Area  
**Attachments:** OregonTrailSolar\_ProposedRFA1\_AnalysisArea\_05-25-2022.pdf

Hi Kellen,

It was nice to meet with you a few moments ago. I wanted to take a moment to follow up on prior call in May. As discussed during our pre-amendment conference call on May 18, 2022, the Oregon Trail Solar, LLC intends to file a Request for Amendment (RFA) to the Oregon Trail Solar Facility Site Certificate seeking approval from the Council as follows:

- Amend Site Certificate Conditions 24 and 25 to extend the construction deadlines by 3 years from August 30, 2022.
- Amend Site Certificate Condition 50(b) to revise the cultural monitoring requirement.

As approved, under the Site Certificate issued September 25, 2020, the not-yet constructed Oregon Trail Solar Facility (Facility) includes a combination of up to 16 wind turbines and solar array on up to 1,228 acres in Gilliam County. The Facility is also authorized to share related and supporting facilities between Montague Wind, Solar and Oregon Trail Solar including the constructed and operating 230-kV generation-tie (gen-tie) transmission line between the existing Montague Wind collector substation and Bonneville Power Administration (BPA) Slatt substation. This shared 230-kV gen-tie transmission line is existing and is not subject to the proposed RFA.

Under Oregon Administrative Rule (OAR) 345-027-0360(3), Oregon Trail Solar, LLC seeks written approved from the Oregon Department of Energy (Department) to apply the "Proposed RFA 1 Analysis Area" within the approved Oregon Trail Solar Site Boundary shown on the attached Figure, as the basis for the study area boundaries under OAR 345-001-0010(59) and the boundary to develop the property owner list and map under OAR 345-027-0060(1)(f) for the proposed RFA.

The reasons for this request are as follows:

1. The proposed RFA makes no changes to the shared 230-kV gen-tie transmission line operating within the Oregon Trail Solar Site Boundary. The proposed RFA will not change any previously evaluated impact areas associated with the existing 230-kV gen-tie transmission line.
2. The attached Figure identifies the approved Oregon Trail Solar Site Boundary. The proposed RFA makes no changes to the Site Boundary. Because the existing 230-kV gen-tie transmission line is constructed it is not affected by the proposed RFA. Oregon Trail Solar, LLC proposes that the line be left out of the analysis and property owner notification list for the RFA.
3. Lastly, the attached Figure identifies the "Proposed RFA 1 Analysis Area" in green cross hatching. This area encompasses the previously evaluated and approved Facility and its related or supporting components within the approved Oregon Trail Solar Site Boundary that are not yet constructed. This area also encompasses the disturbance areas approved in the Site Certificate to ensure that areas where construction will occur are captured in the assessment of the proposed RFA and corresponding property owner notification lists.



If you are agreeable, could you please provide an email confirming that the proposed RFA can be evaluated using the Proposed RFA 1 Analysis Area shown on the Figure attached. I understand that the Proposed RFA 1 Analysis Area would then serve as the basis for the study area boundaries under OAR 345-001-0010(59) and the boundary to develop the property owner list and map under OAR 345-027-0060(1)(f). Additionally, please let me know if you would like to discuss this request further.

Thank you very much for this consideration.

Kristen



Internal Use

**Kristen Goland**  
Director, Development Permitting and Environmental

2701 NW Vaughn St, Suite 300, Portland, OR 97210 \*NEW  
Cell 508.397.6130  
[Kristen.Goland@Avangrid.com](mailto:Kristen.Goland@Avangrid.com)

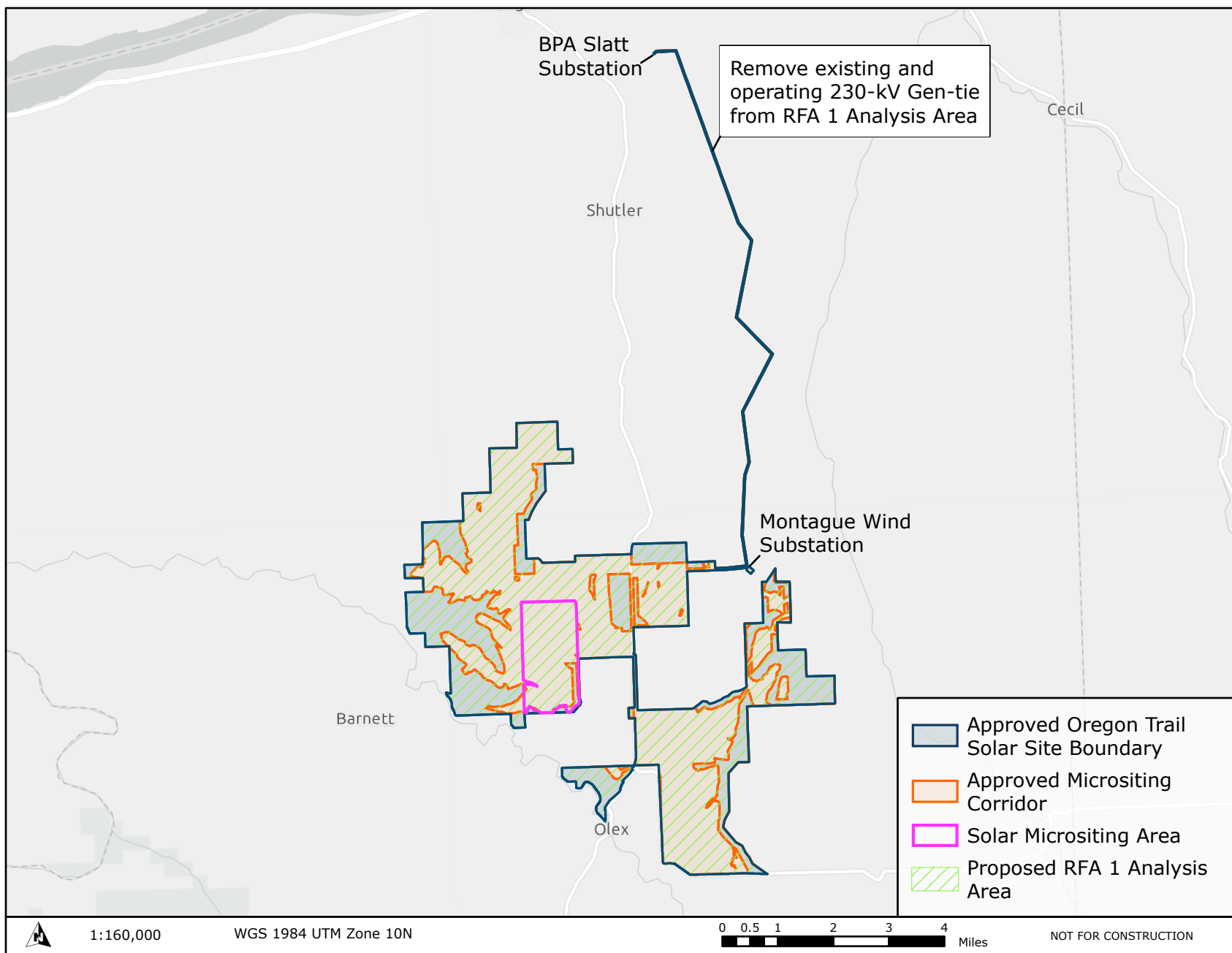
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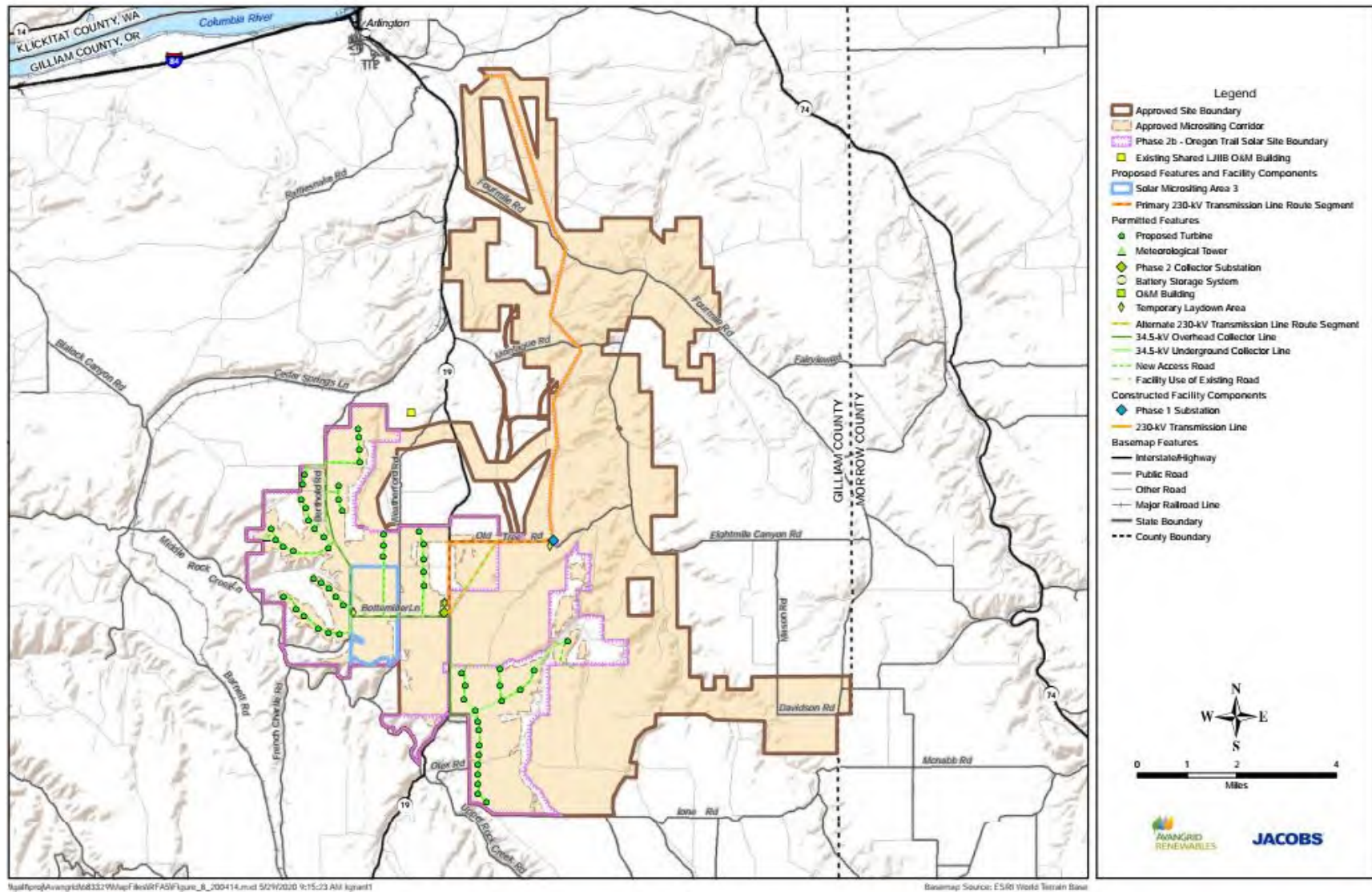
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**Figure 1: Site Boundary and 230 kV transmission line corridor (with two route segments)**





## **Attachment 5. Oregon Trail Solar Facility Disturbance Areas**

**Table A-1. Oregon Trail Solar Facility – Permanently Disturbed Areas (Wind Layout)**

Facilities	Units	OTS Facility Wind Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
Facility Components					
Wind Turbine Pads/Towers <sup>1</sup>	Square feet per tower	1,809	16	0.67	
Collector Substation <sup>2</sup>	Acres	3.99	1	3.99	
Battery Storage System <sup>3</sup>	Acres	6.43	1	6.43	
O&M Building <sup>4</sup>	Acres	3	1	3	
Meteorological Towers (self-supporting) <sup>5</sup>	Square feet per tower	900	2	0.04	
Overhead 34.5-kV Collector Line Structures <sup>6</sup>	Square feet per 2-pole location	24	185	0.1	
Overhead 230-kV Transmission Line Structures <sup>7</sup>	Square feet per 2-pole location	40	32	0.03	
Access Roads and Turnarounds					
New 20-foot-wide turbine and met tower access roads <sup>8</sup>	Feet of width per linear foot	20	98,736	45.33	18.7
Improved existing roads to 20 feet (except county roads) <sup>9</sup>	Feet of width per linear foot	10	13,728	3.15	2.6
Improved existing county roads to 30 feet (within county right-of- way) <sup>10</sup>	Feet of width per linear foot	14	17,424	2.6	3.3
Approximate Permanently Disturbed Area				65.34 <sup>11</sup>	
<div>1. Includes graveled area of pad, transformer, and disturbed area for each tower, excluding access road. The dimensions are based on a circular area of disturbance with a radius of 24 feet (includes a turbine tower with a radius of up to 8 feet and surrounding gravel area with a radius of up to 16 feet). These dimensions represent the maximum potential graveled area for the range of turbine types under consideration within the approved wind micro-siting corridor.</div> <div>2. Includes the shared Montague Solar Facility collector substation and surrounding graveled area and fence (520 feet by 334 feet). No temporary disturbance will occur outside the fenced area.</div> <div>3. Includes the area within the fenced perimeter of the battery storage system (467 feet by 600 feet).</div> <div>4. Includes the O&amp;M building and surrounding graveled parking area and fence (467 feet by 280 feet).</div> <div>5. Includes met tower foundation measuring approximately 28-feet-wide and surrounding graveled area.</div> <div>6. Assumes two-pole H-frame structures.</div>					

Facilities	Units	OTS Facility Wind Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
7. Assumes two-pole H-frame structures. Assumes pole structures for the shared overhead 230-kV transmission line between the shared Montague Solar Facility collector substation and shared Montague Wind Facility collector substation. The portion of the shared overhead 230-kV transmission line between the Montague Wind Facility collector substation and BPA Slatt Substation is in operation and not included herein.					
8. Assumes 20-foot-wide road, if needed.					
9. Assumes maximum of 20 feet of travel lanes or 10 feet of improvements to existing 10-foot road. For roads that are already 30 feet in width, there will be no permanent impacts beyond this width. These roads will only be temporarily widened for construction, if needed. Therefore, the length of existing roads needing improvements is greater for temporary impacts than for permanent impacts.					
10. Assumes maximum of 30 feet of travel lanes or 14 feet of improvements to existing 16-foot road, if needed.					
11. Disturbance areas associated with the OTS Facility layout are the same as those previously evaluated and approved in MWP RFA4 and RFA5. The estimated disturbance areas are based on preliminary design and the exact type, location, and dimensions of the components may be revised at final design within the approved micrositing areas.					



**Table A-2. Oregon Trail Solar Facility – Temporarily Disturbed Areas (Wind Layout)**

Facilities	Units	OTS Facility Wind Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
Facility Components					
Collector Substation <sup>1</sup>	Acres	0	1	0	
Battery Storage System <sup>1</sup>	Acres	0	1	0	
Meteorological Towers (self-supporting) <sup>2</sup>	Square feet per tower	1,600	2	0.03	
Wind Turbine Tower Construction/Staging (Laydown) Areas					
Central staging and storage areas for collector lines and other equipment <sup>3</sup>	Acres	Not applicable	2	17.06	
Staging area at each tower site <sup>4</sup>	Square feet per tower site	158,338	16	57.49	
Power Collection System					
Underground collector lines <sup>5</sup>	Feet of width per linear foot	24	104,755	57.72	19.84
Temporary access for overhead 34.5-kV collector line <sup>6</sup>	Feet of width per linear foot	12	36,960	10.18	7.00
Temporary pulling sites for overhead 34.5-kV collector line <sup>7</sup>	Not applicable	Not applicable	9	3.80	
Temporary disturbance around overhead 34.5-kV poles <sup>8</sup>	Square feet per 2-pole location	1,576	185	6.69	
Overhead 230-kV Transmission Line					
Temporary access for overhead 230-kV transmission line <sup>6</sup>	Feet of width per linear foot	-	-	-	3.6
Temporary disturbance around overhead 230-kV transmission line structures <sup>9</sup>	Square feet per 2-pole location	1,560	32	1.1	
Access Roads					

Facilities	Units	OTS Facility Wind Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
New 20-foot turbine string roads and road to met tower(s) (temporarily widened to 100 feet) <sup>10</sup>	Feet of width per linear foot	100	98,736	181.33	18.7
Existing road improvements, except County roads (temporarily widened to 80 feet) <sup>11</sup>	Feet of width per linear foot	60	13,728	15.76	2.6
Existing County road improvements (temporarily widened to 60 feet, within County right-of-way) <sup>12</sup>	Feet of width per linear foot	30	17,424	9.4	3.3
<b>Approximate Temporarily Disturbed Area</b>				<b>360.56<sup>13</sup></b>	
<p>1. Assumes contractor will permanently disturb the entire shared Montague Solar Facility collector substation and Oregon Trail Solar Facility battery storage system area. Therefore, no temporary impacts will occur.</p> <p>2. Assumes contractor will temporarily disturb a total of up to 2,500 square feet (sq. ft.) during construction, of which 900 sq. ft. will remain permanently impacted. The 1,600-sq. ft. dimension represents 2,500 sq. ft. minus 900 sq. ft.</p> <p>3. The staging areas vary in acreage.</p> <p>4. Assumes disturbance of 160,000 sq. ft. (225-foot radius) at each turbine location minus the permanent graveled area. This disturbance area is larger than the typical staging area and represents a worst-case disturbance area.</p> <p>5. Assumes width of trench plus areas for spoils and travel paths. Assumes one circuit per trench, if additional circuits are needed lines will be buried 8 feet apart for heat dissipation.</p> <p>6. Temporary disturbance will be an average of 12 feet wide.</p> <p>7. Pulling site dimensions and acreages vary.</p> <p>8. Assumes temporary disturbance of 40 feet by 40 feet at each two-pole H-frame location minus the 24-sq.-ft. permanent disturbance.</p> <p>9. Assumes temporary disturbance of 40 feet by 40 feet at each two-pole H-frame location minus the 40-sq.-ft. permanent disturbance for the shared overhead 230-kV transmission line between the shared Montague Solar Facility collector substation and shared Montague Wind Facility collector substation. The portion of the shared overhead 230-kV transmission line between the Montague Wind Facility collector substation and BPA Slatt Substation is in operation and not included herein.</p> <p>10. The temporary disturbance will be equal to 100-foot total width during construction (for crane path plus access road) minus the 20-foot permanent width, if needed.</p> <p>11. Assumes the 10-foot existing road will be temporarily widened to 80 feet. The temporary disturbance will be equal to 80-foot total width during construction (for crane path plus access road) minus the 20-foot permanent width, if needed.</p> <p>12. Assumes the 16-foot existing road will be temporarily widened to a maximum of 60 feet within the County right-of-way. The County roads will be widened up to 60 feet for portions of the road to allow for wider turning radii and/or straightening of tight corners. The temporary disturbance will be equal to 60-foot total width during construction minus the 30-foot permanent width, if needed.</p> <p>13. Disturbance areas associated with the OTS Facility layout are the same as those previously evaluated in MWP RFA4 and RFA5. The estimated disturbance areas are based on preliminary design and the exact type, location, and dimensions of the components may be revised at final design within the approved micrositing areas.</p>					

**Table A-3. Oregon Trail Solar Facility – Permanently Disturbed Areas (Solar Layout)**

Facilities	Units	OTS Facility Solar Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
Facility Components					
Collector Substation <sup>1</sup>	Acres	3.99	1	3.99	
Battery Storage System <sup>2</sup>	Acres	6.43	1	6.43	
O&M Building <sup>3</sup>	Acres	3	1	3	
Overhead 230-kV Transmission Line Structures <sup>4</sup>	Square feet per 2-pole location	40	32	0.03	
Access Roads and Turnarounds					
Improved existing roads to 20 feet (except county roads) <sup>5</sup>	Feet of width per linear foot	10	5,342	1.23	1.0
Improved existing county roads to 30 feet (within county right-of- way) <sup>6</sup>	Feet of width per linear foot	14	12,308	3.96	2.3
Solar Array <sup>7</sup>	Acres	1,228	1	1,228	
Approximate Permanently Disturbed Area				1,246.64 <sup>8</sup>	
<div>1. Includes the shared Montague Solar Facility collector substation and surrounding graveled area and fence (520 feet by 334 feet). No temporary disturbance will occur outside the fenced area.</div> <div>2. Includes the area within the fenced perimeter of the battery storage system (467 feet by 600 feet).</div> <div>3. Includes the O&amp;M building and surrounding graveled parking area and fence (467 feet by 280 feet).</div> <div>4. Assumes pole structures for the shared overhead 230-kV transmission line between the shared Montague Solar Facility collector substation and shared Montague Wind Facility collector substation. The portion of the shared overhead 230-kV transmission line between the Montague Wind Facility collector substation and BPA Slatt Substation is in operation and not included herein..</div> <div>5. Assumes maximum of 20 feet of travel lanes or 10 feet of improvements to existing 10-foot road. For roads that are already 30 feet in width, there will be no permanent impacts beyond this width. These roads will only be temporarily widened for construction, if needed. Therefore, the length of existing roads needing improvements is greater for temporary impacts than for permanent impacts.</div> <div>6. Assumes maximum of 30 feet of travel lanes or 14 feet of improvements to existing 16-foot road, if needed.</div> <div>7. The permanently disturbed area of the solar array will not exceed 1,228 acres within the solar micrositng area.</div> <div>8. Disturbance areas associated with the OTS Facility layout are the same as those previously evaluated in MWP RFA4 and RFA5. The estimated disturbance areas are based on preliminary design and the exact location and dimensions of the components may be revised at final design within the approved micrositng areas.</div>					



**Table A-4. Oregon Trail Solar Facility – Temporarily Disturbed Areas (Solar Layout)**

Facilities	Units	OTS Facility Solar Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
Facility Components					
Collector Substation <sup>1</sup>	Acres	0	1	0	
Battery Storage System <sup>1</sup>	Acres	0	1	0	
Staging (Laydown) Areas					
Central staging and storage areas for collector lines and other equipment <sup>2</sup>	Acres	Not applicable	2	17.06	
Power Collection System					
Underground collector lines <sup>3</sup>	Feet of width per linear foot	24	26,030	14.34	4.93
Overhead 230-kV Transmission Line					
Temporary access for overhead 230-kV transmission line <sup>4</sup>	Feet of width per linear foot	-	-	-	3.6
Temporary disturbance around overhead 230-kV transmission line structures <sup>5</sup>	Square feet per 2-pole location	1,560	32	1.1	
Access Roads					
Existing road improvements, except County roads (temporarily widened to 80 feet) <sup>6</sup>	Feet of width per linear foot	60	5,342	7.36	1.0
Existing County road improvements (temporarily widened to 60 feet, within County right-of-way) <sup>7</sup>	Feet of width per linear foot	30	12,308	8.48	2.3
Approximate Temporarily Disturbed Area				48.34 <sup>8</sup>	
1. Assumes contractor will permanently disturb the entire shared Montague Solar Facility collector substation and Oregon Trail Solar Facility battery storage system area. Therefore, no temporary impacts will occur.					
2. The staging areas vary in acreage.					
3. Assumes width of trench plus areas for spoils and travel paths. Assumes one circuit per trench, if additional circuits are needed lines will be buried 8 feet apart for heat dissipation.					
4. Temporary disturbance will be an average of 12 feet wide.					

Facilities	Units	OTS Facility Solar Layout			
		Dimensions/Unit	Number of Units	Acres	Miles
5. Assumes temporary disturbance of 40 feet by 40 feet at each two-pole H-frame location minus the 40-sq.-ft. permanent disturbance for the shared overhead 230-kV transmission line between the shared Montague Solar Facility collector substation and shared Montague Wind Facility collector substation. The portion of the shared overhead 230-kV transmission line between the Montague Wind Facility collector substation and BPA Slatt Substation is in operation and not included herein.					
6. Assumes the 10-foot existing road will be temporarily widened to 80 feet. The temporary disturbance will be equal to 80-foot total width during construction minus the 20-foot permanent width, if needed.					
7. Assumes the 16-foot existing road will be temporarily widened to a maximum of 60 feet within the County right-of-way. The County roads will be widened up to 60 feet for portions of the road to allow for wider turning radii and/or straightening of tight corners. The temporary disturbance will be equal to 60-foot total width during construction minus the 30-foot permanent width, if needed.					
8. Disturbance areas associated with the OTS Facility layout are the same as those previously evaluated in MWP RFA4 and RFA5. The estimated disturbance areas are based on preliminary design and the exact location and dimensions of the components may be revised at final design within the approved micrositing areas.					

## **Attachment 6. Proposed Revisions to the Oregon Trail Solar Site Certificate**



**ENERGY FACILITY SITING COUNCIL  
OF THE  
STATE OF OREGON**

**First Amended  
Site Certificate  
for the  
Oregon Trail Solar Facility**

ISSUANCE DATES:

Site Certificate September 25, 2020

First Amended Site Certificate MONTH DATE, ~~2023~~2022

Issuance Date History under Montague Wind Power Facility Site Certificate

Site Certificate September 10, 2010

First Amended Site Certificate June 21, 2013

Second Amended Site Certificate December 4, 2015

Third Amended Site Certificate July 12, 2017

Fourth Amended Site Certificate August 23, 2019

Fifth Amended Site Certificate September 25, 2020

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# The Oregon Energy Facility Siting Council

## I. INTRODUCTION

The Oregon Energy Facility Siting Council (Council) issues this site certificate for the Oregon Trail Solar Facility (the facility) in the manner authorized under ORS Chapter 469. This site certificate is a binding agreement between the State of Oregon (State), acting through the Council, and Oregon Trail Solar, LLC (certificate holder), a wholly owned subsidiary of Avangrid Renewables, LLC (certificate holder owner) authorizing the certificate holder to construct and operate the facility in Gilliam County, Oregon.

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, incorporated herein by this reference: (a) the Final Order on the Application for Site Certificate for the Montague Wind Power Facility issued on September 10, 2010 (hereafter, Final Order on the Application), (b) the Final Order on Amendment #1 for the Montague Wind Power Facility issued on June 21, 2013; (c) the Final Order on Amendment #2 for the Montague Wind Power Facility issued on December 4, 2015; (d) the Final Order on Amendment #3 for the Montague Wind Power Facility issued on July 12, 2017; (e) the Final Order on Amendment #4 for the Montague Wind Power Facility issued on August 23, 2019; (f) the Final Order on Amendment #5 for the Montague Wind Power Facility issued on September 25, 2020; and (g) the Final Order on Amendment #1 for the Oregon Trail Site Certificate XX Date XX.

In interpreting this site certificate, any ambiguity will be clarified by reference to the following, in order of priority: (1) this Final Order on Amendment #1 of the Oregon Trail Solar Facility (2) the Final Order on Amendment #5 of the Montague Wind Power Facility, (3) the Final Order on Amendment #4 of the Montague Wind Power Facility, (4) the Final Order on Amendment #3 of the Montague Wind Power Facility, (5) the Final Order on Amendment #2 of the Montague Wind Power Facility, (6) the Final Order on Amendment #1 of the Montague Wind Power Facility, (7) the Final Order on the Application, and (8) the record of the proceedings that led to the final orders as referenced.

As authorized in Final Order on Amendment #5, the Montague Wind Power Facility certificate holder obtained approval to split the Montague Wind Power Facility site certificate into three site certificates – Montague Wind Power Facility, Montague Solar Facility and Oregon Trail Solar Facility. Each of these site certificates are held by a wholly owned subsidiary and LLC created by Avangrid Renewables, LLC resulting in each certificate holder being owned by the same parent company. In addition, these facilities share facility components, interconnecting facility components and long-term operation.

Because the findings of fact, reasoning and conclusions of law underlying the terms and conditions of the site certificate are set forth in the 2010 Final Order on the Application for Site Certificate and subsequent Final Orders on Requests for Amendment 1 through 5 for the Montague Wind Power Facility, which are incorporated by reference into the site certificate, these underlying findings, including any findings establishing the predevelopment condition of the site and impacts of approved facility components continue to have bearing on the analysis and findings required to approve any future changes to the site certificates for the successor facilities. In other words, environmental impacts evaluated in future site certificate amendment requests shall be based on 2010 predevelopment conditions and the incremental change in environmental impact based on the original site certificate application review and subsequent amendments to the Montague Wind Power Facility site certificate, either as approved or in operation, at the time of the amendment request. This clarification is intended to establish that, with the splitting of facility components under three site certificates, baseline



1 conditions and environmental impacts shall not adjusted in a way that results in greater overall impacts  
2 than the level of impacts that would be authorized under one site certificate.

3  
4 The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this site certificate, except  
5 where otherwise stated or where the context clearly indicates otherwise.  
6

## II. SITE CERTIFICATION

7 1. To the extent authorized by state law and subject to the conditions set forth herein, the State  
8 authorizes the certificate holder to construct, operate and retire a wind and photovoltaic (PV) solar  
9 energy facility, together with certain related or supporting facilities, at the site in Gilliam County,  
10 Oregon, as described in Section III of this site certificate. ORS 469.401(1). [MWP Final Order on ASC;  
11 AMD4; AMD5, OTS AMD1]

12 2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in effect  
13 on the date that termination is sought or until the site certificate is revoked under ORS 469.440 and  
14 OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS  
15 469.401(1).

16 3. This site certificate does not address, and is not binding with respect to, matters that were not  
17 addressed on the record of the proceedings for Montague Wind Power Facility Site Certificate  
18 including the Final Order on the Application, Final Order on Amendment #1, Final Order on  
19 Amendment #2, Final Order on Amendment #3, Final Order on Amendment #4, Final Order on  
20 Amendment #5; and Final Order on Amendment #1 of the Oregon Trail Solar Facility Site Certificate.  
21 Such matters include, but are not limited to: building code compliance, wage, hour and other labor  
22 regulations, local government fees and charges and other design or operational issues that do not  
23 relate to siting the facility (ORS 469.401(4)) and permits issued under statutes and rules for which  
24 the decision on compliance has been delegated by the federal government to a state agency other  
25 than the Council. 469.503(3). [MWP Final Order on ASC; AMD1; AMD2; AMD3; AMD4; AMD5; OTS  
26 AMD1]

27 4. Both the State and the certificate holder shall abide by local ordinances, state law and the rules of  
28 the Council in effect on the date this site certificate is executed. ORS 469.401(2). In addition, upon a  
29 clear showing of a significant threat to public health, safety or the environment that requires  
30 application of later-adopted laws or rules, the Council may require compliance with such later-  
31 adopted laws or rules. ORS 469.401(2).

32 5. For a permit, license or other approval addressed in and governed by this site certificate, the  
33 certificate holder shall comply with applicable state and federal laws adopted in the future to the  
34 extent that such compliance is required under the respective state agency statutes and rules. ORS  
35 469.401(2).

36 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities and  
37 political subdivisions in Oregon as to the approval of the site and the construction, operation and

retirement of the facility as to matters that are addressed in and governed by this site certificate.  
ORS 469.401(3).

7. Each affected state agency, county, city and political subdivision in Oregon with authority to issue a permit, license or other approval addressed in or governed by this site certificate shall, upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. ORS 469.401(3).

8. After issuance of this site certificate, each state agency or local government agency that issues a permit, license or other approval for the facility shall continue to exercise enforcement authority over such permit, license or other approval. ORS 469.401(3).

9. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate. ORS 469.430.

### III. DESCRIPTION

#### 1. The Facility

The Oregon Trail Solar Facility is an electric power generating plant approved to consist of a combination of up to 16 wind turbines and/or a solar photovoltaic array on up to 1,228 acres. The total capacity of the facility will be up to 41 MW and comprised of solar, wind, or a combination of technologies. The dimensions and specifications of energy facility and related or supporting facilities approved to be constructed and operated within the wind micro-siting area are presented in Table 1 below.

Wind turbines consist of a nacelle, a three-bladed rotor, turbine tower and foundations, with a maximum blade-tip height of 597 feet. The nacelle houses the equipment such as the gearbox, generator, brakes, and control systems for the turbines. Wind turbines may be located anywhere within the micro-siting corridor.

Within the solar micro-siting area, solar photovoltaic energy generation equipment could include modules consisting of solar panels, trackers, racks, posts, inverter/transformer units and above- and belowground cabling. Solar panels would be supported by galvanized steel posts, which would be hydraulically driven into the ground at a depth of 5 to 8 feet, with an approximately 4 to 5.5-foot aboveground height. Solar panels would be designed with anti-reflective coating. Modules would be placed on non-specular metal galvanized steel racks, with heights ranging from 4 to 15 feet at full tilt. To convert energy generated within the modules from alternating current (ac) to direct current (dc), inverter/transformer units would be installed. Solar photovoltaic energy generation equipment would be contained by an approximately 8-foot chain-link fence extending around the perimeter. Access to solar facility components would be provided via two new access points on the north side of from Bottemiller Lane or Weatherford Lane.

The energy facility is described further in proceedings on the record for the Montague Wind Power Facility including the Final Order on the Application, Final Order on Amendment #1, Final Order on

Amendment #2, Final Order on Amendment #3, Final Order on Amendment #4 and Final Order on Amendment #5.

### **(a) Related or Supporting Facilities**

The facility includes the following related or supporting facilities described below and in greater detail in the Final Order on the Application, Final Order on Amendment #1, Final Order on Amendment #2, Final Order on Amendment #3, and the Final Order on Amendment #4:

- Power collection system
- Control system
- Substation, ~~switching station~~, and 230-kV transmission lines
- Battery storage system
- Meteorological towers
- Operations and maintenance (O&M) building
- Access roads
- Public roadway modifications
- Temporary construction areas

### **Power Collection System**

A power collection system operating at 34.5 kilovolts (kV) transports power from each turbine or the solar array to the collector substation. To the extent practicable, the collection system is installed underground at a depth of at least three feet. Not more than 27 miles of the collector system is installed aboveground.

### **Control System**

A fiber optic communications network links the wind turbines and solar array to a central computer at the Montague Solar O&M building shared with the Montague Solar facility. A Supervisory, Control and Data Acquisition (SCADA) system collects operating and performance data from each wind turbine and from the facility as a whole and allows remote operation of the facility.

### **Substation, ~~Switching Station~~, and 230-kV Transmission Lines**

The facility includes two collector substations. One substation (“Montague Wind collector substation”) is shared with the Montague Wind Power facility, and the second (“Montague Solar collector substation”) is shared with the Montague Solar facility. ~~The facility components, including one switching station. The switching station includes circuit-breakers, switches and other auxiliary equipment may be installed at these two shared substation. , and is located within a 2 acre graveled, fenced area.~~

~~An~~ Underground or aboveground 34.5-kV collector lines will connects the generating facilities to the ~~switching station~~ to the Montague Solar collector substation where the voltage will be stepped up to 230 kV. An aboveground, single-circuit 230-kV transmission line connects the Montague Solar collector substation to the Montague Wind collector substation. An aboveground, single-circuit 230-kV



transmission line connects the Montague Wind collector substation to the 500-kV Slatt-Buckley transmission line owned by the Bonneville Power Administration (BPA) at the Slatt substation. As approved in Final Order on Amendment 5, the 230 kV transmission line includes two approved route segments, as presented in Attachment 1, Figure 1 of the site certificate.

### **Battery Storage**

The facility is approved to include a battery storage system shared with the Montague Solar facility. The battery storage system would be capable of storing up to 100 MW of wind or solar energy generated by the Facility, and would be used to stabilize the wind or solar resource through dispatching of energy stored in the battery system. The battery system is placed in a series of containers or building located near the Montague Solar collector substation.

The battery system would be composed of either lithium-ion (Li-ion) batteries or a flow battery. Lithium-ion batteries are a solid-state rechargeable battery utilizing lithium ions in an electrolyte. Flow batteries are composed of a variety of different technologies; however, all flow batteries dispatch electricity by allowing the migration of electrons from a positive ion tank to a negative ion tank. The electrons migrate between solutions via a membrane.

The battery storage would occupy up to 6 acres and would include batteries and racks or containers, inverters, isolation transformers, and switchboards, an approximately 20-foot warehouse-type building, medium-voltage and low-voltage electrical systems, fire suppression, heating, ventilation, and air-conditioning systems, building auxiliary electrical systems, and network/SCADA systems. Battery storage would include a cooling system (more advanced systems required for Li-ion), which may include a separate chiller plant located outside the battery racks with chillers, pumps, and heat exchangers. High-voltage (HV) equipment would include a step-up transformer, HV circuit breaker, HV current transformers and voltage transformers, a packaged control building for the HV breaker and transformer equipment, HV towers, structures, and HV cabling. The battery storage area would be enclosed by approximately 2,140 feet of continuous chain-link perimeter fencing 8 feet in height, with two 16-foot-wide gates and one pedestrian, 4-foot-wide gate.

### **Meteorological Towers**

The facility includes up to four permanent meteorological towers.

### **Operations and Maintenance Building**

The facility includes one O&M building (“Montague Solar O&M building”) shared with the Montague Solar facility. An on-site well at the Montague Solar O&M facility supplies water for use during facility operation. Sewage is discharged to an on-site septic system.

### **Access Roads**

The facility includes access roads to provide access to the turbine strings, solar array, battery storage system and other related or supporting components.

### **Public Roadway Modifications**

The certificate holder may construct improvements to existing state and county public roads that are necessary for construction of the facility. These modifications would be confined to the existing road rights-of-way and would be undertaken with the approval of the Gilliam County

Road Department or the Oregon Department of Transportation, depending on the location of the improvement.

### **Temporary Construction Areas**

During construction, the facility includes temporary laydown areas used to stage construction and store supplies and equipment. Construction crane paths are used to move construction cranes between turbine strings.

## **1.1 Shared Related or Supporting Facilities**

The site certificates for the Oregon Trail Solar Facility, Montague Solar Facility, and Montague Wind Power Facility were originally approved as one site certificate for the Montague Wind Power Facility (September 2010 – September 2019). On September 25, 2020, facility components were split or allocated into three separate site certificates, but identified that certain related or supporting facilities would be shared or used by each facility. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under each site certificate, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between the Oregon Trail Solar Facility, Montague Solar Facility and Montague Wind Power Facility including the Montague Wind collector substation, 230 kV transmission line, temporary laydown areas, and access roads, based on the component specifications presented in Table 3 below.

The certificate holder is authorized to share related or supporting facilities between the Montague Solar Facility, Montague Wind Facility, and Oregon Trail Solar Facility including the Montague Solar collector substation, 230 kV transmission line, O&M building and battery storage. These related or supporting facilities are included in each site certificate. Compliance responsibility with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between site certificates and certificate holders. In accordance with Condition 118, if any certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, each certificate holder would be obligated to submit an amendment determination request or request for amendment to the Department to determine the appropriate process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a legally binding agreement has been fully executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

## **1.2 Summary Tables of Facility Components**

The following tables summarize the facility components as described in the Final Order on Amendment #1 for the Oregon Trail Solar Site Certificate XX Date XX. The final facility design must substantially comply with the dimensions and specifications as presented in Tables 1, 2, and 3 below.

**Table 1: Wind Micrositing Area Facility Component Summary**

<u>Component and Design Standard</u>	<u>No.</u>	<u>Unit</u>
<b><u>Wind Components</u></b>		
<u>Wind turbines</u>	<u>16</u>	<u>total</u>
<u>Max. blade tip height</u>	<u>597</u>	<u>feet</u>
<b><u>Wind Related or Supporting Facility Components</u></b>		
<u>Meteorological Towers</u>		
<u>Towers</u>	<u>2</u>	<u>total</u>
<u>Access Roads</u>		
<u>Approximate road length, width</u>	<u>18.7, 20</u>	<u>Miles, feet</u>
<u>Improvements to existing roads (approximate length, width)</u>	<u>2.6, 20</u>	<u>Miles, feet</u>
<u>Improvements to existing roads (approximate length, width)</u>	<u>3.3, 30</u>	<u>Miles, feet</u>
<u>Overhead 34.5 kV Collector lines</u>		
<u>Approximate Length</u>	<u>7</u>	<u>miles</u>
<u>Approximate Structure type, height</u>	<u>H-frame, 100</u>	<u>feet</u>

**Table 2: Solar Micrositing Area Component Summary**

<u>Component and Design Standard</u>	<u>No.</u>	<u>Unit</u>
<b><u>Solar Components</u></b>		
<u>Solar micrositing area</u>	<u>1,228</u>	<u>acres</u>
<u>Max Solar Module Height at full-tilt</u>	<u>15</u>	<u>feet</u>
<b><u>Solar Related or Supporting Facility Components</u></b>		
<u>34.5 kV Collection System</u>		



**Table 2: Solar Micrositing Area Component Summary**

<u>Component and Design Standard</u>	<u>No.</u>	<u>Unit</u>
<u>Approximate Collector line length, aboveground, if needed</u>	<u>1.5</u>	<u>miles</u>
<u>Structure type, height</u>	<u>H-frame, 100</u>	<u>feet</u>
<u>Roads</u>		
<u>Improvements to existing roads (approximate length, width)</u>	<u>1, 20</u>	<u>Miles, feet</u>
<u>Improvements to existing roads (approximate length, width)</u>	<u>2.3, 30</u>	<u>Miles, feet</u>

**Table 3: Shared Related or Supporting Facilities Component Summary**

<u>Component and Design Standard</u>	<u>No.</u>	<u>Unit</u>
<u>Overhead 230 kV Transmission line</u>		
<u>Approximate Length</u>	<u>14</u>	<u>miles</u>
<u>Structure type, height</u>	<u>H-frame, 100</u>	<u>feet</u>
<u>Battery Energy Storage System (Lithium-ion or flow)</u>		
<u>Storage Capacity</u>	<u>100</u>	<u>Megawatts</u>
<u>Approximate container dimensions (with stacked battery storage units)</u>	<u>20 x 8 x40 XX</u>	<u>HxWxL feet</u>
<u>Substation</u>		
<u>No. of substations</u>	<u>2</u>	<u>Total</u>
<u>O&amp;M Building</u>		
<u>No. of O&amp;M Buildings</u>	<u>1</u>	<u>Total</u>
<u>Construction Staging and Laydown Areas</u>		
<u>No. of Areas</u>	<u>23</u>	<u>No.</u>
<u>Approximate- Area</u>	<u>170</u>	<u>acres</u>

## 2. Location of the Facility

The facility is located south of Arlington, in Gilliam County, Oregon. The facility is located on private land subject to easements or lease agreements with landowners, as presented in Attachment A, Figure 1.

## 3. Site Boundary and Micrositing Areas

The approved site boundary includes 15,094 acres. Within the site boundary, there are two approved micrositing areas – a solar micrositing area and a wind micrositing area. The solar micrositing area includes 1,228 acres (see pink polygon in Figure 1); the wind micrositing area includes 12,638 acres (see orange polygon in Figure 1). The Council permits final siting flexibility within the approved micrositing corridors because the certificate holder has

demonstrated that requirements of all applicable standards have been satisfied by adequately evaluating the entirety of the micrositing corridors and location of wind and solar energy generation components anywhere within the respective micrositing corridors.

This site boundary also includes three approved transmission line corridors (as presented in Figure 2):

- 230 kV Transmission Line: Extends approximately 10.4 miles north out of the Montague Wind collector substation to the BPA at the Slatt substation.
- 230 kV Transmission Line Corridor Route 1: Extends approximately 3.614 miles east out of the Montague Solar collector substation to a 90-degree turning structure just east of OR 19. From there, it would extend straight north along OR 19 (outside of the road right-of-way) until it reaches the corner of Old Tree Road where it would turn east towards the Montague Wind collector substation.
- 230 kV Transmission Line Corridor Route 2: Extends approximately 3.144 miles going east out of the Montague Solar collector substation, crosses OR 19 and diagonals across fields to Old Tree Road where it may run on the north or the south side of the road to reach the Montague Wind collector substation, ~~and then extends north to BPA's Slatt Substation~~
- ~~34.5 kV Transmission Line Corridor: Extends XX miles from the switching station to the Montague Solar collector substation.~~

#### ~~4. Facility Development~~

##### 4.1 Construction

##### 4.2 Operations and Maintenance

##### 4.3 Retirement/Decommissioning

#### IV. SITE CERTIFICATE CONDITIONS

This section lists conditions required by OAR 345-025-0006 (Mandatory Conditions in Site Certificates), OAR 345025-0010 (Site Specific Conditions), OAR 345-025-0016 (Monitoring and Mitigation Conditions) and OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be read together with the specific facility conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions the definitions in OAR 345-001-0010 apply.

1 The obligation of the certificate holder to report information to the Oregon Department of Energy  
2 (Department) or the Council under the conditions listed in this section and in Section V is subject to the  
3 provisions of ORS 192.502 et seq. and ORS 469.560. To the extent permitted by law, the Department  
4 and the Council will not publicly disclose information that may be exempt from public disclosure if the  
5 certificate holder has clearly labeled such information and stated the basis for the exemption at the time  
6 of submitting the information to the Department or the Council. If the Council or the Department  
7 receives a request for the disclosure of the information, the Council or the Department, as appropriate,  
8 will make a reasonable attempt to notify the certificate holder and will refer the matter to the Attorney  
9 General for a determination of whether the exemption is applicable, pursuant to ORS 192.450.

10 In addition to these conditions, the certificate holder is subject to all conditions and requirements  
11 contained in the rules of the Council and in local ordinances and state law in effect on the date the  
12 certificate is executed. Under ORS 469.401(2), upon a clear showing of a significant threat to the public  
13 health, safety or the environment that requires application of later-adopted laws or rules, the Council  
14 may require compliance with such later-adopted laws or rules.

15 The Council recognizes that many specific tasks related to the design, construction, operation and  
16 retirement of the facility will be undertaken by the certificate holder's agents or contractors.  
17 Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site  
18 certificate.

19 1 OAR 345-025-0006(1): The Council shall not change the conditions of the site certificate except  
20 as provided for in OAR Chapter 345, Division 27.

21 2 OAR 345-025-0006(2): The certificate holder shall submit a legal description of the site to the  
22 Department of Energy within 90 days after beginning operation of the facility. The legal  
23 description required by this rule means a description of metes and bounds or a description of  
24 the site by reference to a map and geographic data that clearly and specifically identifies the  
25 outer boundaries that contain all parts of the facility.

26 3 OAR 345-025-0006(3): The certificate holder shall design, construct, operate and retire the  
27 facility:

- 28 (a) Substantially as described in the site certificate;  
29 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and  
30 applicable state and local laws, rules and ordinances in effect at the time the site  
31 certificate is issued; and  
32 (c) In compliance with all applicable permit requirements of other state agencies.  
33

34 4 OAR 345-025-0006(4): The certificate holder shall begin and complete construction of the  
35 facility by the dates specified in the site certificate. (See Conditions 24 and 25.)  
36

37 5 OAR 345-025-0006(5): Except as necessary for the initial survey or as otherwise allowed for wind  
38 energy facilities, transmission lines or pipelines under this section, the certificate holder shall  
39 not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the  
40 site until the certificate holder has construction rights on all parts of the site. For the purpose of  
41 this rule, "construction rights" means the legal right to engage in construction activities. For  
42 wind energy facilities, transmission lines or pipelines, if the certificate holder does not have



construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and:

(a) The certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of the transmission line or pipeline occurs during the certificate holder's negotiations to acquire construction rights on another part of the site; or

(b) The certificate holder would construct and operate part of a wind energy facility on that part of the site even if other parts of the facility were modified by amendment of the site certificate or were not built.

6 OAR 345-025-0006(6): If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.

7 OAR 345-025-0006(7): The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.

8 OAR 345-025-0006(8): Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit, in a form and amount satisfactory to the Council to restore the site or a portion of the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility. (See Condition 32.)

9 OAR 345-025-0006(9): The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council's approval in the site certificate of an estimated amount required to restore the site.

10 OAR 345-025-0006(10): The Council shall include as conditions in the site certificate all representations in the site certificate application and supporting record the Council deems to be binding commitments made by the applicant.

11 OAR 345-025-0006(11): Upon completion of construction, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.

- 1    12    OAR 345-025-0006(12): The certificate holder shall design, engineer and construct the facility to  
2    avoid dangers to human safety and the environment presented by seismic hazards affecting the  
3    site that are expected to result from all maximum probable seismic events. As used in this rule  
4    “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction triggering and  
5    consequences (including flow failure, settlement buoyancy, and lateral spreading, cyclic  
6    softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. For  
7    coastal sites, this also includes tsunami hazards and seismically-induced subsidence. [AMD5,  
8    Sept 2020]
- 9    13    OAR 345-025-0006(13): The certificate holder shall notify the Department, the State Building  
10    Codes Division and the Department of Geology and Mineral Industries promptly if site  
11    investigations or trenching reveal that conditions in the foundation rocks differ significantly  
12    from those described in the application for a site certificate. After the Department receives the  
13    notice, the Council may require the certificate holder to consult with the Department of Geology  
14    and Mineral Industries and the Building Codes Division to propose and implement corrective or  
15    mitigation actions.
- 16    14    OAR 345-025-0006(14): The certificate holder shall notify the Department, the State Building  
17    Codes Division and the Department of Geology and Mineral Industries promptly if shear zones,  
18    artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After  
19    the Department receives notice, the Council may require the certificate holder to consult with  
20    the Department of Geology and Mineral Industries and the Building Codes Division to propose  
21    and implement corrective or mitigation actions.
- 22    15    OAR 345-025-0006(15): Before any transfer of ownership of the facility or ownership of the site  
23    certificate holder, the certificate holder shall inform the Department of the proposed new  
24    owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership that  
25    requires a transfer of the site certificate.
- 26    16    OAR 345-025-0006(16): If the Council finds that the certificate holder has permanently ceased  
27    construction or operation of the facility without retiring the facility according to a final  
28    retirement plan approved by the Council, as described in OAR 345-027-0110, the Council shall  
29    notify the certificate holder and request that the certificate holder submit a proposed final  
30    retirement plan to the Department within a reasonable time not to exceed 90 days. If the  
31    certificate holder does not submit a proposed final retirement plan by the specified date, the  
32    Council may direct the Department to prepare a proposed final retirement plan for the Council’s  
33    approval. Upon the Council’s approval of the final retirement plan, the Council may draw on the  
34    bond or letter of credit described in OAR 345-027-0020(8) to restore the site to a useful, non-  
35    hazardous condition according to the final retirement plan, in addition to any penalties the  
36    Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of  
37    credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any  
38    additional cost necessary to restore the site to a useful, non-hazardous condition. After  
39    completion of site restoration, the Council shall issue an order to terminate the site certificate if  
40    the Council finds that the facility has been retired according to the approved final retirement  
41    plan.

17 [AMD3; Deleted AMD4, 2019]

18 OAR 345-025-0010(5): The certificate holder is authorized to construct a 230 kV transmission  
line anywhere within the approved corridor, subject to the conditions of the site certificate. The  
approved corridor is ½-mile in width and extends approximately 14 miles from the Montague  
Solar collector substation to the Montague Wind substation to BPA's Slatt Substation as  
presented in Figure 1 of the site certificate.  
[OAR 345-025-0010(5); ASC; AMD4]

19 OAR 345-025-0016: The following general monitoring conditions apply:

- (1) In the site certificate, the Council shall include conditions that address monitoring and mitigation to ensure compliance with the standards contained in OAR Chapter 345, Division 22 and Division 24. The certificate holder shall develop proposed monitoring and mitigation plans in consultation with the Department and, as appropriate, other state agencies, local governments and tribes. Monitoring and mitigation plans are subject to Council approval. The Council shall incorporate approved monitoring and mitigation plans in applicable site certificate conditions.

20 OAR 345-026-0048: Following receipt of the site certificate or an amended site certificate, the certificate holder shall implement a plan that verifies compliance with all site certificate terms and conditions and applicable statutes and rules. As a part of the compliance plan, to verify compliance with the requirement to begin construction by the date specified in the site certificate, the certificate holder shall report promptly to the Department of Energy when construction begins. Construction is defined in OAR 345-001-0010. In reporting the beginning of construction, the certificate holder shall describe all work on the site performed before beginning construction, including work performed before the Council issued the site certificate, and shall state the cost of that work. For the purpose of this exhibit, "work on the site" means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the site or corridor. The certificate holder shall document the compliance plan and maintain it for inspection by the Department or the Council.

21 OAR 345-026-0080: The certificate holder shall report according to the following requirements:

(a) General reporting obligation for energy facilities under construction or operating:

- (i) Within six months after beginning construction, and every six months thereafter during construction of the energy facility and related or supporting facilities, the certificate holder shall submit a semiannual construction progress report to the Department of Energy. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall report on the progress of construction and shall address the subjects listed in subsections (2)(a), (d), (f) and (g). When the reporting date coincides, the certificate holder may include the construction progress report within the annual report described in this rule.

- (ii) After January 1 but no later than April 30 of each year after beginning operation of the facility, the certificate holder shall submit an annual report to the Department



1 addressing the subjects listed in Subsection (2). For the purposes of this rule, the  
2 beginning of operation of the facility means the date when construction of a  
3 significant portion of the facility is substantially complete and the certificate  
4 holder begins commercial operation of the facility as reported by the certificate  
5 holder and accepted by the Department. The Council Secretary and the certificate  
6 holder may, by mutual agreement, change the reporting date.

7 (iii) To the extent that information required by this rule is contained in reports the  
8 certificate holder submits to other state, federal or local agencies, the certificate  
9 holder may submit excerpts from such other reports to satisfy this rule. The  
10 Council reserves the right to request full copies of such excerpted reports

11 (b) In the annual report, the certificate holder shall include the following information for  
12 the calendar year preceding the date of the report:

13 (i) Facility Status: An overview of site conditions, the status of facilities under  
14 construction and a summary of the operating experience of facilities that are in  
15 operation. The certificate holder shall describe any unusual events, such as  
16 earthquakes, extraordinary windstorms, major accidents or the like that occurred  
17 during the year and that had a significant adverse impact on the facility.

18 (ii) Reliability and Efficiency of Power Production: For electric power plants, the plant  
19 availability and capacity factors for the reporting year. The certificate holder shall  
20 describe any equipment failures or plant breakdowns that had a significant impact  
21 on those factors and shall describe any actions taken to prevent the recurrence of  
22 such problems.

23 (iii) Status of Surety Information: Documentation demonstrating that bonds or letters  
24 of credit as described in the site certificate are in full force and effect and will  
25 remain in full force and effect for the term of the next reporting period.

26 (iv) Monitoring Report: A list and description of all significant monitoring and  
27 mitigation activities performed during the previous year in accordance with site  
28 certificate terms and conditions, a summary of the results of those activities and a  
29 discussion of any significant changes to any monitoring or mitigation program,  
30 including the reason for any such changes.

31 (v) Compliance Report: A description of all instances of noncompliance with a site  
32 certificate condition. For ease of review, the certificate holder shall, in this section  
33 of the report, use numbered subparagraphs corresponding to the applicable  
34 sections of the site certificate.

35 (vi) Facility Modification Report: A summary of changes to the facility that the  
36 certificate holder has determined do not require a site certificate amendment in  
37 accordance with OAR 345-027-0350.

38 22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange copies  
39 of all correspondence or summaries of correspondence related to compliance with statutes,  
40 rules and local ordinances on which the Council determined compliance, except for material

withheld from public disclosure under state or federal law or under Council rules. The certificate holder may submit abstracts of reports in place of full reports; however, the certificate holder shall provide full copies of abstracted reports and any summarized correspondence at the request of the Department.

23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72 hours of any occurrence involving the facility if:

(a) There is an attempt by anyone to interfere with its safe operation;

(b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused event such as a fire or explosion affects or threatens to affect the public health and safety or the environment; or

(c) There is any fatal injury at the facility.

## **1. Administrative Conditions**

The conditions listed in this section include conditions based on representations in the site certificate application and supporting record. The Council deems these representations to be binding commitments made by the applicant. These conditions are required under OAR 345-025-0006. The certificate holder must comply with these conditions in addition to the conditions listed in Section IV. This section includes other specific facility conditions the Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect public health and safety. For conditions that require subsequent review and approval of a future action, ORS 469.402 authorizes the Council to delegate the future review and approval to the Department if, in the Council's discretion, the delegation is warranted under the circumstances of the case.

24 The certificate holder shall begin construction of the facility by August 30, 2025. Certificate holder shall provide written notification to the Department of "start of construction" as defined in commencement. Commencement shall be determined by the certificate holder by performing work on site exceeding \$250,000 (ORS 469.300(6)).

25 The certificate holder shall complete construction of the facility by [3 years of from the date of construction commencement]. Construction is complete when: (1) the facility is substantially complete as defined by the certificate holder's construction contract documents, (2) acceptance testing has been satisfactorily completed and (3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction.

26 [Deleted in AMD5, Sept 2020]

27 The certificate holders shall construct the facility substantially as described in the site certificate. Before beginning construction, the certificate holder shall provide to the Department a description of the facility to be constructed, any phasing and construction schedule. [MWP Final Order on ASC; AMD3; AMD4; AMD5; OTS AMD1]

- 28 The certificate holder shall obtain all necessary federal, state and local permits or approvals required for construction, operation and retirement of the facility or ensure that its contractors obtain the necessary federal, state and local permits or approvals.
- 29 The certificate holder shall:
- (a) Before beginning construction of the facility, provide to the Department a list of all third-party permits which would normally be governed by the site certificate and that are necessary for construction (e.g. Air Contaminant Discharge Permit; Limited Water Use License). Once obtained, the certificate holder shall provide copies of third-party permits to the Department and Gilliam County and shall provide to the Department proof of agreements between the certificate holder and the third-party regarding access to the resources or services secured by the permits or approvals.
  - (b) During construction and operation, promptly report to the Department if any third-party permits referenced in sub(i) of this condition have been subject to a cited violation, Notice of Violation, or allegation of a violation. [AMD5, Sept 2020]
- 30 Before beginning construction, the certificate holder shall notify the Department in advance of any work on the site that does not meet the definition of “construction” in ORS 469.300, excluding surveying, exploration or other activities to define or characterize the site, and shall provide to the Department a description of the work and evidence that its value is less than \$250,000.
- 31 Before beginning construction of the facility, facility components or phase but no more than two years before beginning construction and after considering all micrositng factors, the certificate holder shall provide to the Department, to the Oregon Department of Fish and Wildlife (ODFW) and to the Planning Director of Gilliam County detailed maps of the facility site, showing the final locations where the certificate holder proposes to build facility components, and a table showing the acres of temporary and permanent habitat impact by habitat category and subtype. The detailed maps of the facility site shall indicate the habitat categories of all areas that would be affected during construction
- 32 Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The bond or letter of credit will be issued for an amount that is either \$3.5 million (3<sup>rd</sup> Quarter 2022 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).
- (a) The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of the facility, and both the battery storage or turbine types selected by applying the unit costs and general costs illustrated in Table XX of this site certificate and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department. The certificate holder may adjust the amount of the bond or letter of credit under (a) if opting to construct only a portion of the facility.
  - (b) The certificate holder shall adjust the amount of the bond or letter of credit, using the following calculation and subject to approval by the Department:



- (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in 3<sup>rd</sup> Qtr 2022 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 2022 dollars to present value.
- (c) The certificate holder shall adjust the amount of the bond or letter of credit, using the following calculation and subject to approval by the Department:
- (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in 2022 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 2022 dollars to present value.
- (ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.
- (iii) Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration and project management costs, add 20 percent of the adjusted Gross Cost of the Solar Generation and Battery Storage System (ii) and 10 percent of the adjusted Gross Cost of all other facility components(ii) for the adjusted future developments contingency.
- (iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest \$1,000 to determine the adjusted financial assurance amount.
- (d) The certificate holder shall use a form of bond or letter of credit approved by the Council.
- (e) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
- (f) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.
- (g) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.  
[MWP AMD5, OTS AMD1]
- 33 If the certificate holder elects to use a bond to meet the requirements of Condition 32, the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety commences any activity to complete construction, operate or retire the energy facility.
- 34 Before beginning construction, the certificate holder shall notify the Department of the identity and qualifications of the major design, engineering and construction contractor(s) for the

1 facility. The certificate holder shall select contractors that have substantial experience in the  
2 design, engineering and construction of similar facilities. The certificate holder shall report to  
3 the Department any change of major contractors.

4 35 The certificate holder shall contractually require all construction contractors and subcontractors  
5 involved in the construction of the facility to comply with all applicable laws and regulations and  
6 with the terms and conditions of the site certificate. Such contractual provisions shall not  
7 operate to relieve the certificate holder of responsibility under the site certificate.

8 36 The certificate holder shall:

9 ~~P~~prior to construction, notify the Department of the name, telephone number and  
10 e-mail address of the full-time, onsite construction manager.

11 ~~(a) — During construction, the construction manager or a designated, qualified representative~~  
12 ~~shall be on site to manage and implement all applicable requirements of the site~~  
13 ~~certificate.~~

14 [MWP Final Order on ASC, OTS AMD1]

15 37 Within 72 hours after discovery of conditions or circumstances that may violate the terms or  
16 conditions of the site certificate, the certificate holder shall report the conditions or  
17 circumstances to the Department.

## 18 **2. Land Use Conditions**

20 38 During construction and operation, the certificate holder shall consult with area landowners and  
21 lessees that could be impacted by activities or facility component location and implement  
22 measures to reduce and avoid any adverse impacts to ongoing farm practices on surrounding  
23 lands, including coordination with the landowner of the solar microsite area to ensure that the  
24 final solar array layout does not prevent the landowner from maximizing agricultural production  
25 on the land not occupied by the solar array.

26 [MWP Final Order on ASC; AMD5; OTS AMD1]

28 39 The certificate holder shall design and construct the facility to minimize the permanent impacts  
29 to agricultural land, including to the extent practicable, using existing access roads, co-locating  
30 facilities, reducing road and transmission line/collector line lengths, and designing facility  
31 components to allow ongoing access to agricultural fields.

32 [MWP Final Order on ASC; AMD5]

33 40 If, prior to construction, final facility design includes wind facility components, the certificate  
34 holder shall install gates within the wind microsite area on private access roads in accordance  
35 with Gilliam County Zoning Ordinance (GCZO) Article 7 Section 7.020(T)(~~54~~)(~~id~~)(~~6~~) unless the  
36 County has granted a variance to this requirement. [MWP Final Order on ASC, OTS AMD1]

37 41 Prior to operation of wind and solar facility components, if constructed, the certificate holder  
38 shall record in the real property records of Gilliam County a Covenant Not to Sue with regard to  
39 generally accepted farming practices on adjacent farmland consistent with GCZO Article 7  
40 Section 7.020(T)(~~54~~)(a)(5).

42 The certificate holder shall construct all facility components in compliance with the following setback requirements:

- (a) All facility components must be at least 3,520 feet from the property line of properties zoned residential use or designated in the Gilliam County Comprehensive Plan as residential.
- (b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest edge of any public road right-of-way. The certificate holder shall assume a minimum right-of-way width of 60 feet.
- (c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest residence existing at the time of tower construction.
- (d) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each turbine tower to the nearest edge of any railroad right-of-way or electrical substation.
- (e) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each meteorological tower to the nearest edge of any public road right-of-way or railroad right-of-way, the nearest boundary of the certificate holder's lease area or the nearest electrical substation.
- (f) The certificate holder shall maintain a minimum distance of 50 feet measured from the Montague Solar O&M building to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's lease area.
- (g) The certificate holder shall maintain a minimum distance of 50 feet measured from any substation to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's electrical substation easement or, if there is no easement, the nearest boundary of the certificate holder's lease area.
- (h) Where (a) does not apply, the certificate holder shall maintain a minimum of 110 percent of maximum blade tip height, measured from the centerline of the turbine tower from any overhead utility line.
- (i) Where (a) does not apply, the certificate holder shall maintain a minimum of 150 percent of maximum turbine height from blade tip height, measured from the centerline of the turbine tower from federal transmission lines, unless the affected parties agree otherwise.
- (j) The certificate holder shall maintain a minimum distance of 25 feet measured from the fence line of the solar array to the nearest property line.
- (k) The certificate holder shall maintain a minimum distance of 25 feet measured from the front, rear and side yard of the battery storage system site to the nearest property line.
- (l) Wind turbines must be setback a minimum distance of 656 feet (200 meters), measured from the centerline of the turbine tower to the nearest edge of the breaks of Rock Creek Canyon. [AMD5, Sept 2020]

43 During construction and operation of the facility, the certificate holder shall implement a weed control plan substantially similar to the draft Noxious Weed Plan included in Attachment X of this site certificate, as approved by the Department in consultation with Gilliam County Weed Control Officer or other appropriate County officials to control the introduction and spread of noxious weeds.



44 During operation of the facility, the certificate holder shall restore areas that are temporarily disturbed during facility maintenance or repair activities using the same methods and monitoring procedures described in the Revegetation Plan referenced in Condition 92.

45 Within 90 days after beginning operation of wind facility components, if constructed, the certificate holder shall provide to the Department and to the Gilliam County Planning Department the actual latitude and longitude location or Stateplane NAD 83(91) coordinates of each turbine tower, connecting lines and transmission lines and a summary of as-built changes in the facility compared to the original plan.

46 The certificate holder shall provide an electronic copy of the annual report required under Condition 21 to the Gilliam County Planning Commission on an annual basis unless specifically discontinued by the County.

### **3. Cultural Resource Conditions**

47 Before beginning construction, the certificate holder shall label all identified historic, cultural or archeological resource sites on construction maps and drawings as “no entry” areas. If construction activities will occur within 200 feet of an identified site, the certificate holder shall flag a 30-meter no entry buffer around the site. The certificate holder may use existing private roads within the buffer areas but may not widen or improve private roads within the buffer areas. The no-entry restriction does not apply to public road rights-of-way within the buffer areas or to operational farmsteads. [Final Order on ASC]

48 In reference to the alignment of the Oregon Trail described in the Final Order on the Application, the certificate holder shall comply with the following requirements:

(a) The certificate holder shall not locate facility components on visible remnants of the Oregon Trail and shall avoid any construction disturbance to those remnants.

(b) The certificate holder shall not locate facility components on undeveloped land where the trail alignment is marked by existing Oregon-California Trail Association markers.

(c) Before beginning construction, the certificate holder shall provide to the State Historic Preservation Office (SHPO) and the Department documentation of the presumed Oregon Trail alignments within the site boundary.

(d) The certificate holder shall ensure that construction personnel proceed carefully in the vicinity of the presumed alignments of the Oregon Trail. If any physical evidence of the trail is discovered, the certificate holder shall avoid any disturbance to the intact segments by redesign, re-engineering or restricting the area of construction activity and shall flag a 30-meter no-entry buffer around the intact Trail segments. The certificate holder shall promptly notify the SHPO and the Department of the discovery. The certificate holder shall consult with the SHPO and the Department to determine appropriate mitigation measures.

49 Before beginning construction, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility, the areas that would be temporarily disturbed during construction and the areas that have previously been surveyed.

The certificate holder shall hire qualified personnel to conduct field investigations of all areas to be disturbed during construction that lie outside the previously-surveyed areas. The certificate holder shall provide a written report of the field investigations to the Department and to the Oregon State Historic Preservation Office (SHPO) for review. If any potentially significant historic, cultural or archaeological resources are found during the field investigation, the certificate holder shall instruct all construction personnel to avoid the identified sites and shall implement appropriate measures to protect the sites, including the measures described in Condition 47.

50 During construction, the certificate holder shall:

- (a) Ensure that a qualified archeologist, as defined in OAR 736-051-0070, instructs construction personnel in the identification of cultural materials and avoidance of accidental damage to identified resource site.
- (b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater associated with collection line trenching in the solar microsite area. The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. Initial open ground disturbance below 12 inches associated with collection line trenching in the solar microsite area shall not occur without the presence of the approved cultural resources monitor. If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment X of the Final Order on Amendment 1 should be followed. The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor. [MWP AMD5, OTS AMD1]

51 The certificate holder shall ensure that construction personnel cease all ground-disturbing activities in the immediate area if any archaeological or cultural resources are found during construction of the facility until a qualified archaeologist can evaluate the significance of the find. The certificate holder shall notify the Department and the Oregon State Historic Preservation Office (SHPO) of the find. If the SHPO determines that the resource is significant, the certificate holder shall make recommendations to the Council for mitigation, including avoidance, field documentation and data recovery, in consultation with the Department, SHPO, interested Tribes and other appropriate parties. The certificate holder shall not restart work in the affected area until the certificate holder has demonstrated to the Department and the SHPO that it has complied with archaeological resource protection regulations

#### **4. Geotechnical Conditions**

52 Before beginning construction of the facility, the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Department. The certificate holder shall conduct the geotechnical investigation after consultation with the Department and a third-party consultant, as necessary, to confirm appropriate site-specific methodologies for evaluating seismic and non-seismic hazards to inform equipment foundation and road design. [MWP Final Order on ASC; AMD5; OTS AMD1]

- 1    53    The certificate holder shall design and construct the facility in accordance with requirements of  
2    the current Oregon Structural Specialty Code and International Building Code. [AMD5, Sept  
3    2020]
- 4    54    The certificate holder shall design, engineer and construct the facility to avoid dangers to human  
5    safety presented by non-seismic hazards. As used in this condition, “non-seismic hazards”  
6    include settlement, landslides, flooding and erosion.
- 7    **5.    Hazardous Materials, Fire Protection & Public Safety Conditions**  
8
- 9    55    During construction and operation, the certificate holder shall handle hazardous materials used  
10    on the site in a manner that protects public health, safety and the environment and shall comply  
11    with all applicable local, state and federal environmental laws and regulations. The certificate  
12    holder shall not store diesel fuel or gasoline on the facility site during operations. [AMD5, Sept  
13    2020]
- 14    56    If a spill or release of hazardous material occurs during construction or operation of the facility,  
15    the certificate holder shall notify the Department within 72 hours and shall clean up the spill or  
16    release and dispose of any contaminated soil or other materials according to applicable  
17    regulations. The certificate holder shall make sure that spill kits containing items such as  
18    absorbent pads are located on equipment and at the O&M buildings. The certificate holder shall  
19    instruct employees about proper handling, storage and cleanup of hazardous materials
- 20    57    If final facility design includes wind facility components, the certificate holder shall construct  
21    turbines and pad-mounted transformers on concrete foundations and shall cover the ground  
22    within a 10-foot radius with non-flammable material. The certificate holder shall maintain the  
23    non-flammable pad area covering during operation of the facility.
- 24    58    If final facility design includes wind facility components, the certificate holder shall install and  
25    maintain self-monitoring devices on each turbine, linked to sensors at the operations and  
26    maintenance building, to alert operators to potentially dangerous conditions, and the certificate  
27    holder shall immediately remedy any dangerous conditions. The certificate holder shall maintain  
28    automatic equipment protection features in each turbine that would shut down the turbine and  
29    reduce the chance of a mechanical problem causing a fire.
- 30    59    During construction and operation of the facility, the certificate holder shall ensure that the  
31    Montague Solar O&M building and all service vehicles are equipped with shovels and portable  
32    fire extinguishers of a 4A50BC or equivalent rating.
- 33    60    During construction and operation of the facility, the certificate holder shall develop and  
34    implement ~~the Wildfire Mitigation Plan fire safety plans~~ in consultation with the North Gilliam  
35    County Rural Fire Protection District to minimize the risk of fire and to respond appropriately to  
36    any fires that occur on the facility site. In developing the ~~Wildfire Mitigation Plan~~~~fire safety~~  
37    ~~plans~~, the certificate holder shall take into account the dry nature of the region and shall  
38    address risks on a seasonal basis. For solar facility components, the certificate holder shall  
39    address worker training requirements, inspections, vegetation management, fire prevention and  
40    response equipment and potential mutual assistance in the case of fire within or around the  
41    facility site boundary. The certificate holder shall meet annually with local fire protection agency



1 personnel to discuss emergency planning and shall invite local fire protection agency personnel  
2 to observe any emergency drill or tower rescue training conducted at the facility. [AMD5, Sept  
3 2020]

4 61 Upon the beginning of operation of the facility, the certificate holder shall provide a site plan to  
5 the North Gilliam County Rural Fire Protection District. The certificate holder shall indicate on  
6 the site plan the identification number assigned to each turbine, if constructed, and the actual  
7 location of all facility structures. The certificate holder shall provide an updated site plan if  
8 additional turbines or other structures are later added to the facility. During operation, the  
9 certificate holder shall ensure that appropriate fire protection agency personnel have an up-to-  
10 date list of the names and telephone numbers of facility personnel available to respond on a 24-  
11 hour basis in case of an emergency on the facility site.

12 62 During construction, the certificate holder shall ensure that construction personnel are trained  
13 in fire prevention and response, that construction vehicles and equipment are operated on  
14 graveled areas to the extent possible and that open flames, such as cutting torches, are kept  
15 away from dry grass areas.

16 63 During operation of the facility, the certificate holder shall ensure that all on-site employees  
17 receive annual fire prevention and response training by qualified instructors or members of the  
18 local fire districts. The certificate holder shall ensure that all employees are instructed to keep  
19 vehicles on roads and off dry grassland, except when off-road operation is required for  
20 emergency purposes.

21 64 Before beginning construction of the certificate holder shall submit a Notice of Proposed  
22 Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon  
23 Department of Aviation identifying the final locations of turbine towers and meteorological  
24 towers to determine if the structure(s) are a hazard to air navigation and aviation safety. The  
25 certificate holder shall promptly notify the Department of the responses from the FAA and the  
26 Oregon Department of Aviation. The FAA and ODA evaluation and determinations are valid for  
27 18 months (per OAR 738-070-0180), once issued. The certificate holder shall maintain current  
28 hazard determinations on file commensurate with construction timelines. [AMD5, Sept 2020]

29 65 If final facility design includes wind facility components, the certificate holder shall follow  
30 manufacturers' recommended handling instructions and procedures to prevent damage to  
31 turbine or turbine tower components that could lead to failure.

32 66 If final facility design includes wind facility components, there shall be no exterior ladders or  
33 access to the turbine blades; turbine towers shall have locked access doors. The certificate  
34 holder shall keep tower access doors locked at all times, except when authorized personnel are  
35 present.

36 67 If final facility design includes wind facility components, during operation the certificate holder  
37 shall:  
38 implement a safety monitoring program and inspect all turbine and turbine tower components  
39 on a regular basis. The certificate holder shall maintain or repair turbine and turbine tower  
40 components as necessary to protect public safety and report to the Department any change to  
41 its operational safety-monitoring program in its annual report for the reporting year.

Prior to operations, provide to the Department, for review and approval, information or programmatic details on its operational safety monitoring program that includes regular inspections, maintenance, and reporting program to prevent structural or electrical failure of wind turbine foundations, towers, blades, or electrical equipment. Required elements of the operational safety monitoring program include:

1. Identify and conduct inspections and testing of wind facility components, including but not limited to foundations, towers, blades, nacelle, pad-mounted transformers, and SCADA system, consistent with manufacturers' recommendations and recognized and generally accepted good engineering practices (RAGAGEP) for frequency and process.
2. Maintain records of each inspection and test performed. Records shall:
  - i. Identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.
  - ii. Identify testing or inspection results that show deficiencies in equipment or operation issues that are outside acceptable limits or recommendations identified by the manufacturer. These issues must be corrected before further use, or in a safe and timely manner if precautions are taken to assure safe operation.
  - iii.i. Be made available for inspection by the Department's Compliance Officer during site visits, or upon request from the Department. A summary report of the annual inspections, testing and maintenance activities performed shall be submitted to the Department pursuant to OAR 345-026-0080 in the facility's annual compliance report. The summary report shall include the details of the replacement of any system components which could impact the structural integrity of foundations, towers and blades.

During operations, implement the program as approved by the Department under sub(a) of the condition. Certificate holder shall report in its annual report to the Department of any changes to its operational safety monitoring program that occurred during the reporting year.

(b) During operations, in the event of blade or tower failure, a structural or electrical issue that causes a fire or other safety hazard the certificate holder shall report the incident to the Department within 72 hours, in accordance with OAR 345-026-0170(1), and shall, within 30 days of the event, submit a report which contains:

- i. A discussion of the cause of the reported incident including results of on-site or remote inspections or investigations;
- ii. A description of immediate actions taken to correct the reported conditions or circumstances; and
- iii.ii. A description of actions taken or planned to minimize the possibility of recurrence and a description of manufacturers' recommendations and recognized and generally accepted good engineering practices to avoid instances in the future.

68 If final facility design includes wind facility components, any pad-mounted step-up transformers shall be installed at the base of each tower in locked cabinets designed to protect the public from electrical hazards and to avoid creation of artificial habitat for raptor prey.

69 The certificate holder shall:

- (a) Prior to construction of facility substations, solar array, and battery storage systems, if included in final design, provide maps or engineering drawings to the Department demonstrating that the final layout includes fencing and gates.
- (b) During operation of substations, solar arrays and battery storage systems, if included in final design, ensure that fencing is maintained and gates are locked to prohibit public access.

70 Before beginning construction of any new State Highway approaches or utility crossings, the certificate holder shall obtain all required permits from the Oregon Department of Transportation (ODOT) subject to the applicable conditions required by OAR Chapter 734, Divisions 51 and 55. The certificate holder shall submit the necessary application in a form satisfactory to ODOT and the Department for the location, construction and maintenance of a new approach to State Highway 19 for access to the site. The certificate holder shall submit the necessary application in a form satisfactory to ODOT and the Department for the location, construction and maintenance of transmission lines crossing Highway 19.

71 The certificate holder shall design and construct new access roads and private road improvements to standards approved by the Gilliam County Road Department. Where modifications of County roads are necessary, the certificate holder shall construct the modifications entirely within the County road rights-of-way and in conformance with County road design standards subject to the approval of the Gilliam County Road Department. Where modifications of State roads or highways are necessary, the certificate holder shall construct the modifications entirely within the public road rights-of-way and in conformance with Oregon Department of Transportation (ODOT) standards subject to the approval of ODOT.

72 The certificate holder shall construct access roads with a finished width of up to 20 feet, designed under the direction of a licensed engineer and compacted to meet equipment load requirements.

73 During construction of the facility, the certificate holder shall implement measures to reduce traffic impacts, including:

- (a) Providing notice to adjacent landowners when heavy construction traffic is anticipated.
- (b) Providing appropriate traffic safety signage and warnings.
- (c) Requiring flaggers to be at appropriate locations at appropriate times during construction to direct traffic.
- (d) Using traffic diversion equipment (such as advance signage and pilot cars) when slow or oversize construction loads are anticipated.
- (e) Maintaining at least one travel lane at all times to the extent reasonably possible so that roads will not be closed to traffic because of construction vehicles.
- (f) Encouraging carpooling for the construction workforce.
- (g) Including traffic control procedures in contract specifications for construction of the facility.
- (h) Keeping Highway 19 free of gravel that tracks out onto the highway at facility access points.

74 The certificate holder shall ensure that no equipment or machinery is parked or stored on any County road whether inside or outside the site boundary. The certificate holder may temporarily



1 park equipment off the road but within County rights-of-way with the approval of the Gilliam  
2 County Road Department.

3  
4 75 The certificate holder shall cooperate with the Gilliam County Road Department to ensure that  
5 any unusual damage or wear to county roads that is caused by construction of the facility is  
6 repaired by the certificate holder. Submittal to the Department of an executed Road Use  
7 Agreement with Gilliam County shall constitute evidence of compliance with this condition.  
8 Upon completion of construction, the certificate holder shall restore public roads to pre-  
9 construction condition or better to the satisfaction of the applicable county departments. If  
10 required by Gilliam County, the certificate holder shall post bonds to ensure funds are available  
11 to repair and maintain roads affected by the facility. If construction of the facility will utilize  
12 county roads in counties other than Gilliam County, the certificate holder shall coordinate with  
13 the Department and the respective county road departments regarding the implementation of a  
14 similar Road Use Agreement. [AMD5, Sept 2020]

15 76 The certificate holder shall:

- 16 (a) Prior to construction, submit to the Department a copy of contractor site health and safety  
17 plan(s) that informs workers and others on-site about first aid techniques and what to do in  
18 case of an emergency and that includes important telephone numbers and the locations of  
19 on-site fire extinguishers and nearby hospitals.  
20 (b) During construction, the certificate holder shall require that all on-site construction  
21 contractors implement the site health and safety plan submitted per sub(a) of this  
22 condition. The certificate holder shall ensure that construction contractors have personnel  
23 on-site who are first aid and CPR certified.  
24 (i) If final facility design includes wind facility components, the certificate holder shall  
25 ensure that construction contractors have personnel on-site who are trained and  
26 equipped for tower rescue-.

27  
28 77 During operation of the facility, the certificate holder shall develop and implement a site health  
29 and safety plan that informs employees and others on-site about first aid techniques and what  
30 to do in case of an emergency, including a contingency plan in a fire emergency, and that  
31 includes important telephone numbers and the locations of on-site fire extinguishers, nearby  
32 hospitals, Gilliam County Sheriff's Office and the office locations of the backup law enforcement  
33 services.

- 34 (a) If final facility design includes wind facility components, the certificate holder shall ensure  
35 that operations personnel are trained and equipped for tower rescue. If the certificate  
36 holder conducts an annual emergency drill or performs tower rescue training at the  
37 facility, the North Gilliam County Rural Fire Protection District and the Arlington Fire  
38 Department will be invited to observe. [AMD5, Sept 2020]

39  
40 78 The certificate holder shall:

- 41 (a) Prior to construction, provide to the Department a protocol for communication that will  
42 occur during construction between certificate holder's on-site security and Gilliam  
43 County Sheriff's Office.  
44 (b) During construction, the certificate holder shall provide on-site security within the facility  
45 site boundary, and shall establish good communications between on-site security  
46 personnel and the Gilliam County Sheriff's Office by establishing a communication  
47 protocol between the security personnel and the Sherrieff's office.

(c) During operation, the certificate holder shall ensure that appropriate law enforcement agency personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site. The list shall also be sent to the Department.

79 The certificate holder shall notify the Department of Energy and the Gilliam County Planning Department within 72 hours of any accidents including mechanical failures on the site associated with construction or operation of the facility that may result in public health and safety concerns

## **6. Water, Soils, Streams & Wetlands Conditions**

80 (a) Prior to construction, the certificate holder shall:

(i) Before beginning construction of wind energy generation components, the certificate holder shall submit to the Department and Gilliam County Planning Director for review and approval a topsoil management plan including how topsoil will be stripped, stockpiled, and clearly marked in order to maximize topsoil preservation and minimize erosion impacts. [OAR 660-033-0130(378)(~~b~~)(B)]. The topsoil management plan may be incorporated into the final Erosion and Sediment Control Plan, required under sub(ii) or may be provided to the Department as a separate plan.

(ii) Obtain a National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit #1200-C from the Oregon Department of Environmental Quality.

(b) During construction, the certificate holder shall conduct all work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the Department and Oregon Department of Environmental Quality and as required under the National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder shall include in the ESCP any procedures necessary to meet local erosion and sediment control requirements or storm water management requirements.

(c) Prior to beginning facility operation, the certificate holder shall provide the Department a copy of an operational SPCC plan, if required pursuant to OAR 340-141-0001 to -0240. [AMD5, Sept 2020]

81 During construction, the certificate holder shall limit truck traffic to improved road surfaces to avoid soil compaction, to the extent practicable.

82 During construction, the certificate holder shall implement best management practices to control any dust generated by construction activities, such as applying water to roads and disturbed soil areas.

83 Before beginning construction of the facility, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility, and the areas that would be disturbed during construction and showing the wetlands and stream channels previously surveyed. For areas to be disturbed during construction that lie outside of the previously-surveyed areas, the certificate holder shall hire qualified personnel to conduct a pre-construction investigation to determine whether any jurisdictional waters of the State exist in those locations within the proposed expanded site boundary. The certificate holder shall provide a written report on the pre-construction investigation to the Department and the Department of State Lands for approval before beginning construction. The certificate holder

shall ensure that construction and operation of the facility will have no impact on any jurisdictional water identified in the pre-construction investigation.

- 84 The certificate holder shall avoid impacts to waters of the state in the following manner:
- (a) The certificate holder shall avoid any disturbance to delineated wetlands.
  - (b) The certificate holder shall construct stream crossings for roads and underground collector lines substantially. In particular, the certificate holder shall not remove material from waters of the State or add new fill material to waters of the State such that the total volume of removal and fill exceeds 50 cubic yards for the project as a whole.
  - (c) The certificate holder shall construct support poles for aboveground lines outside of delineated stream channels and shall avoid in-channel impacts.
- [AMD5]

85 During facility operation, the certificate holder shall routinely inspect and maintain all facility components including roads, pads (including turbine and battery storage pad), solar array, and trenched areas and, as necessary, maintain or repair erosion and sediment control measures.

[AMD5, Sept 2020]

86 During facility operation, the certificate holder shall obtain water for on-site uses from an on-site well located near the Montague Solar O&M building. The certificate holder shall construct the on-site well subject to compliance with the provisions of ORS 537.765 relating to keeping a well log. The certificate holder shall not use more than 5,000 gallons of water per day from the on-site well. The certificate holder may use other sources of water for on-site uses subject to prior approval by the Department.

87 During facility operation, if wind turbine blade or solar panel-washing becomes necessary, the certificate holder shall ensure that there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells. The certificate holder shall not use acids, bases or metal brighteners with the wash water. The certificate holder may use biodegradable, phosphate-free cleaners sparingly. [MWP AMD5]

## **7. Transmission Line & EMF Conditions**

88 The certificate holder shall install the 34.5-kV collector system underground to the extent practical. The certificate holder shall install underground lines at a minimum depth of three feet. Based on geotechnical conditions or other engineering considerations, the certificate holder may install segments of the collector system aboveground, but the total length of aboveground segments must not exceed 27 miles.

89 The certificate holder shall take reasonable steps to reduce or manage human exposure to electromagnetic fields, including but not limited to:

~~(a)~~ [Deleted AMD5, Sept 2020]

(a) Providing to landowners a map of underground and overhead transmission lines on their property ~~and advising landowners of possible health risks from electric and magnetic fields.~~



(b) Designing and maintaining all transmission lines so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.

(c) Designing and maintaining all transmission lines so that induced voltages during operation are as low as reasonably achievable.

90 ~~[Deleted, OT AMD 1, 2023] In advance of, and during, preparation of detailed design drawings and specifications for 230 kV and 34.5 kV transmission lines, the certificate holder shall consult with the Utility Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the designs and specifications are consistent with applicable codes and standards.~~

## **8. Plants, Wildlife & Habitat Protection Conditions**

91 During operation, the certificate holder shall implement the requirements of the Wildlife Monitoring and Mitigation Plan (WMMP), as provided in Attachment XX of the Final Order on Amendment 1. [MWP Final Order on ASC, AMD3, AMD5; OTS AMD1]

92 The certificate holder shall restore areas disturbed by facility construction but not occupied by permanent facility structures according to the methods and monitoring procedures described in the final Revegetation Plan for the facility, as approved by the Department in consultation with ODFW. The final Revegetation Plan shall be based on the draft plan as Attachment XX in the Final Order on Request for Amendment 1. [MWP Final Order on ASC, AMD3, AMD5; OTS AMD1]

93 The certificate holder shall:

(a) Acquire the legal right to create, enhance, maintain and protect a habitat mitigation area as long as the site certificate is in effect by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the final Habitat Mitigation Plans for the Facility, as approved by the Department in consultation with ODFW. The final Habitat Mitigation Plans shall be based on the draft plan included as Attachment XX to the Final Order on Request for Amendment 1 and updated based on Condition 31. The final Habitat Mitigation Plans may be amended from time to time.

(b) Prior to construction, the certificate holder shall finalize and implement the Habitat Mitigation Plan (HMP) included as Attachment XX of the Final Order on Amendment 1, as approved by ODOE in Consultation with ODFW. Provision 93(b)(A) regarding impacted acreage calculations shall be completed and submitted to the department after construction is complete as described in the condition below.

(c) Within 90 days of completion of construction, the certificate holder shall submit to the department and ODFW an updated HMP Table.  
[AMD5, Sept 2020]

94 Prior to construction of facility components or a phase of components that will occur within suitable Washington ground squirrel (WGS) habitat, the certificate holder shall conduct

1 protocol-level surveys for WGS within 1000 feet of any ground disturbing activity. Suitable WGS  
2 habitat can be defined as any terrestrial habitat that has not been developed (i.e. active  
3 agricultural lands), particularly shrub-steppe and grassland habitats. Protocol-level surveys  
4 include two sets of surveys at least two weeks apart, in the active squirrel season (March 1 to  
5 May 31). If a single or multiple WGS burrows are identified, the delineation of Category 1  
6 habitat shall be based on a 785-foot buffer from those burrows, excluding areas of habitat types  
7 not suitable for WGS foraging or burrow establishment. ~~Category 2 habitat shall be defined as~~  
8 ~~the buffer extending 4,875 feet from the delineated Category 1 habitat, excluding areas of~~  
9 ~~habitat types not suitable for WGS foraging or burrow establishment.~~ Protocol-level surveys are  
10 valid for three (3) years. If construction does not commence the year following the protocol-  
11 level survey, any active burrows or colonies shall be checked prior to the year of construction to  
12 evaluate any changes that may occur in the location and delineation of Category 1 ~~and 2~~ habitat.

13  
14 95 The certificate holder shall implement measures to mitigate impacts to sensitive wildlife habitat  
15 during construction including, but not limited to, the following:

- 16 (a) The certificate holder shall not construct any facility components within areas of  
17 Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.
- 18 (b) Before beginning construction of the facility, the certificate holder's qualified  
19 professional biologist shall survey the Category 1 Washington ground squirrel habitat to  
20 ensure that the sensitive use area is correctly marked with exclusion flagging and  
21 avoided during construction. The certificate holder shall maintain the exclusion  
22 markings until construction has been completed.
- 23 (c) Before beginning construction of the facility, certificate holder's qualified professional  
24 biologist shall complete raptor nest surveys within the raptor nest survey area as  
25 described in the Final Order on the Application. The purposes of the survey are to  
26 identify any sensitive raptor nests near construction areas and to provide baseline  
27 information on raptor nest use for analysis as described in the Wildlife Monitoring and  
28 Mitigation Plan referenced in Condition 91. The certificate holder shall provide a written  
29 report on the raptor nest surveys and the surveys to the Department and to ODFW. If  
30 the surveys identify the presence of raptor nests within the survey area, the certificate  
31 holder shall implement appropriate measures to assure that the design, construction  
32 and operation of the facility are consistent with the fish and wildlife habitat mitigation  
33 goals and standards of OAR 635-415-0025, as approved by the Department, in  
34 consultation with ODFW.
- 35 (d) In the final design layout of the facility, the certificate holder shall locate facility  
36 components, access roads and construction areas to avoid or minimize temporary and  
37 permanent impacts to high quality native habitat and to retain habitat cover in the  
38 general landscape where practicable.

39 96 ~~If final facility design includes wind facility components:~~

40 Prior to the ~~the~~ year in which construction occurs and each subsequent year of construction, the  
41 certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife  
42 (ODFW) to determine whether there are any active nests of these species within a half-mile of

any areas that would be disturbed during construction. The certificate holder shall begin monitoring potential nest sites by March 15 and shall continue monitoring until at least May 31 to determine whether any potentially-active nest sites become active during the sensitive period.

During construction, the certificate holder shall avoid all construction activities within a 1,300-foot buffer around active nest sites of the following species during the sensitive period, as provided in this condition:

<u>Species</u>	<u>Sensitive Period</u>	<u>Early Release Date</u>
Swainson's hawk	April 1 to August 15	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

If any nest site is determined to be unoccupied by the early release date (May 31), then unrestricted construction activities may occur within 1,300 feet of the nest site after that date. If a nest is occupied by any of these species after the beginning of the sensitive period, the certificate holder will flag the boundaries of a 1,300-foot buffer area around the nest site and shall instruct construction personnel to avoid disturbance of the buffer area. During the sensitive period, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) within the buffer area. The certificate holder shall restrict construction traffic within the buffer, except on public roads, to vehicles essential to the limited construction activities allowed within the buffer.

If burrowing owl nests are occupied during the sensitive period, the certificate holder may adjust the 1,300-foot buffer around these nests after consultation with ODFW and subject to the approval of the Department.

The certificate holder shall hire a qualified independent professional biologist to observe the active nest sites during the sensitive period for signs of disturbance and to notify the Department of any non-compliance with this condition. If the biologist observes nest site abandonment or other adverse impact to nesting activity, the certificate holder shall implement appropriate mitigation, in consultation with ODFW and subject to the approval of the Department, unless the adverse impact is clearly shown to have a cause other than construction activity.

The certificate holder may begin or resume construction activities within the buffer area before the ending day of the sensitive period with the approval of ODFW, after the young are fledged. The certificate holder shall use a protocol approved by ODFW to determine when the young are fledged (the young are independent of the core nest site).

97 [Deleted AMD5, Sept 2020]

98 The certificate holder shall implement measures to avoid or mitigate impacts to sensitive wildlife habitat during construction including, but not limited to, the following:



- (a) Preparing maps to show occlusion areas that are off-limits to construction personnel, such as nesting or denning areas for sensitive wildlife species.
- (b) Avoiding unnecessary road construction, temporary disturbance and vehicle use.
- (c) Limiting construction work to approved and surveyed areas shown on facility constraints maps.
- (d) Ensuring that all construction personnel are instructed to avoid driving cross-country or taking short-cuts within the site boundary or otherwise disturbing areas outside of the approved and surveyed construction areas.

99 If final facility design includes wind facility components, the certificate holder shall reduce the risk of injuries to avian species by:

- (a) Installing turbine towers that are smooth steel structures that lack features that would allow avian perching.
- (b) Locating turbine towers to avoid areas of increased risk to avian species, such as cliff edges, narrow ridge saddles and gaps between hilltops.
- (c) Installing meteorological towers that are non-guyed structures to eliminate the risk of avian collision with guy-wires.
- (d) Designing and installing all aboveground transmission line support structures following the most current suggested practices for avian protection on power lines published by the Avian Power Line Interaction Committee.

100 The certificate holder shall hire a qualified environmental professional to provide environmental training during construction and operation. Environmental training includes information on the sensitive species present onsite, precautions to avoid injuring or destroying wildlife or sensitive wildlife habitat, exclusion areas, permit requirements and other environmental issues. The certificate holder shall instruct construction and operations personnel to report any injured or dead wildlife detected while on the site to the appropriate onsite environmental manager.

101 The certificate holder shall impose and enforce a construction and operation speed limit of 20 miles per hour throughout the facility site and, during the active squirrel season (March 1 to May 31), a speed limit of 10 miles per hour from one hour before sunset to one hour after sunrise on private roads near known Washington ground squirrel (WGS) colonies. The certificate holder shall ensure that all construction and operations personnel are instructed to watch out for and avoid WGS and other wildlife while driving through the facility site.

## **8. Visual Effects Conditions**

102 To reduce the visual impact of the facility, if applicable based on final facility design, the certificate holder shall:

- (a) Mount nacelles on smooth, steel structures, painted uniformly in a low-reflectivity, neutral white color.
- (b) Paint the Montague Solar collector substation and switching station structures in a low-reflectivity neutral color to blend with the surrounding landscape.

- (c) Not allow any advertising to be used on any part of the facility.
- (d) Use only those signs required for facility safety, required by law or otherwise required by this site certificate, except that the certificate holder may erect a sign near the Montague Solar O&M building to identify the facility, may paint turbine numbers on each tower and may allow unobtrusive manufacturers' logos on turbine nacelles.
- (e) Maintain any signs allowed under this condition in good repair.

103 The certificate holder shall design and construct the O&M building, substation, and buildings and containers associated with battery storage, if applicable based on final facility design, to be generally consistent with the character of similar buildings used by commercial farmers or ranchers in the area and shall paint the building in a low-reflectivity, neutral color to blend with the surrounding landscape. [AMD5, Sept 2020]

104 The certificate holder shall not use exterior nighttime lighting except, if applicable based on final facility design:

- (a) The minimum turbine tower lighting required or recommended by the Federal Aviation Administration.
- (b) Security lighting at the O&M buildings and at the substations, provided that such lighting is shielded or downward-directed to reduce glare.
- (c) Minimum lighting necessary for repairs or emergencies.
- (d) Minimum lighting necessary for construction directed to illuminate the work area and shielded or downward-directed to reduce glare.

105 [Deleted AMD5, Sept 2020]

## **9. NOISE CONTROL CONDITIONS**

106 To reduce construction noise impacts at nearby residences, the certificate holder shall:

- (a) Confine the noisiest operation of heavy construction equipment to the daylight hours.
- (b) Require contractors to install and maintain exhaust mufflers on all combustion engine-powered equipment; and
- (c) Establish a complaint response system at the construction manager's office to address noise complaints.

107 The certificate holder shall provide to the Department:

(i) Prior to construction:

(a) A noise analysis that includes the following Information:

Final design locations of all noise-generating facility components (all wind turbines; substation transformers, inverters, and transformers associated with the photovoltaic solar array; and inverters and cooling systems associated with the battery storage system).

The maximum sound power level for the Montague Solar collector substation transformers; inverters and transformers associated with the photovoltaic solar array; inverters and cooling systems associated with battery storage system; and the maximum sound power level and octave band data for the Phase 2 wind turbines

selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.

The results of noise analysis according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii) (IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from wind turbines, substation transformers, inverters and transformers associated with the photovoltaic solar array; inverters and cooling systems associated with battery storage system) would meet the ambient degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties. The certificate holder shall verify that all noise sensitive properties within one mile of the final design locations of noise-generating components have been identified and included in the preconstruction noise analysis based on review of the most recent property owner information obtained from the Gilliam County Tax Assessor Roll.

For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise-sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

[Final Order on ASC; AMD5, Sept 2020]

108 During operation of the facility, the certificate holder shall implement measures to ensure compliance with the noise control regulation, including:

(a) Providing notice of the noise complaint system and how to file a noise complaint to noise sensitive receptors within 1-mile of noise-generating components.

(b) Maintain a complaint response system to address noise complaints. The certificate holder shall promptly notify the Department of any complaints received regarding facility noise and of any actions taken by the certificate holder to address those complaints. In response to a complaint from the owner of a noise sensitive property regarding noise levels during operation of the facility, the Council may require the certificate holder to monitor and record the statistical noise levels to verify that the certificate holder is operating the facility in compliance with the noise control regulations. [AMD5, Sept 2020]

## **10. Waste Management Conditions**

109 The certificate holder shall provide portable toilets for on-site sewage handling during construction and shall ensure that they are pumped and cleaned regularly by a licensed contractor who is qualified to pump and clean portable toilet facilities.



110 During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the Montague Solar O&M building to a licensed on-site septic system in compliance with State permit requirements. The certificate holder shall design the septic system for a discharge capacity of less than 2,500 gallons per day.

111 The certificate holder shall implement a waste management plan during construction that includes but is not limited to the following measures:

- (a) Recycling steel and other metal scrap.
- (b) Recycling wood waste.
- (c) Recycling packaging wastes such as paper and cardboard.
- (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler.
- (e) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent materials, and mercury-containing lights and lithium-ion, flow, lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous wastes. [AMD5, Sept 2020]
- (f) Confining concrete delivery truck rinse-out within the foundation excavation, discharging rinse water into foundation holes and burying other concrete waste as part of backfilling the turbine foundation.

112 The certificate holder shall implement a waste management plan during facility operation that includes but is not limited to the following measures:

- (a) Training employees to minimize and recycle solid waste.
- (b) Recycling paper products, metals, glass and plastics.
- (c) Recycling used oil and hydraulic fluid
- (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler.
- (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, and mercury-containing lights and lithium-ion, flow, lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous wastes. [AMD5, Sept 2020]

**V. CONDITIONS ADDED BY MONTAGUE WIND POWER FACILITY SITE CERTIFICATE AMENDMENTS**

113-115 [Deleted AMD2, Dec 2015]

116 If final facility design includes battery energy storage components, the certificate holder shall ensure its third-party contractor transports and disposes of battery and battery waste in compliance with all applicable regulations and manufacturer recommendations related to the transport of hazardous battery materials.

- (a) Prior to construction, the certificate holder shall provide a description to the Department of applicable regulations and manufacturer recommendations applicable to the transport and disposal of batteries and battery related waste.
- (b) During construction and operation, the certificate holder shall report to the Department any potential compliance issue or cited violations of its third-party contractor for the requirements identified in sub(a) of this condition. [AMD5, Sept 2020]

1 117 During facility operation, If final facility design includes battery energy storage components, the  
2 certificate holder shall conduct monthly inspections of the battery storage systems, in  
3 accordance with manufacturer specifications. The certificate holder shall maintain  
4 documentation of inspections, including any corrective actions, and shall make available for  
5 review upon request by the Department. [AMD5, Sept 2020]  
6

7 118 The site certificate authorizes shared use of related or supporting facilities including the  
8 Montague Solar collector substation, Montague Solar O&M building, battery storage system,  
9 230 kV transmission line, access roads, and temporary staging areas under the site certificates  
10 issued for the Montague Solar Facility and Oregon Trail Solar Facility. The site certificate  
11 authorizes shared use of related or supporting facilities including the Montague Wind collector  
12 substation under the site certificates issued for the Montague Wind Facility, Montague Solar  
13 Facility and Oregon Trail Solar Facility.

- 14 (a) Within 30 days of shared use, the certificate holder must provide evidence to the  
15 Department that the certificate holders have an executed agreement for shared use of  
16 facilities.  
17 (b) If certificate holders of Montague Solar Facility or Oregon Trail Solar Facility propose to  
18 substantially modify any of the shared facilities listed in sub(a) of this condition, each  
19 certificate holder shall submit an amendment determination request or request for site  
20 certificate amendment to obtain a determination from the Department on whether a site  
21 certificate amendment is required or to process an amendment for both site certificates.  
22 If certificate holders opt to submit an amendment determination request, the  
23 requirement may be satisfied through submittal of a single amendment determination  
24 request with authorization (or signature) provided from each certificate holder.  
25 (c) Prior to facility decommissioning or if facility operations cease, each certificate holder  
26 shall submit an amendment determination request or request for site certificate  
27 amendment to document continued ownership and full responsibility, including coverage  
28 of full decommissioning amount of the shared facilities in the bond or letter of credit  
29 pursuant to Condition 32, for the operational facility, if facilities are decommissioned at  
30 different times.

31 [AMD5, Sept 2020]  
32

33 119 Prior to construction and operation of the facility, the certificate holder shall identify the  
34 number of outdoor signs and applicable Gilliam County Zoning Ordinance (GCZO) Section 8.050  
35 Sign Regulation provisions and provide to the Department and Gilliam County Planning  
36 Department written confirmation that outdoor signage complies with the applicable provisions.  
37 [AMD5, Sept 2020]  
38

## 39 **VI. SUCCESSORS AND ASSIGNS**

40 To transfer this site certificate or any portion thereof or to assign or dispose of it in any other manner,  
41 directly or indirectly, the certificate holder shall comply with OAR 345-027-0400.

## 42 **VII. SEVERABILITY AND CONSTRUCTION**

43 If any provision of this agreement and certificate is declared by a court to be illegal or in conflict with  
44 any law, the validity of the remaining terms and conditions shall not be affected, and the rights and  
45 obligations of the parties shall be construed and enforced as if the agreement and certificate did not  
46 contain the particular provision held to be invalid.

1       **VIII.     GOVERNING LAW AND FORUM**

2     This site certificate shall be governed by the laws of the State of Oregon. Any litigation or arbitration  
3     arising out of this agreement shall be conducted in an appropriate forum in Oregon.



**IX. EXECUTION**

This site certificate may be executed in counterparts and will become effective upon signature by the Chair of the Energy Facility Siting Council and the authorized representative of the certificate holder.

IN WITNESS WHEREOF, this site certificate has been executed by the State of Oregon, acting by and through its Energy Facility Siting Council, and by Oregon Trail Solar, LLC.

**ENERGY FACILITY SITTING COUNCIL**

By: \_\_\_\_\_

Print: \_\_\_\_\_

Date: \_\_\_\_\_

**OREGON TRAIL SOLAR, LLC**

By: \_\_\_\_\_

Print: \_\_\_\_\_

Date: \_\_\_\_\_

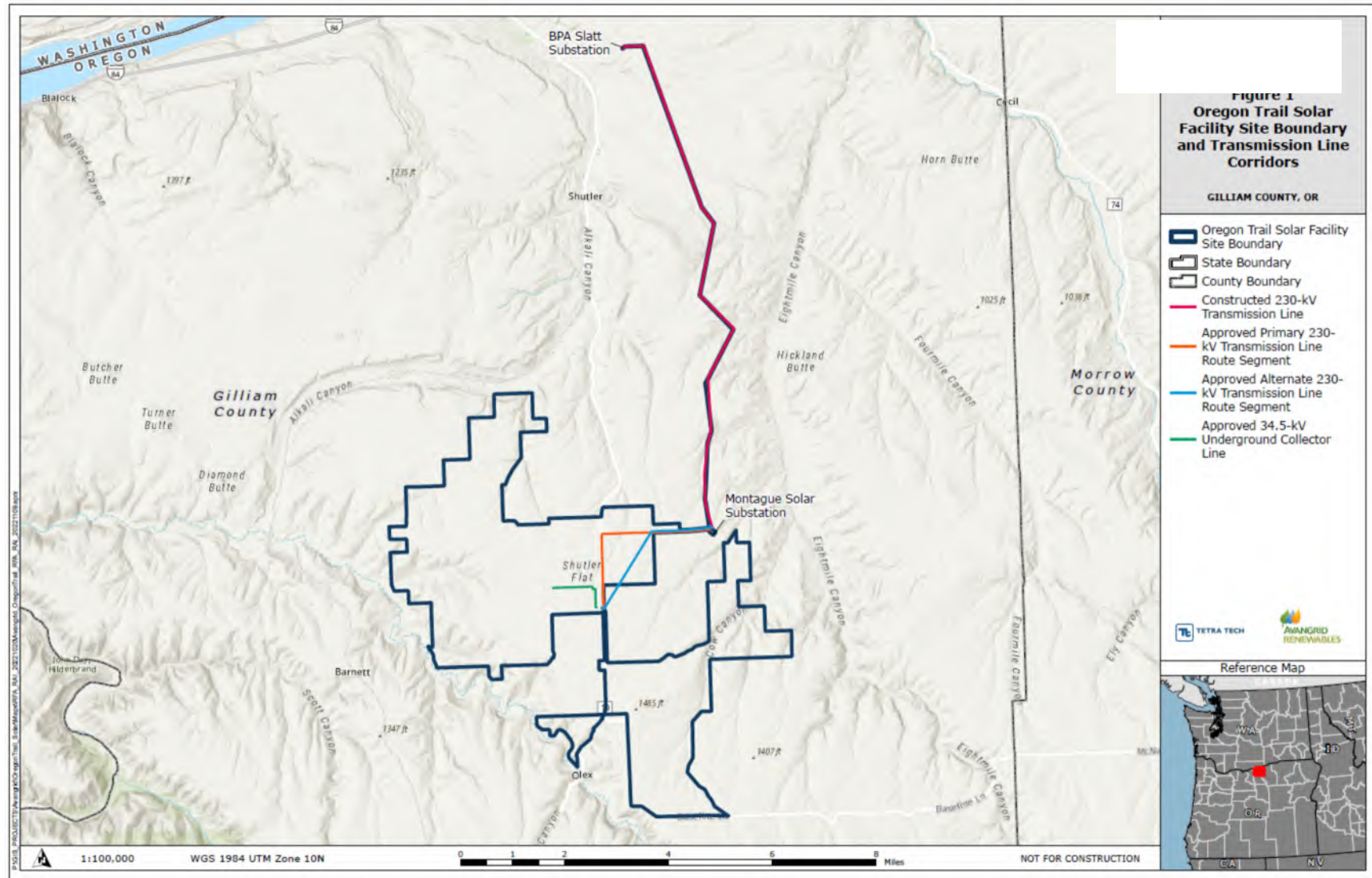
and

By: \_\_\_\_\_

Print: \_\_\_\_\_

Date: \_\_\_\_\_

Figure 1: Site Boundary and 230 kV transmission line corridor (with two route segments)



## **Attachment 7. Articles of Incorporation and Supporting Documentation**



# ARTICLES OF ORGANIZATION



Corporation Division  
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**E-FILED**  
Mar 24, 2020  
**OREGON SECRETARY OF STATE**

## REGISTRY NUMBER

165779795

## TYPE

DOMESTIC LIMITED LIABILITY COMPANY

## 1. ENTITY NAME

OREGON TRAIL SOLAR, LLC

## 2. MAILING ADDRESS

1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

## 3. PRINCIPAL PLACE OF BUSINESS

1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

## 4. NAME & ADDRESS OF REGISTERED AGENT

15872088 - CORPORATION SERVICE COMPANY  
  
1127 BROADWAY ST NE STE 310  
SALEM OR 97301 USA

## 5. ORGANIZERS

44852689 - AVANGRID RENEWABLES, LLC  
  
1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

## 6. INDIVIDUALS WITH DIRECT KNOWLEDGE

TOAN NGUYEN  
  
1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

## 7. INITIAL MEMBERS/MANAGERS

### MEMBER

44852689 - AVANGRID RENEWABLES, LLC



1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

**8. DURATION**

PERPETUAL

**9. MANAGEMENT**

This Limited Liability Company will be member-managed by one or more members

**10. OPTIONAL PROVISIONS**

The company elects to indemnify its members, managers, employees, agents for liability and related expenses under ORS 63.160 to 63.170.

I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

By typing my name in the electronic signature field, I am agreeing to conduct business electronically with the State of Oregon. I understand that transactions and/or signatures in records may not be denied legal effect solely because they are conducted, executed, or prepared in electronic form and that if a law requires a record or signature to be in writing, an electronic record or signature satisfies that requirement.

**ELECTRONIC SIGNATURE**

**NAME**

TOAN NGUYEN

**TITLE**

ASSISTANT SECRETARY

**DATE SIGNED**

03-24-2020

# AMENDED ANNUAL REPORT



Corporation Division  
[www.filinginoregon.com](http://www.filinginoregon.com)

**E-FILED**  
Mar 10, 2021  
**OREGON SECRETARY OF STATE**

---

**REGISTRY NUMBER**

165779795

**REGISTRATION DATE**

03/24/2020

**BUSINESS NAME**

OREGON TRAIL SOLAR, LLC

**BUSINESS ACTIVITY**

HOLDING COMPANY FOR SOLAR ASSETS

**MAILING ADDRESS**

1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

**TYPE**

DOMESTIC LIMITED LIABILITY COMPANY

**PRIMARY PLACE OF BUSINESS**

1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA

**JURISDICTION**

OREGON

**REGISTERED AGENT**

15872088 - CORPORATION SERVICE COMPANY

1127 BROADWAY ST NE STE 310  
SALEM OR 97301 USA

If the Registered Agent has changed, the new agent has consented to the appointment.

**MEMBER**

44852689 - AVANGRID RENEWABLES, LLC

1125 NW COUCH ST  
STE 700  
PORTLAND OR 97209 USA





I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

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**ELECTRONIC SIGNATURE**

**NAME**

W. BENJAMIN LACKEY

**TITLE**

AUTH PERSON

**DATE SIGNED**

03-10-2021

# AMENDED ANNUAL REPORT



Corporation Division  
[www.filinginoregon.com](http://www.filinginoregon.com)

**E-FILED**  
Mar 21, 2022  
**OREGON SECRETARY OF STATE**

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**REGISTRY NUMBER**

165779795

**REGISTRATION DATE**

03/24/2020

**BUSINESS NAME**

OREGON TRAIL SOLAR, LLC

**BUSINESS**

HOLDING COMPANY FOR SOLAR ASSETS

**MAILING ADDRESS**

2701 NW VAUGHN STREET  
STE 300  
PORTLAND OR 97210 USA

**TYPE**

DOMESTIC LIMITED LIABILITY COMPANY

**PRIMARY PLACE OF BUSINESS**

2701 NW VAUGHN STREET  
STE 300  
PORTLAND OR 97210 USA

**JURISDICTION**

OREGON

**REGISTERED AGENT**

15872088 - CORPORATION SERVICE COMPANY

1127 BROADWAY ST NE STE 310  
SALEM OR 97301 USA

If the Registered Agent has changed, the new agent has consented to the appointment.

**MEMBER**

44852689 - AVANGRID RENEWABLES, LLC

2701 NW VAUGHN STREET  
STE 300  
PORTLAND OR 97210 USA



I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

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**ELECTRONIC SIGNATURE**

**NAME**

W. BENJAMIN LACKEY

**TITLE**

AUTHORIZED PERSON

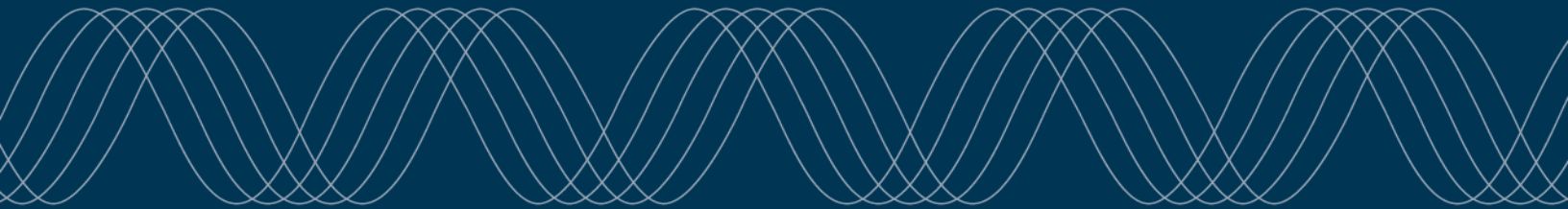
**DATE**

03-21-2022



# PGE Green Future Impact Phase 2 Customer Supplied Option

Material Terms and Conditions



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- 1. Non-Binding Indicative Term Sheet for Renewable Energy PPA ..... 3
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# 1. Non-Binding Indicative Term Sheet for Renewable Energy PPA

Subject to Mutual NDA

*Note: The following represents a summary of certain material terms and conditions for seeking to execute a Renewable Energy Power Purchase Agreement (PPA). The following is not an exhaustive list of all material terms, nor does it purport to comprehensively express PGE's expectations for any of the terms herein mentioned. Capitalized terms not otherwise defined in this Term Sheet will be defined in the PPA.*

<b>Buyer:</b>	Portland General Electric Company ("PGE")
<b>Seller:</b>	[Name of Seller]
<b>Description of Facility:</b>	[type of technology] generating facility (the "Facility"), located in [Name of County] County, in the State of [Name of State].
<b>Facility Nameplate Capacity:</b>	[For solar resources: ____MW <sub>DC</sub> ] [For non-solar resources: ____MW <sub>AC</sub> ]
<b>Net Available Capacity:</b>	"Net Available Capacity" means the full (maximum) net Energy the Facility is capable of delivering to the interconnecting Balancing Authority Area continuously for at least sixty (60) minutes, which is equivalent to the Nameplate Capacity of the Facility's generating unit less station service (parasitic power and electrical losses) and inverter limitations, expressed in MW <sub>AC</sub> .
<b>Product:</b>	The Product includes the following:  "Energy": any Energy generated by the Facility, scheduled in hourly increments, and delivered by Seller to Buyer on eligible long-term firm, conditional firm, or short-term firm transmission from the Facility to the Delivery Point, during the Delivery Term, including all necessary Ancillary Services. Energy shall be delivered to Buyer pursuant to the Scheduling Procedures set forth below.

“Environmental Attributes”: any and all claims, credits, benefits, emissions reductions, offsets and allowances, however named, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water or otherwise arising as a result of the generation of electricity from the Facility, regardless of whether or not (i) such environmental attributes have been verified or certified, (ii) such environmental attributes are creditable under any applicable legislative or regulatory program, or (iii) such environmental attributes are recognized as of the Effective Date or at any time during the Delivery Term. Environmental Attributes include but are not limited to: (a) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; (b) all Emissions Reduction Credits; and (c) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and (d) the reporting rights to these avoided emissions, such as the carbon content of the energy generated by the Facility and REC Reporting Rights. Environmental Attributes do not include: (i) any PTCs, ITCs, or any other tax credits, deductions, or tax benefits associated with the Facility, or (ii) any state, federal, local, or private cash payments, grants, or costs relating in any way to the Facility or the electric power output of the Facility.

“Capacity Attributes”: any current or future attribute, as may be currently defined or otherwise defined in the future, including but not limited to a characteristic, certificate, tag, credit, ancillary service or attribute thereof, or accounting construct, associated with the electric generation capability and capacity of the Facility or the Facility's capability and ability to produce or curtail energy, including any attribute counted towards any current or future resource adequacy or reserve requirements. Capacity Attributes are measured in MW. Capacity Attributes do not include: (i) any PTCs, ITCs,



	or any other tax credits, deductions, or tax benefits associated with the Facility, or (ii) any state, federal, local, or private cash payments, grants, or costs relating in any way to the Facility or the electric power output of the Facility.
<i>Delivered Energy Quantity:</i>	" <u>Delivered Energy Quantity</u> " means the sum of the Energy delivered to Buyer by or on behalf of Seller to the Delivery Point each hour during the Delivery Term as represented on the final e-Tag.
<i>No Sales to third parties:</i>	<p>Seller shall sell one hundred percent (100%) of the Facility Output to Buyer and may not sell any Energy, Capacity Attributes, Environmental Attributes or any other Facility capability to Buyer and may not sell the same to any other party or purchaser, unless such sale is expressly allowed by the PPA.</p> <p>"Facility Output" means all electric energy, produced by the Facility, less station service (parasitic power and electrical losses), if any, all as measured at the Facility meter.</p>
<i>Delivery Term:</i>	"Delivery Term" means no less than fifteen (15) Contract Years after the Commercial Operation Date. "Contract Years" means a period of twelve (12) consecutive months beginning on January 1st and continuing through December 31st of each calendar year, except that the first Contract Year shall commence on the Commercial Operation Date and the last Contract Year shall end at the end of the day prior to the anniversary of the Commercial Operation Date.
<i>Interconnection Point:</i>	The Facility shall interconnect to [XX substation] (the "Interconnection Point"). Seller shall be responsible for all costs of interconnecting the Facility to the Interconnection Point.
<i>Delivery Point:</i>	<p>PGE scheduling point [BPAT.PGE or PGE BA]</p> <p>PGE will not accept delivery at PacifiCorp West or at Pelton Round Butte.</p>
<i>Commercial Operation Date:</i>	"Commercial Operation Date" means the date on which the total Nameplate Capacity of the Facility is fully operational and reliable, and the Facility is fully interconnected, fully integrated, and synchronized with the transmission system.

<i>Scheduled Commercial Operation Date:</i>	<p>“Scheduled Commercial Operation Date” means [Date]. In no event shall the Scheduled Commercial Operation Date be later than December 31, 2024. If the Commercial Operation Date is not achieved on or before the Scheduled Commercial Operation Date, Seller shall pay Delay Damages to PGE from and after the Scheduled Commercial Operation Date up to, but not including the first to occur of (i) the date on which the Facility achieves Commercial Operation, and (ii) the Guaranteed Commercial Operation Date.</p> <p>“Delay Damages” are equal to \$100 per MW of Nameplate Capacity per day beginning on the first day through the 30<sup>th</sup> day after the Scheduled Commercial Operation Date, \$200 per MW of Nameplate Capacity of the Facility per day beginning on the 31<sup>st</sup> day through the 60<sup>th</sup> day after Scheduled Commercial Operation Date, and \$300 per MW of Nameplate Capacity of the Facility per day beginning on the 61<sup>st</sup> day after Scheduled Commercial Operation Date until the Commercial Operation Date is actually achieved or the Guaranteed Commercial Operation Date, whichever occurs first.</p>
<i>Guaranteed Commercial Operation Date:</i>	<p>“Guaranteed Commercial Operation Date” means the date that is one hundred twenty (120) days after the Scheduled Commercial Operation Date.</p> <p>Buyer shall have the right to terminate the PPA if the Commercial Operation Date is not achieved by the Guaranteed Commercial Operation Date and Seller shall forfeit the development security.</p>
<i>Pre- COD Progress Reporting:</i>	<p>Seller shall provide a monthly report to Buyer that (a) describes the progress towards meeting the Facility development milestones set forth in the PPA; (b) identifies any missed Facility development milestones, including the cause of the delay; and (c) provides a detailed description of Seller’s corrective actions to achieve the missed Facility development milestones and all subsequent Facility development milestones by the Guaranteed Commercial Operation Date.</p>
<i>Contract Price:</i>	<p>_____ (\$/MWh)</p>

	Control Area Service costs may not be included in the Contract Price.
<i>Market Index Price:</i>	The EIM real-time pre-dispatch nodal price for the Delivery Point. In the event Buyer is participating in an organized market other than the EIM, then the Market Index Price will mean the Locational Marginal Price associated with the Pricing Node or Aggregate Pricing Node for the Delivery Point within such organized market.
<i>Test Energy:</i>	<p>"Test Energy" means all Facility Output generated by the Facility prior to achieving the Commercial Operation Date. Seller may elect to sell Test Energy to its transmission provider, to a third-party or to an organized market via its transmission provider's system. Seller shall be entitled to any and all compensation received from its transmission provider or any third-party or organized market for such Test Energy. Otherwise, Seller shall Schedule in accordance with the Scheduling Procedure and deliver Test Energy to Buyer in order to complete Start-Up Testing. In such case, the parties shall coordinate in good faith to Schedule deliveries of Test Energy to Buyer that minimizes the burden to each of the parties, and Buyer shall receive the Test Energy. The price for such Test Energy received by Buyer shall be zero dollars (\$0.00) and Seller shall pay any costs or additional expenses that are required for Buyer to receive the Test Energy, including but not limited to reimbursement for negative pricing and any necessary capacity costs or reserves costs.</p>
<i>Transmission Requirements:</i>	<p>For Off-system Facilities:</p> <p>Seller shall pay for and maintain eligible Long-Term Transmission, for a minimum of 80% of the Net Available Capacity, for delivery of Energy from the Facility's point of interconnection/point of receipt (POR) identified in the Interconnection Agreement to the Delivery Point for the entire Delivery Term, commencing on the Commercial Operation Date.</p> <p>Seller may deliver up to 20% of the Net Available Capacity on short term firm transmission.</p> <p>If the Seller has a transmission service request that utilizes Newpoint as the POR, the transmission service request must</p>

	<p>reference the specific generation interconnection request number for the resource in the comments field.</p> <p>Curtailment or a transmission provider's cancelation of conditional firm reassessment transmission service shall not be a Force Majeure event.</p> <p>If the reassessment service is terminated or the number of curtailment hours is increased, Seller default and failure to perform provisions would be triggered would be triggered.</p> <p>If Seller is participating in a BPA TSEP process which includes completing any and all actions necessary to keep the transmission service request(s) in an active OASIS status, Seller has the commercial obligation to participate in and fund all requirements in the TSEP process necessary to be granted long term firm or conditional firm bridge if those are the services elected. Seller with conditional firm reassessment does not have any participation requirements beyond the cluster study.<sup>1</sup></p> <p>Seller shall be responsible for making all arrangements and paying all costs related to transmission, including but not limited to Ancillary Services costs and EIM costs, required to deliver the Product(s) to the Delivery Point.</p> <p>For On-System Facilities:</p> <p>Seller must have requested NRIS interconnection service for Facility Output and Buyer must be able to designate the Facility as a network resource and. In such case, Buyer will be responsible for all costs associated with the delivery of Facility Output to PGELOAD.</p>
<i>Control Area Services and other costs:</i>	<p>Seller shall procure and Buyer will reimburse Seller for all Control Area Services from an entity that is mutually agreed upon by the parties that may be required by its transmission provider or balancing authority area as a condition of interconnection.</p> <p>Control Area Services include, but are not limited to, generation imbalance, variable energy resource balancing service and any EIM costs associated with interconnection.</p>

<sup>1</sup> See BPA TSEP Business Practice Manual:  
[bpa.gov/transmission/Doing%20Business/bp/tbp/TSR-Study-Expansion-Process-BP.pdf](http://bpa.gov/transmission/Doing%20Business/bp/tbp/TSR-Study-Expansion-Process-BP.pdf)



	<p>Control Area Services do not include ancillary service costs associated with the transmission provider's provision of firm transmission service.</p> <p>For off-system resources, Control Area Services do not include real power losses.</p>
<i>Forecasting:</i>	<p>Seller shall provide Buyer with (i) a rolling generation forecast, updated hourly, for the next fourteen (14) days, (ii) a rolling generation forecast for five (5) minute and fifteen (15) minute intervals, updated every five (5) and fifteen (15) minutes respectively, for the next 24 hours, and (iii) an updated hourly generation forecast ninety (90) minutes prior to each delivery hour for the balance of the delivery day (collectively, "Generation Forecast"). Each Generation Forecast shall be performed by a third-party forecasting agent that is mutually agreed to by Buyer and Seller ("Forecasting Agent"). At Buyer's request, Seller will cause the Forecasting Agent to provide Buyer with an application program interface from which Buyer may access raw forecasting files. Seller shall ensure that the Forecasting Agent provides Buyer real time access to information and forecasts concerning the Facility's availability status.</p>
<i>Scheduling:</i>	<p>Seller shall schedule and deliver Energy to Buyer at the Delivery Point, commencing on the Commercial Operation Date and continuing through the end of the Delivery Term. Seller's Energy delivery may not intentionally exceed the Generation Forecast.</p> <p>For On-System Facilities:</p> <p>For each day during the Delivery Term, Seller shall comply with the following scheduling procedure:</p> <p>Seller shall, by 5:00 a.m. PPT of the customary WECC Pre-Scheduling Day, communicate to Buyer's pre-schedule desk via an Application Program Interface (API) or as directed by Buyer, the expected Energy to be delivered each hour at the Delivery Point for the delivery day, consistent with the Generation Forecast.</p> <p>Seller shall communicate to Buyer's real-time desk via API, or as otherwise directed by Buyer, Energy deliveries consistent</p>

	<p>with the Generation Forecast no later than ninety (90) minutes prior to the flow hour.</p> <p>Seller and Buyer agree that the intent of these scheduling provisions is for Seller to schedule and deliver Energy resembling actual production from the Facility for each interval.</p> <p>For Off System Facilities:</p> <p>For each day during the Delivery Term, Seller shall comply with the following scheduling procedure:</p> <p>Seller shall, by 5:00 a.m. PPT of the customary WECC Pre-Scheduling Day, communicate to Buyer's pre-schedule desk via an application program interface (API) or as directed by Buyer, the expected Energy to be delivered each hour at the Delivery Point for the delivery day, consistent with the Generation Forecast.</p> <p>Seller shall schedule the Energy by submitting a NERC e-Tag ("e-Tags") prior to 1:00 p.m. PPT of the applicable WECC pre-scheduling day for all hours of the applicable delivery day(s); and</p> <p>Seller shall schedule the Energy with e-Tags according to prevailing WECC pre-scheduling provisions and protocols. Seller shall schedule the Facility as the identified e-Tag source. Seller may not net or otherwise combine schedules from resources other than the Facility, except as necessary for Ancillary Services.</p> <p>Seller shall not schedule any energy to be delivered to Buyer using a dynamic or pseudo-tie e-tag as such terms are defined and used by NERC.</p> <p>Seller shall make adjustments to the pre-scheduled energy scheduled from the Facility each hour in real-time ("Real-time Adjustments") consistent with the Generation Forecast. For such Real-time Adjustments, Seller will:</p> <p>Submit and receive approval of e-Tag adjustment no later than seventy-five (75) minutes prior to the flow hour, in accordance with the requirements of the applicable transmission provider.</p> <p>Make all NERC e-Tag adjustments.</p>
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	<p>Seller's e-tag shall match the adjustment communicated to the Buyer.</p> <p>Be responsible for any costs, charges, or fees associated with adjustments to the e-tag after seventy-five (75) minutes prior to the flow hour.</p> <p>In the event that the regional market design, balancing authority, reliability entity or regulatory entity (e.g., PGE Transmission, BPA, WECC, NERC, RC West, FERC) causes or otherwise reasonably requires Buyer's scheduling practices to change after the effective date of the PPA, Buyer and Seller shall meet within thirty (30) days after written notice to Seller of such proposed change and mutually agree on updated Scheduling Procedures. Seller shall not unreasonably withhold agreement to proposed changes to the Scheduling Procedures.</p>
<i>Output Guarantee:</i>	<p>Seller guarantees that during the Delivery Term, the Delivered Energy Quantity, shall meet or exceed the Guaranteed Output Threshold.</p> <p>The "Guaranteed Output Threshold" is equal to [90%] of the Annual Expected Output.</p> <p>The "Performance Measurement Period" is equal to a monthly period. The initial Performance Measurement Period will commence on the Commercial Operation Date.</p> <p>The "Expected Output" is equal to the Facility's P50 expected monthly output.</p> <p>After each Performance Measurement Period, Seller shall provide Buyer sufficient detail of the Facility's performance to substantiate its calculation of Energy deliveries for the Guaranteed Output Threshold. The Guaranteed Output Threshold shall be adjusted for energy that was not delivered during Excused Hours. "Excused Hours" means hours when the Facility was not available due to Force Majeure, excused curtailments, or Buyer's failure to perform.</p> <p>It shall be a Seller event of default if, commencing on the Commercial Operation Date, Seller fails to deliver [<i>for wind resources</i>: seventy-five percent (75%) of the annual sum of the Guaranteed Output Threshold to Buyer during two (2) out of three (3) Contract Years during the Delivery Period]</p>

	[for non-wind resources: fifty percent (50%) of the annual sum of the Guaranteed Output Threshold to Buyer during any Contract Year during the Delivery Period].
<i>Mechanical Availability Guarantee:</i>	Beginning with the first full calendar year following the Contract Year in which the Commercial Operation Date has occurred, Seller's failure to maintain a minimum Mechanical Availability Percentage for the Facility of [ninety-seven percent (97%)] for any two (2) out of three (3) Contract Years on a rolling basis. The Mechanical Available Percentage of the Facility shall be determined by Seller by dividing the total Operational Hours for such calendar year [non-solar resources: by the total number of hours in the calendar year] [solar resources: by the total number of daylight hours in the calendar year.] On or before January 31 <sup>st</sup> of each year, Seller shall provide Buyer written documentation, which shall be subject to audit by Buyer, to verify or otherwise substantiate Seller's calculation of the Mechanical Available Percentage of the Facility for the prior calendar year. The operational hours for the Facility shall be the hours that the Facility is potentially capable of producing power at Nameplate Capacity regardless of actual weather conditions or season, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the point of interconnection with the Transmission Provider.
<i>Failure to Deliver Facility Output:</i>	<p>In the event Seller fails to deliver Facility Output, Seller shall pay Buyer the following damages:</p> <p>The replacement cost for such deficiency calculated by multiplying the amount of the deficiency by the positive difference, if any, of the Replacement Price less the Contract Price; provided, however, such amount shall not be less than zero dollars (\$0.00). The "Replacement Price" shall be the average day-ahead Intercontinental Exchange Mid-C Physical Peak (bilateral) or Mid-C Physical Off-Peak (bilateral) indices ("ICE DA Indices") for such month; plus</p> <p>The incremental cost associated with Carbon Emissions costs incurred by the Buyer as a result of Seller's failure to deliver Facility Output; plus</p> <p>Any incremental Ancillary Services and transmission costs incurred by Buyer; plus</p>



	<p>Any penalties or fines imposed by a Reliability Entity as a result of Seller's failure to deliver.</p> <p>"Reliability Entity" may include, without limitation, NERC, WECC, the Balancing Authority, Transmission Provider, regional transmission organization, independent system operator, reliability coordinator or any other entity that has, or that may have in the future, (i) responsibility over the reliability of the bulk power system and (ii) by virtue of such responsibility the legal authority to affect the operations of the Facility or delivery of the Product.</p> <p>In the event Seller fails to deliver Environmental Attributes, including Bundled RECs, associated with the Facility Output, Seller shall settle any such shortfall as follows:</p> <p>deliver an equivalent amount of Qualifying Replacement RECs that are generated in the same calendar year; or</p> <p>If Seller elects not to deliver an equivalent amount of Qualifying Replacement RECs and Buyer elects in its sole discretion to purchase Qualifying Replacement RECs, Seller shall owe PGE the price that PGE actually pays for Qualifying Replacement RECs; or</p> <p>If Seller elects not to deliver an equivalent amount of Qualifying Replacement RECs and Buyer does not elect, in its sole discretion, to purchase replacement bundled RECs under subpart (b), Seller shall owe Buyer the Qualifying Replacement REC Price identified by Buyer, multiplied by the number of Bundled RECs Seller failed to deliver.</p> <p><u>"Qualifying Replacement RECs"</u> means environmental attributes (including renewable energy credits and renewable energy credit reporting rights) that are delivered to Buyer bundled with energy produced simultaneously by a generating source that (A) is an Oregon Renewable Portfolio Standard eligible renewable energy resource, (B) produces environmental attributes (including renewable energy credits and renewable energy credit reporting rights) of the same type and quality as Environmental Attributes (including Bundled RECs and REC Reporting Rights), (C) is located in [Oregon or Washington], and (D) achieves commercial operation after the Commercial Operation Date.</p>
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	<p><u>"Qualifying Replacement REC Price"</u> means the price for Qualifying Replacement RECs as determined by taking the lower of two dealer quotes representing a live offer to sell Qualifying Replacement RECs for the entire quantity of Bundled RECs that are being replaced and subtracting the value of the energy component of such quantity (as specified in the applicable dealer quotes) of such Qualifying Replacement RECs.</p>
<i>Excess Energy:</i>	<p>If during the Performance Measurement Period, the Delivered Energy Quantity is in excess of [110%] of the Guaranteed Output Threshold, then for each MWh of Delivered Energy Quantity in excess of [110%] of the Guaranteed Output Threshold ("Excess Energy"), the applicable price paid by Buyer for such Excess Energy shall be equal to the lesser of (a) [93%] of the Market Index Price applicable to the interval in which such Excess Energy was delivered, or (b) [75%] of the Contract Price.</p>
<i>Curtailment:</i>	<p>In the event the Facility is curtailed due to a System Emergency, Force Majeure, or by the transmission provider (excluding curtailment hours as a result of Seller's utilization of conditional firm transmission), Seller shall not be liable for failure to deliver such curtailed Energy and Buyer shall not be obligated to pay for such curtailed Energy.</p> <p>Notwithstanding the foregoing, Buyer shall have the right to curtail deliveries of scheduled Energy, up to [400 hours] each Contract Year (or a prorated amount for any partial Contract Year during the Delivery Term) without compensation, and all such events shall be defined as "Buyer Curtailment".</p> <p>The Guaranteed Output Threshold will be reduced by the number of MWhs subject to Buyer Curtailment.</p>
<i>REC Tracking System:</i>	<p>Seller shall transfer RECs associated with the Facility Output from the Facility for each month via WREGIS pursuant to the timelines in WREGIS Operating Rules.</p>
<i>Negative Price Event:</i>	<p>When the Market Index Price is less than zero ("Negative Price Event"), Seller shall have the right, but not the obligation, to suspend part or all of its Energy deliveries ("Seller Curtailment"). Seller's obligation to deliver the Guaranteed Output Threshold shall be reduced by one (1)</p>

	MWh for each substantiated MWh reduced due to a Negative Price Event.
<i>Monthly Settlement and Invoice:</i>	<p>All invoices shall be due on the tenth (10th) day of each month and payable on or before the later of the twentieth (20th) day of each month, or the tenth (10th) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day.</p> <p>The payment for each month during the Delivery Term is equal to the sum of:</p> <p>the lesser of (i) the hourly Delivered Energy Quantity, or (ii) hourly Facility Output, each up to [110%] of the Guaranteed Output Threshold, multiplied by the Contract Price; plus</p> <p>hourly Excess Energy multiplied by the lesser of (i) [93%] of the Market Index Price, or (ii) [75%] of the Contract Price; plus</p> <p>(c) for each hour that the Market Index Price is negative, the hourly Delivered Energy Quantity multiplied by [107%] of the Market Index Price.</p>
<i>Operations and Maintenance:</i>	<p>Seller shall not schedule any non-emergency maintenance that reduces the energy generating capability of the Facility by more than ten percent (10%) during the months of June through September, unless (i) such outage is required to avoid damage to the Facility, (ii) such maintenance is necessary to maintain equipment warranties and cannot be scheduled outside the months of June through September, (iii) such outage is required in accordance with prudent electrical practices, or (iv) the parties agree otherwise in writing.</p> <p>Seller shall provide its outage schedule no later than September 1st of each year preceding such outage(s).</p> <p>The outage schedule for each Contract Year shall not exceed 200 hours.</p>
<i>Labor Requirements:</i>	Union labor must be utilized for major construction activities related to the Facility and must include a Project Labor Agreement requirement in any related construction agreements.

	<p>The labor group that constructs and maintains the Facility must have policies in place that are designed to limit or prevent workplace harassment and discrimination. Additionally, such labor group must have policies in place that are designed to promote workplace diversity, equity and inclusion of communities who have been traditionally underrepresented in the renewable energy sector including, but not limited to, women, veterans and black, indigenous and People of Color, with an aspirational goal of having at least fifteen percent (15%) of the total work hours performed by individuals from those communities.</p>
<i>Buyer Conditions Precedent:</i>	<p>Buyer's obligations shall be conditioned and will become effective only upon the occurrence of each and every one of the following conditions:</p> <p>(i) receipt of approval from the Oregon Public Utility Commission, in form and substance satisfactory in Buyer's sole discretion; and</p> <p>(ii) written approval of the PPA by Buyer's Board of Directors.</p>
<i>Seller Conditions Precedent</i>	[CPs TBD]
<i>Security Requirements:</i>	<p>Within thirty (30) days after the Effective Date of the PPA, Seller shall deliver development security to Buyer in an amount equal to \$200/kW of Nameplate Capacity and Seller shall maintain such development security until COD.</p> <p>On or before COD, Seller shall deliver delivery term security to Buyer in an amount equal to \$100/kW of Nameplate Capacity and shall maintain such delivery term security through the end of the Delivery Term. Within five (5) Business Days following any draw by Buyer on the delivery term security, Seller shall replenish the amount drawn such that the delivery term security is restored to the full amount.</p> <p>All security shall be in the form of cash or a letter of credit from a Qualified Institution as defined below and in a form reasonably acceptable to Buyer.</p> <p>"Qualified Institution" means a major U.S. commercial bank or a U.S. ibranch office of a major foreign commercial bank which is acceptable to PGE, organized under the laws of the United States (or any state or political subdivision thereof)</p>



	<p>with such bank having shareholders' equity of at least \$10 billion (U.S. Dollars) and a Credit Rating of at least A- by S&amp;P or A1 by Moody's, or an insurance company with assets of \$2 billion or greater, an A.M. Best financial strength rating of an A or greater and authorized to issue surety bonds in the state in which the project will be located. On a case by case basis, PGE will accept banks as Qualified Institutions if they have received an endorsement from an institution that meets the criteria in the Qualified Institution definition.</p>
<p><i>Termination Settlement Amount:</i></p>	<p>In the event the PPA is terminated due to an event of default, the non-defaulting party shall calculate the Settlement Amount. The defaulting shall pay the Settlement Amount to the non-defaulting party.</p> <p>The Gains or Losses resulting from the termination of the PPA shall be determined by calculating the amount that would be incurred or realized to replace or to provide the economic equivalent of the remaining payments or deliveries in respect of the PPA. The Gains or Losses shall be calculated for a period equal to the remaining Term ("Settlement Period"). The quantity of Energy in each month of the Settlement Period shall be equal to the Expected Output for such month.</p> <p><u>"Settlement Amount"</u> means the Losses or Gains, and Costs, expressed in USD, which the non-defaulting party incurs as a result of the termination and liquidation of the PPA. If the non-defaulting party's Costs and Losses exceed its Gains, then the Settlement Amount shall be an amount owing to the non-defaulting party. If the non-defaulting party's Gains exceed its Costs and Losses, then the Settlement Amount shall be zero dollars (\$0). The Settlement Amount shall not include consequential, punitive, exemplary or indirect or business interruption damages.</p> <p><u>"Gains"</u> means, with respect to a party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of its obligations with respect to the PPA determined in a commercially reasonable manner.</p> <p><u>"Losses"</u> means, with respect to a party, an amount equal to the present value of the economic loss to it, if any (exclusive</p>

	<p>of Costs), resulting from termination of its obligations with respect to the PPA determined in a commercially reasonable manner.</p> <p><u>"Costs"</u> means, with respect to a party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party in entering into new arrangements which replace this Agreement and all reasonable attorneys' fees and expenses incurred by a Party in connection with enforcing its rights under the Agreement. Costs shall not include any expenses incurred by such Party in either entering into or terminating any arrangement pursuant to which it has hedged its obligations.</p>
<i>Compliance with Law</i>	<p>Seller shall comply with all applicable local, state and federal laws, including but not limited to obtaining and maintaining all requisite legal authority to sell power and be able to schedule power and operate under industry standards established by FERC, WECC, NERC and all other applicable regulatory and government agencies.</p>
<i>RPS Compliance:</i>	<p>Seller shall ensure the Facility obtains Oregon RPS Certification within ninety (90) days after the Commercial Operation Date and shall maintain such certification during the Delivery Term. If a change in law occurs after execution of the PPA that impacts the Facility's Oregon RPS Certification, then the Seller shall use commercially reasonable efforts to comply with such change of law as necessary to maintain the Oregon RPS Certification.</p>
<i>Assignment:</i>	<p>Neither party may assign the PPA without prior written consent of the other party, which consent may not be unreasonably withheld or delayed.</p> <p>Any direct or indirect change of control of Seller (whether voluntary or by operation of law) will be deemed an assignment and will require the prior written consent of the Buyer.</p> <p>Seller shall pay Buyer's reasonable expenses incurred to provide consents, estoppels, or other required documentation in connection with Seller's financing for the Facility.</p>

<i>Other Standard Contract Terms to be included in the PPA:</i>	The PPA will include additional terms and conditions that are usual and customary in transactions of its nature.
<i>Confidentiality:</i>	This Term Sheet and all information exchanged during negotiations of the PPA are confidential, subject to the Non-Disclosure Agreement between Buyer and Seller dated [Date].

## 2.Non-Binding Indicative Term Sheet for Renewable Energy & Storage PPA

Subject to Mutual NDA

*Note: The following represents a summary of certain material terms and conditions for seeking to execute a Renewable Energy and Storage Power Purchase Agreement (PPA). The following is not an exhaustive list of all material terms, nor does it purport to comprehensively express PGE's expectations for any of the terms herein mentioned. Capitalized terms not otherwise defined in this Term Sheet will be defined in the PPA.*

<i>Buyer:</i>	Portland General Electric Company ("PGE")
<i>Seller:</i>	[Name of Seller]
<i>Description of Facility:</i>	<p>A [XX] MW<sub>AC</sub> [type of technology] generating facility (the "Generating Facility"), which includes a [XX] MW/[XX] MWh [co-located][hybrid] battery energy storage facility (the "Storage Facility"), located in [name of County] County, in the State of [Name of State].</p> <p>The Generating Facility and the Storage Facility are collectively referred to herein as the "Facility."</p>
<i>Generating Facility Nameplate Capacity:</i>	[For solar resources: ____MW <sub>DC</sub> ] [For non-solar resources: ____MW <sub>AC</sub> ]
<i>Storage Facility Nameplate Capacity:</i>	[XX] MW <sub>AC</sub>
<i>Storage Contract Capacity:</i>	The Storage Facility will have an initial Storage Contract Capacity of [XX] MW <sub>AC</sub> for [XX] hour discharge. The Storage Contract Capacity shall be adjusted during the Delivery Term in accordance with periodic storage capacity tests.
<i>"Net Available Capacity"</i>	"Net Available Capacity" means the full (maximum) net Energy the Facility is capable of delivering to the interconnecting Balancing Authority Area continuously for at least sixty (60) minutes, expressed in MW <sub>AC</sub> ; limited by the



	interconnection limit identified in the interconnection agreement.
<i>Product:</i>	<p>The Product includes the following:</p> <p>“Energy”: Energy generated and/or discharged by the Facility, scheduled in hourly increments, and delivered by Seller to Buyer on eligible firm, conditional firm or short-term firm transmission from the Facility to the Delivery Point, during the Delivery Term, including all necessary Ancillary Services. Energy shall be delivered to Buyer pursuant to the Scheduling Procedures set forth below;</p> <p>“Environmental Attributes”: any and all claims, credits, benefits, emissions reductions, offsets and allowances, however named, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water or otherwise arising as a result of the generation of electricity from the Facility, regardless of whether or not (i) such environmental attributes have been verified or certified, (ii) such environmental attributes are creditable under any applicable legislative or regulatory program, or (iii) such environmental attributes are recognized as of the Effective Date or at any time during the Delivery Term. Environmental Attributes include but are not limited to: (a) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; (b) all Emissions Reduction Credits; and (c) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and (d) the reporting rights to these avoided emissions, such as the carbon content of the energy generated by the Facility and REC Reporting Rights. Environmental Attributes do not include: (i) any PTCs, ITCs, or any other tax credits, deductions, or tax benefits associated with the Facility, or (ii) any state, federal, local, or</p>

	<p>private cash payments, grants, or costs relating in any way to the Facility or the electric power output of the Facility;</p> <p>“Capacity Attributes”: any current or future attribute, as may be currently defined or otherwise defined in the future, including but not limited to a characteristic, certificate, tag, credit, ancillary service or attribute thereof, or accounting construct, associated with the electric generation capability and capacity of the Facility or the Facility’s capability and ability to produce or curtail energy, including any attribute counted towards any current or future resource adequacy or reserve requirements. Capacity Attributes are measured in MW. Capacity Attributes do not include: (i) any PTCs, ITCs, or any other tax credits, deductions, or tax benefits associated with the Facility, or (ii) any state, federal, local, or private cash payments, grants, or costs relating in any way to the Facility or the electric power output of the Facility;</p> <p>Storage Capacity: All rights and products and attributes associated with the maximum dependable operating capability of the Storage Facility to be charged with, store and discharge electric energy; and</p> <p>Ancillary Services: All ancillary services, products, and other attributes, if any that may be obtained from the Facility.</p>
<i>Delivered Energy Quantity:</i>	<p>“<u>Delivered Energy Quantity</u>” means the sum of the Energy delivered to Buyer by or on behalf of Seller to the Delivery Point each hour during the Delivery Term as represented on the final e-Tag.</p>
No Sales to third parties:	<p>Seller shall sell one hundred percent (100%) of the Facility capability and Facility Output to Buyer and may not sell any Energy, Storage Capacity, Capacity Attributes, Environmental Attributes or any other Facility capability to any other party or purchaser, unless such sale is expressly allowed by the PPA.</p> <p>“Facility Output” means all electric energy, generated and/or discharged by the Facility, less station service (parasitic power and electrical losses), if any, all as measured at the Facility meter. Facility Output does not include energy used to charge the Storage Facility or lost due to round trip efficiency at the Storage Facility.</p>

<i>Delivery Term:</i>	"Delivery Term" means no less than fifteen (15) Contract Years after the Commercial Operation Date. "Contract Years" means a period of twelve (12) consecutive months beginning on January 1st and continuing through December 31st of each calendar year, except that the first Contract Year shall commence on the Commercial Operation Date and the last Contract Year shall end at the end of the day prior to the anniversary of the Commercial Operation Date.
<i>Interconnection Point:</i>	The Facility shall interconnect to [XX substation] (the "Interconnection Point"). Seller shall be responsible for all costs of interconnecting the Facility to the Interconnection Point.
<i>Delivery Point:</i>	PGE scheduling point [BPAT.PGE or PGELOAD]  PGE will not accept delivery at PacifiCorp West or at Pelton Round Butte.
<i>Commercial Operation Date:</i>	"Commercial Operation Date" means the date on which the total Nameplate Capacity of both the Generating Facility and Storage Facility is fully operational and reliable, and the Facility is fully interconnected, fully integrated, and synchronized with the transmission system.
<i>Scheduled Commercial Operation Date:</i>	<p>"Scheduled Commercial Operation Date" means [Date]. In no event shall the Scheduled Commercial Operation Date be later than December 31, 2024. If the Commercial Operation Date is not achieved on or before the Scheduled Commercial Operation Date, Seller shall pay Delay Damages to PGE from and after the Scheduled Commercial Operation Date up to, but not including the first to occur of (i) the date on which the Facility achieves the Commercial Operation Date, and (ii) the Guaranteed Commercial Operation Date.</p> <p>"Delay Damages" are equal to \$100 per MW of Nameplate Capacity for each of the Generating Facility and the Storage Facility per day beginning on the first day through the 30<sup>th</sup> day after the Scheduled Commercial Operation Date, \$200 per MW of Nameplate Capacity for each of the Generating Facility and the Storage Facility per day beginning on the 31<sup>st</sup> day through the 60<sup>th</sup> day after Scheduled Commercial Operation Date, and \$300 per MW of Nameplate Capacity</p>

	for each of the Generating Facility and the Storage Facility per day beginning on the 61 <sup>st</sup> day after Scheduled Commercial Operation Date until the Commercial Operation Date is actually achieved or the Guaranteed Commercial Operation Date, whichever occurs first.
<i>Guaranteed Commercial Operation Date:</i>	<p>"Guaranteed Commercial Operation Date" means the date that is one hundred twenty (120) days after the Scheduled Commercial Operation Date.</p> <p>Buyer shall have the right to terminate the PPA if the Commercial Operation Date is not met by the Guaranteed Commercial Operation Date and Seller shall forfeit the development security.</p>
<i>Pre-COD Progress Reporting:</i>	Seller shall provide a monthly report to Buyer that (a) describes the progress towards meeting the Facility development milestones set forth in the PPA; (b) identifies any missed Facility development milestones, including the cause of the delay; and (c) provides a detailed description of Seller's corrective actions to achieve the missed Facility development milestones and all subsequent Facility development milestones by the Guaranteed Commercial Operation Date.
<i>Contract Price:</i>	<p>The Contract Price shall be the sum of the Generation Contract Price and the Storage Contract Price.</p> <p>The Generation Contract Price shall be \$(XX) /MWh. Control Area Services costs may not be included in the Generation Contract Price.</p> <p>The Storage Contract Price shall be \$(XX)/kW.</p>
<i>Test Energy:</i>	<p>For the Generating Facility:</p> <p>Generating Facility Test Energy means energy generated by the Generating Facility prior to achieving the Commercial Operation Date. Seller may elect to sell Generating Facility Test Energy to its transmission provider, to a third-party or to an organized market via its transmission provider's system. Seller shall be entitled to any and all compensation received from its transmission provider or any third-party or organized market for such Generating Facility Test Energy. Otherwise, Seller shall Schedule in accordance with the Scheduling Procedure and deliver Generating Facility Test</p>



	<p>Energy to Buyer in order to complete Start-Up Testing of the Generating Facility. In such case, the parties shall coordinate in good faith to Schedule deliveries of Generating Facility Test Energy to Buyer that minimizes the burden to each of the parties, and Buyer shall receive the Generating Facility Test Energy. The price for such Generating Facility Test Energy received by Buyer shall be zero dollars (\$0.00) and Seller shall pay any costs or additional expenses that are required for Buyer to receive the Generating Facility Test Energy, including but not limited to reimbursement for negative pricing and any necessary capacity costs or reserves costs.</p> <p>For the Storage Facility:</p> <p>Seller is responsible for all energy necessary for charging the Storage Facility in order to complete Start-Up Testing for the Storage Facility. Storage Facility Test Energy means all energy discharged by the Storage Facility prior to achieving the Commercial Operation Date. Seller may elect to sell Storage Facility Test Energy to its transmission provider, to a third-party or to an organized market via its transmission provider's system. Seller shall be entitled to any and all compensation received from its transmission provider or any third-party or organized market for such Storage Facility Test Energy. Otherwise, Seller may schedule and deliver Storage Facility Test Energy to Buyer in accordance with the Scheduling Procedure in order to complete Start-Up Testing for the Storage Facility. In such case, the parties shall coordinate in good faith to schedule deliveries of Storage Facility Test Energy to Buyer that minimizes the burden to each of the parties, and Buyer shall receive the Storage Facility Test Energy. The price for such Storage Facility Test Energy received by Buyer shall be zero dollars (\$0.00) and Seller shall pay any costs or additional expenses that are required for Buyer to receive the Storage Facility Test Energy, including but not limited to reimbursement for negative pricing, and any necessary capacity costs or reserves costs.</p>
<i>Transmission Requirements:</i>	<p>For Off-System Facilities:</p> <p>Seller shall pay for and maintain eligible Long-Term Transmission, for a minimum of 80% of the Net Available</p>

	<p>Capacity, for delivery of Energy from the Facility's point of interconnection/point of receipt (POR) identified in the interconnection agreement to the Delivery Point for the entire Delivery Term, commencing on the Commercial Operation Date.</p> <p>Seller may deliver up to 20% of the Net Available Capacity on short term firm transmission.</p> <p>If the Seller has a transmission service request that utilizes Newpoint as the POR, the transmission service request must reference the specific Generation Interconnection Request number for the resource in the comments field.</p> <p>Curtailment or a transmission provider's cancelation of conditional firm reassessment transmission service shall not be a Force Majeure event.</p> <p>If the reassessment service is terminated or the number of curtailment hours is increased, default and failure to perform provisions in the PPA would be triggered.</p> <p>If Seller is participating in a BPA TSEP process, which includes completing any and all actions necessary to keep the transmission service request(s) in an active OASIS status, Seller has the commercial obligation to participate in and fund all requirements in the TSEP process necessary to be granted long term firm or conditional firm bridge if those are the services elected. If Seller has a conditional firm reassessment, its participation requirements do not extend beyond the cluster study.<sup>2</sup></p> <p>Seller shall be responsible for making all arrangements and paying all costs related to transmission, including but not limited to Ancillary Services costs required to deliver the Product(s) to the Delivery Point.</p> <p>For On-System Facilities:</p> <p>PGE must be able to designate the Facility as a network resource and Seller must have requested NRIS interconnection for Facility Output. In such case, Buyer will</p>
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<sup>2</sup> See BPA TSEP Business Practice Manual:  
[bpa.gov/transmission/Doing%20Business/bp/tbp/TSR-Study-Expansion-Process-BP.pdf](https://bpa.gov/transmission/Doing%20Business/bp/tbp/TSR-Study-Expansion-Process-BP.pdf)

	be responsible for all costs associated with the delivery of Facility Output to PGELoad.
<i>Control Area Services and Other Costs:</i>	<p>Seller shall procure and Buyer will reimburse Seller for all Control Area Services from an entity that is mutually agreed upon by the parties that may be required by the transmission provider or balancing authority area as a condition of interconnection.</p> <p>"Control Area Services" include, but are not limited to, generation imbalance, variable energy resource balancing service and any EIM costs associated with interconnection. Control Area Services do not include ancillary service costs associated with the transmission provider's provision of firm transmission service. For off-system resources, Control Area Services do not include real power losses.</p>
<i>Forecasting:</i>	<p>Seller shall provide Buyer with: (i) a rolling generation forecast, updated hourly, for the next fourteen (14) days, (ii) a rolling generation forecast for five (5) minute and fifteen (15) minute intervals, updated every five (5) and fifteen (15) minutes respectively, for the next 24 hours, and (iii) an updated hourly generation forecast ninety (90) minutes prior to each delivery hour for the balance of the delivery day ("Generation Forecast"). Each Generation Forecast shall be performed by a third-party forecasting agent that is mutually agreed to by Buyer and Seller ("Forecasting Agent"). At Buyer's request, Seller will cause the Forecasting Agent to provide Buyer with an application program interface from which Buyer can access raw forecasting files. Seller shall ensure that the Forecasting Agent provides Buyer real time access to information and forecasts concerning the Facility's availability status.</p>
<i>Charging Energy:</i>	<p>During the Delivery Term, Seller shall be responsible, at its sole cost, for generating, managing, and delivering all Charging Energy (as measured at the Storage System metering point) necessary to charge the Storage Facility to supply the discharge schedule (defined in the Scheduling Procedure).</p>
<i>Scheduling:</i>	<p>Seller shall schedule and deliver Energy to Buyer at the Delivery Point commencing on the Commercial Operation Date and continuing through the end of the Delivery Term.</p>

Seller's Energy delivery may not intentionally exceed the Generation Forecast plus discharge Energy.

For each day during the Delivery Term, Seller shall comply with the following scheduling procedure:

Seller shall, by 5:00 a.m. PPT of the customary WECC Pre-Scheduling Day, communicate to Buyer's pre-schedule desk via an Application Program Interface (API) or as directed by Buyer, the expected Energy to be delivered each hour at the Delivery Point for the delivery day, consistent with the Generation Forecast net of Charging Energy;

Seller shall schedule the Energy by submitting a NERC e-Tag ("e-Tags") prior to 5:00 a.m. PPT of the applicable WECC pre-scheduling day for all hours of the applicable delivery day(s); and

Seller shall, by 5:00 a.m. PPT of the customary WECC Pre-Scheduling Day communicate to Buyer's pre-schedule desk via an Application Program Interface (API) or as directed by Buyer, Seller's optimal charging schedule for the WECC Pre-Schedule Day. At a minimum, the charging schedule will include:

the hours in which Seller proposes to charge the Storage System; and

the total capacity and state-of-charge Seller proposes to charge the Storage System to, by the end of the last hour in which Seller shall charge the Storage System.

Buyer shall, by 8:00 a.m. PPT of the customary WECC Pre-Scheduling Day communicate to Seller via an Application Program Interface (API) or as directed by Buyer, Buyer's adjusted discharge schedule for the WECC Pre-Schedule Day if different from the discharge schedule in Seller's expected Energy communicated to Buyer by 5:00 a.m. PPT of the customary WECC Pre-Scheduling Day. At a minimum, the discharge schedule will include:

the hours in which Seller shall discharge the Storage System; and



the MW amount at which Seller shall discharge the Storage System for each hour.

Seller shall Schedule the Energy with e-Tags according to prevailing WECC pre-scheduling provisions and protocols and the terms of the PPA. Seller shall schedule the Facility as the identified e-Tag source. Seller may not net or otherwise combine schedules from resources other than the Facility, except as necessary for Ancillary Services.

Seller shall make adjustments to the pre-scheduled energy scheduled from the Facility each hour in real-time ("Real-time Adjustments") consistent with the Generation Forecast net of charging energy and account for Facility Net Available Capacity. For such Real-time Adjustments:

Buyer reserves the right to adjust its discharge schedule. To make Real-time Adjustments, the Buyer shall communicate to Seller's real-time desk via API, or as otherwise directed by Buyer, Buyer's revised discharge schedule. Buyer shall communicate the Real-time Adjustments no later than one-hundred and twenty (120) minutes prior to the flow hour.

Seller will submit and receive approval of e-Tag adjustment no later than seventy-five (75) minutes prior to the flow hour, in accordance with the requirements of the applicable Transmission Provider(s).

Seller will make all NERC e-Tag adjustments.

Seller's e-tag shall match the adjustment communicated to the Buyer.

Seller will be responsible for any costs, charges, or fees associated with adjustments to the e-tag after seventy-five (75) minutes prior to the flow hour.

Buyer discharge schedule shall be followed by Seller so long as such discharge schedule remains feasible and total Facility Output does not exceed Net Available Capacity.

Seller shall not schedule any energy to be delivered to Buyer pursuant to this Agreement using a dynamic or pseudo-tie e-tag as such terms are defined and used by NERC.

In the event that the regional market design, balancing authority, reliability entity or regulatory entity (e.g., PGE

	<p>Transmission, BPA, WECC, NERC, RC West, FERC) causes or otherwise reasonably requires Buyer's scheduling practices to change after the Effective Date, Buyer and Seller shall meet and mutually agree on updated Scheduling Procedures within thirty (30) days after written notice to Seller of such proposed change. Seller shall not unreasonably withhold agreement to proposed changes to the scheduling practices.</p>
<p><i>Output Guarantee:</i></p>	<p>Seller guarantees that during the Delivery Term, the Delivered Energy Quantity, shall meet or exceed the Guaranteed Output Threshold.</p> <p>The "Guaranteed Output Threshold" is equal to [90%] of the Expected Output.</p> <p>The "Performance Measurement Period" is equal to a monthly period. The initial Performance Measurement Period will commence on the Commercial Operation Date.</p> <p>The "Expected Output" is equal to the Facility's P50 expected monthly output.</p> <p>After each Performance Measurement Period, Seller shall provide Buyer sufficient detail of the Facility's performance to substantiate its calculation of Energy deliveries for the Guaranteed Output Threshold. The Guaranteed Output Threshold shall be adjusted for energy that was not delivered during Excused Hours. "Excused Hours" means hours when the Facility was not available due to Force Majeure, excused curtailments, or Buyer's failure to perform.</p> <p>It shall be a Seller event of default if, commencing on the Commercial Operation Date, Seller fails to deliver [<i>for wind resources</i>: seventy five percent (75%) of the annual sum of the Guaranteed Output Threshold to Buyer during two (2) out of three (3) Contract Years during the Delivery Term] [<i>for non-wind resources</i>: fifty percent (50%) of the annual sum of the Guaranteed Output Threshold to Buyer during any Contract Year during the Delivery Term].</p>
<p><i>Generating Facility Mechanical</i></p>	<p>Beginning with the first full calendar year following the Contract Year in which the Commercial Operation Date has occurred, Seller's failure to maintain a minimum Generating Facility Mechanical Availability Percentage for the Generating Facility of [ninety-seven percent (97%)] for any</p>

<i>Availability Guarantee:</i>	two (2) out of three (3) Contract Years on a rolling basis. The Generating Facility Mechanical Available Percentage of the Generating Facility shall be determined by Seller by dividing the total Operational Hours for such calendar year [ <i>non-solar resources</i> : by the total number of hours in the calendar year]/[ <i>solar resources</i> : by the total number of daylight hours in the calendar year.] On or before January 31st of each year, Seller shall provide Buyer written documentation, which shall be subject to audit by Buyer, to verify or otherwise substantiate Seller's calculation of the Generating Facility Mechanical Available Percentage of the Generating Facility for the prior calendar year. The operational hours for the Generating Facility shall be the hours that the Generating Facility is potentially capable of producing power at Generating Facility Nameplate Capacity regardless of actual weather conditions or season, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the point of interconnection with the transmission provider.
<i>Excess Energy:</i>	If during the Performance Measurement Period, the Delivered Energy Quantity is in excess of [110%] of the Guaranteed Output Threshold, then for each MWh of Delivered Energy Quantity in excess of [110%] of the Guaranteed Output Threshold ("Excess Energy"), the applicable price paid by Buyer for such Excess Energy shall be equal to the lesser of (a) [93%] of the Market Index Price applicable to the interval in which such Excess Energy was delivered, or (b) [75%] of the Generation Contract Price.
<i>Curtailment:</i>	<p>In the event the Facility is curtailed due to a System Emergency, Force Majeure, by the transmission provider (excluding curtailment hours as a result of utilization of conditional firm transmission), Seller shall not be liable for failure to deliver such curtailed energy and Buyer shall not be obligated to pay for such curtailed energy.</p> <p>Notwithstanding the foregoing, Buyer shall have the right to curtail deliveries of Energy, up to [400 hours] each calendar year (or a prorate number of hours for any partial year during the Delivery Term) without compensation, and all such events shall be defined as "Buyer Curtailment".</p>

	<p>The Guaranteed Output Threshold will be reduced by the number of MWhs subject to Buyer Curtailment. Curtailment hours as a result of utilization of conditional firm transmission do not qualify as a Buyer Curtailment.</p>
<p><i>Storage Capacity Guarantee:</i></p>	<p>During the Delivery Term, Seller shall maintain the Storage Facility with guaranteed storage contract capacity of not less than [___MW, representing 90% of the Storage Contract Capacity as of the Commercial Operation Date] ("Guaranteed Storage Contract Capacity"). If the Storage Contract Capacity for the Facility is determined during a storage capacity test to be less than the Guaranteed Storage Contract Capacity, Seller shall pay to Buyer as liquidated damages for such deficiency an amount determined by multiplying the number of months since the last storage capacity test (including the month in which the most current storage capacity test was completed) by (i) Storage Contract Price multiplied by [125%] multiplied by (ii) the difference between the Guaranteed Storage Contract Capacity and the Storage Contract Capacity for the Storage Facility as determined during the most recent storage contract capacity test ("Guaranteed Storage Contract Capacity LDs"). Payment of Guaranteed Storage Contract Capacity LDs is Seller's sole and exclusive liability, and Buyer's sole and exclusive remedy, in connection with the Storage Contract Capacity being less than the Guaranteed Storage Contract Capacity for a Contract Year.</p> <p>Additionally, it will be an event of default if the Storage Contract Capacity, as determined by the most recent storage contract capacity test, is less than the Guaranteed Storage Contract Capacity, which remains uncured for a period of thirty (30) days as shown by a new Storage Capacity Test.</p>
<p><i>Actual Round-Trip Efficiency:</i></p>	<p>The round-trip efficiency for each month is calculated as a percentage, based on the amount of MWhs used to charge the Facility and the amount of MWhs discharged from the Facility, as measured by the Storage Facility meter at the Interconnection Point.</p>



<i>Guaranteed Round-Trip Efficiency:</i>	<p>"Guaranteed Round-Trip Efficiency" means [ninety percent (90%)].</p> <table border="1"> <thead> <tr> <th>Contract Year</th><th>Guaranteed Round-Trip Efficiency</th></tr> </thead> <tbody> <tr> <td>1</td><td>90.0%</td></tr> <tr> <td>2 - XX</td><td>[Seller to fill out rest of table]</td></tr> </tbody> </table> <p>It will be an event of default if the Round-Trip Efficiency is less than the Guaranteed Roundtrip Efficiency and such failure continues for [90] days after Seller's receipt of written notice or discovery of such failure.</p>	Contract Year	Guaranteed Round-Trip Efficiency	1	90.0%	2 - XX	[Seller to fill out rest of table]
Contract Year	Guaranteed Round-Trip Efficiency						
1	90.0%						
2 - XX	[Seller to fill out rest of table]						
<i>Guaranteed Round-Trip Efficiency Adjustment:</i>	<p>If during any month during the Delivery Term, the Actual Round-Trip efficiency for such month is less than the Guaranteed Round-Trip Efficiency, the Seller shall pay the Buyer the following amount: (i) the total Charging Energy for such month, multiplied by (ii) the percentage amount by which the Actual Round-Trip Efficiency is less than the Guaranteed Round-Trip Efficiency, multiplied by (iii) average day-ahead Intercontinental Exchange Mid-C Physical Peak (bilateral) or Mid-C Physical On-Peak (bilateral) indices.</p>						
<i>Maximum Annual Discharge MWh:</i>	<p>Buyer may discharge a maximum of [MWhs] per year, subject to the Daily Dispatch Limits.</p>						
<i>Daily Dispatch Limits:</i>	<p>Full Charging limits (if any): [XX] times per day  Full Discharging limits (if any): [XX] times per day  Partial Charging limits (if any): [XX] times per day  Partial Discharging limits (if any): [XX] times per day</p>						
<i>Other Operating Limits and Parameters:</i>	<p>[Seller to describe all applicable operating limits on dispatch of the Storage Facility, if any]</p>						
<i>Guaranteed Storage Monthly Availability:</i>	<p>Seller guarantees the Storage Facility availability shall be no less than [98 %] for each month during the Delivery Term. Storage Facility availability shall be calculated using a methodology that is generally consistent with the method prescribed by the Storage Facility's equipment manufacturers. The Storage Contract Price shall be adjusted</p>						

	<p>if the Storage Facility fails to meet the Guaranteed Storage Monthly Availability in any month during the Delivery Term.</p> <p>In the event Seller fails to meet the Guaranteed Storage Monthly Availability during [2] months during any [12] month rolling period during the Delivery Term, Buyer may terminate the PPA.</p>
<i>Guaranteed Storage Monthly Availability Adjustment:</i>	<p>If the Storage Facility does not meet the Storage Guaranteed Monthly Availability, the Storage Contract Price shall be adjusted by multiplying it by the following adjustment, which shall be calculated after any Guaranteed Round-Trip Efficiency Adjustment, if any, has been applied to the Storage Contract Price:</p> <ul style="list-style-type: none"> <li>(i) If the monthly storage availability is less than the Guaranteed Storage Availability, but greater than or equal to 70%, then: <math display="block">AA = 100\% - [(98\% - \text{monthly storage availability}) \times 2]</math> </li> <li>(ii) If the monthly storage availability is less than 70%, then: <math display="block">AA = 0\%</math> </li> </ul>
<i>Grid Charging of Storage Facility:</i>	<p>The Storage Facility shall not receive charging energy from any source other than the Generating Facility prior to [the expiration of the ITC recapture period]. Following the ITC recapture period, if the Storage Facility is capable of receiving charging energy from the Generating Facility and in the form of grid energy and Buyer elects to provide charging energy from a source other than the Generating Facility, including grid energy (i) Buyer will be responsible for all costs relating to the charging of the Storage Facility from a source other than the Generating Facility, including the cost of energy used to charge the Storage Facility and (ii) the Parties will amend the PPA to the extent necessary so that Generating Facility Energy delivered by Seller to the Delivery Point is fully paid for by Buyer (unless Buyer is otherwise not required to pay for such Generating Facility Energy hereunder).</p>

*Failure to Deliver  
Facility Output:*

In the event Seller fails to deliver Facility Output, Seller shall pay Buyer the following damages ("Failure to Deliver Damages"):

The replacement cost for such deficiency calculated by multiplying the amount of the deficiency by the positive difference, if any, of the Replacement Price less the Generation Contract Price; provided, however, such amount shall not be less than zero dollars (\$0.00). The "Replacement Price" shall be the average day-ahead Intercontinental Exchange Mid-C Physical Peak (bilateral) or Mid-C Physical Off-Peak (bilateral) indices ("ICE DA Indices") for such month; plus

The incremental cost associated with Capacity Attributes, and/or carbon emissions costs incurred by the Buyer as a result of Seller's failure to deliver Facility Output; plus

Any incremental Ancillary Services and transmission costs incurred by Buyer; plus

Any penalties or fines imposed by a Reliability Entity as a result of Seller's failure to deliver.

"Reliability Entity" may include, without limitation, NERC, WECC, the Balancing Authority, Transmission Provider, regional transmission organization, independent system operator, reliability coordinator or any other entity that has, or that may have in the future, (i) responsibility over the reliability of the bulk power system and (ii) by virtue of such responsibility the legal authority to affect the operations of the Facility or delivery of the Product.

In the event Seller fails to deliver Environmental Attributes, including Bundled RECs, associated with the Facility Output, Seller shall settle any such shortfall as follows:

deliver an equivalent amount of Qualifying Replacement RECs that are generated in the same calendar year; or

If Seller elects not to deliver an equivalent amount of Qualifying Replacement RECs and Buyer elects in its sole discretion to purchase Qualifying Replacement RECs, Seller shall owe PGE the price that PGE actually pays for Qualifying Replacement RECs; or

	<p>If Seller elects not to deliver an equivalent amount of Qualifying Replacement RECs and Buyer does not elect, in its sole discretion, to purchase replacement bundled RECs under subpart (b), Seller shall owe Buyer the Qualifying Replacement REC Price identified by Buyer, multiplied by the number of Bundled RECs Seller failed to deliver.</p> <p><u>"Qualifying Replacement RECs"</u> means environmental attributes (including renewable energy credits and renewable energy credit reporting rights) that are delivered to Buyer bundled with energy produced simultaneously by a generating source that (A) is an Oregon Renewable Portfolio Standard eligible renewable energy resource, (B) produces environmental attributes (including renewable energy credits and renewable energy credit reporting rights) of the same type and quality as Environmental Attributes (including Bundled RECs and REC Reporting Rights), (C) is located in [Oregon or Washington], and (D) achieves commercial operation after the Commercial Operation Date.</p> <p><u>"Qualifying Replacement REC Price"</u> means the price for Qualifying Replacement RECs as determined by taking the lower of two dealer quotes representing a live offer to sell Qualifying Replacement RECs for the entire quantity of Bundled RECs that are being replaced and subtracting the value of the energy component of such quantity (as specified in the applicable dealer quotes) of such Qualifying Replacement RECs.</p>
<p><i>Monthly Settlement and Invoice:</i></p>	<p>All invoices shall be due on the tenth (10<sup>th</sup>) day of each month and payable on or before the later of the twentieth (20<sup>th</sup>) day of each month, or the tenth (10<sup>th</sup>) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day.</p> <p>The payment for all Products shall be the sum of the Energy Payment and Storage Capacity Payment.</p> <p>The Energy Payment for each month during the Delivery Term is equal to the sum of:</p> <p>the lesser of (i) the hourly Delivered Energy Quantity, or (ii) hourly Facility Output, each up to [110%] of the Guaranteed Output Threshold, multiplied by the Generation Contract Price; plus</p>



	<p>hourly Excess Energy multiplied by the lesser of (i) [93%] of the Market Index Price, or (ii) [75%] of the Generation Contract Price; plus</p> <p>for each hour that the Market Index Price is negative, the hourly Delivered Energy Quantity multiplied by [107%] of the Market Index Price.</p> <p>The Storage Capacity Payment for each month during the Delivery Term will be equal to:</p> <p>the Storage Contract Price multiplied by the Storage Contract Capacity;</p> <p>adjusted by the Guaranteed Round-Trip Efficiency Adjustment and Guaranteed Storage Monthly Availability Adjustment, if any;</p> <p>minus any Guaranteed Storage Contract Capacity LDs and Failure to Deliver Damages.</p>
<i>Market Index Price:</i>	The EIM real-time pre-dispatch nodal price for the Delivery Point. In the event Buyer is participating in an organized market other than the EIM, then the Market Index Price will mean the Locational Marginal Price associated with the Pricing Node or Aggregate Pricing Node for the Delivery Point within such organized market.
<i>Negative Price Event:</i>	When the Market Index Price is less than zero ("Negative Price Event"), Seller shall have the right, but not the obligation, to suspend part or all of its deliveries, via a reduction in Energy. Seller's obligation to deliver the Guaranteed Output Threshold shall be reduced by one (1) MWh for each substantiated MWh reduced due to a Negative Price Event.
<i>REC Transfer:</i>	Seller shall transfer all RECs generated by the Facility during each month of the Delivery Term to Buyer via WREGIS pursuant to the timelines in WREGIS Operating Rules.
<i>Operations and Maintenance:</i>	Seller shall not schedule any non-emergency maintenance that reduces the energy generation and/or storage capability of the Facility, as applicable, by more than ten percent (10%) during the months of June through September, unless (i) such outage is required to avoid damage to the Facility, (ii) such maintenance is necessary to maintain equipment warranties and cannot be scheduled

	<p>outside the months of June through September, (iii) such outage is required in accordance with prudent electrical practices, or (iv) the parties agree otherwise in writing.</p> <p>Seller shall provide its outage schedule no later than September 1st of each year preceding such outage(s).</p> <p>The outage schedule for each Contract Year shall not exceed 200 hours.</p>
<i>RPS Compliance:</i>	<p>Seller shall ensure the Facility obtains Oregon RPS Certification within ninety (90) days of the Commercial Operation Date and shall maintain such certification during the Delivery Term.</p>
<i>Labor Requirement:</i>	<p>Union labor must be utilized for major construction activities related to the Facility and must include a Project Labor Agreement requirement in any related executed Engineering, Procurement and Construction Agreements.</p> <p>The labor group that constructs and maintains the Facility must have policies in place that are designed to limit or prevent workplace harassment and discrimination.</p> <p>Additionally, such labor group must have policies in place that are designed to promote workplace diversity, equity and inclusion of communities who have been traditionally underrepresented in the renewable energy sector including, but not limited to, women, veterans and Black, Indigenous and People of Color, with an aspirational goal of having at least fifteen (15) percent of the total work hours performed by individuals from those communities.</p>
<i>Buyer Conditions Precedent:</i>	<p>Buyer's obligations shall be conditioned and will become effective only upon the occurrence of each and every one of the following conditions:</p> <p>[(i) receipt of approval from the Oregon Public Utility Commission, in form and substance satisfactory in Buyer's sole discretion; and</p> <p>(ii) written approval of the PPA by Buyer's Board of Directors.]</p>
<i>Seller Conditions Precedent:</i>	<p>[ Seller CPs]</p>

<p><i>Security Requirements:</i></p>	<p>Within thirty (30) days after the Effective Date of the PPA, Seller shall deliver development security to Buyer in an amount equal to \$200/kW of Generating Facility Nameplate and \$200/kW of Storage Facility Nameplate Capacity and shall maintain such development security until the Commercial Operation Date.</p> <p>On or before Commercial Operation Date, Seller shall deliver delivery term security to Buyer in an amount equal to \$100/kW of Generating Facility Nameplate and \$100/kW of Storage Facility Nameplate Capacity and shall maintain such delivery term security through the end of the Delivery Term. Within five (5) Business Days following any draw by Buyer on the delivery term security, Seller shall replenish the amount drawn such that the delivery term security is restored to the full amount.</p> <p>All security shall be in the form of cash or a letter of credit from a Qualified Institution as defined below and in a form reasonably acceptable to Buyer.</p> <p>"Qualified Institution" means a major U.S. commercial bank or a U.S. branch office of a major foreign commercial bank which is acceptable to PGE, organized under the laws of the United States (or any state or political subdivision thereof) with such bank having shareholders' equity of at least \$10 billion (U.S. Dollars) and a Credit Rating of at least A- by S&amp;P or A1 by Moody's, or an insurance company with assets of \$2 billion or greater, an A.M. Best financial strength rating of an A or greater and authorized to issue surety bonds in the state in which the project will be located. On a case by case basis PGE will accept banks that do not meet the above criteria as Qualified Institutions if they have received an endorsement from an institution that does meet the criteria in the Qualified Institution definition.</p>
<p><i>Assignment:</i></p>	<p>Neither party may assign the PPA without prior written consent of the other party, which consent may not be unreasonably withheld or delayed.</p> <p>Any direct or indirect change of control of Seller (whether voluntary or by operation of law) will be deemed as an assignment and will require the prior written consent of the Buyer.</p>

	Seller shall pay Buyer's reasonable expenses incurred to provide consents, estoppels, or other required documentation in connection with Seller's financing for the Facility.
<i>Other Standard Contract Terms and Conditions to be included in the PPA:</i>	The PPA will include additional terms and conditions that are usual and customary in transactions of its nature.
<i>Termination Settlement Amount:</i>	<p>In the event the PPA is terminated due to an event of default, the non-defaulting party shall calculate the Settlement Amount. The defaulting shall pay the Settlement Amount to the non-defaulting party.</p> <p>The Gains or Losses resulting from the termination of the PPA shall be determined by calculating the amount that would be incurred or realized to replace or to provide the economic equivalent of the remaining payments or deliveries in respect of the PPA. The Gains or Losses shall be calculated for a period equal to the remaining Term ("Settlement Period"). The quantity of Energy in each month of the Settlement Period associated with Generating Facility shall be equal to the Expected Output for such month. The storage capacity in each month of the Settlement Period shall be equal to the Storage Contract Capacity as of the Termination Date.</p> <p><u>"Settlement Amount"</u> means the Losses or Gains, and Costs, expressed in USD, which the non-defaulting party incurs as a result of the termination and liquidation of the PPA. If the non-defaulting party's Costs and Losses exceed its Gains, then the Settlement Amount shall be an amount owing to the non-defaulting party. If the non-defaulting party's Gains exceed its Costs and Losses, then the Settlement Amount shall be zero dollars (\$0). The Settlement Amount shall not include consequential, punitive, exemplary or indirect or business interruption damages.</p> <p><u>"Gains"</u> means, with respect to a party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of its</p>



	<p>obligations with respect to the PPA determined in a commercially reasonable manner.</p> <p><u>"Losses"</u> means, with respect to a party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from termination of its obligations with respect to the PPA determined in a commercially reasonable manner.</p> <p><u>"Costs"</u> means, with respect to a party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party in entering into new arrangements which replace this Agreement and all reasonable attorneys' fees and expenses incurred by a Party in connection with enforcing its rights under the Agreement. Costs shall not include any expenses incurred by such Party in either entering into or terminating any arrangement pursuant to which it has hedged its obligations.</p>
<i>Confidentiality:</i>	<p>This Term Sheet and all information exchanged during negotiations of the PPA are confidential, subject to the Non-Disclosure Agreement between Buyer and Seller dated [Date].</p>

# 1. Qualifications

Entity Requirement	As applicable, entities must be authorized under the law to sell power, and able to schedule power and operate under industry standards established by the Federal Energy Regulatory Commission (FERC), Western Electricity Coordinating Council (WECC), and the North American Energy Reliability Council (NERC), or other applicable regulatory body or government agency.
Financing Requirement	As applicable, counterparty must provide a reasonable plan to obtain project financing. Those counterparties who are unable to internally or balance sheet finance the proposed project (supported by appropriate financial statements) must provide evidence of a good faith commitment from a financial institution or lender.
Technology Eligibility	PGE will accept resource core technologies that are commercially proven and deployed at large scales within the North American utility industry. Renewable resources must be RPS eligible.
Qualifying Product	<p>PGE shall be the offtake for all output from the facility or portion of the facility. Projects must include all power attributes including associated renewable energy credits, environmental attributes, energy benefits, and capacity benefits.</p> <p>Counterparty is responsible for ensuring RECs are established in WREGIS.</p>
Nameplate Requirement	Resources must be large enough to qualify for contracting under PGE's Schedule 202 for qualifying facilities. <sup>3</sup> Solar resources must be larger than 3 MW and all other facilities must be larger than 10 MW. If a Counterparty already has a Schedule 202 agreement with PGE, they are welcome to include such the resource subject of agreement, but PGE does not guarantee that the Counterparty will be excused from the existing agreement.

<sup>3</sup> This requirement is consistent with OAR 860-089-0250(4).

Term Length	PGE requires a 15-year minimum term and a 30-year maximum term for those agreements.
Tax Credit Eligibility	Renewable resources must be eligible for the federal PTC or ITC and must provide a narrative on how the project will obtain the tax credits.
Credit	Counterparties must meet PGE's credit eligibility thresholds. For investment grade Counterparties, their long-term, senior unsecured debt must be rated BBB- or higher by Standard & Poor's and Fitch, BBB (low) or higher by DBRS, or Baa3 or higher by Moody's Investor Services, Inc. For non-investment grade Counterparties, they must demonstrate that a qualified institution will secure the Counterparties performance obligations through a letter of credit or guaranty, in a form acceptable to PGE.
Site Control	<p>Counterparties must demonstrate dependable site control, for both the location of the resource and any gen-tie path that is required. Counterparties must possess at least one of the following:</p> <ul style="list-style-type: none"> <li>title to the site</li> <li>an executed lease agreement</li> <li>an executed easement</li> <li>an executed option agreement applicable to a minimum of 80% of the project site</li> </ul> <p>The site control documents should reflect the resource type.</p> <p>Counterparties will be required to demonstrate site control for 100% of the project site.</p>
Permitting	Please see the chart in <a href="#">Exhibit A</a> that denotes permitting requirements.
Acceptable Delivery Points	<p>PGE will accept delivery within PGE's balancing authority area and at BPAT.PGE. PGE will not accept delivery at Pelton Round Butte or at PacifiCorp West.</p> <p>The BPAT.PGE Point of Delivery is associated with the following substations or "sinks":</p> <ul style="list-style-type: none"> <li>PGE Contiguous</li> <li>Pearl 230 kV (Sherwood)</li> <li>McLoughlin 230 kV</li> <li>Keeler 230 kV (St. Marys)</li> </ul>

	<p>Rivergate 230 kV</p> <p>Bethel 230 kV <sup>4</sup></p> <p>Troutdale 230 kV (Blue Lake)</p>
Interconnection	<p>Counterparties must have completed an interconnection facilities study before entering into negotiations with PGE</p> <p>If interconnection involves a 3rd party other than the transmission provider, the bid must also include an interconnection request to the 3rd party and all associated studies.</p> <p>Resources located on PGE's system must be studied as Network Resource Interconnection Service.</p> <p>Resources located off-system can be studied as Energy Resource Interconnection Service or Network Resource Interconnection Service.</p>
Transmission Requirements	<p>Renewable Resources</p> <p>Eligible transmission service products include:</p> <p>long-term firm transmission service,</p> <p>long-term conditional firm bridge, number of hours, or</p> <p>long-term conditional firm reassessment, number of hours</p> <p>To qualify, a counterparty must have eligible transmission service described above that is equivalent to at least 80 percent of the facility's interconnection limit. The eligible transmission service must originate at the POR/POI and provide delivery to one of the acceptable points of delivery, defined above, prior to project COD.</p> <p>Counterparties relying on BPA for transmission service are required to have either: 1) previously granted eligible transmission service, or 2) an eligible and active OASIS status Transmission Service Request (TSR) participating in the BPA TSR Study and Expansion Process.</p> <p>PGE's will determine if there are additional costs or risks to deliver the resource to PGE load.</p> <p>If a Counterparty has a TSR that utilizes Newpoint as the POR, the TSR must reference the specific Generation</p>

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<sup>4</sup> At this time the Bethel 230 kV POD has been determined to have insufficient available capacity and is unavailable for new transmission service requests. However, Counterparties that have already been granted long-term service at this POD may use this POD.



	Interconnection Request number for the resource in the comments field.
Integration	For projects located outside of PGE's Balancing Authority Area, PGE will determine and elect integration services necessary to ensure delivery of energy to the Point of Delivery. For a third party owned project, PGE will reimburse projects for integration services elected by PGE. Integration Services include, but are not limited to, generation imbalance, variable energy resource balancing service and any EIM costs associated with interconnection. Integration Services do not include ancillary service costs associated with the transmission provider's provision of firm transmission service.
Labor Requirement	<p>Union labor must be utilized for major construction activities related to the resource and must include a Project Labor Agreement requirement in any related executed Engineering, Procurement and Construction Agreements.</p> <p>PGE requires that the labor group has policies in place that are designed to limit or prevent workplace harassment and discrimination.</p> <p>PGE will be asking that the labor group has policies in place that are designed to promote workplace diversity, equity and inclusion of communities who have been traditionally underrepresented in the renewable energy sector including, but not limited to, women, veterans and Black, Indigenous and People of Color, with an aspirational goal of having at least 15 percent of the total work hours performed by individuals from those communities.</p> <p>PGE requires that counterparties recognize this requirement upon bidding and affirm their commitment to meet the requirement. However, PGE does not expect a counterparty to have secured a PLA prior to contract execution with PGE as it is customary to negotiate such labor agreements closer to construction activities.</p>
Accepted equipment manufacturers for utility owned resources	All major equipment manufacturers must be PGE preferred vendors.



Home > Clean Energy Choices > Green Future Impact

Green Future Impact helps your business, city or county meet its ambitious sustainability and carbon reduction goals with the opportunity to source up to 100% of your electricity from a new regional wind or solar facility that you make possible.

PGE has two options for enrollment in Green Future Impact, phase 2. To learn more about each of these options, click on the links below.

#### October 2022

1. PGE Supplied Option (PSO) is expected to open a queue to participate in Q1 2023
2. Customer Supplied Option (CSO) is fully subscribed as of Feb. 14, 2022

Please email us at [greenfutureimpact@pgn.com](mailto:greenfutureimpact@pgn.com) if you have any questions.



### Program participants

Cities and businesses are leading the way to a clean energy future here in Oregon. We're proud to offer more ways to meet the demand for renewables, which is stronger than ever.

Currently, the following businesses and municipalities are leading the way with Green Future Impact:

- Adobe
- Comcast
- Daimler Trucks North America
- Digital Realty
- Intel
- Multnomah County
- Oregon Health & Science University
- Portland State University
- Portland Community College
- The City of Beaverton
- The City of Hillsboro
- The City of Lake Oswego
- The City of Milwaukie
- The City of Portland
- The City of Salem
- The City of West Linn
- The City of Wilsonville
- Washington County



### What you get

- Additional options for sourcing up to 100% renewable energy.
- The ability to purchase full output of a facility or just a share of it.
- The knowledge that you're helping to bring a new, local renewable resource online.
- A more tangible connection with your renewable power resource.
- Predictable, energy prices through a long-term contract.



### Oregon's largest solar facility gets named

Customers that subscribed to Green Future Impact had the opportunity to name their new solar facility. By overwhelming support, they picked Pachwaywit Fields. The project is located on ceded lands of the Confederated Tribes of the Warm Springs in Gilliam County. The name pays homage to lands traditionally stewarded by the Warm Springs and Umatilla Tribes.

Pachwaywit, pronounced Patch-Why-Wit, means "sun" in the Sahaptin language and ties Oregon's largest solar facility with the land's rich history and stewardship.

### Newest participant catalyzes second major solar facility

Intel has signed up as the single largest participant in Green Future Impact, catalyzing a second renewable solar facility in Wasco County, Oregon. This new facility will produce a significant portion of the energy needed to power its advanced technology development and manufacturing facilities in Hillsboro, Oregon.

Together, Green Future Impact customers are bringing more and more renewable energy facilities online, more than tripling the amount of solar installed in Oregon.



Green Future Choice, Green Future Block, Green Future Solar, Green Future Enterprise and Green Future Impact are service marks of Portland General Electric Company.

## **Attachment 8. Mitigation Correspondence**

From: Natasha Bellis <natasha@deschuteslandtrust.org>  
Sent: Friday, October 28, 2022 11:58 AM  
To: Hutchinson, Matthew  
Cc: Gofand, Kristen; PATRICK, MARCELLA  
Subject: Re: Avangrid/Oregon Trail Solar - Letter of Support

EXTERNAL SENDER: Be cautious, especially with links and attachments. Report phishing if suspicious.

Hi Matt,  
I am confirming that Bakeoven Solar, LLC and Day Break Solar, LLC have satisfied the payment terms of the Habitat Mitigation MOU with the Deschutes Land Trust.

Regards,  
Natasha

Natasha Bellis  
Pronouns: she/her/hers  
Conservation Director  
Deschutes Land Trust  
210 NW Irving Avenue, Suite 102  
Bend, Oregon 97703  
O (541) 330-0017  
M (971) 215-3300  
[deschuteslandtrust.org](mailto:deschuteslandtrust.org)

On Oct 28, 2022, at 10:58 AM, Hutchinson, Matthew <[matt@awangrid.com](mailto:matt@awangrid.com)> wrote:

Natasha,

Avangrid is amending Site Certificate for the Oregon Trail Solar project in Gilliam County to delay the start of construction, and ODOE is requiring is us to re-verify Avangrid's organizational experience for implementing habitat mitigation. Can you help us by confirming that Bakeoven Solar, LLC and Day Break Solar, LLC have satisfied the payment terms of the Habitat Mitigation MOU with Deschutes Land Trust? A simple response to this email will help and be much appreciated.

Thanks,  
Matt

<image001.jpg>

Matt Hutchinson  
Senior Energy Developer  
2701 NW Vaughn St, Suite 300  
Portland, OR 97210  
503-701-0865  
[matt@awangrid.com](mailto:matt@awangrid.com)

<image002.png> In the interest of the environment,  
please print only if necessary and recycle.

Internal Use

Please consider the environment before printing this email.  
If you have received this message in error, please notify the sender and immediately delete this message and any attachment herein and/or copy thereof, as such message contains confidential information intended solely for the individual or entity to whom it is addressed. The use or disclosure of such information to third parties is prohibited by law and may give rise to civil or criminal liability.  
The views presented in this message are solely those of the author(s) and do not necessarily represent the opinion of Avangrid Renewables, LLC, or any company of its group. Neither Avangrid Renewables, LLC, nor any company of its group guarantees the integrity, security or proper receipt of this message. Likewise, neither Avangrid Renewables, LLC, nor any company of its group accepts any liability whatsoever for any possible damages arising from, or in connection with, data interception, software viruses or manipulation by third parties.





Oregon  
Kate Brown, Governor

Parks and Recreation Department  
State Historic Preservation Office  
725 Summer St NE Ste C  
Salem, OR 97301-1266  
Phone (503) 986-0690  
Fax (503) 986-0793  
[www.oregonheritage.org](http://www.oregonheritage.org)



August 30, 2022

Ms. Sarah Esterson  
ODOE  
550 Capitol St NE, 1st Flr  
Salem, OR 97301

RE: SHPO Case No. 10-0378  
ODOE, Avangrid Renewables Montague Wind Power, NWP-2010-86  
Wind farm  
(1N 20E 1, 12) (1N 21E 1, 4, 5, 6, 7, 8), Arlington, Gilliam County

Dear Ms. Esterson:

This letter is to acknowledge the receipt of the final Gilliam County Barns survey report and database, prepared as part of the requirements for the issuance of an Oregon Department of Energy license. The project was found during review by our office to have an adverse effect on a historic barn, and per the regulations associated with the Energy Facility Siting process this adverse effect was resolved through the negotiation and implementation of these measures.

The requirement is met, and the required reporting and data are received. We therefore consider this case closed, and consultation with our office complete. If you have any questions, or would like to discuss this case or the documents referred to above, please feel free to contact our office.

Sincerely,

Jason Allen, M.A.  
Historic Preservation Specialist  
(503) 986-0579  
[jason.allen@oprds.oregon.gov](mailto:jason.allen@oprds.oregon.gov)

cc: Marcia Montgomery, Jacobs Engineering Group Inc.



# **Attachment 9. Oregon Trail Solar Facility 2022 Habitat and Rare Plants Survey Report**

# Memo

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To:	Steve Cherry, Oregon Department of Fish and Wildlife Sarah Esterson, Oregon Department of Energy
Cc:	Matt Hutchinson, Avangrid; Paul Hicks, Tetra Tech
From:	Kate Atkins, Tetra Tech
Date:	July 29, 2022
Subject:	Oregon Trail Solar 2022 Habitat and Rare Plants Survey Report

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## Introduction

The Oregon Trail Solar Facility (Facility) is a not-yet-constructed 41 megawatt (MW) electric power generating plant approved to consist of a combination of up to 16 wind turbines and a solar photovoltaic array on up to 1,228 acres. The Facility is located within an overall site boundary of approximately 13,866 acres. Oregon Trail Solar, LLC (Oregon Trail Solar), a wholly owned subsidiary of Avangrid Renewables, LLC, contracted with Tetra Tech, Inc. (Tetra Tech) to conduct a habitat and rare plants reconnaissance survey within the Oregon Trail Solar Micrositing Area (Figure 1). The objectives of the survey were to verify habitat within the Oregon Trail Solar Micrositing Area and a corridor along the path of a proposed, alternative underground 34.5-kilovolt collector line, including an assessment of habitat quality, and to assess the potential for the occurrence of special status wildlife and vascular plant species.

## Methods

The Survey Area (1,443.4 acres) is defined as the Oregon Trail Solar Micrositing Area and an adjacent corridor which overlaps the Montague Solar Facility (Montague Solar, Figure 1). Tetra Tech used aerial photography, topographic maps, previously defined habitat mapping, and the site reconnaissance survey to identify habitat types and verify or revise habitat polygons within the Survey Area (Montague Wind 2019, Jacobs 2020). Habitat was mapped and classified per the habitat categories set forth in Oregon Administrative Rules (OAR) 635-415-0025, including an assessment of habitat quality. Habitat was assessed specifically to determine suitability for the following threatened, endangered, and candidate species previously identified as having the potential to occur at the Facility: the state-endangered Washington ground squirrel (*Urocitellus*

*washingtoni*; WGS), the state-threatened plant species, Laurent's milk-vetch (*Astragalus collinus* var. *laurentii*), and the state candidate plant species, sessile mousetail (*Myosurus sessilis*) and dwarf evening primrose (*Camissonia pygmaea*; Montague Wind 2019, Jacobs 2020).

In the field, biologists used ESRI FieldMaps software to confirm or redefine areas of relatively homogenous vegetation. Habitat was mapped and classified per the habitat categories set forth in OAR 635-415-0025, including an assessment of habitat quality. If a biologist determined that a habitat type designation or categorization did not correspond to conditions previously described, or that the extent of a previously described area had changed, that area would be surveyed to assess habitat type and category in a manner consistent with previously applied definitions (Montague Wind 2019, Jacobs 2020). Surveyors utilized a minimum mapping unit of 1 acre. Observations of state-designated noxious weeds, state sensitive, threatened, and endangered wildlife species, and state-threatened, endangered, and candidate vascular plant species were recorded if observed (ODA 2020, ODA 2022a, ODA 2022b, ODFW 2021a, ODFW 2021b).

## Results

Tetra Tech conducted the field survey on May 28, 2022. Based on aerial imagery and previous habitat mapping (i.e., Montague Wind 2019, Jacobs 2020), habitat within the Survey Area was primarily composed of category 6 Dryland Wheat. The biologist confirmed that the condition of the Solar Micrositing Area, west of Weatherford Road, remains category 6 Dryland Wheat, with some areas under active cultivation and limited areas of bare, fallow fields (Table 1, Photo 1, Figure 1, Figure 2). East of Weatherford Road, the Montague Solar Facility (Montague Solar) is under construction. The proposed collection corridor adjacent to the Solar Micrositing Area overlaps with the site boundary for Montague Solar. Prior to construction of Montague Solar, the habitat in this overlapping area was category 6 Dryland Wheat. The habitat in this area is now a combination of category 6 Developed (Montague Solar) and category 4 Exotic Annual Grassland (Table 1, Photo 2, Figure 1, Figure 2). The grassland areas in the former Dryland Wheat fields are dominated by the non-native cheatgrass (*Bromus tectorum*) and tumble mustard (*Sisymbrium altissimum*), with areas of Russian thistle (*Salsola spp.*) and traces of wheat (*Triticum aestivum*).

**Table 1. Habitat Survey Area**

Habitat Category	Habitat Type and Subtype	Acres <sup>1</sup>
6	Developed-Dryland Wheat (DW)	1,221.6
6	Developed-Other (DX)	130.8
4	Exotic Annual Grassland (GA)	91
<b>Total</b>		1,443.4
1. Totals may not be precise due to rounding.		





**Photo 1.** Southeast corner of Solar Micrositing Area, looking west. Category 6 Dryland Wheat.



**Photo 2.** Habitat in corridor east of Solar Micrositing Area, north of Montague Solar Facility fence line. Category 4 Exotic Annual Grassland, previously Category 6 Dryland Wheat. Looking east/southeast from Weatherford Road.

Sessile mousetail occurs in alkali flats and vernal pools. This habitat is absent within the Survey Area. Dwarf evening primrose can occur in disturbed habitat such as along roadcuts; however, the likelihood of its occurrence in recently disturbed areas of Exotic Annual Grasslands within former Dryland Wheat fields is low. The survey occurred when this annual species is generally recognizable, between June and August. Laurent's milk-vetch occurs in sandy or rocky soils on dry slopes and is commonly associated with native plant species such as bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda*) and non-native cheatgrass. The composition of the recently disturbed areas (no native species observed) suggest that these areas are not appropriate habitat for Laurent's milk-vetch. No *Astragalus* species were observed. No special status vascular plant species were observed during the survey. No major infestations of noxious weeds were recorded.

Category 6 habitat is not appropriate habitat for the Washington ground squirrel. This species can occur within category 4 Exotic Annual Grassland habitat; however, these former agricultural areas are bounded on all sides by barriers to the dispersal of this species: category 6 Dryland Wheat to the north and west, an asphalt road to the east, and a category 6 Developed-Other solar facility to the south (Figure 1). The likelihood of occurrence of this species within the areas of Exotic Annual Grassland around Montague Solar are low. No WGS or sign of WGS (scat, calls, burrows) were observed. The survey occurred during the time period when WGS are most active (March-May). No sensitive, threatened, or endangered wildlife species were observed.

## References

- Jacobs. 2020. 2020 Washington Ground Squirrel Surveys and Habitat Mapping for Montague Solar Facility and Oregon Trail Solar Facility. September 2020.
- Montague Wind (Montague Wind Power Facility, LLC). 2019. Request for Amendment Number 4. April 2019.
- ODA (Oregon Department of Agriculture). 2020. Noxious Weed Policy and Classification System. <https://www.oregon.gov/oda/shared/Documents/Publications/Weeds/NoxiousWeedPolicyClassification.pdf>. Accessed June 2022.
- ODA. 2022a. Oregon Listed Plants by County for Gilliam County. Available online at: <http://www.oregon.gov/ODA/programs/PlantConservation/Pages/ListedPlants.aspx>. Accessed June 2022.
- ODA. 2022b. Oregon's Threatened, Endangered, and Candidate Plants. Available online at: <https://www.oregon.gov/oda/programs/PlantConservation/Pages/AboutPlants.aspx>. Accessed June 2022.

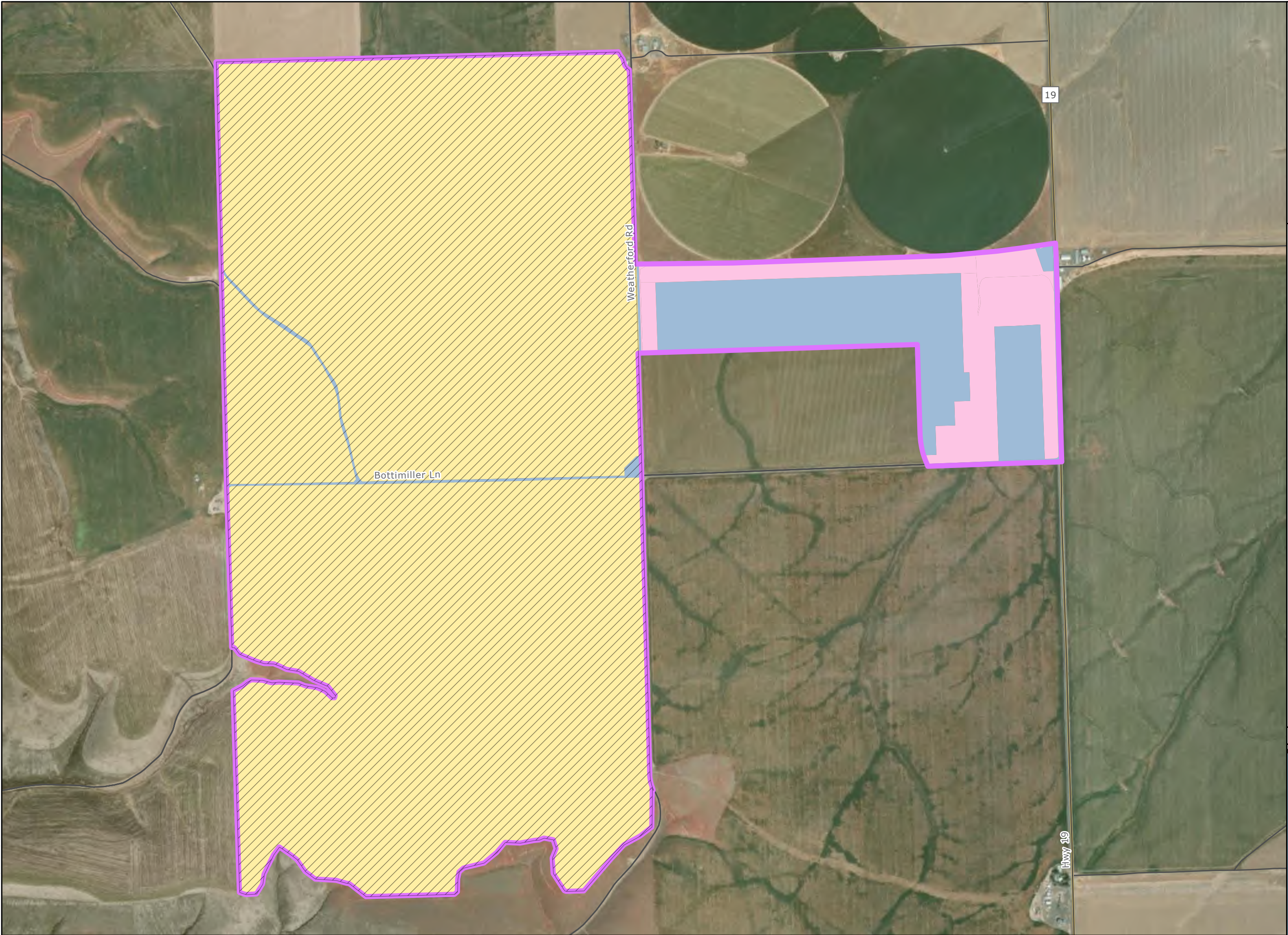
ODFW. 2021a. Oregon Department of Fish and Wildlife Sensitive Species List. Available online at: [http://www.dfw.state.or.us/wildlife/diversity/species/docs/Sensitive\\_Species\\_List.pdf](http://www.dfw.state.or.us/wildlife/diversity/species/docs/Sensitive_Species_List.pdf). Accessed June 2022.

ODFW. 2021b. Threatened, Endangered and Candidate Fish and Wildlife Species. Available online at: [https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened\\_and\\_Endangered\\_Species.pdf](https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf). Accessed June 2022.

## FIGURES



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# Oregon Trail Solar Facility

**Figure 1**  
**2022 Habitat and Rare Plants**  
**Site Reconnaissance Results**  
**Habitat Types**

GILLIAM COUNTY, OR

- 2022 Survey Area
- Solar Micrositing Area
- State Highway
- Local Roads
- Habitat Types**
  - Developed-Dryland Wheat (DW)
  - Developed-Other (DX)
  - Exotic Annual Grassland (GA)

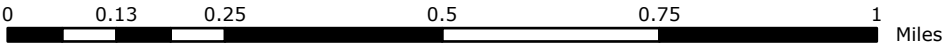


## Reference Map



1:14,000

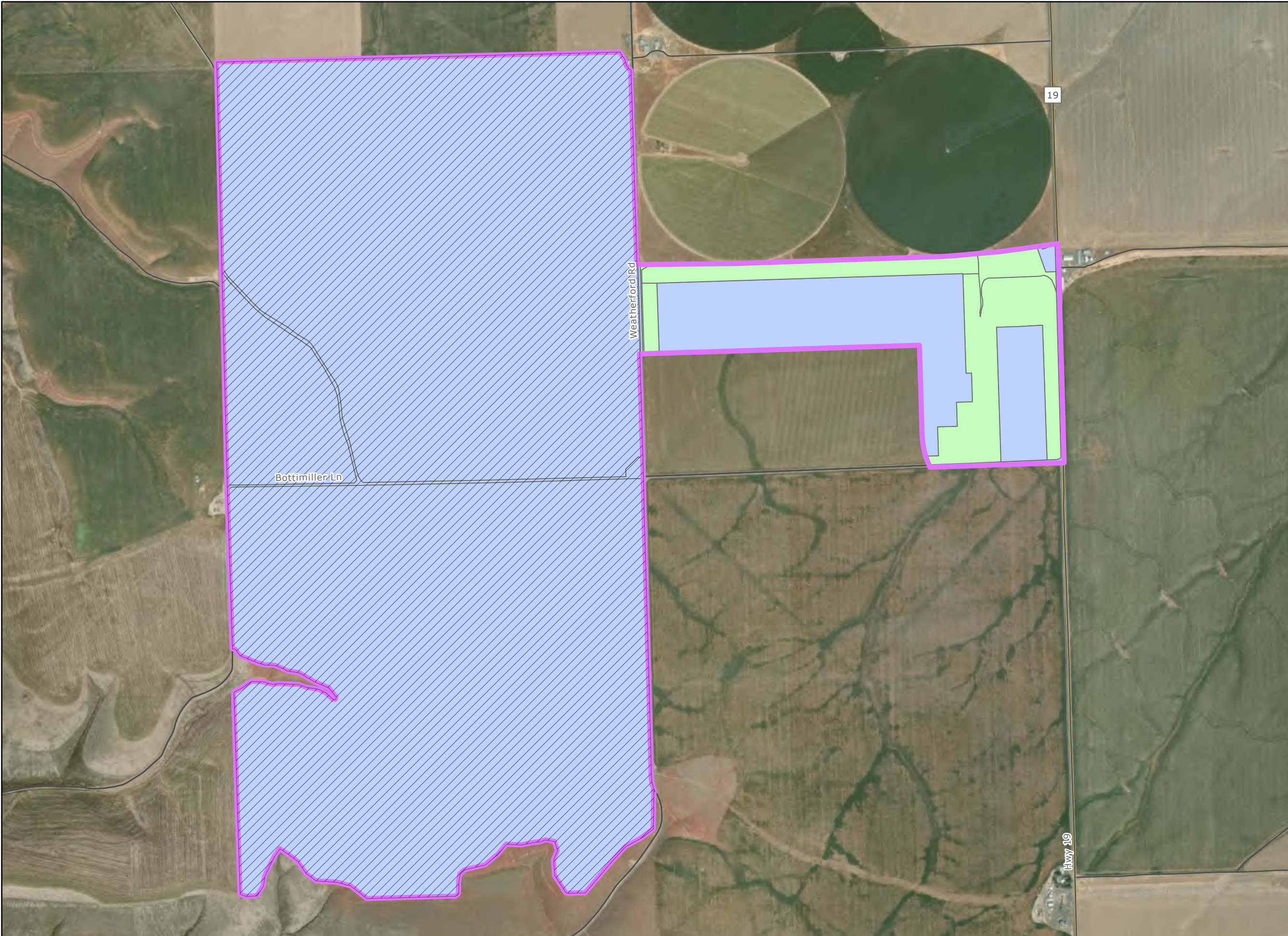
WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



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# Oregon Trail Solar Facility

**Figure 2**  
**2022 Habitat and Rare Plants**  
**Site Reconnaissance Results**  
**Habitat Categories**

GILLIAM COUNTY, OR

- 2022 Survey Area
- Solar Micrositing Area
- State Highway
- Local Roads
- Habitat Category
  - 6 (DW, DX)
  - 4 (GA)



## Reference Map



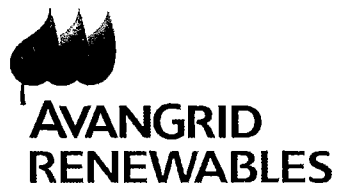
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WGS 1984 UTM Zone 10N

0 0.13 0.25 0.5 0.75 1 Miles

NOT FOR CONSTRUCTION

## **Attachment 10. Landowner Consultation**



October 17, 2022

Ann Weatherford Flores  
201 Lamkin Street No 407  
Pueblo, CO 81003

Re: Solar Energy and Energy Storage Lease Agreement dated June 29, 2020 (the "Lease") by and between Ann Weatherford Flores ("Landowner"), and Oregon Trail Solar, LLC, an Oregon limited liability company (the "Lease")

Dear Ms. Flores.

The purpose of this letter is to document Oregon Trail Solar, LLC's ("Oregon Trail") compliance with Section 7.1 of the Lease. This section requires Oregon Trail to consult with you regarding the site development plan for the project prior to construction.

Attached are three drawings which describe and depict Oregon Trail's planned improvements on the Property. If you have any questions regarding these drawings, please contact me at the information below. Once you have reviewed the attached documents to your satisfaction, please sign below to acknowledge Oregon Trail's having consulted with you regarding the site development plan for the project. Once you have signed this letter, please return a complete, signed copy of the letter (including exhibits) to me at the following mailing or email address:

Matt Hutchinson  
2701 NW Vaughn St, Suite 300  
Portland, OR 97210  
Email Address [matthew.hutchinson@avangrid.com](mailto:matthew.hutchinson@avangrid.com)  
Phone (503) 701-0665

Thank you very much for your cooperation in this matter.

Sincerely,  
Matt Hutchinson

ACKNOWLEDGED



Ann Weatherford Flores

Dated 10/20/22

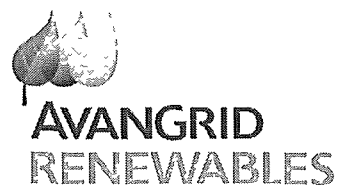
**Avangrid Renewables LLC**  
2710 NW Vaughn Street, Suite 300, Portland, OR 97210  
Telephone 503 796 7000

An equal opportunity employer





NO										REVISIONS										DATE			BY			CHK			APR			<div>M</div> <div>MOTT</div> <div>MACDONALD</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>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**VIA FEDEX**

October 17, 2022

Tim & Debbie Holz  
P.O. Box 224  
Ione, OR 97843

Re Solar Energy and Energy Storage Lease Agreement dated June 29, 2020 (the "Lease") by and between Timothy H. Holz, Deborah L. Holz, Jerry Rietmann and Lisa Rietmann (collectively, "Landowner"), and Oregon Trail Solar, LLC, an Oregon limited liability company (the "Lease")

Dear Mr and Mrs Holz

Avangrid Renewables ("Avangrid") is advancing the engineering design for the proposed solar project on your property. The purpose of this letter is to document Oregon Trail Solar, LLC's ("Oregon Trail") compliance with two requirements contained in the above-referenced Lease.

The first requirement is contained in Section 2.2.3 of the Lease. This section provides that Oregon Trail may "excavate, grade, level and otherwise modify the land included within the Property" provided Oregon Trail first obtains your approval to do so (and which approval shall not be unreasonably withheld). The second requirement is contained in Section 7.1 of the Lease. This section requires Oregon Trail to consult with you regarding the site development plan for the project prior to construction.

Attached are three drawings which describe and depict Oregon Trail's planned improvements on the Property. If you have any questions regarding these drawings, please contact me at the number below. Once you have reviewed the attached documents to your satisfaction, please have this letter signed by each of the parties indicated below to acknowledge (a) your approval of Oregon Trail's plans with regard to the excavating, grading and leveling of the Property, and (b) Oregon Trail's having consulted with you regarding the site development plan for the project. Once this letter has been signed, please return a complete, signed copy of the letter (including exhibits) to me at the following mailing or email address:

Matt Hutchinson  
2701 NW Vaughn St, Suite 300  
Portland, OR 97210  
Email Address [matthew.hutchinson@avangrid.com](mailto:matthew.hutchinson@avangrid.com)  
Phone (503) 701-0665

**Avangrid Renewables LLC**  
2710 NW Vaughn Street, Suite 300, Portland, OR 97210  
Telephone 503 796 7000

An equal opportunity employer

Thank you very much for your cooperation in this matter. Our engineering team is diligently working finalizing the design for the solar project and your timely response to this request is much appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Hutchinson". The signature is fluid and cursive, with the first name "Matt" and last name "Hutchinson" clearly distinguishable.

Matt Hutchinson  
Project Developer

Enclosures:

- Acknowledgement of site plan and grading plan review
- Site Plan
- Grading

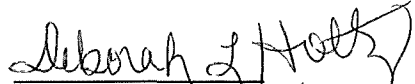
ACKNOWLEDGEMENT OF COMPLIANCE WITH SECTIONS 2 2 3 AND 7 1 OF  
SOLAR ENERGY AND ENERGY STORAGE LEASE AGREEMENT DATED JUNE 29, 2020

Acknowledged



Timothy H. ~~Holtz~~ HOLTZ

Dated 10/20/22, 2022



Deborah L. ~~Holtz~~ HOLTZ

Dated 10/20/22, 2022

~~Jerry Rietmann~~

~~Dated: \_\_\_\_\_, 2022~~

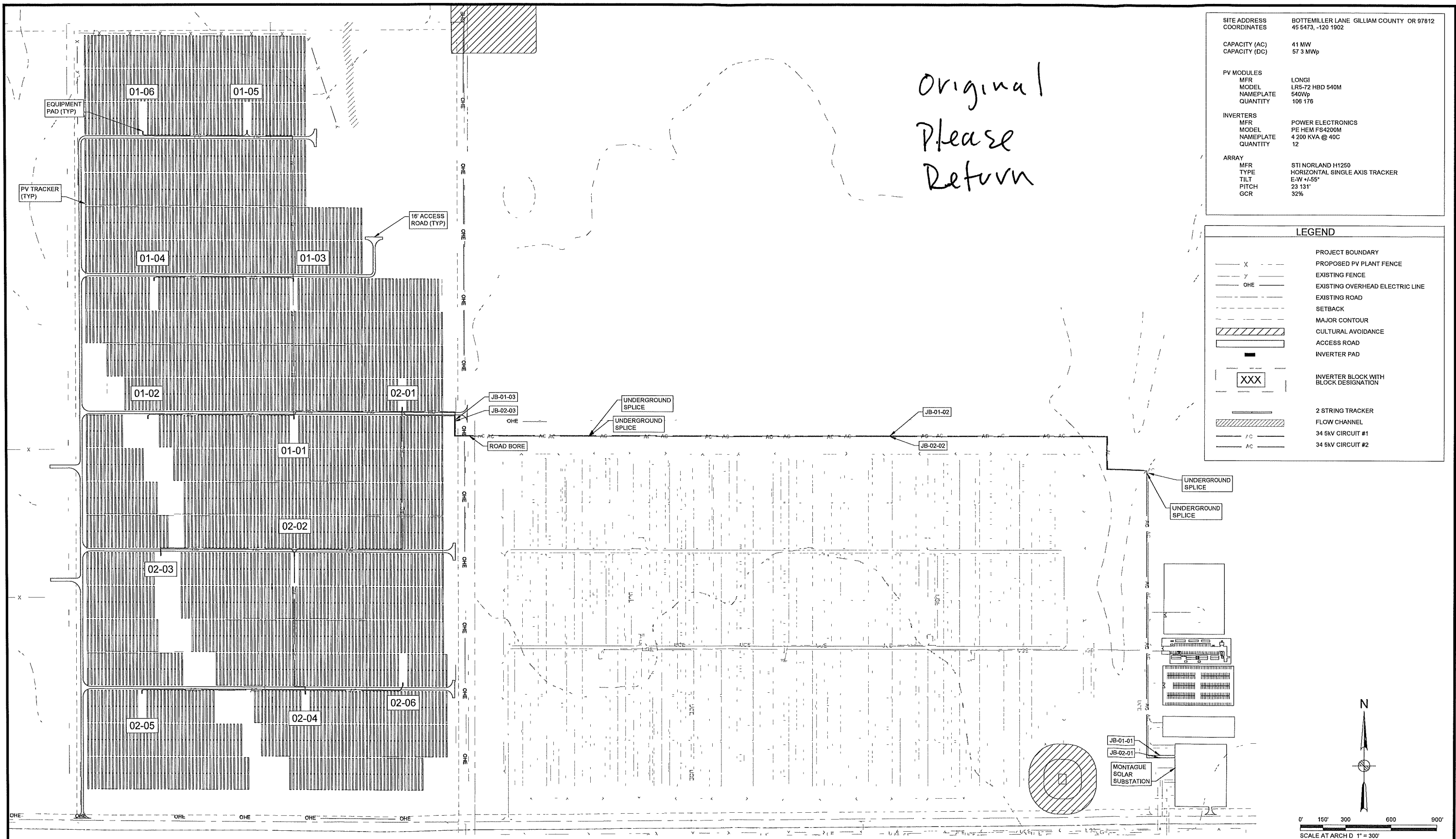
*NO LONGER LANDOWNER*

~~Lisa Rietmann~~

~~Dated: \_\_\_\_\_, 2022~~

*NO LONGER LANDOWNER*





SITE ADDRESS	BOTTEMILLER LANE GILLIAM COUNTY OR 97812
COORDINATES	45 5473, -120 1902
CAPACITY (AC)	41 MW
CAPACITY (DC)	57.3 MWp
PV MODULES	
MFR	LONGI
MODEL	LR5-72 HBD 540M
NAMEPLATE	540Wp
QUANTITY	106 176
INVERTERS	
MFR	POWER ELECTRONICS
MODEL	PE HEM FS4200M
NAMEPLATE	4 200 KVA @ 40C
QUANTITY	12
ARRAY	
MFR	STI NORLAND H1250
TYPE	HORIZONTAL SINGLE AXIS TRACKER
TILT	E-W +1.55°
PITCH	23 131'
GCR	32%

LEGEND	
---	PROJECT BOUNDARY
-X-	PROPOSED PV PLANT FENCE
-y-	EXISTING FENCE
-OHE-	EXISTING OVERHEAD ELECTRIC LINE
----	EXISTING ROAD
----	SETBACK
----	MAJOR CONTOUR
----	CULTURAL AVOIDANCE
----	ACCESS ROAD
----	INVERTER PAD
XXX	INVERTER BLOCK WITH BLOCK DESIGNATION
----	2 STRING TRACKER
----	FLOW CHANNEL
-FC-	34 5kV CIRCUIT #1
-AC-	34 5kV CIRCUIT #2

NO	REVISIONS	DATE	BY	CHK	APR
A	5% SUBMITTAL - ISSUED FOR REVIEW	12/02/20	SRA	BG	NJM
B	5% SUBMITTAL - REISSUED FOR REVIEW	12/09/20	SRA	BG	NJM
C	5% SUBMITTAL - REISSUED FOR REVIEW	01/08/20	SRA	BG	NJM
D	5% SUBMITTAL - REISSUED FOR REVIEW	08/13/21	JLL	M8	JS
E	10% SUBMITTAL - ISSUED FOR REVIEW	12/06/21	AHL	JL	JS
F	30% SUBMITTAL - ISSUED FOR REVIEW	09/02/22	RCH	JL	JS

NO	REVISIONS	DATE	BY	CHK	APR
G	30% SUBMITTAL - RE-ISSUED FOR REVIEW	10/07/22	RCH	JL	JS

M

M

MOTT

MACDONALD

AVANGRID

RENEWABLES

ENGINEERING RECORD	DATE
DRAWN J LIZALDE	08/13/21
DESIGNED J LIZALDE	08/13/21
CHECKED M BUDAY	08/13/21
APPROVED J SIERRA	08/13/21

CADFILE OTS-E-800-01 DWG

OREGON TRAIL SOLAR PROJECT

OVERALL SITE PLAN

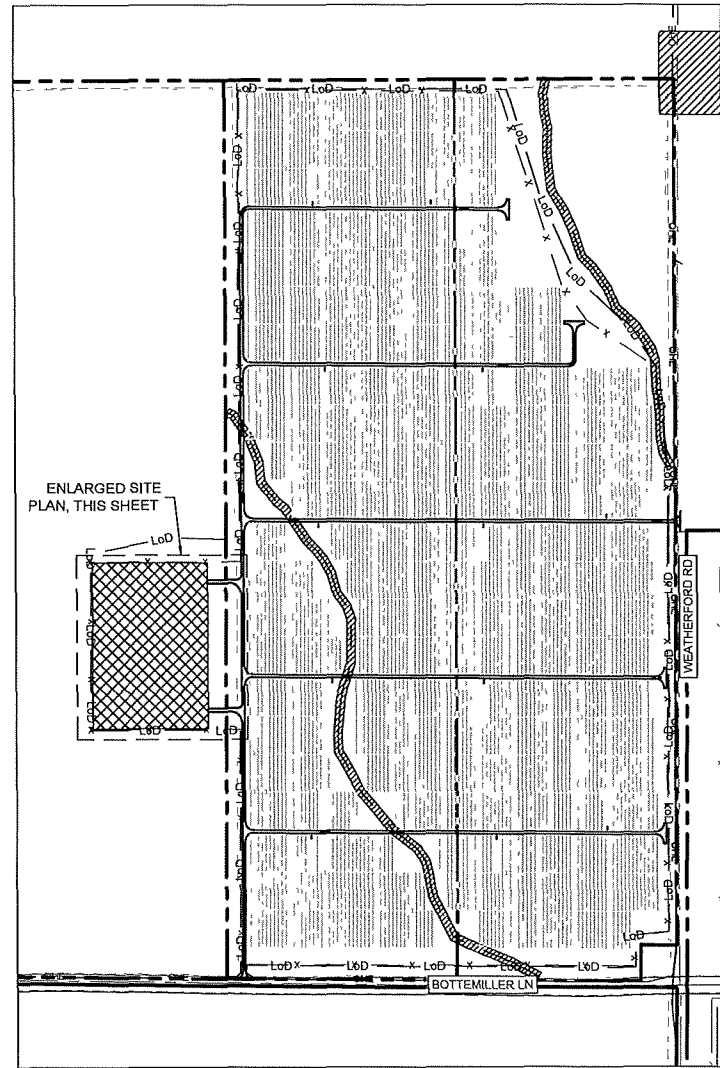
SCALE 1"=300'

DWG NO OTS-E-800-01

SHEET 1 OF 1

REV G

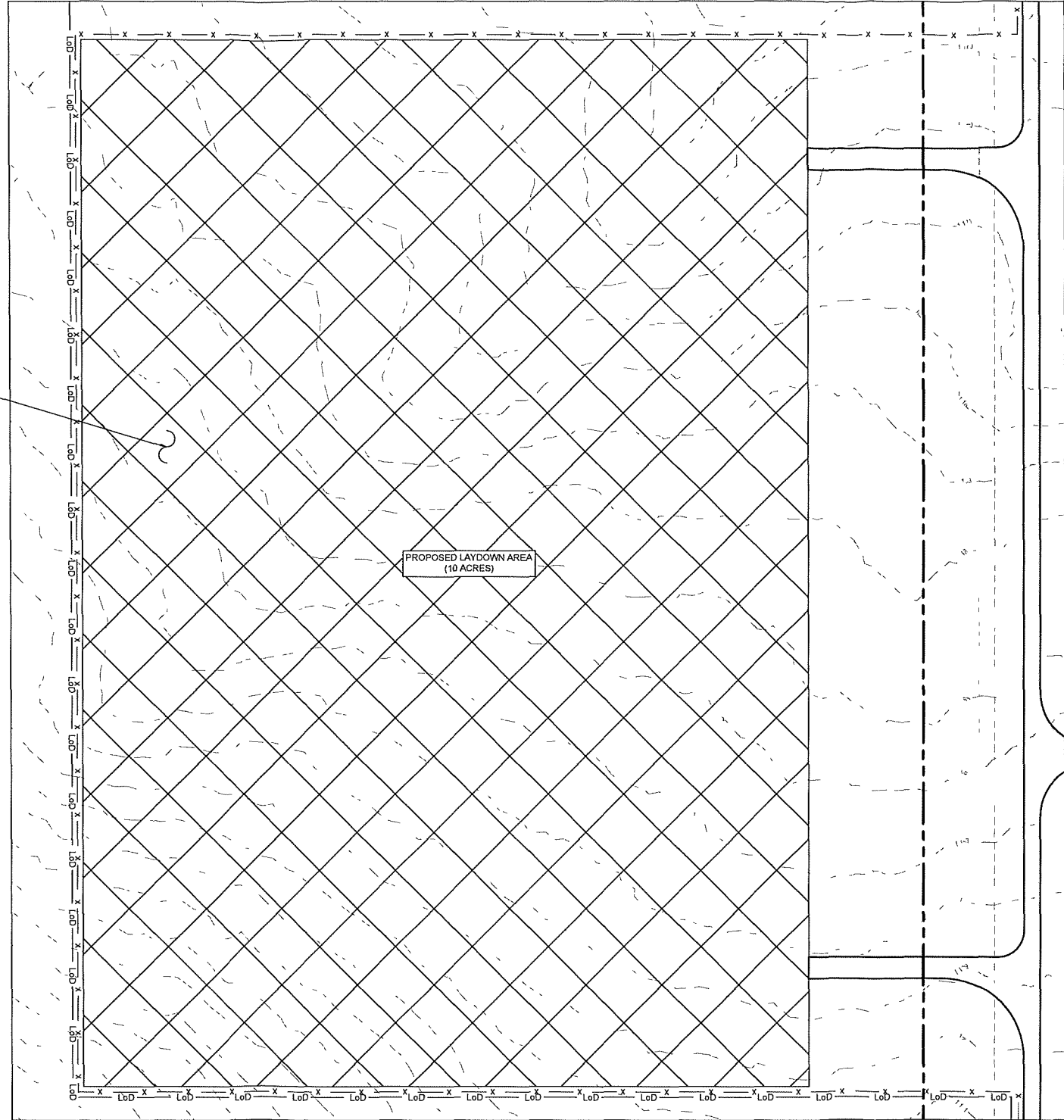




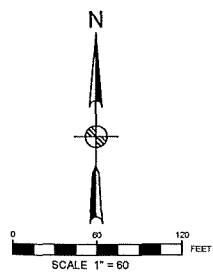
OVERALL SITE PLAN  
SCALE 1" = 500'

LEGEND	
— LoD — LoD —	LIMIT OF DISTURBANCE
— X — X —	PROPOSED PERIMETER FENCE
— — — —	PROJECT BOUNDARY
— — — —	OVERHEAD ELECTRIC LINE
— — — —	EXISTING ROAD
— — — —	SETBACK
— — — —	MAJOR CONTOUR
— — — —	NON JURISDICTIONAL DRAINAGE PATH CENTERLINE
— — — —	INVERTER PAD
— — — —	ACCESS ROAD
— — — —	LOW WATER CROSSING

SEE SHEET 810-4 DETAIL 1  
FOR TYPICAL LAYDOWN  
CROSS SECTION



ENLARGED SITE PLAN  
SCALE 1" = 60'



PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS			
REV	DESCRIPTION	DATE	BY
A	10% SUBMITTAL - ISSUED FOR REVIEW	12/06/21	CC
B	30% SUBMITTAL - ISSUED FOR REVIEW	10/07/22	LMB

NOTES

**M M**  
**MOTT**  
**MACDONALD**

Mott MacDonald LLC  
111 Wood Avenue South  
Iselin, NJ 08830-4112  
United States  
T +1 (973) 379-3400  
F +1 (973) 378-1072  
www.motmac.com  
License No. 184005406-0006

**AVANGRID**  
**RENEWABLES**

OREGON TRAIL  
SOLAR PROJECT  
LAYDOWN YARD PLAN

Drawn By: H C      Checked By: M H  
Design By: L L      Approved By: M H  
Scale: 1"=100'      Date Created: 12/06/2021  
Project Number: 507101346-503  
File Name: OTS-C-864-01 DWG  
Dwg No: OTS-C-864      Sht No: 01

GILLIAM COUNTY, OREGON		<b>2022-000028</b>
D-MEMO		
Cnt=1 Pgs=13 DAWNP	<b>01/24/2022 10:21:00 AM</b>	
\$65.00 \$11.00 \$10.00 \$60.00 \$20.00	\$166.00	
I, Ellen Wagenaar, County Clerk for Gilliam County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.		
Ellen Wagenaar - County Clerk		

**PREPARED BY:**

Oregon Trail Solar, LLC  
Attention: Land Management  
1125 NW Couch, Suite 700  
Portland, OR 97209  
Telephone: 503.796.7000

**AFTER RECORDING RETURN TO:**

First American (FATCO)  
Attn: Susan Toribara  
200 SW Market Street, Suite 250  
Portland, OR 97201-5753  
Telephone: 503-795-7600

---

(Space above this line for Recorder's use only)

MEMORANDUM OF AMENDED AND RESTATED  
LEASE AGREEMENT

ROBERT F. ATHEARN

AND

OREGON TRAIL SOLAR, LLC, an Oregon limited liability company

First American NCS-1000373-1, -1A & FA672-01



PREPARED AND REQUESTED BY and  
WHEN RECORDED, RETURN TO:  
Oregon Trail Solar LLC  
Attention: Land Management  
1125 NW Couch, Suite 700  
Portland, OR 97209  
Telephone: 503.796.7000

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*(Space above this line for Recorder's use only)*

**MEMORANDUM OF AMENDED AND RESTATED LEASE AGREEMENT  
(Oregon Trail Solar LLC / Athearn Living Trust)**

This **MEMORANDUM OF AMENDED AND RESTATED LEASE AGREEMENT** (this "**Memorandum**") is dated and effective as of April 29, 2021 (the "**Effective Date**"), by and between **ROBERT F. ATHEARN, Trustee of the ROBERT F. ATHEARN LIVING TRUST**, whose address for purposes hereof is 333 Rose Court, Mount Vernon, Washington 98273 ("**Landowner**"), and **OREGON TRAIL SOLAR LLC**, an Oregon limited liability company, whose address is Attn: Contracts Administration, 1125 NW Couch Street, Suite 700, Portland, Oregon 97209 ("**Lessee**") and consented to by Montague Solar, LLC, a Delaware limited liability Company, whose address is Attn: Contracts Administration, 1125 NW Couch Street, Suite 700, Portland, Oregon 97209 ("**Montague Solar**").

**RECITALS**

A. Landowner and Lessee entered in that certain Amended and Restated Lease Agreement dated as of the Effective Date (the "**Agreement**"), pursuant to which Landowner has leased to Lessee the real property of Landowner located in Gilliam County, Oregon, as more particularly described on Exhibit A attached hereto (the "**Property**") and which Agreement and such Exhibit A are hereby incorporated herein as if fully set forth in this Memorandum. Landowner and Lessee have executed and acknowledged this Memorandum for the purpose of providing constructive notice of the Agreement.

B. The Agreement is, to the extent of the Property, an amendment and restatement of that certain Amended and Restated Lease Agreement between Landowner and Aurora Solar Development LLC, an Oregon limited liability company ("**Aurora Solar**") made, dated, and effective as of October 18, 2019, a memorandum of which was recorded in the Office of the County Recorder of Gilliam County, Oregon (the "**Records**") on October 22, 2019, as Document No. 2019-000321, which was amended by that certain First Amendment to Amended and Restated Lease Agreement, dated and effective as of September 25, 2020 (collectively, the "**Aurora Lease**"), whereby Landowner granted to Aurora Solar, its successors and assigns, the sole and

exclusive rights to use the Property for Solar Operations, Energy Storage, and wind energy purposes and to convert all of the solar and wind resources of the Property, which Amended and Restated Lease Agreement was amended by the Assignment of and Second Amendment to Amended and Restated Lease Agreement dated as of the Effective Date (the "**Amendment**"), a memorandum of which (the "**Memorandum of Amendment**") has been or will be recorded in the Records (such Aurora Lease, as amended by the Amendment, is referred to hereinafter as the "**Original Lease Agreement**"). The Original Lease Agreement, to the extent of the Property, has been assigned to Lessee by Aurora Solar, as evidenced by the Memorandum of Amendment.

C. Lessee requires transmission and access rights as described in Section 3.3 in the Agreement over portions of the Property generally described and depicted on Exhibit A-1 attached hereto (the "**Easement Areas**") that Landowner is concurrently leasing to Montague Solar, and Montague Solar is willing to consent to such transmission and access rights.

D. Capitalized terms not otherwise defined in this Memorandum shall have the meanings provided in the Agreement. In the event of any conflict or inconsistency between the provisions of this Memorandum and the provisions of the Agreement, the provisions of the Agreement shall control. Nothing in this Memorandum shall be deemed to amend, modify, change, alter, amplify, limit, interpret or supersede any provision of the Agreement or otherwise limit or expand the rights and obligations of the parties under the Agreement and the Agreement shall control over this Memorandum in all events.

### **AGREEMENT**

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landowner and Lessee hereby agree as follows:

1. **Lease**. Pursuant to the Agreement, Landowner leases and continues to lease the Property to Lessee, on the terms provided herein.

2. **Purpose of the Lease; Permitted Uses**. The lease created by the Agreement is solely and exclusively for Solar Operations, Energy Storage, and wind energy purposes. Throughout the term of the Agreement, Lessee shall have the sole and exclusive rights to use the Property for Solar Operations, Energy Storage, and wind energy purposes and to convert all of the solar and wind resources of the Property. The rights granted to Lessee in the Agreement permit Lessee, without limitation, to use, maintain and operate Windpower Facilities (as defined below), Solar Generation Facilities, a substation, and Energy Storage Facilities on the Property, and to do the following on the Property in connection therewith:

(a) Extract soil samples, perform geotechnical tests, and conduct such other tests, studies, inspections and analysis as Lessee deems necessary, useful or appropriate. However, the Agreement does not allow Lessee the right to develop or operate pits or quarries, or to mine or extract minerals.

(b) Construct, erect, install, reinstall, replace, relocate and remove from time to time, the following "**Windpower Facilities**": (i) meteorological and wind measuring equipment, including but not limited to anemometer towers and all necessary and proper appliances and fixtures for use in connection with said towers ("**Met Towers**"), to determine the feasibility of wind energy

conversion on the Property; (ii) wind turbines, steel towers, foundations and concrete pads, support structure, footings, anchors, fences and other fixtures and facilities, maintenance, security, office, staging areas for the assembly of equipment, control buildings, laydown areas, crane pads, and related facilities and equipment; (iii) electrical wires and cables required for the gathering and transmission of electrical energy and/or for communication purposes, which may be placed overhead on appurtenant support structures or underground, and Interconnection and Transmission Facilities from which Lessee may interconnect to a utility transmission system or the transmission system of another purchaser of electrical energy, together with the appropriate rights of way; and (iv) any other Improvements, including roads, facilities, machinery and equipment that Lessee reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing.

(c) With respect to Solar Operations and Energy Storage, Lessee shall have the right to construct, erect, install, reinstall, replace, relocate, and remove from time to time the following, on the Property: (a) Solar Generation Facilities; (b) Interconnection and Transmission Facilities, including electrical wires and cables required for the gathering and transmission of electrical energy and/or for communication purposes, which may be placed overhead on appurtenant support structures or underground; (c) Energy Storage Facilities; (d) solar energy measurement equipment; (e) maintenance yards, control buildings, control boxes and computer monitoring hardware; and/or (f) any other Improvements, including roads, fixtures, facilities, machinery and equipment useful or appropriate to accomplish any of the foregoing (collectively, the “**Solar Energy Facilities**”); and excavate, grade, level and otherwise modify the land included within the Property, with Landowner’s approval, which shall not be unreasonably withheld, in connection with Lessee’s use of the Property for Solar Operations and Energy Storage.

(d) Lessee’s rights to use the Easement Areas for Limited Purposes (as defined below), shall be non-exclusive, since pursuant to the Montague Solar Lease, Landowner is granting Montague Solar the exclusive right, of equal priority with the Agreement, to use such portions of the Easement Area for Solar Operations, Energy Storage, and wind energy purposes as defined in the Montague Solar Lease. Lessee’s rights to use the portions of the Easement Areas described on Exhibit A-1 shall be non-exclusive, and shall be solely for Limited Purposes. As used herein, the term “Limited Purposes” means the following: (1) constructing, installing, using, replacing, relocating and removing from time to time, and maintaining and operating, overhead and underground electrical transmission, collection and communications lines (including without limitation towers, wires, cables, foundations, footings, crossarms and other appliances and fixtures for use in connection therewith), electric transformers, telecommunications equipment, roads, and related facilities and equipment; (2) improving existing roads and lanes, and building new roads; and (3) other activities, facilities and improvements associated with the foregoing (but not including the location or use of meteorological towers, wind turbines, Solar Generation Facilities, or Energy Storage Facilities thereon). To the extent commercially practicable, Lessee shall share roads located within the Property with Montague Solar or other holder of the lease and easement rights under the Montague Solar Lease.

Montague Solar hereby acknowledges and consents to the Lessee’s use of the Easement Areas and any and all rights granted in the Agreement, provided, such acknowledgment and consent shall in no manner diminish Montague Solar’s rights or increase its obligations under the Montague Solar Lease.

3. **Ingress and Egress.** The Agreement includes the right of ingress of and egress from the Improvements over and across the Property by means of any existing roads and lanes thereof, and by such other route or routes as Lessee may construct on the Property from time to time. Lessee shall not construct any additional routes on the Property except as reasonably necessary for Lessee to efficiently utilize the Property for the uses permitted under the Agreement.

4. **Term.** The term of the Agreement comprises the Development Period, which commenced under the Original Lease Agreement on October 4, 2016, and the Extended Term of forty (40) years. Lessee's rights under the Agreement shall continue initially throughout the Development Period, and unless earlier terminated, the Development Period will end and the Agreement will be automatically renewed for the Extended Term if, prior to the end of the Development Period, Lessee pays to Landowner the first Annual Minimum Rent payment or the Operations Date occurs. The Extended Term shall commence and be effective as to the Parties and the Property on the earlier of the Operations Date or the date Lessee pays to Landowner the first Annual Minimum Rent payment.

5. **Ownership of Improvements.** Landowner shall have no ownership or other interest in any Improvements installed by Lessee on the Property or any environmental attributes produced therefrom, including without limitation any and all credits, benefits, emissions reductions, offsets and allowances of any kind, howsoever entitled, attributable to the Windpower Facilities or Solar Generation Facilities, or the electric energy, capacity or other generator-based products produced therefrom. The manner of operation of the Windpower Facilities and Solar Generation Facilities, including but not limited to decisions on when to conduct maintenance, is within the sole discretion of Lessee.

6. **No Interference.** Landowner's activities and any grant of rights Landowner makes to any person or entity located on the Property shall not, currently or in the future, impede or interfere with: (i) the siting, permitting, construction, installation, maintenance, operation, replacement, or removal of Improvements located on the Property; (ii) the flow of wind, wind speed or wind direction over the Property; (iii) the availability, accessibility, or non-obstructed passage of direct solar radiation across the Property; (iv) the transmission of electric, electromagnetic or other forms of energy to or from the Property; (v) access over the Property to Windpower Facilities located thereon; or (vi) the undertaking of any other activities of Lessee permitted under the Agreement. In no event during the term of the Agreement shall Landowner construct, build or locate or allow others to construct, build or locate any wind energy or solar energy conversion system, Energy Storage, or similar Improvement on the Property.

7. **Miscellaneous.**

7.1 **Successors and Assigns.** Landowner and Lessee agree that the Agreement shall burden the Property and shall run with the land. The Agreement shall inure to the benefit of and be binding upon Landowner and Lessee and, to the extent provided in any assignment or other transfer under the Agreement, any Assignee or Tenant, and their respective heirs, transferees, successors and assigns, and all persons claiming under them.

7.2 **Conflict.** In the event of any conflict or inconsistency between the provisions of this Memorandum and the provisions of the Agreement, the provisions of the Agreement shall



control. Nothing in this Memorandum shall be deemed to amend, modify, change, alter, amplify, limit, interpret or supersede any provision of the Agreement or otherwise limit or expand the rights and obligations of the parties under the Agreement, and the Agreement shall control over this Memorandum in all events.

**7.3     Counterparts.** This Memorandum may be executed with counterpart signature pages and in duplicate originals, each of which shall be deemed an original, and all of which together shall constitute a single instrument.

**[SIGNATURE PAGES FOLLOW]**

IN WITNESS WHEREOF, Landowner and Lessee have caused this Memorandum to be executed and delivered by their duly authorized representatives as of the Effective Date.

**LESSEE:**

**OREGON TRAIL SOLAR, LLC,**  
an Oregon limited liability company

By: [Signature]  
Printed Name: Sara Parsons  
Title: Authorized Representative



By: [Signature]  
Printed Name: JESSE BOUMANN  
Title: AUTHORIZED REP

**LANDOWNER:**

**Robert F Athearn, Trustee of the Robert F. Athearn Living Trust**

By: [Signature]  
Printed Name: Robert F. Athearn  
Title: TRUSTEE

**CONSENTED TO BY:**

**MONTAGE SOLAR, LLC,**  
an Oregon limited liability company

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

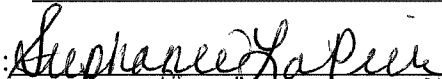
By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

IN WITNESS WHEREOF, Landowner and Lessee have caused this Memorandum to be executed and delivered by their duly authorized representatives as of the Effective Date.

**LESSEE:**

**OREGON TRAIL SOLAR, LLC,**  
an Oregon limited liability company

By:   
Printed Name: Sara Parsons  
Title: Authorized Representative

By:   
Printed Name: Stephanie LaPier  
Title: Authorized Representative

**LANDOWNER:**

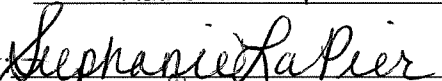
**Robert F Athearn,** Trustee of the Robert F.  
Athearn Living Trust

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**CONSENTED TO BY:**

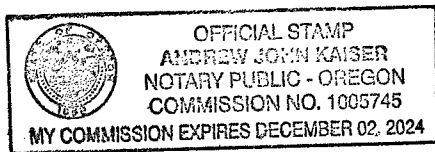
**MONTAGE SOLAR, LLC,**  
a Delaware limited liability company

By:   
Printed Name: Sara Parsons  
Title: Authorized Representative

By:   
Printed Name: Stephanie LaPier  
Title: Authorized Representative

STATE OF OREGON )  
 ) ss.  
COUNTY OF MULTNOMAH )

The foregoing instrument was acknowledged before me this 10<sup>th</sup> day of May, 2021  
by Sean Parsons and  
Stephanie LaPier, as Authorized Representatives of Oregon Trail  
Solar, LLC, an Oregon limited liability company, on behalf of the limited liability company.

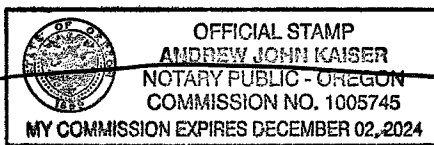


[Signature]  
Notary Public for Oregon

My commission expires: December 02, 2024  
Commission No.: 1005745

STATE OF WASHINGTON )  
 ) ss.  
COUNTY OF SKAGIT )

I certify that I know or have satisfactory evidence that ROBERT F. ATHEARN is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the TRUSTEE OF THE ROBERT F. ATHEARN LIVING TRUST to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.



A.K.

Dated: \_\_\_\_\_

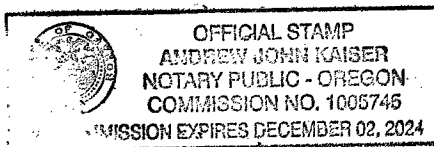
By: \_\_\_\_\_

Title: \_\_\_\_\_

My appointment expires: \_\_\_\_\_

STATE OF OREGON )  
 ) ss.  
COUNTY OF MULTNOMAH )

The foregoing instrument was acknowledged before me this 10<sup>th</sup> day of May, 2021  
by Sean Parsons and  
Stephanie LaPier, as Authorized Representatives of Montague  
Solar, LLC, a Delaware limited liability company, on behalf of the limited liability company.



[Signature]  
Notary Public for Oregon

My commission expires: December 02, 2024

Commission No.: 1005745





**"EXHIBIT A"**

**Description of Property**

All that real property located in Gilliam County, Oregon, described as follows:

Township 1 North, Range 21 East, W.M.

Section 14: All

Section 23: The North half

EXCEPTING therefrom county road and state highway rights-of-way.

**EXHIBIT A-1**

**DESCRIPTION OF OREGON TRAIL'S ACCESS AND TRANSMISSION EASEMENTS  
OVER THE MONTAGUE SOLAR PREMISES**

All that real property located in Gilliam County, Oregon, described as follows:

In Section 22 of Township 1 North, Range 21 East, W.M., Gilliam County, Oregon, a 100 foot wide transmission and access easement running on, over, across, and along the northern boundary of the South half of Section 22 and then running southward in the East half of the Southwest quarter of said Section 22 to southern boundary line of Section 22 as depicted below.

In Section 22 of Township 1 North, Range 21 East, W.M., Gilliam County, Oregon, a 100 foot-wide transmission and access easement running on, over, across, and along the southern boundary of the South half of Section 22 as depicted below.

In Section 14 of Township 1 North, Range 21 East, W.M., Gilliam County, Oregon, a 100 foot wide transmission and access easement running on, over, across, and along the westernmost 100 feet of the South half, and the northernmost 100 feet of the South half as depicted below.

In Section 23 of Township 1 North, Range 21 East, W.M., Gilliam County, Oregon, a 100 foot wide transmission and access easement running on, over, across, and along the westernmost 100 feet of the North half as depicted below.

EXCEPTING therefrom county road and state highway rights-of-way.

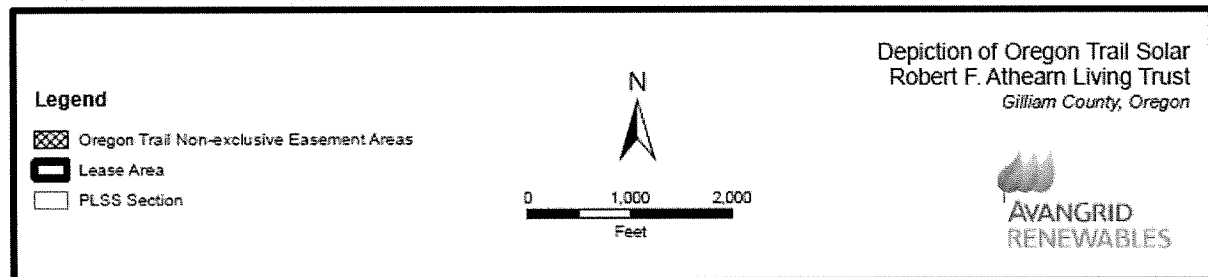
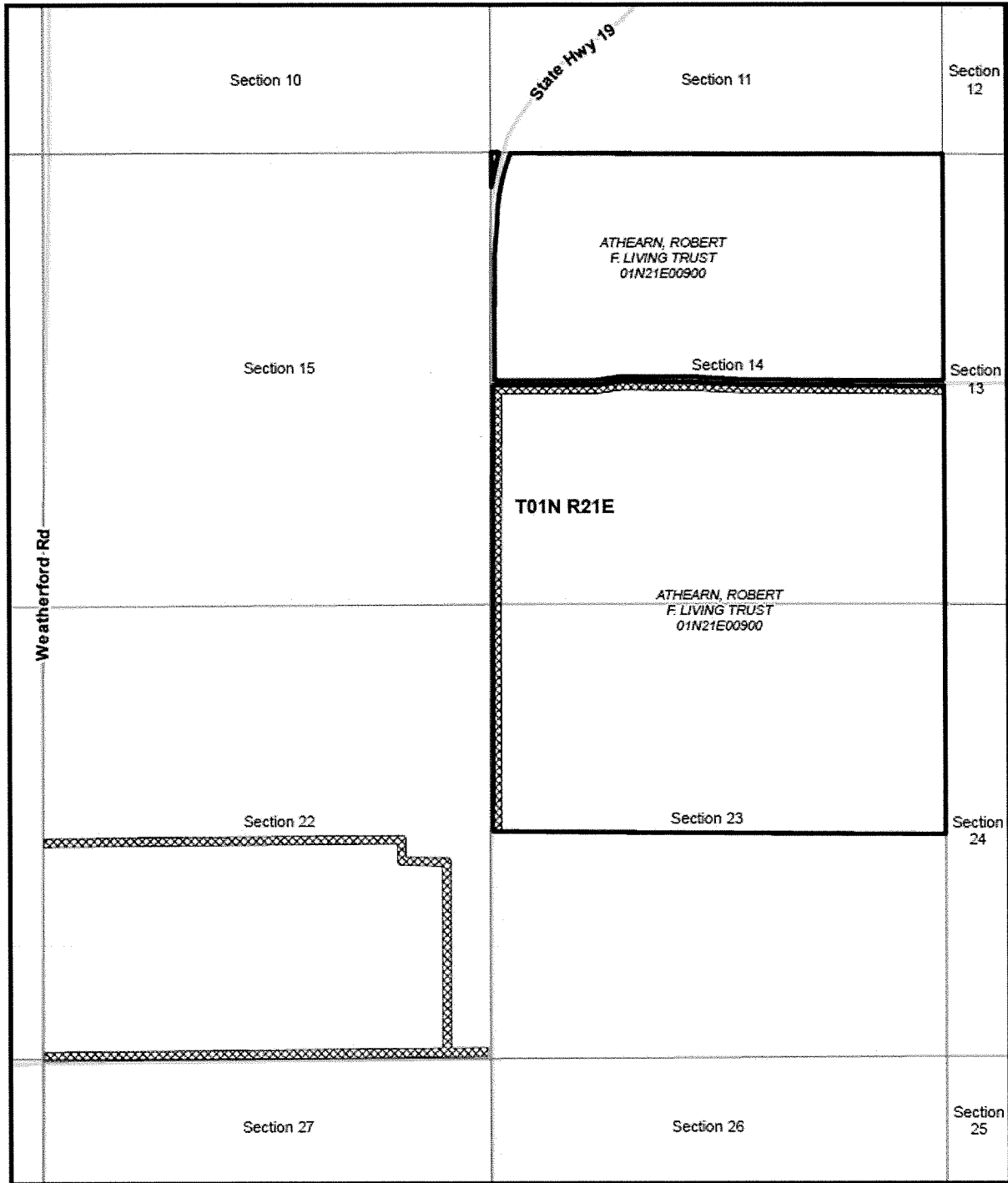


EXHIBIT A



PREPARED AND REQUESTED BY:  
Oregon Trail Solar, LLC  
Attention: Land Management  
1125 NW Couch, Suite 700  
Portland, OR 97209  
Telephone: 503.796.7000

WHEN RECORDED, RETURN TO:  
Winthrop & Weinstine  
Attn: Krista Bengtson-Cook  
225 South Sixth Street, Suite 3500  
Minneapolis, MN 55402  
Telephone: 612.604.6629

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**MEMORANDUM OF SOLAR ENERGY AND ENERGY STORAGE LEASE  
AGREEMENT  
(Ann Weatherford Flores / Oregon Trail Solar, LLC)**

This **MEMORANDUM OF SOLAR ENERGY AND ENERGY STORAGE LEASE AGREEMENT** (this “**Memorandum**”) is made, effective as of June 29, 2020 (the “**Effective Date**”), by and between **Ann Weatherford Flores**, whose address is 4240 Wills Blvd, Pueblo, Colorado 81008 (“**Landowner**”), and **OREGON TRAIL SOLAR, LLC**, an Oregon limited liability company, whose address is Attn: Land Management, 1125 NW Couch Street, Suite 700, Portland, Oregon 97209 (“**Lessee**”).

**RECITALS**

A. Landowner and Lessee are parties to that certain Solar Energy and Energy Storage Lease Agreement dated of even date herewith (the “**Agreement**”) in connection with that certain real property of Landowner (the “**Property**”) located in Gilliam County, Oregon more particularly described on Exhibit A attached hereto and which Agreement and said Exhibit A are hereby incorporated herein as if fully set forth in this Memorandum.

B. Landowner and Lessee have executed and acknowledged this Memorandum for the purpose of providing public and constructive notice of the Agreement. Capitalized terms not otherwise defined in this Memorandum have the meanings provided in the Agreement.

**AGREEMENT**

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landowner and Lessee hereby agree as follows:

1. **Lease.** Pursuant to the Agreement, Landowner leases the Property to Lessee, on the terms provided therein.

2. **Purpose of the Lease; Permitted Uses.** The lease created by the Agreement is solely and exclusively for Solar Operations, Energy Storage, and solar energy purposes. Throughout the term of the Agreement, Lessee shall have the sole and exclusive rights to use the Property for Solar Operations, Energy Storage, and solar energy purposes and to convert all of the solar and wind resources of the Property. The rights granted to Lessee in the Agreement permit Lessee, without limitation, to use, maintain and operate Solar Generation Facilities, a substation, and Energy Storage Facilities on the Property, and to do the following on the Property in connection therewith:

(a) Extract soil samples, perform geotechnical tests, and conduct such other tests, studies, inspections and analysis as Lessee deems necessary, useful or appropriate. However, the Agreement does not allow Lessee the right to develop or operate pits or quarries, or to mine or extract minerals.

(b) Construct, erect, install, reinstall, replace, relocate, and remove from time to time the following, on the Property: (a) Solar Generation Facilities; (b) Interconnection and Transmission Facilities, including electrical wires and cables required for the gathering and transmission of electrical energy and/or for communication purposes, which may be placed overhead on appurtenant support structures or underground; (c) Energy Storage Facilities; (d) solar energy measurement equipment; (e) maintenance yards, control buildings, control boxes and computer monitoring hardware; and/or (f) any other Improvements, including roads, fixtures, facilities, machinery and equipment useful or appropriate to accomplish any of the foregoing (collectively, the “**Solar Energy Facilities**”); and excavate, grade, level and otherwise modify the land included within the Property, with Landowner’s approval, which shall not be unreasonably withheld, in connection with Lessee’s use of the Property for Solar Operations and Energy Storage.

3. **Ingress and Egress.** The Agreement includes the right of ingress of and egress from the Improvements over and across the Property by means of any existing roads and lanes thereof, and by such other route or routes as Lessee may construct on the Property from time to time. Lessee shall not construct any additional routes on the Property except as reasonably necessary for Lessee to efficiently utilize the Property for the uses permitted under the Agreement.

4. **Term.** The term of the Agreement comprises the Development Period of five years commencing on the Effective Date and an Extended Term of forty (40) years. Lessee’s rights under the Agreement shall continue initially throughout the Development Period, and unless earlier terminated, the Development Period will end and the Agreement will be automatically renewed for the Extended Term if, prior to the end of the Development Period, Lessee pays to Landowner the first Annual Minimum Rent payment or the Operations Date occurs. The Extended Term shall commence and be effective as to the Parties and the Property on the earlier of the Operations Date or the date Lessee pays to Landowner the first Annual Minimum Rent payment.

5. **Ownership of Improvements.** Landowner shall have no ownership or other interest in any Improvements installed by Lessee on the Property or any environmental attributes produced therefrom, including without limitation any and all credits, benefits, emissions reductions, offsets and allowances of any kind, howsoever entitled, attributable to the Solar Generation Facilities, or

the electric energy, capacity or other generator-based products produced therefrom. The manner of operation of the Solar Generation Facilities, including but not limited to decisions on when to conduct maintenance, is within the sole discretion of Lessee.

6. **No Interference.** Landowner's activities and any grant of rights Landowner makes to any person or entity located on the Property shall not, currently or in the future, impede or interfere with: (i) the siting, permitting, construction, installation, maintenance, operation, replacement, or removal of Improvements located on the Property; (ii) the availability, accessibility, or non-obstructed passage of direct solar radiation across the Property; (iii) the transmission of electric, electromagnetic or other forms of energy to or from the Property; (iv) access over the Property to Windpower Facilities located thereon; or (v) the undertaking of any other activities of Lessee permitted under the Agreement. In no event during the term of the Agreement shall Landowner construct, build or locate or allow others to construct, build or locate any solar energy conversion system, Energy Storage, or similar Improvement on the Property.

7. **Consent of Pacific Wind.** It is recognized and mutually contemplated by Landowner and Lessee that the Agreement is to work in cooperation with prior existing wind lease and easement rights over the Property within the same area granted to and held by Pacific Wind Development, LLC, an Oregon limited liability company ("**Pacific Wind**"). Pacific Wind specifically agrees and consents to Landowner entering into the Agreement with Lessee pertaining to the Property.

8. **Miscellaneous.**

8.1 **Successors and Assigns.** Landowner and Lessee agree that the Agreement shall burden the Property and shall run with the land. The Agreement shall inure to the benefit of and be binding upon Landowner and Lessee and, to the extent provided in any assignment or other transfer under the Agreement, any Assignee or Tenant, and their respective heirs, transferees, successors and assigns, and all persons claiming under them.

8.2 **Conflict.** In the event of any conflict or inconsistency between the provisions of this Memorandum and the provisions of the Agreement, the provisions of the Agreement shall control. Nothing in this Memorandum shall be deemed to amend, modify, change, alter, amplify, limit, interpret or supersede any provision of the Agreement or otherwise limit or expand the rights and obligations of the parties under the Agreement, and the Agreement shall control over this Memorandum in all events.

8.3 **Counterparts.** This Memorandum may be executed with counterpart signature pages and in duplicate originals, each of which shall be deemed an original, and all of which together shall constitute a single instrument.

[SIGNATURE PAGES FOLLOW]

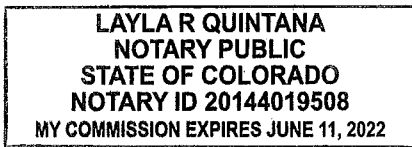
IN WITNESS WHEREOF, Landowner and Lessee have caused this Memorandum to be executed and delivered by their duly authorized representatives as of the Effective Date.

**LANDOWNER:**

Ann Weatherford Flores  
Ann Weatherford Flores

STATE OF COLORADO     )  
  ) ss.  
COUNTY OF Pueblo     )

The foregoing instrument was acknowledged before me this 1<sup>st</sup> day of June, 2020 by Ann Weatherford Flores.



[Signature]  
Notary Public for ~~Oregon~~ Colorado  
My commission expires: JUNE 11, 2022  
Commission No.: 20144019508



IN WITNESS WHEREOF, Pacific Wind has executed and delivered its agreement with and consent to **specifically only Section 7 of this Memorandum** as of the Effective Date.

**"PACIFIC WIND"**

**Pacific Wind Development, LLC,**  
an Oregon limited liability company

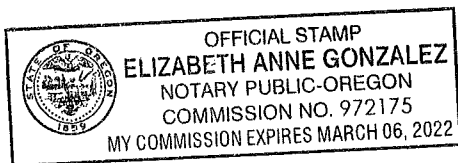
By: [Signature]  
Printed Name: **Sara Parsons**  
Title: **Authorized Representative**

By: [Signature]  
Printed Name: **Paul Dixon**  
Title: **Authorized Representative**

**PACIFIC WIND ACKNOWLEDGMENT**

STATE OF OREGON            )  
  ) ss.  
COUNTY OF Multnomah    )

The foregoing instrument was acknowledged before me this 21<sup>st</sup> day of June, 2020 by Sara M Parsons and Paul Dixon, as Authorized Representatives of Pacific Wind Development, LLC, an Oregon limited liability company, on its behalf.



[Signature]  
Notary Public for Oregon  
My commission expires: 3-6-22  
Commission No.: 972175

**"EXHIBIT A"**

**Description of Property**

All that real property located in Gilliam County, Oregon, described as follows:

Township 1 North, Range 21 East, W.M.:

Section 21: East Half of the East Half (E $\frac{1}{2}$ E $\frac{1}{2}$ )

PREPARED AND REQUESTED BY:  
Oregon Trail Solar, LLC  
Attention: Land Management  
1125 NW Couch, Suite 700  
Portland, OR 97209  
Telephone: 503.796.7000

WHEN RECORDED, RETURN TO:  
Winthrop & Weinstine  
Attn: Krista Bengtson-Cook  
225 South Sixth Street, Suite 3500  
Minneapolis, MN 55402  
Telephone: 612.604.6629

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**MEMORANDUM OF SOLAR ENERGY AND ENERGY STORAGE LEASE  
AGREEMENT  
(Holtz / Oregon Trail Solar, LLC)**

This **MEMORANDUM OF SOLAR ENERGY AND ENERGY STORAGE LEASE AGREEMENT** (this “**Memorandum**”) is made, effective as of June 29, 2020 (the “**Effective Date**”), by and between **Timothy H. Holtz and Deborah L. Holtz**, husband and wife, whose address is P.O. Box 224, Ione, Oregon 97843 (“**Landowner**”), and **OREGON TRAIL SOLAR, LLC**, an Oregon limited liability company, whose address is Attn: Land Management, 1125 NW Couch Street, Suite 700, Portland, Oregon 97209 (“**Lessee**”).

**RECITALS**

A. Landowner and Lessee are parties to that certain Solar Energy and Energy Storage Lease Agreement dated of even date herewith (the “**Agreement**”) in connection with that certain real property of Landowner (the “**Property**”) located in Gilliam County, Oregon more particularly described on Exhibit A attached hereto and which Agreement and said Exhibit A are hereby incorporated herein as if fully set forth in this Memorandum.

B. Landowner and Lessee have executed and acknowledged this Memorandum for the purpose of providing public and constructive notice of the Agreement. Capitalized terms not otherwise defined in this Memorandum have the meanings provided in the Agreement.

**AGREEMENT**

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landowner and Lessee hereby agree as follows:

1. **Lease.** Pursuant to the Agreement, Landowner leases the Property to Lessee, on the terms provided therein.

2. **Purpose of the Lease; Permitted Uses.** The lease created by the Agreement is solely and exclusively for Solar Operations, Energy Storage, and solar energy purposes. Throughout the term of the Agreement, Lessee shall have the sole and exclusive rights to use the Property for Solar Operations, Energy Storage, and solar energy purposes and to convert all of the solar and wind resources of the Property. The rights granted to Lessee in the Agreement permit Lessee, without limitation, to use, maintain and operate Solar Generation Facilities, a substation, and Energy Storage Facilities on the Property, and to do the following on the Property in connection therewith:

(a) Extract soil samples, perform geotechnical tests, and conduct such other tests, studies, inspections and analysis as Lessee deems necessary, useful or appropriate. However, the Agreement does not allow Lessee the right to develop or operate pits or quarries, or to mine or extract minerals.

(b) Construct, erect, install, reinstall, replace, relocate, and remove from time to time the following, on the Property: (a) Solar Generation Facilities; (b) Interconnection and Transmission Facilities, including electrical wires and cables required for the gathering and transmission of electrical energy and/or for communication purposes, which may be placed overhead on appurtenant support structures or underground; (c) Energy Storage Facilities; (d) solar energy measurement equipment; (e) maintenance yards, control buildings, control boxes and computer monitoring hardware; and/or (f) any other Improvements, including roads, fixtures, facilities, machinery and equipment useful or appropriate to accomplish any of the foregoing (collectively, the “**Solar Energy Facilities**”); and excavate, grade, level and otherwise modify the land included within the Property, with Landowner’s approval, which shall not be unreasonably withheld, in connection with Lessee’s use of the Property for Solar Operations and Energy Storage.

3. **Ingress and Egress.** The Agreement includes the right of ingress of and egress from the Improvements over and across the Property by means of any existing roads and lanes thereof, and by such other route or routes as Lessee may construct on the Property from time to time. Lessee shall not construct any additional routes on the Property except as reasonably necessary for Lessee to efficiently utilize the Property for the uses permitted under the Agreement.

4. **Term.** The term of the Agreement comprises the Development Period of five years commencing on the Effective Date and an Extended Term of forty (40) years. Lessee’s rights under the Agreement shall continue initially throughout the Development Period, and unless earlier terminated, the Development Period will end and the Agreement will be automatically renewed for the Extended Term if, prior to the end of the Development Period, Lessee pays to Landowner the first Annual Minimum Rent payment or the Operations Date occurs. The Extended Term shall commence and be effective as to the Parties and the Property on the earlier of the Operations Date or the date Lessee pays to Landowner the first Annual Minimum Rent payment.



5. **Ownership of Improvements.** Landowner shall have no ownership or other interest in any Improvements installed by Lessee on the Property or any environmental attributes produced therefrom, including without limitation any and all credits, benefits, emissions reductions, offsets and allowances of any kind, howsoever entitled, attributable to the Solar Generation Facilities, or the electric energy, capacity or other generator-based products produced therefrom. The manner of operation of the Solar Generation Facilities, including but not limited to decisions on when to conduct maintenance, is within the sole discretion of Lessee.

6. **No Interference.** Landowner's activities and any grant of rights Landowner makes to any person or entity located on the Property shall not, currently or in the future, impede or interfere with: (i) the siting, permitting, construction, installation, maintenance, operation, replacement, or removal of Improvements located on the Property; (ii) the availability, accessibility, or non-obstructed passage of direct solar radiation across the Property; (iii) the transmission of electric, electromagnetic or other forms of energy to or from the Property; (iv) access over the Property to Windpower Facilities located thereon; or (v) the undertaking of any other activities of Lessee permitted under the Agreement. In no event during the term of the Agreement shall Landowner construct, build or locate or allow others to construct, build or locate any solar energy conversion system, Energy Storage, or similar Improvement on the Property.

7. **Consent of Montague Wind.** It is recognized and mutually contemplated by Landowner and Lessee that the Agreement is to work in cooperation with prior existing wind lease and easement rights over the Property within the same area granted to and held by Montague Wind Power Facility, LLC, an Oregon limited liability company ("**Montague Wind**"). Montague Wind specifically agrees and consents to Landowner entering into the Agreement with Lessee pertaining to the Property.

8. **Miscellaneous.**

8.1 **Successors and Assigns.** Landowner and Lessee agree that the Agreement shall burden the Property and shall run with the land. The Agreement shall inure to the benefit of and be binding upon Landowner and Lessee and, to the extent provided in any assignment or other transfer under the Agreement, any Assignee or Tenant, and their respective heirs, transferees, successors and assigns, and all persons claiming under them.

8.2 **Conflict.** In the event of any conflict or inconsistency between the provisions of this Memorandum and the provisions of the Agreement, the provisions of the Agreement shall control. Nothing in this Memorandum shall be deemed to amend, modify, change, alter, amplify, limit, interpret or supersede any provision of the Agreement or otherwise limit or expand the rights and obligations of the parties under the Agreement, and the Agreement shall control over this Memorandum in all events.

8.3 **Counterparts.** This Memorandum may be executed with counterpart signature pages and in duplicate originals, each of which shall be deemed an original, and all of which together shall constitute a single instrument.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, Landowner and Lessee have caused this Memorandum to be executed and delivered by their duly authorized representatives as of the Effective Date.

**LESSEE:**

**OREGON TRAIL SOLAR, LLC,**  
an Oregon limited liability company

LEGAL  
KIT

By: \_\_\_\_\_

Name:

**Sara Parsons**

Title:

Authorized Representative

By: \_\_\_\_\_

Name:

**Paul Dixon**

Title:

Authorized Representative

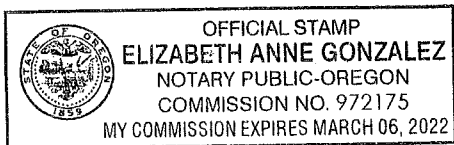
LAND M

STATE OF OREGON            )

) ss.

COUNTY OF Multnomah    )

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of June, 2020 by Sara M Parsons and Paul Dixon, as Authorized Representatives of Oregon Trail Solar, LLC, an Oregon limited liability company, on its behalf.



\_\_\_\_\_  
Notary Public for Oregon  
My commission expires: 3-6-22  
Commission No.: 972175

IN WITNESS WHEREOF, Landowner and Lessee have caused this Memorandum to be executed and delivered by their duly authorized representatives as of the Effective Date.

**LANDOWNER:**



**Timothy H. Holtz**



**Deborah L. Holtz**

STATE OF OREGON           )  
  ) ss.  
COUNTY OF                )

The foregoing instrument was acknowledged before me this 11 day of May, 2020 by **Timothy H. Holtz and Deborah L. Holtz**.



Notary Public for Oregon

My commission expires: Jan 13, 2023

Commission No.: 982885

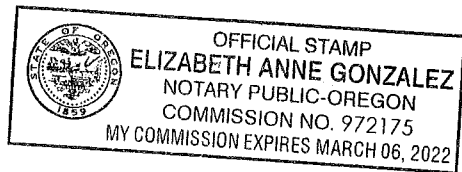
LEGAL  
Ked

**Montague Wind Power Facility, LLC,**  
an Oregon limited liability company

LAND M

## MONTAGUE WIND ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me this 20th day of June, 2020 by Sara M. Parsons and Paul Dixon, as Authorized Representatives of Montague Wind Power Facility, LLC, an Oregon limited liability company, on its behalf.



Elizabeth Anne Berger  
Notary Public for Oregon  
My commission expires: 3-6-22  
Commission No.: 972175



**"EXHIBIT A"**

**Description of Property**

All that real property located in Gilliam County, Oregon, described as follows:

Township 1 North, Range 21 East, W.M.

Section 21:   West Half (W½)  
                  West Half of the East Half (W½E½)

## **Attachment 11. Certificate Holder Letter to Gilliam County**



Matt Hutchinson  
Business Developer

VIA EMAIL

December 14, 2022

Judge Farrar Campbell  
Gilliam County Court  
221 S. Oregon St.  
PO Box 427  
Condon, OR 97823

**Re: Certificate Holder Response to Gilliam County Court Comments on Request for Amendment 1 on the Oregon Trail Solar Facility.**

Dear Judge Farrar Campbell,

Oregon Trail Solar, LLC ("Oregon Trail"), a subsidiary of Avangrid Renewables, LLC ("Avangrid"), is in receipt of your letter dated October 21, 2022 ("County Letter"), commenting on Oregon Trail's site certificate amendment request to delay the start of construction ("RFA 1"). The County Letter comments on the Oregon Trail's Goal 3 exception that was approved by the Oregon Energy Facility Siting Council ("EFSC") in the Fourth Amended Site Certificate for the Montague Wind Power Facility, dated August 23, 2019, and Site Certificate for the Montague Solar Facility, dated September 25, 2020. The County Letter provided observations on the Montague Solar Facility, an adjacent solar project also owned by Avangrid. Specifically, the County Letter questions the local economic benefits generated by construction of the Montague solar project. Avangrid and Oregon Trail want to be responsive to the questions posed in the County Letter and ensure the Oregon Trail solar project will have local benefits for Gilliam County.

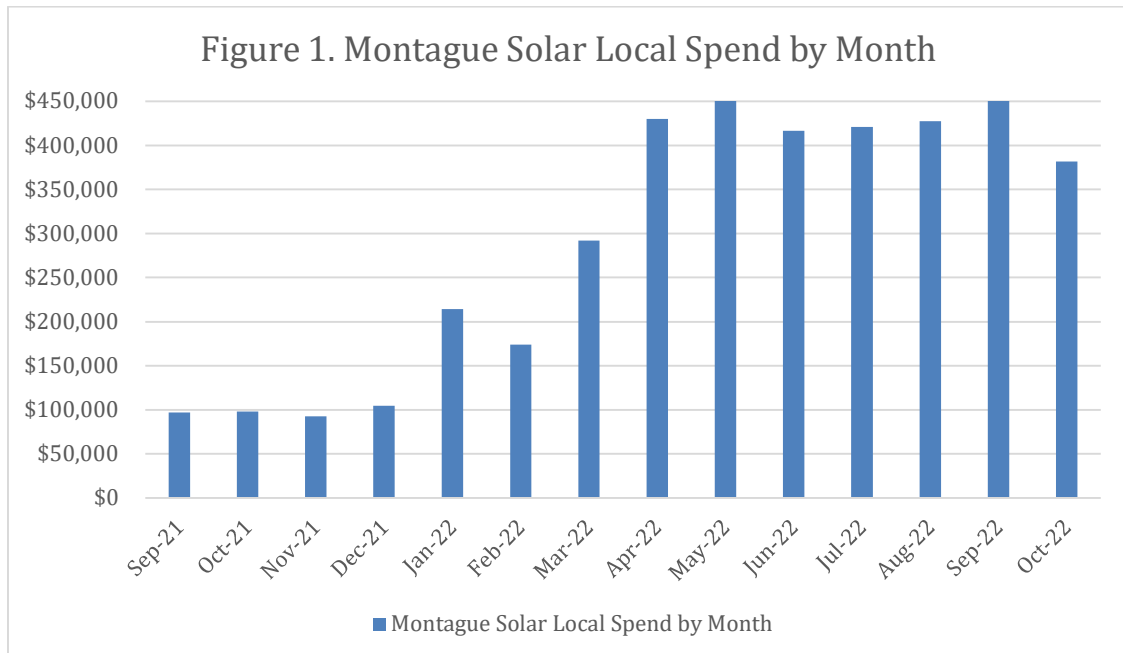
**Montague Solar Local Economic Benefits**

Construction of the Montague Solar project has contributed over \$4 million into the local economy through the purchase on construction supplies, equipment rentals, fuel, and lodging (Figure 1). While this total amount was spent over a 100-mile radius from the project site, a substantial proportion was spent with local suppliers. For example, Montague Solar's contractors relied on the following local suppliers, among others, during construction of the project:

- Condon Pacific Pride (diesel and gasoline)
- Devin Oil Company (diesel and gasoline)
- Morrow County Grain Growers (propane)
- W.I. (rock used in concrete foundations)
- Keven Haguewood (construction water)

**Avangrid Renewables**  
2701 NW Vaughn St. Suite 300 Portland, OR 97210  
Telephone 503.701.0665  
[www.avangridrenewables.com](http://www.avangridrenewables.com), [matthew.hutchinson@avangrid.com](mailto:matthew.hutchinson@avangrid.com)

- Rodeway Inn & Suites (lodging)
- Weatherford Family (lodging)
- Arlington Hardware (construction supplies)
- Industrial Tire Service (tire repair)



While local businesses in Arlington may not have seen as much increased business as desired during construction, the data in presented in Table 1 and contractor’s verification of using local suppliers (Attachment 1) continue to support EFSC’s prior finding that construction of the solar project has a local economic benefit. Montague Solar also donated \$25,000 to the Gilliam County Historical Society to help with installation of electrical service in their new exhibit hall (Attachment 2).

Over the next 25 years, Montague Solar will pay over \$17 million in tax revenue to the County and more than \$4 million in lease payments to landowners, which will provide notable local economic benefit to the county. The County Letter notes that the Montague Solar Facility has a 3-year tax abatement under the RRED Zone, however, this abatement takes affect during operation. During the construction phase, Montague Solar paid over \$850,000 in property taxes in 2022 to the County and is expected to pay between \$1 million to \$2 million in 2023 property taxes (see Attachment 3 for copies of tax bills). This near- and long-term County tax revenue from Montague Solar, combined with payments to local landowners, continue to support EFSC’s prior finding that construction of the solar project will have local economic benefit.

### **Response to Oregon Trail Solar Comments**

The Oregon Trail Solar Facility is approved by the EFSC for both wind and solar generation, however, the County Letter comments are limited to solar generation and the prior Goal 3 exception granted by EFSC. Specifically, the County Letter questions the “local economic benefit” and “minimal impacts to agricultural” reasons for the solar project’s Goal 3 exception. In response, Oregon Trail offers the following:



### Local Economic Benefit

The County Letter recommended that the “certificate holder initiate discussions with the County to identify projects within Gilliam County that can be implemented to provide direct economic benefit to our communities, such as investing in workforce housing or childcare access initiatives that support local economic growth and vitality.” Oregon Trail met with the County on two occasions prior to the date of this letter and identified opportunities for direct economic benefit to workforce housing and agriculture. These opportunities will be in addition to property taxes to be paid by the solar project. Oregon Trail proposes a “Community Donation” to support to creation of workforce housing in Gilliam County through the Pioneer Community Development Corporation (“PCDC”) grant program.

Oregon Trail Solar proposes a Community Donation of \$500 per megawatt annually for 15 years to be split evenly between the PCDC to support housing and Gilliam Soil and Water Conservation District (“Gilliam SWCD”) to support local agricultural (described below). This Community Donation directly responds to the County Letter’s request to provide “direct economic benefit to our community.”

Renewable energy projects, Avangrid’s Montague Wind and Montague Solar and the proposed Oregon Trail Solar project, require housing for both temporary construction workers and our full-time plant operations personnel. Local housing is limited in Gilliam County near the Avangrid projects, and in general. Daily per diem spent dollars for construction workers generally get spent in the area they are housed which is often outside of Gilliam County. To support local workforce housing, Oregon Trail will provide funding to the PCDC, which is a private non-profit organization that improves and increases the availability of workforce housing in Gilliam County<sup>1</sup>. PCDC provides construction loans for new houses or apartments, grants for demolition of derelict structures to make way for new houses, and grants for remodeling of existing housing. Housing for farm and construction workers is generally limited in Gilliam County to non-EFU properties in cities or small towns. The ability to redevelop residential tax lots in small towns and cities can be constrained by existing derelict structures and/or inadequate access to construction financing. PCDC’s programs can create new housing opportunities that encourage new businesses to locate in Gilliam County. Oregon Trail will directly address the shortage of housing by providing a one-time payment of \$153,750 (i.e., \$250/MW x 41MW = \$10,250/year x 15 years = \$153,750) to PCDC. We are working with PCDC to obtain a letter of support to confirm this funding and will provide you a copy upon receipt.

Another option Oregon Trail explored was partnering with the Port of Arlington. The Port of Arlington is a county-wide special district that is seeking new opportunities to provide additional housing. However, the Port has yet to finalize the details of this plan and therefore funding to the Port of Arlington is not feasible at this time but could be viable in the future. It is an opportunity that Avangrid will keep in mind for future projects.

Oregon Trail will also provide local economic benefits through property taxes, considerably more than if the land was in agricultural tax deferral. Oregon Trail submitted a PILOT agreement for the County’s consideration at its December 21, 2022 commission meeting. (Attachment 4). The PILOT agreement provides a base rate of \$5,500/MW for the installed capacity of the solar project which would result in \$3,382,500 in payments to taxing districts over a 15-year term. The solar project is located within the Tax Code Area 4 which includes

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<sup>1</sup> Link to Pioneer Community Development Corporation’s website with more information:  
<https://pioneercdc.com/>

seven taxing districts: the Gilliam County General Fund, North Gilliam County Health, North Central Education Service District (ESD), Arlington #3 School District, North Gilliam County Rural Fire Protection District, North Gilliam County Cemetery, and Arlington Port. The tax payments from Oregon Trail will directly support programs that benefit the local communities such as North Gilliam County Health District, which is responsible for providing local public health programs and services<sup>2</sup>. The County Letter noted health care funding as a concern and taxes paid by Oregon Trail under the PILOT agreement will benefit the North Gilliam Health District.

With consideration of the Community Donation and property taxes to be paid by the solar project, Oregon Trail believes that EFSC's prior use of "local economic benefit" for the Goal 3 exception to be justified and supported by evidence.

#### Minimal Impacts to Agricultural

The County Letter states, "Gilliam County does not agree that taking 1,228 acres of cultivated dryland winter wheat out of production can be found to have "minimal impacts to agriculture" without some level of offset." In response, Oregon Trail proposes that half of the Community Donation to be provided to the Gilliam SWCD for use in projects that benefit local agricultural practices and natural resource conservation. Gilliam SWCD has a long history of successfully partnering with private landowners throughout the county to achieve its vision "to recognize and maximize the production of crops and livestock through the utilization of natural resources, while remaining environmentally and economically sustainable<sup>3</sup>" and Oregon Trail Solar would support this work by providing a one-time payment of \$153,750 (i.e., \$250/MW x 41MW = \$10,250/year x 15 years = \$153,750) to Gilliam County SWCD. A Gilliam County SWCD letter of support is provided as Attachment 5.

Lastly, the size of the solar project will not approach the maximum 1,228 acres approved by EFSC because the project's interconnection capacity is limited to 41 MW. At 41MW, the solar project is unlikely to exceed 400 acres.

Considering the additional economic benefits provided by the Community Donation payment to PDCD and Gilliam SWCD, Oregon Trail believes that EFSC's may rely on its prior finding to affirm the Goal 3 exception for the Oregon Trail solar project.

We hope these responses address your concerns about the Oregon Trail Solar project, and we look forward to being long-term partners in Gilliam County. Please let me know if you would like to discuss further. Thank you for your consideration.

Yours Sincerely,

Matt Hutchinson  
Avangrid Renewables  
Business Developer

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<sup>2</sup> North Central Public District. June 29, 2022. Public Service Announcement: "Gilliam County Open Public Health Department July 1. Available online: [link](#)

<sup>3</sup> Link to Gilliam SWCD website: <https://www.gilliamcountyswcd.com/>

Cc: Brian Walsh – Avangrid  
Kristen Golan - Avangrid  
Elaine Albrich – DWT  
Sarah Esterson – ODOE

Attachments:

1. Evidence of local spend from Montague Solar
2. Museum letter
3. Copies of Montague Solar tax bills
4. Oregon Trail Solar PILOT agreement
5. Gilliam SWCD letter of support

## Attachment 1 – Local Suppliers Used by Montague Solar





**Sterling and Wilson Solar Solutions**  
7025 N. Scottsdale Road Suite #160  
Scottsdale, AZ 85253

**Sterling and Wilson Solar Solutions, and its employees have conducted business while working on the Montague project with the following:**

**Arlington Hardware Store**

**Morrow County Grain Growers**

**Kevin Haguewood**

**Rivers Edge Restaurant and Lounge**

**Pheasant Grill Restaurant**

**Bee Sweet Deli and Bakery**

**Bennett's Point S Tire and Auto Service**

**Arlington Auto Towing and Repair**

**Hattenhauer Distributing Co.**

**United States Post Office- Arlington location**

**2 Boy's Groceries**

**Condon Drive-in Restaurant**

**Arlington Shell Station**

**Big River Pizza**

**Waste Management**

**Columbia Basin Electric Cooperative**

**Pacific Power**

**Wind Wave Internet Services**

**Gilliam County Road Department**

**Emergency Service Providers:** law enforcement, ambulance, and fire personnel

If there are any questions or additional questions, please contact:



4770 N Belleview Ave., Ste. 300  
Kansas City, MO 64116

**PHONE** 816.474.9340  
**WEB** [parelectric.com](http://parelectric.com)

Mr. Walsh

Par Electric conducted business with the below while working on the Montague Solar Substation & Transmission Line.

Port Of Arlington RV Park  
Driftwood RV Park  
Hitching Post RV Park  
Morrow County Grain Growers  
Pacific Pride Fuel  
Roadway Inn  
Arlington Hardware Store  
WI Construction  
Hood River Sand & Gravel  
Rivers Edge Restaurant  
Weatherford Farms For T-Line Clearing  
Bob Weatherford For Lodging  
Industrial Tire  
Waste Management  
China Creek Golf Course  
River Lodge & Cabins  
The Pheasant Restaurant  
Kevin Haguewood  
City Of Arlington For Yard Rock

If you have any questions please feel free to contact me @ 503-849-6228

Thank You  
Rob Northrup

Attachment 2. Gilliam Historical Society Letter



## GILLIAM COUNTY HISTORICAL SOCIETY

Highway 19 at Burns Park  
P.O. Box 377  
Condon, Oregon 97823  
Ph. 541-384-4233

April 18, 2022

Avangrid Renewables  
1125 NW Couch St., Ste 700  
Portland, OR 97209

ATTN: MARCELLA PATRICK, BRIAN WALSH, MATTHEW HUTCHISON

Good Morning!

The Gilliam County Historical Society would like to thank Avangrid Renewables for their most generous donation of \$25,000. The Gilliam County Historical Society was established in 1974 and has moved seven historic buildings to the site and constructed two agricultural buildings to expand the rich history of Gilliam County and its people. Your donation will enable us to move forward with getting electrical service to our most recent Ag Building, constructed last year. Our first Ag building was at capacity and we could no longer accept items for donation. We now have three pieces of equipment that will be donated and moved this summer. We will be erecting a plaque in the building to recognize both our grant donors and outside funding and Avangrid Renewables will be listed.

It was nice meeting you and we wish you the best. We hope you can again visit the Museum Complex and see the new additions.

Sincerely,

GILLIAM COUNTY HISTORICAL SOCIETY

By:



Eileen E. Potter, Vice-President

MUSEUM COMPLEX

Depot ~ Log Cabin ~ School House ~ Barber Shop ~ Caboose ~ Ag. Machinery



Attachment 3. Montague Solar 2022 Tax Statement

**GILLIAM COUNTY, OREGON PROPERTY TAX STATEMENT**

221 S OREGON ST, PO BOX 484

CONDON, OR 97823

JULY 1, 2022 TO JUNE 30, 2023

**ACCOUNT NO:**

**80626**

80626

**UTILITY PROPERTY**

**CODE:** 0004

**UP#:** 80626

AVANGRID RENEWABLES LLC  
ARYN HANSEN  
MONTAGUE SOLAR  
2701 NW VAUGHN ST STE 300  
PORTLAND OR 97210

NORTH CENTRAL E.S.D. 154,297.03

ARLINGTON #3 SCHOOL DISTRICT 241,932.97

**EDUCATION TOTAL:** 396,230.00

GENERAL FUND 304,700.87

NORTH GILLIAM CO. HEALTH 74,689.36

NORTH GILLIAM CO. R.F.P.D. 42,087.55

NORTH GILLIAM CO CEMETERY 12,758.61

ARLINGTON PORT 11,292.56

**GENERAL GOVT TOTAL:** 445,528.95

VALUES	LAST YEAR	THIS YEAR
<b>REAL MARKET</b>		
<b>LAND</b>		0
<b>STRUCTURES</b>		79,246,000
<b>TOTAL RMV</b>	0	79,246,000
<b>TOTAL ASSESSED VALUE</b>	0	79,246,000
<b>EXEMPTIONS</b>		
<b>NET TAXABLE:</b>	0	79,246,000
<b>TOTAL PROPERTY TAX:</b>		841,758.95

Please Make Payment To: GILLIAM COUNTY TAX COLLECTOR  
(Refer to back of statement and insert enclosed for more information)

Questions about your statement? Please call:  
Tax Collector (541) 351-9173

YOUR CANCELLED CHECK IS YOUR RECEIPT

**2022 - 2023 TAX ( Before Discount ) 841,758.95**

PAYMENT OPTIONS			
Date Due	3% Option	2% Option	Trimester Option
11/15/22	816,506.18	549,949.18	280,586.32
02/15/23			280,586.32
05/15/23		280,586.32	280,586.31
<b>Total</b>	<b>816,506.18</b>	<b>830,535.50</b>	<b>841,758.95</b>

**TOTAL DUE (After Discount and Pre-payments) 816,506.18**

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PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

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2022 - 2023 PROPERTY TAXES

GILLIAM COUNTY UTILITY

ACCOUNT NO. 80626

PAYMENT OPTIONS	Discount	Date Due	Amount	Date Due	Amount	Date Due	Amount
Full Payment Enclosed	3%	11/15/22	816,506.18				
or 2/3 Payment Enclosed	2%	11/15/22	549,949.18			05/15/23	280,586.32
or 1/3 Payment Enclosed	0%	11/15/22	280,586.32	02/15/23	280,586.32	05/15/23	280,586.31

**DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE**

☐ Mailing address change on back

**MAKE PAYMENT TO:**

Enter Payment Amount

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AVANGRID RENEWABLES LLC  
ARYN HANSEN  
MONTAGUE SOLAR  
2701 NW VAUGHN ST STE 300  
PORTLAND OR 97210

**GILLIAM COUNTY TAX COLLECTOR**  
**PO BOX 484**  
**CONDON, OR 97823**

FOR CREDIT CARD PAYMENT INFO:

www.co.gilliam.or.us/government/treasurer's-office/property-tax-payments.htm





**GILLIAM COUNTY, OREGON PROPERTY TAX STATEMENT**

221 S OREGON ST, PO BOX 484

CONDON, OR 97823

JULY 1, 2022 TO JUNE 30, 2023

ACCOUNT NO:

5229

5229

**REAL PROPERTY DESCRIPTION**

CODE: 0004 PCL: 301

MAP: 01N21E00-00-01900 L1

ACRES: 302.50

SITUS:

AVANGRID RENEWABLES LLC  
MONTAGUE SOLAR LLC  
1125 NW COUCH ST STE 700  
PORTLAND OR 97209

NORTH CENTRAL E.S.D. 1,855.32

ARLINGTON #3 SCHOOL DISTRICT 2,909.08

**EDUCATION TOTAL: 4,764.40**

GENERAL FUND 3,663.82

WEED CONTROL 21.17

NORTH GILLIAM CO. HEALTH 898.09

NORTH GILLIAM CO. R.F.P.D. 506.07

NORTH GILLIAM CO CEMETERY 153.41

ARLINGTON PORT 135.79

**GENERAL GOVT TOTAL: 5,378.35**

VALUES	LAST YEAR	THIS YEAR
REAL MARKET		
LAND		952,880
STRUCTURES		0
TOTAL RMV	0	952,880
TOTAL ASSESSED VALUE	0	952,880
EXEMPTIONS		
NET TAXABLE:	0	952,880
TOTAL PROPERTY TAX:		10,142.75

Please Make Payment To: GILLIAM COUNTY TAX COLLECTOR  
(Refer to back of statement and insert enclosed for more information)

Questions about your statement? Please call:  
Tax Collector (541) 351-9173

YOUR CANCELLED CHECK IS YOUR RECEIPT

2022 - 2023 TAX ( Before Discount ) 10,142.75

PAYMENT OPTIONS			
Date Due	3% Option	2% Option	Trimester Option
11/15/22	9,838.47	6,626.59	3,380.92
02/15/23			3,380.92
05/15/23		3,380.92	3,380.91
Total	9,838.47	10,007.51	10,142.75

TOTAL DUE (After Discount and Pre-payments) 9,838.47

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PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

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2022 - 2023 PROPERTY TAXES

GILLIAM COUNTY REAL

ACCOUNT NO. 5229

PAYMENT OPTIONS	Discount	Date Due	Amount	Date Due	Amount	Date Due	Amount
Full Payment Enclosed	3%	11/15/22	9,838.47				
or 2/3 Payment Enclosed	2%	11/15/22	6,626.59			05/15/23	3,380.92
or 1/3 Payment Enclosed	0%	11/15/22	3,380.92	02/15/23	3,380.92	05/15/23	3,380.91

DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE

☐ Mailing address change on back

MAKE PAYMENT TO:

Enter Payment Amount

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AVANGRID RENEWABLES LLC  
MONTAGUE SOLAR LLC  
1125 NW COUCH ST STE 700  
PORTLAND OR 97209

GILLIAM COUNTY TAX COLLECTOR  
PO BOX 484  
CONDON, OR 97823

FOR CREDIT CARD PAYMENT INFO:

www.co.gilliam.or.us/government/treasurer\_s\_office/property\_tax\_payments.php





# GILLIAM COUNTY, OREGON PROPERTY TAX STATEMENT

221 S OREGON ST, PO BOX 484

CONDON, OR 97823

JULY 1, 2022 TO JUNE 30, 2023

ACCOUNT NO:

5230

5230

## REAL PROPERTY DESCRIPTION

CODE: 0004 PCL: 301

MAP: 01N21E00-00-02100 L1

ACRES: 1024.50

SITUS:

AVANGRID RENEWABLES LLC  
MONTAGUE SOLAR LLC  
1125 NW COUCH ST STE 700  
PORTLAND OR 97209

NORTH CENTRAL E.S.D. 6,283.52

ARLINGTON #3 SCHOOL DISTRICT 9,852.38

**EDUCATION TOTAL:** 16,135.90

GENERAL FUND 12,408.51

WEED CONTROL 71.71

NORTH GILLIAM CO. HEALTH 3,041.62

NORTH GILLIAM CO. R.F.P.D. 1,713.96

NORTH GILLIAM CO CEMETERY 519.58

ARLINGTON PORT 459.87

**GENERAL GOVT TOTAL:** 18,215.25

VALUES	LAST YEAR	THIS YEAR
REAL MARKET		
LAND		3,227,180
STRUCTURES		0
TOTAL RMV	0	3,227,180
TOTAL ASSESSED VALUE	0	3,227,180
EXEMPTIONS		
NET TAXABLE:	0	3,227,180
TOTAL PROPERTY TAX:		34,351.15

Please Make Payment To: GILLIAM COUNTY TAX COLLECTOR  
(Refer to back of statement and insert enclosed for more information)

Questions about your statement? Please call:  
Tax Collector (541) 351-9173

YOUR CANCELLED CHECK IS YOUR RECEIPT

2022 - 2023 TAX ( Before Discount ) 34,351.15

PAYMENT OPTIONS			
Date Due	3% Option	2% Option	Trimester Option
11/15/22	33,320.62	22,442.75	11,450.39
02/15/23			11,450.38
05/15/23		11,450.38	11,450.38
Total	33,320.62	33,893.13	34,351.15

TOTAL DUE (After Discount and Pre-payments) 33,320.62

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PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

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2022 - 2023 PROPERTY TAXES

GILLIAM COUNTY REAL

ACCOUNT NO. 5230

PAYMENT OPTIONS	Discount	Date Due	Amount	Date Due	Amount	Date Due	Amount
Full Payment Enclosed	3%	11/15/22	33,320.62				
or 2/3 Payment Enclosed	2%	11/15/22	22,442.75			05/15/23	11,450.38
or 1/3 Payment Enclosed	0%	11/15/22	11,450.39	02/15/23	11,450.38	05/15/23	11,450.38

DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE

☐ Mailing address change on back

MAKE PAYMENT TO:

Enter Payment Amount

\$

AVANGRID RENEWABLES LLC  
MONTAGUE SOLAR LLC  
1125 NW COUCH ST STE 700  
PORTLAND OR 97209

GILLIAM COUNTY TAX COLLECTOR  
PO BOX 484  
CONDON, OR 97823



#### Attachment 4. Oregon Trail Solar PILOT Agreement

## PAYMENT-IN-LIEU-OF-TAX AGREEMENT

Gilliam County, a political subdivision of the State of Oregon (the “County”), and Oregon Trail Solar, LLC (the “Company”) hereby enter into this agreement (the “Agreement”).

### RECITALS

A. The Company or an affiliate of the Company intends to construct a solar photovoltaic electricity generation facility with an expected potential generating capacity of up to 41 MWac, and an optional battery energy storage system with a capacity of up to 100 MWac that will be located in the County and outside the boundaries of any incorporated city (the “Project”). The Project property is described and depicted further in Exhibits A-1 and A-2 attached hereto.

B. RESERVED

C. Under Section 1, Chapter 571, Oregon Laws 2015 (as amended by Section 1, Chapter 628, Oregon Laws 2019 and Section 1, Chapter 571, Oregon Laws 2021) (the “Legislation”), the governing body of a county and the owner or person in possession or control of a solar project located within the county and outside the boundaries of any incorporated city may enter into an agreement that exempts from property taxes the property constituting the solar project and allows the payment of a fee in lieu of property taxes imposed on the property.

D. The County and the Company would like to enter into a payment-in-lieu-of-tax agreement pursuant to the Legislation.

### AGREEMENT

The County and the Company hereby agree as follows:

#### ARTICLE 1 EXEMPTION

1.1 Exempt Property. The property that is exempt from property tax under this Agreement (the “Exempt Property”) shall include all property comprising the Project during the Exemption Period, which property shall include without limitation solar modules, racking, foundations, inverters, transformers, roads and civil construction work, underground or overhead electrical lines and grid interconnection facilities, land, and associated supporting infrastructure and facilities. Unless otherwise specified by the Company pursuant to Section 3.1, the Exempt Property shall include repairs, replacements, repowering, modernization, renovations and remodeling of such property made during the term of this Agreement.

1.2 Exemption. Except as provided in Article 5, the Exempt Property shall be exempt from property taxes for the period including the fifteen consecutive property tax years beginning July 1 (each, a “Tax Year”) beginning with the Tax Year identified in the first notice provided under Section 3.1 and, if the Company delivers written notice of its intent to extend the period on or before December 31 of the 15<sup>th</sup> Tax Year, the next five consecutive Tax Years after the 15<sup>th</sup> Tax Year in the period (the “Exemption Period”).

## **ARTICLE 2 PILOT PAYMENTS**

2.1 PILOT Payments. On or before March 1 of each Tax Year during the Exemption Period, the Company shall pay to the County Treasurer a fee in lieu of property taxes for the Tax Year equal to \$5,500 per MWac of nameplate capacity of the Project as set forth in the applicable notice for that year, carried to three decimal places (the “PILOT Payments”).

2.2 Credits for Real Property Tax Payments. Should the Company, under any subsequently adopted State or local law or for any other reason, pay for any Tax Year any amounts in the nature of property taxes, general assessments, service charges, or other general governmental charges of a similar nature levied or assessed upon any Exempt Property, the PILOT Payments for the Tax Year shall be reduced by such amounts. The Company shall give the County prior written notice of its intention to claim any credit pursuant to the provisions of this Section 2.2 at least ten days before the applicable PILOT Payment is due.

## **ARTICLE 3 NOTICES**

3.1 Company Notices. On or before December 31 before the first Tax Year of the Exemption Period, the Company shall file with the county assessor a copy of this Agreement and a request for computation of the PILOT Payments for the Tax Year, which request shall specify the first Tax Year of the Exemption Period. On or before December 31 before each subsequent Tax Year in the Exemption Period, the Company shall file with the county assessor a request for computation of the PILOT Payments for the Tax Year. Each request for computation of the PILOT Payments shall identify the owner or person in possession or control of the Project, include any information required by the assessor to compute the PILOT Payments, including the nameplate capacity of the Project in MWac, and specify any property in the Project that is not to be treated as Exempt Property. A request for computation that is filed after December 31 must be accompanied by a late fee of \$200.

3.2 County Notices. On or before February 1 of each Tax Year in the Exemption Period, the county assessor shall compute the PILOT Payment for the Project and shall notify the Company (i) that the PILOT Payment must be paid to the county treasurer on or before March 1 and (ii) of the amount due and of the consequences of late payment or nonpayment.

## **ARTICLE 4 FAILURES TO MAKE PILOT PAYMENTS**

4.1 Temporary Loss of Exemption. If the Company does not timely pay the PILOT Payment for any Tax Year and does not pay the PILOT Payment plus interest at the rate prescribed in ORS 311.505 (2) by the following March 1, the Exempt Property will not be exempt for the next Tax Year and shall be assessed and taxed as other similar property is assessed and taxed. Delinquent fees and interest shall be collected in the manner provided for collection of delinquent property taxes on personal property.

4.2 Disqualification. If the Company fails to pay the PILOT Payments for more than one year during the Exemption Period, the Exempt Property shall be disqualified from the

exemption. Property that is disqualified under this subsection shall be assessed and taxed as other similar property is assessed and taxed and shall be assessed a penalty in an amount equal to one year of the PILOT Payments.

## **ARTICLE 5 ASSIGNMENTS**

5.1 Assignments. The Company may sell, transfer, assign, pledge, mortgage, hypothecate, or otherwise dispose of and encumber all or any of its rights, title, and interests in, to, and under this Agreement to any lender as security for the performance of its obligations under any loan agreement with such lender, to any affiliate or other entity formed for the purpose of developing, constructing, owning, or operating the Project, and to any purchaser or lessee of the Project, without the consent of the County, as long as such successor owner assumes and agrees to be bound by this Agreement. In such event, the Company or the Company's assignee, as the case may be, will provide written notice to the other party of such assignment or pledge as promptly as practicable, but not later than 20 days thereafter. The County shall execute and deliver and furnish such consents, documents, certificates, opinions of counsel, and other instruments and information which any lender may reasonably request as a condition to the financing or refinancing of the Project. Except as set forth in this Article 5, neither this Agreement nor any rights under this Agreement, in whole or in part, shall be assignable or otherwise transferable by any party without the express written consent of the other party, and any attempt by any party to assign any of its rights or delegate any of its duties under this Agreement without the prior written consent of the other party, shall be null and void.

## **ARTICLE 6 MISCELLANEOUS**

6.1 Notices. Each notice or other communication provided under this Agreement (i) must be in writing, (ii) must be delivered to the recipient in person, by courier or certified mail, return receipt requested, or by facsimile or other electronic transmission at the addresses set forth below, and (iii) is effective upon receipt by the party receiving it.

If to the County, to:

Gillam County  
221 S. Oregon St.  
PO Box 427  
Condon, OR 97823  
Facsimile No.: (541) 351-9561

If to the Company, to:

Oregon Trail Solar, LLC  
2701 NW Vaughn Street, Suite 300  
Portland, OR 97210  
Attention: Contracts Administration



And

Avangrid Renewables, LLC  
2701 NW Vaughn Street, Suite 300  
Portland, OR 97210  
Attention: Tax Department

with a copy to:

Troutman Sanders LLP  
100 SW Main Street, Suite 1000  
Portland, OR 97204  
Attention: Adam C. Kobos

6.2 Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute one and the same instrument.

6.3 Entire Agreement. This Agreement is the entire agreement between the County and the Company with respect to the subject matter of this Agreement. There is no other oral or written agreement between the County and the Company with respect to the subject matter of this Agreement. There are no representations or warranties made by either the County or the Company, implied or express, other than those contained in this Agreement.

6.4 Severability. If any clause, sentence, or other portion of this Agreement becomes illegal, null, or void for any reason, the remaining portions will remain in full force and effect to the fullest extent permitted by law.

6.5 Amendments. This Agreement may not be amended unless such amendment is in writing and executed by the County and the Company.

6.6 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon, and venue shall be in the Circuit Court of the State of Oregon for the County of Morrow

6.7 Right to Contest Assessments. Nothing in this Agreement shall limit or restrict the Company from challenging the real market value or assessed value of any property, or the amount that is or would, but for the exemption, be due for property taxes.

The Company and the County have executed this Agreement effective as of the date of the last signature set forth below.

**GILLIAM COUNTY**

\_\_\_\_\_  
County Judge

Date: \_\_\_\_\_

\_\_\_\_\_  
County Commissioner

Date: \_\_\_\_\_

\_\_\_\_\_  
County Commissioner

Date: \_\_\_\_\_

**OREGON TRAIL SOLAR, LLC.**

By: \_\_\_\_\_

Name: Sara Parsons

Title: Authorized Representative

Date: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: Authorized Representative

Date: \_\_\_\_\_

**EXHIBIT A-1**  
**DESCRIPTION OF PROJECT AREA**

**EXHIBIT A-2**  
**DEPICTION OF PROJECT AREA**



Attachment 5. Gilliam SWCD Letter of Support



**Gilliam County Soil and  
Water Conservation District**

PO Box 106, 234 S. Main St. Condon, OR 97823

Phone (541) 384-2672 <https://www.gilliamcountyswed.com>

Oregon Department of Energy

550 Capitol St NE

Salem, OR 97301

To Whom it May Concern,

This is a letter to express Gilliam County Soil and Water Conservation District's willingness to accept funds from Avangrid, and its affiliate Oregon Trail Solar, LLC. The district would utilize these funds to improve agricultural production using established conservation practices such as irrigation efficiency upgrades, annual grass treatments, and cross-fencing. These practices would be prioritized and approved by the district board and implemented following the district's 5-year plan. A report describing the completed work would be presented annually to the Gilliam County Court. Our district appreciates this opportunity to continue to support Gilliam County agricultural producers, and we would be happy to answer any questions that might arise.

Respectfully,

A handwritten signature in blue ink, appearing to read "H. Winters".

Herb Winters

District Manager



## **Attachment 12. Updated Retirement Cost Estimate**

CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
<b>1</b>	<b>OREGON TRAIL SOLAR FACILITY RETIREMENT</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$2,830,948.82</b>	<b>\$2,830,948.82</b>
<b>1.1</b>	<b>Equipment &amp; Facilities Mob / Demob</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$85,694.25</b>	<b>\$85,694.25</b>
1.1.1	Equipment Mob	1.00	Lump Sum	\$40,600.00	\$40,600.00
1.1.2	Site Facilities	1.00	Lump Sum	\$2,200.00	\$2,200.00
1.1.3	Crew Mob & Site Setup	3.00	Day	\$8,578.85	\$25,736.55
1.1.4	Crew Demob & Site Cleanup	2.00	Day	\$8,578.85	\$17,157.70
<b>1.2</b>	<b>Project Site Support</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$115,883.57</b>	<b>\$115,883.57</b>
1.2.1	Site Facilities	2.00	Month	\$1,305.00	\$2,610.00
1.2.2	Field Management	2.00	Month	\$56,636.78	\$113,273.57
<b>1.3</b>	<b>Substation &amp; T-Line Retirement</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$204,319.33</b>	<b>\$204,319.33</b>
1.3.1	Substation Retirement	1.00	Lump Sum	\$184,346.84	\$184,346.84
1.3.2	Transmission Line Retirement	1.00	Lump Sum	\$19,972.49	\$19,972.49
<b>1.4</b>	<b>DC Storage Retirement</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$305,399.59</b>	<b>\$305,399.59</b>
1.4.1	Battery Removal & Disposal	100.00	MW	\$2,171.51	\$217,151.13
1.4.2	Structure & Components Removal	100.00	MW	\$882.48	\$88,248.47
<b>1.5</b>	<b>Solar Array Retirement</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$1,121,409.67</b>	<b>\$1,121,409.67</b>
1.5.1	Fence Removal	16,018.00	Linear Feet	\$1.38	\$22,050.19
1.5.2	Inverter / Transformer Removal	12.00	Each	\$5,530.20	\$66,362.41
1.5.3	Remove Foundations To Subgrade	12.00	Each	\$2,916.01	\$34,992.09
1.5.4	Solar Panel Removal & Disposal	82,000.00	Each	\$7.10	\$582,608.55
1.5.5	Solar Rack (Trackers) & Post Removal	1.00	Lump Sum	\$415,396.42	\$415,396.42
<b>1.6</b>	<b>Site Restoration - Partial Site Seeding</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$87,687.35</b>	<b>\$87,687.35</b>
1.6.1	Decompact Roads	15,443.00	Linear Feet	\$0.98	\$15,130.85
1.6.2	Spot Grade Disturbed Areas	90.00	Acre	\$306.18	\$27,556.50
1.6.3	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	90.00	Acre	\$500.00	\$45,000.00
<b>1.7</b>	<b>Contractor Markups</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$358,153.39</b>	<b>\$358,153.39</b>
1.7.1	Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	\$96,019.70	\$96,019.70
1.7.2	Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	\$262,133.69	\$262,133.69
<b>1.8</b>	<b>ODOE Contingencies</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$552,401.67</b>	<b>\$552,401.67</b>
1.8.1	20% Contingency on BESS	1.00	Lump Sum	\$61,080.00	\$61,080.00
1.8.2	1% Performance Bond	1.00	Lump Sum	\$23,396.27	\$23,396.27
1.8.3	10% Administrative and Project Management	1.00	Lump Sum	\$233,962.70	\$233,962.70
1.8.4	10% Future Development Contingency	1.00	Lump Sum	\$233,962.70	\$233,962.70



**Estimate Summary****TETRA TECH EC, INC.****Job Code: Oregon Trail Solar****Description: Decommissioning Estimate**

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1	1.00 Lump Sum	OREGON TRAIL SOLAR RETIREMENT	0.00	Detail	U.S. Dollar	2,830,948.82	2,830,948.82
1.1	1.00 Lump Sum	Equipment & Facilities Mob / Demob	0.20	Detail	U.S. Dollar	85,694.25	85,694.25
1.1.1	1.00 Lump Sum	Equipment Mob	0.00	Detail	U.S. Dollar	40,600.00	40,600.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
UERNTRLG	Rental Equip Transp-Large		4.00 Each	U.S. Dollar		10,000.00	40,000.00
UERNTRSM	Rental Equip Transp-Small		4.00 Each	U.S. Dollar		150.00	600.00
1.1.2	1.00 Lump Sum	Site Facilities	0.00	Detail	U.S. Dollar	2,200.00	2,200.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
UOCONMOB	Connex Box Mob		2.00 Each	U.S. Dollar		300.00	600.00
UOTRLTRN	Trailer Trnsp/Setup/Trdwn		2.00 Each	U.S. Dollar		800.00	1,600.00
1.1.3	3.00 Day	Crew Mob & Site Setup	1.00	Detail	U.S. Dollar	8,578.85	25,736.55
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	480.00	16.00 Each (hourly)	U.S. Dollar		40.69	19,530.95
L010101	OPERATOR	120.00	4.00 Each (hourly)	U.S. Dollar		51.71	6,205.60
1.1.4	2.00 Day	Crew Demob & Site Cleanup	1.00	Detail	U.S. Dollar	8,578.85	17,157.70
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	320.00	16.00 Each (hourly)	U.S. Dollar		40.69	13,020.63
L010101	OPERATOR	80.00	4.00 Each (hourly)	U.S. Dollar		51.71	4,137.07
1.2	1.00 Lump Sum	Project Site Support	0.02	Detail	U.S. Dollar	115,883.57	115,883.57
1.2.1	2.00 Month	Site Facilities	0.00	Detail	U.S. Dollar	1,305.00	2,610.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
URCONNEX	Connex Box		2.00 Month	U.S. Dollar		150.00	300.00
UROFFTRL	Office Trailer -12x60		2.00 Month	U.S. Dollar		500.00	1,000.00
UO1STAD	1st Aid Supplies		2.00 Month	U.S. Dollar		300.00	600.00
UOOFFSUP	Office Supplies(\$/prs/mo)		2.00 Month	U.S. Dollar		55.00	110.00
URPRTAJH	Port-a-John Unit(s) (4)		2.00 Month	U.S. Dollar		300.00	600.00
1.2.2	2.00 Month	Field Management	0.05	Detail	U.S. Dollar	56,636.78	113,273.57
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L90FXX02	Field - Proj Superintendent	440.00	1.00 Each (hourly)	U.S. Dollar		83.18	36,600.08
RPUTRK05	F-250 4X4 3/4 TON PICKUP	1,320.00	3.00 Each (hourly)	U.S. Dollar		15.14	19,984.80
L90FEL00	Field - Engr. Tech	440.00	1.00 Each (hourly)	U.S. Dollar		39.57	17,412.57
L90FXX03	Field - SHSO	440.00	1.00 Each (hourly)	U.S. Dollar		89.26	39,276.12
1.3	1.00 Lump Sum	Substation & T-Line Retirement	0.03	Detail	U.S. Dollar	204,319.33	204,319.33
1.3.1	1.00 Lump Sum	Substation Retirement	0.04	Detail	U.S. Dollar	184,346.84	184,346.84
1.3.1.1	1.00 Day	Fence Removal	1.00	Detail	U.S. Dollar	1,358.13	1,358.13
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar		51.71	517.13
L060100	GENERAL LABORER	10.00	1.00 Each (hourly)	U.S. Dollar		40.69	406.89
RBACKH09	Deere 710J BACKHOE, 1.62CY	10.00	1.00 Each (hourly)	U.S. Dollar		43.41	434.10
1.3.1.2	1.00 Each	Transformer Removal	0.17	Detail	U.S. Dollar	95,087.02	95,087.02

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.3.1.2.1	1.00 Each	Oil Removal & Disposal	1.00	Detail	U.S. Dollar	58,188.79	58,188.79
1.3.1.2.1.1	1.00 Each	Oil Removal	1.00	Detail	U.S. Dollar	813.79	813.79
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	20.00	2.00 Each (hourly)	U.S. Dollar		40.69	813.79
1.3.1.2.1.2	14,000.00 Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	4.00	56,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		56,000.00 Each	U.S. Dollar		1.00	56,000.00
1.3.1.2.1.3	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.3.1.2.2	1.00 Each	Dismantle & Loadout Transformer	0.20	Detail	U.S. Dollar	36,898.23	36,898.23
1.3.1.2.2.1	1.00 Each	Dismantle, Cut & Size	0.20	Detail	U.S. Dollar	31,398.23	31,398.23
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	200.00	4.00 Each (hourly)	U.S. Dollar		40.69	8,137.90
L010101	OPERATOR	100.00	2.00 Each (hourly)	U.S. Dollar		51.71	5,171.34
*REXCAV06A	Excav 100K w/ Bucket & Grapple	50.00	1.00 Each (hourly)	U.S. Dollar		150.41	7,520.50
*REXCAV06E	Excav 100K w/ Shear	50.00	1.00 Each (hourly)	U.S. Dollar		211.37	10,568.50
1.3.1.2.2.2	4.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	5,500.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		5,500.00 Each	U.S. Dollar		1.00	5,500.00
1.3.1.3	1.00 Each	Remove Control Building	2.00	Detail	U.S. Dollar	2,589.06	2,589.06
1.3.1.3.1	1.00 Each	Demo	2.00	Detail	U.S. Dollar	1,214.06	1,214.06
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	5.00	1.00 Each (hourly)	U.S. Dollar		40.69	203.45
L010101	OPERATOR	5.00	1.00 Each (hourly)	U.S. Dollar		51.71	258.57
*REXCAV06A	Excav 100K w/ Bucket & Grapple	5.00	1.00 Each (hourly)	U.S. Dollar		150.41	752.05
1.3.1.3.2	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.3.1.4	2.00 Day	UG Utility & Ground Removal	1.00	Detail	U.S. Dollar	1,358.13	2,716.26
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	20.00	1.00 Each (hourly)	U.S. Dollar		51.71	1,034.27
L060100	GENERAL LABORER	20.00	1.00 Each (hourly)	U.S. Dollar		40.69	813.79
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00 Each (hourly)	U.S. Dollar		43.41	868.20
1.3.1.5	500.00 Cubic Yard	Remove Foundations To Subgrade	73.68	Detail	U.S. Dollar	30.38	15,187.54
1.3.1.5.1	500.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	280.00	Detail	U.S. Dollar	17.19	8,595.82

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	17.86	1.00 Each (hourly)	U.S. Dollar		40.69	726.60
L010101	OPERATOR	35.71	2.00 Each (hourly)	U.S. Dollar		51.71	1,846.91
*REXCAV06C	Excav 100K w/ Hammer	17.86	1.00 Each (hourly)	U.S. Dollar		186.84	3,336.43
*REXCAV06A	Excav 100K w/ Bucket & Grapple	17.86	1.00 Each (hourly)	U.S. Dollar		150.41	2,685.89
1.3.1.5.2	500.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	13.18	6,591.72
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00 Each (hourly)	U.S. Dollar		86.39	4,319.50
L080940	TEAMSTER	50.00	1.00 Each (hourly)	U.S. Dollar		45.44	2,272.22
1.3.1.6	1.00 Lump Sum	Misc. Material Disposal	0.00	Detail	U.S. Dollar	1,925.00	1,925.00
1.3.1.6.1	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.3.1.6.2	10.00 Ton	Disposal Cost	0.00	Detail	U.S. Dollar	55.00	550.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		550.00 Each	U.S. Dollar		1.00	550.00
1.3.1.7	1.00 Lump Sum	Restore Yard	0.12	Detail	U.S. Dollar	65,483.83	65,483.83
1.3.1.7.1	4.00 Acre	Backfill / Regrade	2.00	Detail	U.S. Dollar	1,753.85	7,015.39
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
L010101	OPERATOR	40.00	2.00 Each (hourly)	U.S. Dollar		51.71	2,068.53
REXCAV06B	Gradall - Excavator	20.00	1.00 Each (hourly)	U.S. Dollar		95.20	1,904.07
*RDOZER08	CAT D6 LGP Dozer	20.00	1.00 Each (hourly)	U.S. Dollar		70.76	1,415.20
1.3.1.7.2	2,000.00 Cubic Yard	Vegetative Cover	300.00	Detail	U.S. Dollar	28.23	56,468.45
1.3.1.7.2.1	2,000.00 Cubic Yard	Topsoil, Delivered	0.00	Detail	U.S. Dollar	20.00	40,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
IMSOIL	Topsoil		2,000.00 Cubic Yard	U.S. Dollar		20.00	40,000.00
1.3.1.7.2.2	2,000.00 Cubic Yard	Placement	300.00	Detail	U.S. Dollar	8.23	16,468.45
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	133.33	2.00 Each (hourly)	U.S. Dollar		51.71	6,895.11
RDOZER08	CAT D6N XL	133.33	2.00 Each (hourly)	U.S. Dollar		71.80	9,573.33
1.3.1.7.3	4.00 Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	500.00	2,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00 Acre	U.S. Dollar		500.00	2,000.00
1.3.2	1.00 Lump Sum	Transmission Line Retirement	0.25	Detail	U.S. Dollar	19,972.49	19,972.49
1.3.2.1	2.00 Each	Structure Removal	1.00	Detail	U.S. Dollar	4,737.31	9,474.62
1.3.2.1.1	2.00 Each	Cut / Lower Structure	2.00	Detail	U.S. Dollar	1,972.26	3,944.51

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	4.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar		51.71	517.13
*RXMISC14	MAN LIFT GAS 125ft	10.00	1.00 Each (hourly)	U.S. Dollar		60.32	603.20
*RXMISC23	GROVE RT 200 TON	10.00	1.00 Each (hourly)	U.S. Dollar		119.66	1,196.60
1.3.2.1.2	2.00 Each Cut / Size Structure & Loadout		2.00	Detail	U.S. Dollar	2,077.55	4,155.10
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	60.00	6.00 Each (hourly)	U.S. Dollar		40.69	2,441.37
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar		51.71	517.13
*RXMISC23	GROVE RT 200 TON	10.00	1.00 Each (hourly)	U.S. Dollar		119.66	1,196.60
1.3.2.1.3	1.00 Each Trucking - Per Load		0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
Notes: ***** Assume 9 ton per steel structure *****							
1.3.2.2	2.00 Each Remove Foundations To Subgrade		0.98	Detail	U.S. Dollar	5,248.94	10,497.87
1.3.2.2.1	2.00 Each Excavate / Remove Foundation - Various Depth		1.00	Detail	U.S. Dollar	5,220.56	10,441.11
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
L010101	OPERATOR	40.00	2.00 Each (hourly)	U.S. Dollar		51.71	2,068.53
*REXCAV06C	Excav 100K w/ Hammer	20.00	1.00 Each (hourly)	U.S. Dollar		186.84	3,736.80
*REXCAV06A	Excav 100K w/ Bucket & Grapple	20.00	1.00 Each (hourly)	U.S. Dollar		150.41	3,008.20
1.3.2.2.2	3.23 Cubic Yard Concrete Transport Offsite		75.00	Detail	U.S. Dollar	17.58	56.76
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	0.43	1.00 Each (hourly)	U.S. Dollar		86.39	37.19
L080940	TEAMSTER	0.43	1.00 Each (hourly)	U.S. Dollar		45.44	19.56
1.4	1.00 Lump Sum DC Storage Retirement		0.02	Detail	U.S. Dollar	305,399.59	305,399.59
1.4.1	100.00 MW Battery Removal & Disposal		2.38	Detail	U.S. Dollar	2,171.51	217,151.13
1.4.1.1	42.00 Day Remove Batteries, Load For Transport		1.00	Detail	U.S. Dollar	1,909.78	80,210.73
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	1,680.00	4.00 Each (hourly)	U.S. Dollar		40.69	68,358.33
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	420.00	1.00 Each (hourly)	U.S. Dollar		28.22	11,852.40
1.4.1.2	34.00 Each Transport Batteries		0.00	Detail	U.S. Dollar	1,480.60	50,340.40
1.4.1.2.1	34.00 Each Roll Off Liners		0.00	Detail	U.S. Dollar	105.60	3,590.40
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
UODCLINER	Rolloff Liner		34.00 Each	U.S. Dollar		105.60	3,590.40
1.4.1.2.2	34.00 Each Trucking - Per Load		0.00	Detail	U.S. Dollar	1,375.00	46,750.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		46,750.00 Each	U.S. Dollar		1.00	46,750.00



Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.4.1.3	433.00 Ton	Disposal Fee's	0.00	Detail	U.S. Dollar	200.00	86,600.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USDISPOSAL	Disposal Fee's		86,600.00 Each	U.S. Dollar	1.00	86,600.00	
1.4.2	100.00 MW	Structure & Components Removal	13.17	Detail	U.S. Dollar	882.48	88,248.47
1.4.2.1	329.00 Ton	Structure Demo	43.33	Detail	U.S. Dollar	126.14	41,498.47
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	75.92	1.00 Each (hourly)	U.S. Dollar	150.41	11,419.59	
*REXCAV06E	Excav 100K w/ Shear	75.92	1.00 Each (hourly)	U.S. Dollar	211.37	16,047.86	
L010101	OPERATOR	151.85	2.00 Each (hourly)	U.S. Dollar	51.71	7,852.47	
L060100	GENERAL LABORER	151.85	2.00 Each (hourly)	U.S. Dollar	40.69	6,178.54	
1.4.2.2	34.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	46,750.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		46,750.00 Each	U.S. Dollar	1.00	46,750.00	
1.5	1.00 Lump Sum	Solar Array Retirement	0.01	Detail	U.S. Dollar	1,121,409.67	1,121,409.67
1.5.1	16,018.00 Linear Feet	Fence Removal	5,124.80	Detail	U.S. Dollar	1.38	22,050.19
1.5.1.1	16,018.00 Linear Feet	Fence Removal	5,124.80	Detail	U.S. Dollar	1.03	16,550.19
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L010101	OPERATOR	93.77	3.00 Each (hourly)	U.S. Dollar	51.71	4,849.03	
L060100	GENERAL LABORER	187.54	6.00 Each (hourly)	U.S. Dollar	40.69	7,630.71	
RBACKH09	Deere 710J BACKHOE, 1.62CY	93.77	3.00 Each (hourly)	U.S. Dollar	43.41	4,070.45	
1.5.1.2	4.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	5,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		5,500.00 Each	U.S. Dollar	1.00	5,500.00	
1.5.2	12.00 Each	Inverter / Transformer Removal	0.50	Detail	U.S. Dollar	5,530.20	66,362.41
1.5.2.1	12.00 Each	Disconnect Electrical	1.00	Detail	U.S. Dollar	1,118.19	13,418.26
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L010110	ELECTRICIAN	120.00	1.00 Each (hourly)	U.S. Dollar	55.99	6,718.72	
L060100	GENERAL LABORER	120.00	1.00 Each (hourly)	U.S. Dollar	40.69	4,882.74	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	120.00	1.00 Each (hourly)	U.S. Dollar	15.14	1,816.80	
1.5.2.2	12.00 Each	Loadout Inverter & Transformer	1.00	Detail	U.S. Dollar	3,037.01	36,444.15
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	480.00	4.00 Each (hourly)	U.S. Dollar	40.69	19,530.95	
L010101	OPERATOR	120.00	1.00 Each (hourly)	U.S. Dollar	51.71	6,205.60	
RHYDCR06	GROVE RT880 73 TON	120.00	1.00 Each (hourly)	U.S. Dollar	89.23	10,707.60	
1.5.2.3	12.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	16,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		16,500.00 Each	U.S. Dollar	1.00	16,500.00	
1.5.3	12.00 Each	Remove Foundations To Subgrade	0.77	Detail	U.S. Dollar	2,916.01	34,992.09

Notes: \*\*\*\*\*  
Assumption: 24x36x1 concrete pad per inverter/  
transformer  
\*\*\*\*\*

1.5.3.1	1,152.00 Cubic Yard	Excavate / Remove Foundation	280.00	Detail	U.S. Dollar	17.19	19,804.78
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	41.14	1.00 Each (hourly)	U.S. Dollar		40.69	1,674.08
L010101	OPERATOR	82.29	2.00 Each (hourly)	U.S. Dollar		51.71	4,255.27
*REXCAV06C	Excav 100K w/ Hammer	41.14	1.00 Each (hourly)	U.S. Dollar		186.84	7,687.13
*REXCAV06A	Excav 100K w/ Bucket & Grapple	41.14	1.00 Each (hourly)	U.S. Dollar		150.41	6,188.30
1.5.3.2	1,152.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	13.18	15,187.31
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	115.20	1.00 Each (hourly)	U.S. Dollar		86.39	9,952.13
L080940	TEAMSTER	115.20	1.00 Each (hourly)	U.S. Dollar		45.44	5,235.18
1.5.4	82,000.00 Each	Solar Panel Removal & Disposal	4,800.00	Detail	U.S. Dollar	7.10	582,608.55
1.5.4.1	82,000.00 Each	Solar Panel Removal	4,800.00	Detail	U.S. Dollar	3.03	248,758.55
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	1,025.00	6.00 Each (hourly)	U.S. Dollar		28.22	28,925.50
L010101	OPERATOR	1,025.00	6.00 Each (hourly)	U.S. Dollar		51.71	53,006.18
L060100	GENERAL LABORER	4,100.00	24.00 Each (hourly)	U.S. Dollar		40.69	166,826.87
<b>Notes:</b> ***** Assumed production: 20 panels per laborer per hour, Includes packaging and preparing for shipment offsite. *****							
1.5.4.2	128.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	176,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		176,000.00 Each	U.S. Dollar		1.00	176,000.00
<b>Notes:</b> ***** Assumption: 45,000 lbs per load *****							
1.5.4.3	2,870.00 Ton	Disposal Cost	0.00	Detail	U.S. Dollar	55.00	157,850.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		157,850.00 Each	U.S. Dollar		1.00	157,850.00
<b>Notes:</b> ***** Assumption: 82,000 modules x 70 lbs each *****							
1.5.5	1.00 Lump Sum	Solar Rack (Trackers) & Post Removal	0.12	Detail	U.S. Dollar	415,396.42	415,396.42
1.5.5.1	1,364.00 Each	Solar Rack (Trackers) & Post Removal	160.00	Detail	U.S. Dollar	273.29	372,771.42
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	1,364.00	16.00 Each (hourly)	U.S. Dollar		51.71	70,537.01
L060100	GENERAL LABORER	1,364.00	16.00 Each (hourly)	U.S. Dollar		40.69	55,500.45
*REXCAV06A	Excav 100K w/ Bucket & Grapple	682.00	8.00 Each (hourly)	U.S. Dollar		150.41	102,579.62
*REXCAV06E	Excav 100K w/ Shear	682.00	8.00 Each (hourly)	U.S. Dollar		211.37	144,154.34
<b>Notes:</b> ***** Assumed production: .5 hour per rack per crew. Crew to include 1 excavator w/shear, 1 excavator w/grapple, 2 operators and 2 laborers. Includes post removal and sizing of steel for sale as scrap, and loadout to haul trucks. 6 piles & 60 modules per rack. *****							
1.5.5.2	31.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	42,625.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		42,625.00 Each	U.S. Dollar		1.00	42,625.00
<b>Notes:</b> ***** Assumption: 45,000 lbs per load *****							

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.6	1.00 Lump Sum	Site Restoration - Partial Site Seeding	0.06	Detail	U.S. Dollar	87,687.35	87,687.35
1.6.1	15,443.00 Linear Feet	Decompact Roads	2,500.00	Detail	U.S. Dollar	0.98	15,130.85
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
*RDOZER08	CAT D6 LGP Dozer	123.54	2.00 Each (hourly)	U.S. Dollar	70.76	8,741.97	
L010101	OPERATOR	123.54	2.00 Each (hourly)	U.S. Dollar	51.71	6,388.87	
Notes: ***** Decompaction to include discing and regrading *****							
1.6.2	90.00 Acre	Spot Grade Disturbed Areas	8.00	Detail	U.S. Dollar	306.18	27,556.50
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
*RDOZER08	CAT D6 LGP Dozer	225.00	2.00 Each (hourly)	U.S. Dollar	70.76	15,921.00	
L010101	OPERATOR	225.00	2.00 Each (hourly)	U.S. Dollar	51.71	11,635.50	
Notes: ***** Assumption: 300 acres total property area. Assume that 30% of the area disturbed by construction will be regraded. *****							
1.6.3	90.00 Acre	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	0.00	Detail	U.S. Dollar	500.00	45,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USLANDSCAPE	Landscape Sub		90.00 Acre	U.S. Dollar	500.00	45,000.00	
Notes: ***** Assumption: 300 acres total property area. Assume that 30% of the area disturbed by construction will be re-seeded. *****							
1.7	1.00 Lump Sum	Contractor Markups	0.00	Detail	U.S. Dollar	358,153.39	358,153.39
1.7.1	1.00 Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	Detail	U.S. Dollar	96,019.70	96,019.70
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USMARKUP5	5% Markup		1,920,394.00 Each	U.S. Dollar	0.05	96,019.70	
1.7.2	1.00 Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	Detail	U.S. Dollar	262,133.69	262,133.69
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USMARKUP	13% Markup		2,016,413.00 Each	U.S. Dollar	0.13	262,133.69	
1.8	1.00 Lump Sum	ODOE Mandated Contingencies	0.00	Detail	U.S. Dollar	552,401.67	552,401.67
1.8.1	1.00 Lump Sum	20% Contingency on BESS	0.00	Detail	U.S. Dollar	61,080.00	61,080.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODCBESS	20% ODOE Mandated Contingency		305,400.00 Each	U.S. Dollar	0.20	61,080.00	
1.8.2	1.00 Lump Sum	1% Performance Bond	0.00	Detail	U.S. Dollar	23,396.27	23,396.27
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODOE1	ODOE 1% Markup		2,339,627.00 Each	U.S. Dollar	0.01	23,396.27	
1.8.3	1.00 Lump Sum	10% Administrative and Project Management	0.00	Detail	U.S. Dollar	233,962.70	233,962.70
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODOE2	ODOE 10% Markup		2,339,627.00 Each	U.S. Dollar	0.10	233,962.70	
1.8.4	1.00 Lump Sum	10% Future Development Contingency	0.00	Detail	U.S. Dollar	233,962.70	233,962.70
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	

Cost Item								
CBS Position Code	Quantity	UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
UODOE2			ODOE 10% Markup	2,339,627.00	Each	U.S. Dollar	0.10	233,962.70
Report Total:								2,830,948.82

Category	Total
Labor	685,062.50
Rented Equipment	455,105.86
Supplies	4,300.40
Materials	40,000.00
Subcontract	1,091,878.39
ODCs	554,601.67



CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
<b>1</b>	<b>OREGON TRAIL SOLAR FACILITY RETIREMENT (WIND)</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$5,056,405.63</b>	<b>\$5,056,405.63</b>
<b>1.1</b>	<b>Equipment &amp; Facilities Mob / Demob</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$883,194.25</b>	<b>\$883,194.25</b>
1.1.1	Equipment Mob	1.00	Lump Sum	\$40,600.00	\$40,600.00
1.1.2	Site Facilities	1.00	Lump Sum	\$2,200.00	\$2,200.00
1.1.3	Crew Mob & Site Setup	3.00	Day	\$8,578.85	\$25,736.55
1.1.4	Crew Demob & Site Cleanup	2.00	Day	\$8,578.85	\$17,157.70
1.1.5	Mob-Erection Sub	1.00	Lump Sum	\$797,500.00	\$797,500.00
<b>1.2</b>	<b>Project Site Support</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$231,767.13</b>	<b>\$231,767.13</b>
1.2.1	Site Facilities	4.00	Month	\$1,305.00	\$5,220.00
1.2.2	Field Management	4.00	Month	\$56,636.78	\$226,547.13
<b>1.3</b>	<b>Substation &amp; T-Line Retirement</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$208,319.33</b>	<b>\$208,319.33</b>
1.3.1	Substation Retirement	1.00	Lump Sum	\$188,346.84	\$188,346.84
1.3.2	Transmission Line Retirement	1.00	Lump Sum	\$19,972.49	\$19,972.49
<b>1.4</b>	<b>35KV Collection Removal</b>	<b>7.00</b>	<b>Mile</b>	<b>\$28,496.36</b>	<b>\$199,474.53</b>
1.4.1	Conductor Removal	36,960.00	Linear Feet	\$2.79	\$103,244.72
1.4.2	Utility Pole Removal	185.00	Each	\$520.16	\$96,229.81
<b>1.5</b>	<b>DC Storage Retirement</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$305,399.59</b>	<b>\$305,399.59</b>
1.5.1	Battery Removal & Disposal	100.00	MW	\$2,171.51	\$217,151.13
1.5.2	Structure & Components Removal	100.00	MW	\$882.48	\$88,248.47
<b>1.6</b>	<b>Construct &amp; Remove Temporary Crane Pads</b>	<b>16.00</b>	<b>Each</b>	<b>\$8,047.20</b>	<b>\$128,755.12</b>
1.6.1	Crane Pad 4" Stone 8" depth	1,600.00	Ton	\$36.93	\$59,094.22
1.6.2	Crane Pad 2" Stone 6" depth	1,200.00	Ton	\$40.25	\$48,294.22
1.6.3	Remove stone after erection	16.00	Each	\$1,335.42	\$21,366.69
<b>1.7</b>	<b>WTG Removal</b>	<b>16.00</b>	<b>Each</b>	<b>\$33,000.00</b>	<b>\$528,000.00</b>
1.7.1	Remove Top,Nacell, Rotor	16.00	Each	\$22,000.00	\$352,000.00
1.7.2	Remove Base & Mid	16.00	Each	\$11,000.00	\$176,000.00
<b>1.8</b>	<b>WTG Sizing &amp; Loadout</b>	<b>16.00</b>	<b>Each</b>	<b>\$36,651.03</b>	<b>\$586,416.43</b>
1.8.1	Oil Removal & Disposal	16.00	Each	\$282.89	\$4,526.26
1.8.2	Demo & Prepare For Shipment Offsite	4,576.00	Ton	\$34.89	\$159,650.17
1.8.3	Blade T&D	608.00	Ton	\$130.00	\$79,040.00
1.8.4	Scrap Trucking Cost	4,576.00	Ton	\$75.00	\$343,200.00
<b>1.9</b>	<b>WTG Foundation Removal</b>	<b>16.00</b>	<b>Each</b>	<b>\$11,126.53</b>	<b>\$178,024.49</b>
1.9.1	Remove Cylindrical Pedestal	320.00	Cubic Yard	\$50.71	\$16,226.33
1.9.2	Remove Top 2' Of Octagonal Base	2,400.00	Cubic Yard	\$52.10	\$125,031.62
1.9.3	Concrete Transport Offsite	2,720.00	Cubic Yard	\$13.52	\$36,766.54
<b>1.10</b>	<b>Pad Mount Transformer Removal</b>	<b>16.00</b>	<b>Each</b>	<b>\$2,158.08</b>	<b>\$34,529.32</b>
1.10.1	Oil Removal & Disposal	16.00	Each	\$1,397.60	\$22,361.54
1.10.2	Remove & Loadout Transformer	16.00	Each	\$121.41	\$1,942.50
1.10.3	Scrap Trucking Cost	128.00	Ton	\$75.00	\$9,600.00
1.10.4	Remove Foundations To Subgrade	16.00	Each	\$39.08	\$625.28
<b>1.11</b>	<b>MET Tower Removal</b>	<b>2.00</b>	<b>Each</b>	<b>\$4,317.13</b>	<b>\$8,634.27</b>
1.11.1	Structure Demo	2.00	Each	\$2,732.93	\$5,465.86
1.11.2	Remove Foundation	30.00	Cubic Yard	\$52.10	\$1,562.90
1.11.3	Concrete Transport Offsite	30.00	Cubic Yard	\$13.52	\$405.51
1.11.4	Scrap Trucking Cost	16.00	Ton	\$75.00	\$1,200.00
<b>1.12</b>	<b>O&amp;M Building Removal</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$26,187.23</b>	<b>\$26,187.23</b>

CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
1.12.1	Structure Demo	40.00	Ton	\$273.29	\$10,931.71
1.12.2	Remove Foundations To Subgrade	320.00	Cubic Yard	\$39.08	\$12,505.52
1.12.3	Trucking - Per Load	2.00	Each	\$1,375.00	\$2,750.00
<b>1.13</b>	<b>Site Restoration - Partial Site Seeding</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$160,749.11</b>	<b>\$160,749.11</b>
1.13.1	Private Access Road Removal (New Roads)	19.00	Mile	\$6,407.85	\$121,749.11
1.13.2	Re-Seed Road Beds	46.00	Acre	\$500.00	\$23,000.00
1.13.3	Re-Seed Turbine Locations	32.00	Acre	\$500.00	\$16,000.00
<b>1.14</b>	<b>Contractor Markups</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$648,917.54</b>	<b>\$648,917.54</b>
1.14.1	Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	\$173,972.55	\$173,972.55
1.14.2	Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	\$474,944.99	\$474,944.99
<b>1.15</b>	<b>ODOE Contingencies</b>	<b>1.00</b>	<b>Lump Sum</b>	<b>\$928,037.28</b>	<b>\$928,037.28</b>
1.15.1	20% Contingency on BESS	1.00	Lump Sum	\$61,080.00	\$61,080.00
1.15.2	1% Performance Bond	1.00	Lump Sum	\$41,283.68	\$41,283.68
1.15.3	10% Administrative and Project Management	1.00	Lump Sum	\$412,836.80	\$412,836.80
1.15.4	10% Future Development Contingency	1.00	Lump Sum	\$412,836.80	\$412,836.80

**Estimate Summary****TETRA TECH EC, INC.****Job Code: Oregon Trail Wind****Description: Decommissioning Estimate**

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1	1.00 Lump Sum	OREGON TRAIL WIND RETIREMENT	0.00	Detail	U.S. Dollar	5,056,405.63	5,056,405.63
1.1	1.00 Lump Sum	Equipment & Facilities Mob / Demob	0.20	Detail	U.S. Dollar	883,194.25	883,194.25
1.1.1	1.00 Lump Sum	Equipment Mob	0.00	Detail	U.S. Dollar	40,600.00	40,600.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UERNTSLG	Rental Equip Transp-Large		4.00 Each	U.S. Dollar	10,000.00	40,000.00	
UERNTRSM	Rental Equip Transp-Small		4.00 Each	U.S. Dollar	150.00	600.00	
1.1.2	1.00 Lump Sum	Site Facilities	0.00	Detail	U.S. Dollar	2,200.00	2,200.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UOCONMOB	Connex Box Mob		2.00 Each	U.S. Dollar	300.00	600.00	
UOTRLTRN	Trailer Trnsp/Setup/Trdwn		2.00 Each	U.S. Dollar	800.00	1,600.00	
1.1.3	3.00 Day	Crew Mob & Site Setup	1.00	Detail	U.S. Dollar	8,578.85	25,736.55
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	480.00	16.00 Each (hourly)	U.S. Dollar	40.69	19,530.95	
L010101	OPERATOR	120.00	4.00 Each (hourly)	U.S. Dollar	51.71	6,205.60	
1.1.4	2.00 Day	Crew Demob & Site Cleanup	1.00	Detail	U.S. Dollar	8,578.85	17,157.70
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	320.00	16.00 Each (hourly)	U.S. Dollar	40.69	13,020.63	
L010101	OPERATOR	80.00	4.00 Each (hourly)	U.S. Dollar	51.71	4,137.07	
1.1.5	1.00 Lump Sum	Mob-Erection Sub	0.00	Detail	U.S. Dollar	797,500.00	797,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USERECTMOB	Sub-Erection Mobilization		1.00 Each	U.S. Dollar	797,500.00	797,500.00	
Notes: ***** Historical pricing from past projects *****							
1.2	1.00 Lump Sum	Project Site Support	0.01	Detail	U.S. Dollar	231,767.13	231,767.13
1.2.1	4.00 Month	Site Facilities	0.00	Detail	U.S. Dollar	1,305.00	5,220.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
URCONNEX	Connex Box		4.00 Month	U.S. Dollar	150.00	600.00	
UROFFTRL	Office Trailer -12x60		4.00 Month	U.S. Dollar	500.00	2,000.00	
UO1STAD	1st Aid Supplies		4.00 Month	U.S. Dollar	300.00	1,200.00	
UOOFFSUP	Office Supplies(\$/prs/mo)		4.00 Month	U.S. Dollar	55.00	220.00	
URPRTAJH	Port-a-John Unit(s) (4)		4.00 Month	U.S. Dollar	300.00	1,200.00	
1.2.2	4.00 Month	Field Management	0.05	Detail	U.S. Dollar	56,636.78	226,547.13
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L90FXX02	Field - Proj Superintendent	880.00	1.00 Each (hourly)	U.S. Dollar	83.18	73,200.16	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	2,640.00	3.00 Each (hourly)	U.S. Dollar	15.14	39,969.60	
L90FEL00	Field - Engr. Tech	880.00	1.00 Each (hourly)	U.S. Dollar	39.57	34,825.14	
L90FXX03	Field - SHSO	880.00	1.00 Each (hourly)	U.S. Dollar	89.26	78,552.23	
1.3	1.00 Lump Sum	Substation & T-Line Retirement	0.03	Detail	U.S. Dollar	208,319.33	208,319.33
1.3.1	1.00 Lump Sum	Substation Retirement	0.04	Detail	U.S. Dollar	188,346.84	188,346.84
1.3.1.1	1.00 Day	Fence Removal	1.00	Detail	U.S. Dollar	1,358.13	1,358.13

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar		51.71	517.13
L060100	GENERAL LABORER	10.00	1.00 Each (hourly)	U.S. Dollar		40.69	406.89
RBACKH09	Deere 710J BACKHOE, 1.62CY	10.00	1.00 Each (hourly)	U.S. Dollar		43.41	434.10
1.3.1.2	1.00 Each	Transformer Removal	0.17	Detail	U.S. Dollar	95,087.02	95,087.02
1.3.1.2.1	1.00 Each	Oil Removal & Disposal	1.00	Detail	U.S. Dollar	58,188.79	58,188.79
1.3.1.2.1.1	1.00 Each	Oil Removal	1.00	Detail	U.S. Dollar	813.79	813.79
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	20.00	2.00 Each (hourly)	U.S. Dollar		40.69	813.79
1.3.1.2.1.2	14,000.00 Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	4.00	56,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		56,000.00 Each	U.S. Dollar		1.00	56,000.00
1.3.1.2.1.3	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.3.1.2.2	1.00 Each	Dismantle & Loadout Transformer	0.20	Detail	U.S. Dollar	36,898.23	36,898.23
1.3.1.2.2.1	1.00 Each	Dismantle, Cut & Size	0.20	Detail	U.S. Dollar	31,398.23	31,398.23
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	200.00	4.00 Each (hourly)	U.S. Dollar		40.69	8,137.90
L010101	OPERATOR	100.00	2.00 Each (hourly)	U.S. Dollar		51.71	5,171.34
*REXCAV06A	Excav 100K w/ Bucket & Grapple	50.00	1.00 Each (hourly)	U.S. Dollar		150.41	7,520.50
*REXCAV06E	Excav 100K w/ Shear	50.00	1.00 Each (hourly)	U.S. Dollar		211.37	10,568.50
1.3.1.2.2.2	4.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	5,500.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		5,500.00 Each	U.S. Dollar		1.00	5,500.00
1.3.1.3	1.00 Each	Remove Control Building	2.00	Detail	U.S. Dollar	2,589.06	2,589.06
1.3.1.3.1	1.00 Each	Demo	2.00	Detail	U.S. Dollar	1,214.06	1,214.06
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	5.00	1.00 Each (hourly)	U.S. Dollar		40.69	203.45
L010101	OPERATOR	5.00	1.00 Each (hourly)	U.S. Dollar		51.71	258.57
*REXCAV06A	Excav 100K w/ Bucket & Grapple	5.00	1.00 Each (hourly)	U.S. Dollar		150.41	752.05
1.3.1.3.2	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.3.1.4	2.00 Day	UG Utility & Ground Removal	1.00	Detail	U.S. Dollar	1,358.13	2,716.26
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	20.00	1.00 Each (hourly)	U.S. Dollar		51.71	1,034.27



Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	20.00	1.00 Each (hourly)	U.S. Dollar		40.69	813.79
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00 Each (hourly)	U.S. Dollar		43.41	868.20
1.3.1.5	500.00 Cubic Yard	Remove Foundations To Subgrade	73.68	Detail	U.S. Dollar	30.38	15,187.54
1.3.1.5.1	500.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	280.00	Detail	U.S. Dollar	17.19	8,595.82
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	17.86	1.00 Each (hourly)	U.S. Dollar		40.69	726.60
L010101	OPERATOR	35.71	2.00 Each (hourly)	U.S. Dollar		51.71	1,846.91
*REXCAV06C	Excav 100K w/ Hammer	17.86	1.00 Each (hourly)	U.S. Dollar		186.84	3,336.43
*REXCAV06A	Excav 100K w/ Bucket & Grapple	17.86	1.00 Each (hourly)	U.S. Dollar		150.41	2,685.89
1.3.1.5.2	500.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	13.18	6,591.72
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00 Each (hourly)	U.S. Dollar		86.39	4,319.50
L080940	TEAMSTER	50.00	1.00 Each (hourly)	U.S. Dollar		45.44	2,272.22
1.3.1.6	1.00 Lump Sum	Misc. Material Disposal	0.00	Detail	U.S. Dollar	1,925.00	1,925.00
1.3.1.6.1	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.3.1.6.2	10.00 Ton	Disposal Cost	0.00	Detail	U.S. Dollar	55.00	550.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		550.00 Each	U.S. Dollar		1.00	550.00
1.3.1.7	1.00 Lump Sum	Restore Yard	0.12	Detail	U.S. Dollar	69,483.83	69,483.83
1.3.1.7.1	4.00 Acre	Backfill / Regrade	2.00	Detail	U.S. Dollar	1,753.85	7,015.39
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
L010101	OPERATOR	40.00	2.00 Each (hourly)	U.S. Dollar		51.71	2,068.53
REXCAV06B	Gradall - Excavator	20.00	1.00 Each (hourly)	U.S. Dollar		95.20	1,904.07
*RDOZER08	CAT D6 LGP Dozer	20.00	1.00 Each (hourly)	U.S. Dollar		70.76	1,415.20
1.3.1.7.2	2,000.00 Cubic Yard	Vegetative Cover	300.00	Detail	U.S. Dollar	30.23	60,468.45
1.3.1.7.2.1	2,000.00 Cubic Yard	Topsoil, Delivered	0.00	Detail	U.S. Dollar	22.00	44,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
IMSOIL	Topsoil		2,000.00 Cubic Yard	U.S. Dollar		22.00	44,000.00
1.3.1.7.2.2	2,000.00 Cubic Yard	Placement	300.00	Detail	U.S. Dollar	8.23	16,468.45
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	133.33	2.00 Each (hourly)	U.S. Dollar		51.71	6,895.11
RDOZER08	CAT D6N XL	133.33	2.00 Each (hourly)	U.S. Dollar		71.80	9,573.33
1.3.1.7.3	4.00 Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	500.00	2,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00 Acre	U.S. Dollar		500.00	2,000.00

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.3.2	1.00 Lump Sum	Transmission Line Retirement	0.25	Detail	U.S. Dollar	19,972.49	19,972.49
1.3.2.1	2.00 Each	Structure Removal	1.00	Detail	U.S. Dollar	4,737.31	9,474.62
1.3.2.1.1	2.00 Each	Cut / Lower Structure	2.00	Detail	U.S. Dollar	1,972.26	3,944.51
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	4.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar		51.71	517.13
*RXMISC14	MAN LIFT GAS 125ft	10.00	1.00 Each (hourly)	U.S. Dollar		60.32	603.20
*RXMISC23	GROVE RT 200 TON	10.00	1.00 Each (hourly)	U.S. Dollar		119.66	1,196.60
1.3.2.1.2	2.00 Each	Cut / Size Structure & Loadout	2.00	Detail	U.S. Dollar	2,077.55	4,155.10
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	60.00	6.00 Each (hourly)	U.S. Dollar		40.69	2,441.37
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar		51.71	517.13
*RXMISC23	GROVE RT 200 TON	10.00	1.00 Each (hourly)	U.S. Dollar		119.66	1,196.60
1.3.2.1.3	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
Notes: ***** Assume 9 ton per steel structure *****							
1.3.2.2	2.00 Each	Remove Foundations To Subgrade	0.98	Detail	U.S. Dollar	5,248.94	10,497.87
1.3.2.2.1	2.00 Each	Excavate / Remove Foundation - Various Depth	1.00	Detail	U.S. Dollar	5,220.56	10,441.11
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
L010101	OPERATOR	40.00	2.00 Each (hourly)	U.S. Dollar		51.71	2,068.53
*REXCAV06C	Excav 100K w/ Hammer	20.00	1.00 Each (hourly)	U.S. Dollar		186.84	3,736.80
*REXCAV06A	Excav 100K w/ Bucket & Grapple	20.00	1.00 Each (hourly)	U.S. Dollar		150.41	3,008.20
1.3.2.2.2	3.23 Cubic Yard	Concrete Transport Offsite	75.00	Detail	U.S. Dollar	17.58	56.76
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	0.43	1.00 Each (hourly)	U.S. Dollar		86.39	37.19
L080940	TEAMSTER	0.43	1.00 Each (hourly)	U.S. Dollar		45.44	19.56
1.4	7.00 Mile	35KV Collection Removal	0.13	Detail	U.S. Dollar	28,496.36	199,474.53
1.4.1	36,960.00 Linear Feet	Conductor Removal	1,333.33	Detail	U.S. Dollar	2.79	103,244.72
1.4.1.1	36,960.00 Linear Feet	Cut / Lower Cable, Size & Loadout	1,333.33	Detail	U.S. Dollar	2.27	83,994.72
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	1,108.80	4.00 Each (hourly)	U.S. Dollar		40.69	45,116.50
L010101	OPERATOR	277.20	1.00 Each (hourly)	U.S. Dollar		51.71	14,334.94
*RXMISC14	MAN LIFT GAS 125ft	277.20	1.00 Each (hourly)	U.S. Dollar		60.32	16,720.70
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	277.20	1.00 Each (hourly)	U.S. Dollar		28.22	7,822.58
1.4.1.2	14.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	19,250.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		19,250.00 Each	U.S. Dollar		1.00	19,250.00

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Notes: ***** Total weight for cable, 40 ton per mile Assume 20 ton per load for trucking *****							
1.4.2	185.00 Each	Utility Pole Removal	6.67	Detail	U.S. Dollar	520.16	96,229.81
1.4.2.1	185.00 Each	Cut / Lower Pole	10.00	Detail	U.S. Dollar	276.26	51,108.33
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	740.00	4.00 Each (hourly)	U.S. Dollar	40.69	30,110.22	
L010101	OPERATOR	185.00	1.00 Each (hourly)	U.S. Dollar	51.71	9,566.97	
RHYDCR05	GROVE RT600E 40 TON	185.00	1.00 Each (hourly)	U.S. Dollar	61.79	11,431.15	
1.4.2.2	185.00 Each	Size & Loadout	20.00	Detail	U.S. Dollar	138.13	25,554.17
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	370.00	4.00 Each (hourly)	U.S. Dollar	40.69	15,055.11	
L010101	OPERATOR	92.50	1.00 Each (hourly)	U.S. Dollar	51.71	4,783.48	
RHYDCR05	GROVE RT600E 40 TON	92.50	1.00 Each (hourly)	U.S. Dollar	61.79	5,715.58	
1.4.2.3	14.23 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	19,567.31
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		19,567.31 Each	U.S. Dollar	1.00	19,567.31	
1.5	1.00 Lump Sum	DC Storage Retirement	0.02	Detail	U.S. Dollar	305,399.59	305,399.59
1.5.1	100.00 MW	Battery Removal & Disposal	2.38	Detail	U.S. Dollar	2,171.51	217,151.13
1.5.1.1	42.00 Day	Remove Batteries, Load For Transport	1.00	Detail	U.S. Dollar	1,909.78	80,210.73
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	1,680.00	4.00 Each (hourly)	U.S. Dollar	40.69	68,358.33	
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	420.00	1.00 Each (hourly)	U.S. Dollar	28.22	11,852.40	
1.5.1.2	34.00 Each	Transport Batteries	0.00	Detail	U.S. Dollar	1,480.60	50,340.40
1.5.1.2.1	34.00 Each	Roll Off Liners	0.00	Detail	U.S. Dollar	105.60	3,590.40
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODCLINER	Rolloff Liner		34.00 Each	U.S. Dollar	105.60	3,590.40	
1.5.1.2.2	34.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	46,750.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		46,750.00 Each	U.S. Dollar	1.00	46,750.00	
1.5.1.3	433.00 Ton	Disposal Fee's	0.00	Detail	U.S. Dollar	200.00	86,600.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USDISPOSAL	Disposal Fee's		86,600.00 Each	U.S. Dollar	1.00	86,600.00	
1.5.2	100.00 MW	Structure & Components Removal	13.17	Detail	U.S. Dollar	882.48	88,248.47
1.5.2.1	329.00 Ton	Structure Demo	43.33	Detail	U.S. Dollar	126.14	41,498.47
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	75.92	1.00 Each (hourly)	U.S. Dollar	150.41	11,419.59	
*REXCAV06E	Excav 100K w/ Shear	75.92	1.00 Each (hourly)	U.S. Dollar	211.37	16,047.86	
L010101	OPERATOR	151.85	2.00 Each (hourly)	U.S. Dollar	51.71	7,852.47	
L060100	GENERAL LABORER	151.85	2.00 Each (hourly)	U.S. Dollar	40.69	6,178.54	
1.5.2.2	34.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	46,750.00

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		46,750.00 Each	U.S. Dollar		1.00	46,750.00
1.6	16.00 Each	Construct & Remove Temporary Crane Pads	0.75	Detail	U.S. Dollar	8,047.20	128,755.12
Notes: ***** 60' x 40' Temporary Crane Pad *****							
1.6.1	1,600.00 Ton	Crane Pad 4" Stone 8" depth	200.00	Detail	U.S. Dollar	36.93	59,094.22
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
M4"STONE	4" Stone		1,600.00 Ton	U.S. Dollar		17.00	27,200.00
RDOZER06	CAT D5H XL	80.00	1.00 Each (hourly)	U.S. Dollar		43.56	3,484.40
RROLLR06	CP-563C 84" SMOOTH DRUM	80.00	1.00 Each (hourly)	U.S. Dollar		51.70	4,135.68
L010101	OPERATOR	160.00	2.00 Each (hourly)	U.S. Dollar		51.71	8,274.14
USSTONETRK	Sub-Trucking of Stone		1,600.00 Ton	U.S. Dollar		10.00	16,000.00
1.6.2	1,200.00 Ton	Crane Pad 2" Stone 6" depth	150.00	Detail	U.S. Dollar	40.25	48,294.22
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USSTONETRK	Sub-Trucking of Stone		1,200.00 Ton	U.S. Dollar		10.00	12,000.00
L010101	OPERATOR	160.00	2.00 Each (hourly)	U.S. Dollar		51.71	8,274.14
RDOZER06	CAT D5H XL	80.00	1.00 Each (hourly)	U.S. Dollar		43.56	3,484.40
RROLLR06	CP-563C 84" SMOOTH DRUM	80.00	1.00 Each (hourly)	U.S. Dollar		51.70	4,135.68
M2"STONE	Material - 2" Stone		1,200.00 Ton	U.S. Dollar		17.00	20,400.00
1.6.3	16.00 Each	Remove stone after erection	3.00	Detail	U.S. Dollar	1,335.42	21,366.69
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDOZER06	CAT D5H XL	53.33	1.00 Each (hourly)	U.S. Dollar		43.56	2,322.93
RFELWH09	CAT 966F LOADER, 4.25CY	53.33	1.00 Each (hourly)	U.S. Dollar		81.12	4,326.40
L010101	OPERATOR	106.67	2.00 Each (hourly)	U.S. Dollar		51.71	5,516.09
L060100	GENERAL LABORER	53.33	1.00 Each (hourly)	U.S. Dollar		40.69	2,170.11
RDUTRK06	CAT D350D, 18CY-24CY	53.33	1.00 Each (hourly)	U.S. Dollar		86.39	4,607.47
L080940	TEAMSTER	53.33	1.00 Each (hourly)	U.S. Dollar		45.44	2,423.70
1.7	16.00 Each	WTG Removal	0.00	Detail	U.S. Dollar	33,000.00	528,000.00
1.7.1	16.00 Each	Remove Top,Nacell, Rotor	0.00	Detail	U.S. Dollar	22,000.00	352,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USERECT1	Sub-Top, Nacelle, Rotor		16.00 Each	U.S. Dollar		22,000.00	352,000.00
1.7.2	16.00 Each	Remove Base & Mid	0.00	Detail	U.S. Dollar	11,000.00	176,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USERECT	Erection Sub - Base/Mid		16.00 Each	U.S. Dollar		11,000.00	176,000.00
1.8	16.00 Each	WTG Sizing & Loadout	0.83	Detail	U.S. Dollar	36,651.03	586,416.43
1.8.1	16.00 Each	Oil Removal & Disposal	5.00	Detail	U.S. Dollar	282.89	4,526.26
1.8.1.1	16.00 Each	Oil Removal	5.00	Detail	U.S. Dollar	193.04	3,088.61
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	64.00	2.00 Each (hourly)	U.S. Dollar		40.69	2,604.13
RPUTRK05	F-250 4X4 3/4 TON PICKUP	32.00	1.00 Each (hourly)	U.S. Dollar		15.14	484.48
1.8.1.2	208.00 Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	6.00	1,248.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		1,248.00 Each	U.S. Dollar		1.00	1,248.00



Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.8.1.3	0.14 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	189.66
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		189.66 Each	U.S. Dollar		1.00	189.66
1.8.2	4,576.00 Ton	Demo & Prepare For Shipment Offsite	286.00	Detail	U.S. Dollar	34.89	159,650.17
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
*RXMISC19	Material Handler	160.00	1.00 Each (hourly)	U.S. Dollar		124.69	19,950.40
*REXCAV08	Excav 240K w/ Shear	160.00	1.00 Each (hourly)	U.S. Dollar		525.56	84,089.60
L010101	OPERATOR	320.00	2.00 Each (hourly)	U.S. Dollar		51.71	16,548.27
L060100	GENERAL LABORER	960.00	6.00 Each (hourly)	U.S. Dollar		40.69	39,061.90
1.8.3	608.00 Ton	Blade T&D	0.00	Detail	U.S. Dollar	130.00	79,040.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		45,600.00 Each	U.S. Dollar		1.00	45,600.00
USDISPOSAL	Disposal Fee's		33,440.00 Each	U.S. Dollar		1.00	33,440.00
1.8.4	4,576.00 Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	75.00	343,200.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		343,200.00 Each	U.S. Dollar		1.00	343,200.00
1.9	16.00 Each	WTG Foundation Removal	0.43	Detail	U.S. Dollar	11,126.53	178,024.49
1.9.1	320.00 Cubic Yard	Remove Cylindrical Pedestal	150.00	Detail	U.S. Dollar	50.71	16,226.33
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	42.67	2.00 Each (hourly)	U.S. Dollar		40.69	1,736.08
L010101	OPERATOR	64.00	3.00 Each (hourly)	U.S. Dollar		51.71	3,309.65
*REXCAV06C	Excav 100K w/ Hammer	42.67	2.00 Each (hourly)	U.S. Dollar		186.84	7,971.84
*REXCAV06A	Excav 100K w/ Bucket & Grapple	21.33	1.00 Each (hourly)	U.S. Dollar		150.41	3,208.75
1.9.2	2,400.00 Cubic Yard	Remove Top 2' Of Octagonal Base	146.00	Detail	U.S. Dollar	52.10	125,031.62
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	328.77	2.00 Each (hourly)	U.S. Dollar		40.69	13,377.36
L010101	OPERATOR	493.15	3.00 Each (hourly)	U.S. Dollar		51.71	25,502.47
*REXCAV06C	Excav 100K w/ Hammer	328.77	2.00 Each (hourly)	U.S. Dollar		186.84	61,426.85
*REXCAV06A	Excav 100K w/ Bucket & Grapple	164.38	1.00 Each (hourly)	U.S. Dollar		150.41	24,724.93
1.9.3	2,720.00 Cubic Yard	Concrete Transport Offsite	146.67	Detail	U.S. Dollar	13.52	36,766.54
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	185.45	1.00 Each (hourly)	U.S. Dollar		86.39	16,021.42
L080940	TEAMSTER	185.45	1.00 Each (hourly)	U.S. Dollar		45.44	8,427.85
L010101	OPERATOR	92.73	0.50 Each (hourly)	U.S. Dollar		51.71	4,795.24
RFELWH09	CAT 966F LOADER, 4.25CY	92.73	0.50 Each (hourly)	U.S. Dollar		81.12	7,522.04
1.10	16.00 Each	Pad Mount Transformer Removal	3.79	Detail	U.S. Dollar	2,158.08	34,529.32
1.10.1	16.00 Each	Oil Removal & Disposal	5.00	Detail	U.S. Dollar	1,397.60	22,361.54
1.10.1.1	16.00 Each	Oil Removal	5.00	Detail	U.S. Dollar	111.66	1,786.54
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	32.00	1.00 Each (hourly)	U.S. Dollar		40.69	1,302.06
RPUTRK05	F-250 4X4 3/4 TON PICKUP	32.00	1.00 Each (hourly)	U.S. Dollar		15.14	484.48
1.10.1.2	3,200.00 Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	6.00	19,200.00

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		19,200.00 Each	U.S. Dollar		1.00	19,200.00
1.10.1.3	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.10.2	16.00 Each	Remove & Loadout Transformer	20.00	Detail	U.S. Dollar	121.41	1,942.50
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	8.00	1.00 Each (hourly)	U.S. Dollar		150.41	1,203.28
L010101	OPERATOR	8.00	1.00 Each (hourly)	U.S. Dollar		51.71	413.71
L060100	GENERAL LABORER	8.00	1.00 Each (hourly)	U.S. Dollar		40.69	325.52
1.10.3	128.00 Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	75.00	9,600.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		9,600.00 Each	U.S. Dollar		1.00	9,600.00
1.10.4	16.00 Each	Remove Foundations To Subgrade	71.43	Detail	U.S. Dollar	39.08	625.28
1.10.4.1	16.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	250.00	Detail	U.S. Dollar	19.25	308.07
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	0.64	1.00 Each (hourly)	U.S. Dollar		40.69	26.04
L010101	OPERATOR	1.28	2.00 Each (hourly)	U.S. Dollar		51.71	66.19
*REXCAV06C	Excav 100K w/ Hammer	0.64	1.00 Each (hourly)	U.S. Dollar		186.84	119.58
*REXCAV06A	Excav 100K w/ Bucket & Grapple	0.64	1.00 Each (hourly)	U.S. Dollar		150.41	96.26
1.10.4.2	16.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	19.83	317.20
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	1.60	1.00 Each (hourly)	U.S. Dollar		86.39	138.22
L080940	TEAMSTER	1.60	1.00 Each (hourly)	U.S. Dollar		45.44	72.71
L010101	OPERATOR	0.80	0.50 Each (hourly)	U.S. Dollar		51.71	41.37
RFELWH09	CAT 966F LOADER, 4.25CY	0.80	0.50 Each (hourly)	U.S. Dollar		81.12	64.90
1.11	2.00 Each	MET Tower Removal	1.42	Detail	U.S. Dollar	4,317.13	8,634.27
1.11.1	2.00 Each	Structure Demo	2.00	Detail	U.S. Dollar	2,732.93	5,465.86
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	10.00	1.00 Each (hourly)	U.S. Dollar		150.41	1,504.10
*REXCAV06E	Excav 100K w/ Shear	10.00	1.00 Each (hourly)	U.S. Dollar		211.37	2,113.70
L010101	OPERATOR	20.00	2.00 Each (hourly)	U.S. Dollar		51.71	1,034.27
L060100	GENERAL LABORER	20.00	2.00 Each (hourly)	U.S. Dollar		40.69	813.79
1.11.2	30.00 Cubic Yard	Remove Foundation	146.00	Detail	U.S. Dollar	52.10	1,562.90
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	4.11	2.00 Each (hourly)	U.S. Dollar		40.69	167.22
L010101	OPERATOR	6.16	3.00 Each (hourly)	U.S. Dollar		51.71	318.78
*REXCAV06C	Excav 100K w/ Hammer	4.11	2.00 Each (hourly)	U.S. Dollar		186.84	767.84
*REXCAV06A	Excav 100K w/ Bucket & Grapple	2.05	1.00 Each (hourly)	U.S. Dollar		150.41	309.06
1.11.3	30.00 Cubic Yard	Concrete Transport Offsite	146.67	Detail	U.S. Dollar	13.52	405.51
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	2.05	1.00 Each (hourly)	U.S. Dollar		86.39	176.71

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L080940	TEAMSTER	2.05	1.00 Each (hourly)	U.S. Dollar		45.44	92.95
L010101	OPERATOR	1.02	0.50 Each (hourly)	U.S. Dollar		51.71	52.89
RFELWH09	CAT 966F LOADER, 4.25CY	1.02	0.50 Each (hourly)	U.S. Dollar		81.12	82.96
1.11.4	16.00 Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	75.00	1,200.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,200.00 Each	U.S. Dollar		1.00	1,200.00
1.12	1.00 Lump Sum	O&M Building Removal	0.15	Detail	U.S. Dollar	26,187.23	26,187.23
1.12.1	40.00 Ton	Structure Demo	20.00	Detail	U.S. Dollar	273.29	10,931.71
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	20.00	1.00 Each (hourly)	U.S. Dollar		150.41	3,008.20
*REXCAV06E	Excav 100K w/ Shear	20.00	1.00 Each (hourly)	U.S. Dollar		211.37	4,227.40
L010101	OPERATOR	40.00	2.00 Each (hourly)	U.S. Dollar		51.71	2,068.53
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar		40.69	1,627.58
1.12.2	320.00 Cubic Yard	Remove Foundations To Subgrade	71.43	Detail	U.S. Dollar	39.08	12,505.52
1.12.2.1	320.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	250.00	Detail	U.S. Dollar	19.25	6,161.49
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	12.80	1.00 Each (hourly)	U.S. Dollar		40.69	520.83
L010101	OPERATOR	25.60	2.00 Each (hourly)	U.S. Dollar		51.71	1,323.86
*REXCAV06C	Excav 100K w/ Hammer	12.80	1.00 Each (hourly)	U.S. Dollar		186.84	2,391.55
*REXCAV06A	Excav 100K w/ Bucket & Grapple	12.80	1.00 Each (hourly)	U.S. Dollar		150.41	1,925.25
1.12.2.2	320.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	19.83	6,344.03
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	32.00	1.00 Each (hourly)	U.S. Dollar		86.39	2,764.48
L080940	TEAMSTER	32.00	1.00 Each (hourly)	U.S. Dollar		45.44	1,454.22
L010101	OPERATOR	16.00	0.50 Each (hourly)	U.S. Dollar		51.71	827.41
RFELWH09	CAT 966F LOADER, 4.25CY	16.00	0.50 Each (hourly)	U.S. Dollar		81.12	1,297.92
1.12.3	2.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	2,750.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		2,750.00 Each	U.S. Dollar		1.00	2,750.00
1.13	1.00 Lump Sum	Site Restoration - Partial Site Seeding	0.11	Detail	U.S. Dollar	160,749.11	160,749.11
1.13.1	19.00 Mile	Private Access Road Removal (New Roads)	2.00	Detail	U.S. Dollar	6,407.85	121,749.11
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	380.00	4.00 Each (hourly)	U.S. Dollar		51.71	19,651.07
L060100	GENERAL LABORER	190.00	2.00 Each (hourly)	U.S. Dollar		40.69	7,731.00
L080940	TEAMSTER	380.00	4.00 Each (hourly)	U.S. Dollar		45.44	17,268.83
RDUTRK06	CAT D350D, 18CY-24CY	380.00	4.00 Each (hourly)	U.S. Dollar		86.39	32,828.20
RFELWH09	CAT 966F LOADER, 4.25CY	380.00	4.00 Each (hourly)	U.S. Dollar		81.12	30,825.60
*RDOZER08	CAT D6 LGP Dozer	190.00	2.00 Each (hourly)	U.S. Dollar		70.76	13,444.40
Notes: ***** Assume topsoil removed during original construction is available for restoration *****							
1.13.2	46.00 Acre	Re-Seed Road Beds	0.00	Detail	U.S. Dollar	500.00	23,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		46.00 Acre		U.S. Dollar	500.00	23,000.00
Notes: ***** 1.45 acres per mile of road *****							
1.13.3	32.00 Acre	Re-Seed Turbine Locations	0.00	Detail	U.S. Dollar	500.00	16,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USLANDSCAPE	Landscape Sub		32.00 Acre		U.S. Dollar	500.00	16,000.00
Notes: ***** Re-Seed 2 acres per turbine location *****							
1.14	1.00 Lump Sum	Contractor Markups	0.00	Detail	U.S. Dollar	648,917.54	648,917.54
1.14.1	1.00 Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	Detail	U.S. Dollar	173,972.55	173,972.55
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USMARKUP5	5% Markup		3,479,451.00 Each		U.S. Dollar	0.05	173,972.55
1.14.2	1.00 Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	Detail	U.S. Dollar	474,944.99	474,944.99
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USMARKUP	13% Markup		3,653,423.00 Each		U.S. Dollar	0.13	474,944.99
1.15	1.00 Lump Sum	ODOE Mandated Contingencies	0.00	Detail	U.S. Dollar	928,037.28	928,037.28
1.15.1	1.00 Lump Sum	20% Contingency on BESS	0.00	Detail	U.S. Dollar	61,080.00	61,080.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODCBESS	20% ODOE Mandated Contingency		305,400.00 Each		U.S. Dollar	0.20	61,080.00
1.15.2	1.00 Lump Sum	1% Performance Bond	0.00	Detail	U.S. Dollar	41,283.68	41,283.68
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODOE1	ODOE 1% Markup		4,128,368.00 Each		U.S. Dollar	0.01	41,283.68
1.15.3	1.00 Lump Sum	10% Administrative and Project Management	0.00	Detail	U.S. Dollar	412,836.80	412,836.80
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODOE2	ODOE 10% Markup		4,128,368.00 Each		U.S. Dollar	0.10	412,836.80
1.15.4	1.00 Lump Sum	10% Future Development Contingency	0.00	Detail	U.S. Dollar	412,836.80	412,836.80
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODOE2	ODOE 10% Markup		4,128,368.00 Each		U.S. Dollar	0.10	412,836.80
Report Total:							5,056,405.63

Category	Total
Labor	671,663.27
Rented Equipment	529,607.18
Supplies	5,010.40
Materials	91,600.00
Subcontract	2,828,287.50
ODCs	930,237.28



## **Attachment 13. Updated Financial Assurance Letter**



July 12, 2022

Ms. Sarah T. Esterson  
Energy Facility Siting Analyst  
Oregon Department of Energy  
550 Capitol St. NE, 1<sup>st</sup> Floor  
Salem, OR 97301

**RE: Avangrid Renewables, LLC**  
Oregon Trail Solar Facility

Dear Ms. Esterson:

Avangrid Renewables, LLC is a highly regarded and valued client of Aon Risk Services and Liberty Mutual Insurance Company. Liberty Mutual Insurance Company (hereinafter, Liberty Mutual) is privileged to act as surety for Avangrid Renewables, LLC. Our surety relationship and experience with Avangrid Renewables, LLC has been superior in all respects and is qualified for issuance of a single bond in the amount of \$10,000,000 with an aggregate capacity of \$200,000,000.

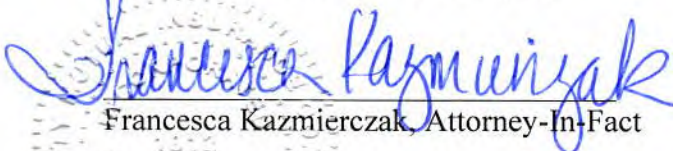
Liberty Mutual is a national provider of surety bonds, enjoying an "Excellent" A.M. Best rating of "A". Liberty Mutual is listed in the Federal Register as a surety acceptable on government projects, and is approved by the Massachusetts Department of Insurance with authorization to issue surety bonds in the State.

If Avangrid Renewables, LLC is selected for the project, and we receive a request from them to provide decommissioning bonds, we are prepared to look favorably upon issuance of these bonds. Such pre-qualification and approval would be conditioned upon applicable underwriting procedures, which are routine at the time of the bond request. However, please understand that the surety assumes no liability to you or to third parties if for any reason we do not execute any required bonds.

Should you have any questions or comments, please feel free to contact our office.

Sincerely,

Liberty Mutual Insurance Company

  
Francesca Kazmierczak, Attorney-In-Fact





This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company  
The Ohio Casualty Insurance Company  
West American Insurance Company

Certificate No: **8205735-015009**

## POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Aklima Noorhassan; Anne Potter; Cynthia Farrell; Debra A. Deming; Frances Rodriguez; Francesca Kazmierczak; Jennifer L. Jakaitis; Kemal Brkanovic; Nancy Schnee; Pablo Garcia Horcajo; Peter Healy; Sandra Diaz; Susan A. Welsh; Valorie Spates

all of the city of New York state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 11th day of June, 2021.



Liberty Mutual Insurance Company  
The Ohio Casualty Insurance Company  
West American Insurance Company

By: David M. Carey  
David M. Carey, Assistant Secretary

State of PENNSYLVANIA ss  
County of MONTGOMERY

On this 11th day of June, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal  
Teresa Pastella, Notary Public  
Montgomery County  
My commission expires March 28, 2025  
Commission number 1126044  
Member, Pennsylvania Association of Notaries

By: Teresa Pastella  
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

### ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

### ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 12th day of July, 2022.



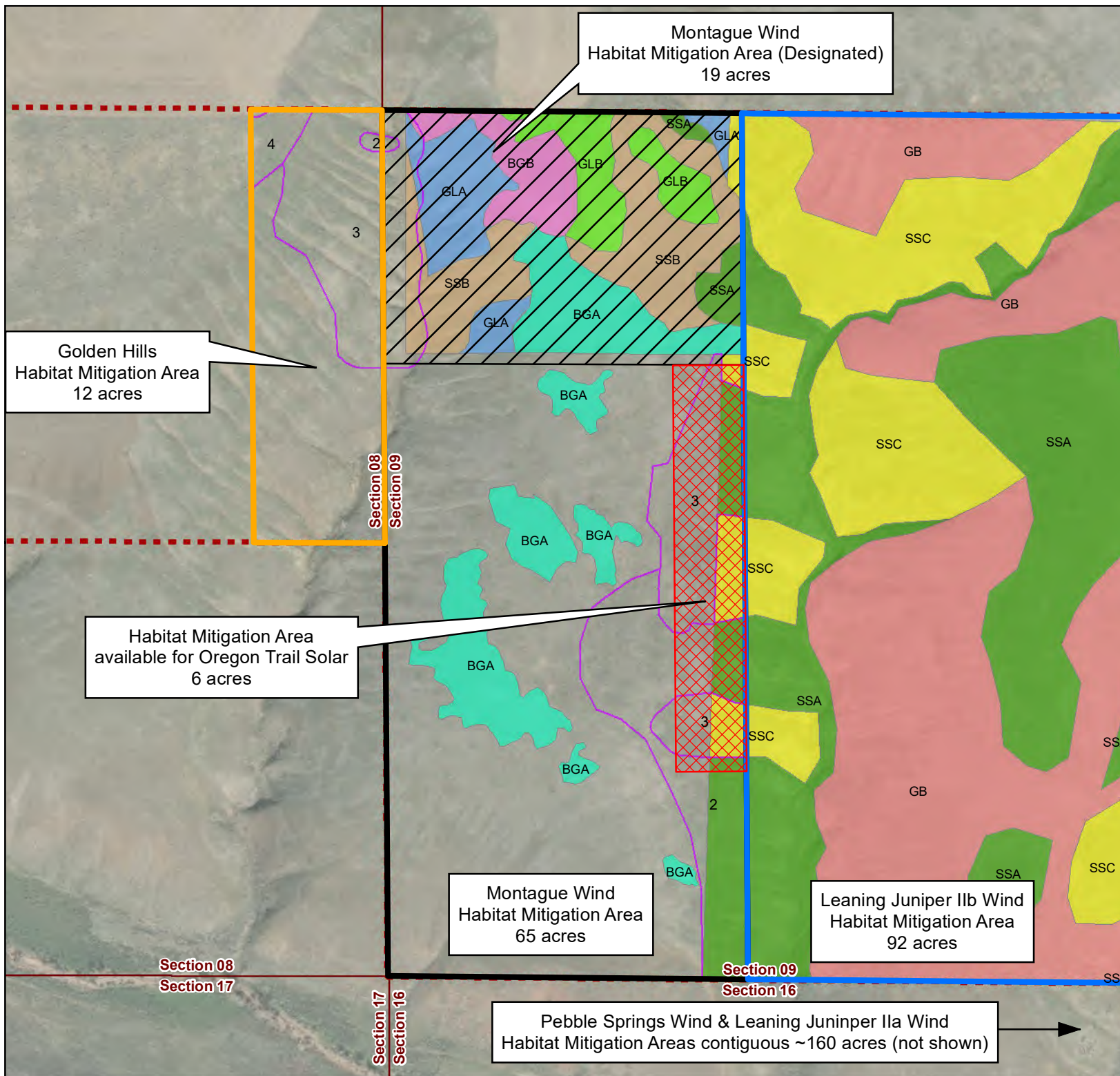
By: Renee C. Llewellyn  
Renee C. Llewellyn, Assistant Secretary

# **Attachment 14. Oregon Biodiversity Information Center Data**

**(Provided Under Separate Confidential Cover)**

## **Attachment 15. Conservation Easement**





**Figure 2**  
**Oregon Trail Solar Mitigation Area**  
Oregon Trail Solar Power Facility

- Legend**
- Montague Wind - Designated 19 acre Mitigation Site
  - Montague Wind - Executed 65 acre Mitigation Site
  - Golden Hills Wind - Executed 12 acre Mitigation Site
  - Leaning Juniper IIb Wind - Executed 92 acre Mitigation Site
  - Oregon Trail Solar - Designated 6 acre Mitigation Site
  - Shrub Steppe for GH Mitigation
  - 440-Acre Easement Boundary

- Habitat Type**
- BGA
  - BGB
  - GB
  - GLA
  - GLB
  - SSA
  - SSB
  - SSC



0 200 400  
Feet



**AFTER RECORDING, RETURN TO:**

Stoel Rives LLP  
900 SW Fifth Avenue, Suite 2600  
Portland, OR 97204  
Attn: Cynthia P. Caggiano

MORROW COUNTY, OREGON **2010-26990**  
E-EAS  
Cnt=1 Stn=1 TC **10/22/2010 10:43:05 AM**  
\$40.00 \$11.00 \$15.00 \$10.00 **\$76.00**



00014011201000269900080086

I, Bobbi Childers, County Clerk for Morrow  
County, Oregon, certify that the instrument  
identified herein was recorded in the Clerk  
records.

Bobbi Childers - County Clerk



**DECLARATION OF CONSERVATION EASEMENT**

DATED: SEPTEMBER 28, 2010

BETWEEN: PACIFIC WIND DEVELOPMENT

“BENEFICIARY”

AND: KBC LLLP,  
a Nevada limited liability partnership

“OWNER”

## EXHIBIT B

Iberdrola Renewables, Inc.  
Attn: Real Estate Department  
1125 NW Couch St. Ste 700  
Portland, OR 97209

---

AFTER RECORDING, RETURN TO:

### DECLARATION OF CONSERVATION EASEMENT

THIS DECLARATION OF CONSERVATION EASEMENT (this "**Conservation Easement**") is made as of the September 28, 2010 (the "**Effective Date**"), although executed and recorded thereafter, by and between Pacific Wind Development LLC an Oregon limited liability company ("**Beneficiary**"), and KBC LLLP, a Nevada limited liability partnership ("**Owner**").

#### RECITALS

A. Owner is the owner of that certain real property located in Morrow County, Oregon described in the attached Exhibit A, referred to in this Agreement as the "**Conservation Easement Property**").

B. Owner and Beneficiary wished to restrict the use of the Conservation Easement Property to conservation, wildlife habitat, and/or grazing purposes and uses reasonably related thereto, and not for residential use or industrial or commercial development.

#### DECLARATION AND AGREEMENT

NOW THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and Beneficiary hereby correct, amend, restate, supersede and replace the Original Easement, as follows:

1. **Declaration of Easement.** Owner hereby declares that Owner's interest in and to the Conservation Easement Property shall be held, transferred and conveyed subject to the following easement and covenants:

## EXHIBIT B

**1.1 Conservation Easement.** Owner establishes an easement over the Conservation Easement Property for the purposes of conservation, wildlife habitat and/or grazing purposes. The Conservation Easement Property shall not be used for residential use or industrial or commercial development thereof. This Conservation Easement is made subject to all existing licenses, leases, easements, restrictions, conditions, covenants, encumbrances, liens and claims of title that may affect the Conservation Easement Property.

**1.2 Permitted Use/Agricultural and Grazing Uses Compatible to Conservation Uses.** The Conservation Easement Property may be used for grazing and nature study provided that conservation and wildlife habitat uses shall take precedence and priority where such uses are or may be deemed incompatible.

**2. Effect of this Agreement.** This Conservation Easement shall inure to the benefit of and be binding on the heirs, successors, assigns and personal representatives of the parties hereto. Beneficiary shall have the right without Owner's consent to convey or assign all or any portion of its interest under this Conservation Easement to one or more persons or entities, including without limitation the assignment of the right to enforce this Conservation Easement set forth in paragraph 4 below.

**3. No Public Dedication.** This Conservation Easement may not be construed as a gift or dedication of the Conservation Easement Property or any portion thereof or interest therein to the general public, nor as a right of use or access by the general public.

**4. Enforcement.** The parties agree that damages would be an inadequate remedy to Owner and its assignees for any breach of this Conservation Easement by Beneficiary, and therefore, in addition to any other remedy that may be available, Owner and its assignees shall be entitled to injunctive relief enjoining any continuing violation of this Conservation Easement. Beneficiary and its assigns shall have the right to enter upon the Conservation Easement Property at reasonable times with 14 day prior notice to the Owner and confirmation from the Owner that notice was provided, for reasonable durations not exceeding one day each visit, for the limited purpose of monitoring compliance with and otherwise enforce the terms of this Conservation Easement; provided that such entry shall not unreasonably interfere with the use and quiet enjoyment of the Conservation Easement Property by the Owner, Owner's guests or by any tenants of the Conservation Easement Property. No overnight presence or motorized vehicle travel is permitted on the Conservation Easement Property and site inspections will be discouraged by Owner from occurring during a high fire danger period, typically July through August. Notwithstanding the foregoing, no failure by Beneficiary or its assignees to enforce the terms of this Conservation Easement in any one instance shall be construed as a waiver of such terms or a relinquishment of the right of future enforcement.

## **5. General Provisions.**

**5.1 Term.** This Conservation Easement shall last for a term of thirty (30) years from the Effective Date.

## EXHIBIT B

### 5.2 Compensation.

[REDACTED FOR RECORDING]

### 5.3 Attorney Fees.

[REDACTED FOR RECORDING]

5.4 Grazing Restrictions. Owner may graze cattle on the Conservation Easement Property only between February 1 and April 15. If a biologist hired by Beneficiary at its expense determines that the grazing of the Conservation Easement



## EXHIBIT B

Property is interfering with the Beneficiary's desire to manage the Conservation Easement Property for the benefit of conservation and wildlife habitat, Owner shall restrict grazing during the above-described grazing season on the 80-acre Conservation Easement Property, as follows: For each 40 acres of the Property, 2 (two) pairings of a mother and calf per month or an equivalent amount of yearlings assuming a yearling to mother and calf pairing ratio of .3. Other domestic livestock may include horses or sheep and the formulas will be the following: number of horses shall be equivalent to the number of cows stated above and the number of sheep shall be at three times the number of cows stated above (6 pairs). Should Beneficiary exercise its right to expand the Conservation Easement Property per Section 5.3 of this Conservation Easement, the number of domestic livestock that may be grazed on the Conservation Easement Property pursuant to this Section shall be increased on a pro-rata per acre basis.

**5.5     Fencing.** If Beneficiary determines fencing to be necessary, Beneficiary must provide fencing and/or cattle guards for the Conservation Easement Property at its sole expense.

**5.6     Confidentiality.**

**[REDACTED FOR RECORDING]**

**5.7     Severability.**

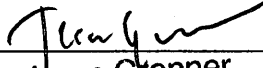
**[REDACTED FOR RECORDING]**

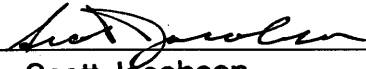
## EXHIBIT B

IN WITNESS WHEREOF, Owner and Beneficiary have executed this Conservation Easement as of the Effective Date.

**BENEFICIARY:**

Pacific Wind Development LLC,  
an Oregon limited liability corporation

LEGAL  
72  
By:   
Name: **Jesse Gronner**  
Title: **Authorized Representative**

By:   
Name: **Scott Jacobson**  
Title: **Authorized Representative**

**OWNER:**

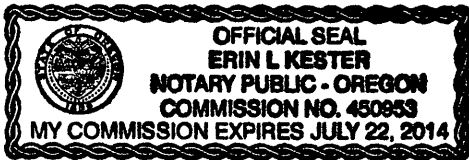
KBC LLLP,  
a Nevada limited liability limited partnership

By:   
Name: **KAREN KRONNER**  
Title: **General Partner**

EXHIBIT B

STATE OF OREGON           )  
  ) ss.  
COUNTY OF Multnomah    )

The foregoing instrument was acknowledged before me this 30 day of SEPTEMBER, 2010 by JESSE GLONNER and SCOTT JACOBSON, as Authorized Representatives of Pacific Wind Development LLC, an Oregon limited liability company, on its behalf.



[Signature]  
Notary Public for Oregon  
My commission expires: 7/22/2014  
Commission No.: 450953

STATE OF Oregon       )  
  ) ss.  
COUNTY OF Umatilla    )

The foregoing instrument was acknowledged before me this 4th day of October, 2010 by Karen Krohner, as General Partner of KBC LLLP, a Nevada limited partnership, on its behalf.



Paula M. Hancock  
Notary Public for Oregon  
My commission expires: May 19, 2012  
Commission No.: 429152

**EXHIBIT A  
TO  
DECLARATION OF CONSERVATION EASEMENT**

**Description of Conservation Easement Property**

Real property situated in the County of Morrow, State of Oregon, hereby described as follows:

Township 2 South, Range 23 East:

Section 8: The Eastern 396 feet of the North one-half of the Southeast Quarter (12 acres total)

Section 9: Western 68 acres of the Southwest Quarter.

After recording return to:

Winthrop & Weinstine, P.A. (MRP)  
Suite 3500  
225 South Sixth Street  
Minneapolis, MN 55402

MORROW COUNTY, OREGON **2011-28654**  
E-EAS 08/22/2011 11:19:29 AM  
Cnt=2 Str=1 TC  
\$35.00 \$5.00 \$11.00 \$15.00 \$10.00 **\$76.00**



00016201201100286540070073

I, Bobbi Childers, County Clerk for Morrow County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.

Bobbi Childers - County Clerk



(Space Above This Line for Recorder's Use Only)

# **AMENDMENT NO. 1 TO DECLARATION OF CONSERVATION EASEMENT AND ASSIGNMENT OF DECLARATION OF CONSERVATION EASEMENT**

**THIS AMENDMENT NO.1 TO DECLARATION OF CONSERVATION EASEMENT AND ASSIGNMENT OF DECLARATION OF CONSERVATION EASEMENT** (this "Amendment and Assignment") is made as of July 27, 2011 (the "Effective Date") by and among **Pacific Wind Development LLC**, an Oregon limited liability company ("Beneficiary"), **Montague Wind Power Facility, LLC**, an Oregon limited liability company ("Assignee"), and **KBC LLP**, a Nevada limited liability partnership ("Owner"). Each of Beneficiary, Assignee, and Owner is sometimes referred to as a "Party" and collectively as the "Parties." Capitalized terms not otherwise defined herein shall have the meanings assigned such terms in the Declaration of Conservation Easement (as defined below).

## **RECITALS**

A. In connection with certain real property more particularly described on the attached Exhibit A and incorporated herein by this reference, Beneficiary and Owner are parties to that certain Declaration of Conservation Easement dated as of September 28, 2010 and recorded in the real property records of Morrow County, Oregon on October 22, 2010 as Document No. 2010-26990 (the "Conservation Easement").

B. The Parties hereto desire to amend the Conservation Easement as set forth herein.

**NOW, THEREFORE**, in consideration of the mutual promises and covenants set forth herein, the Parties agree as follows:

1. **Amendment to Article 5 (Term)**. Section 5.1 of the Conservation Easement, which currently reads:

"5.1 Term. This Conservation Easement shall last for a term of thirty (30) years from the Effective Date."

is hereby deleted in its entirety and replaced with the following:



“5.1 Term. This Conservation Easement shall last for a term of thirty-four (34) years from the Effective Date. Upon consent of Owner the term of this Conversation Easement may be extended for two additional, consecutive periods of ten (10) years each.”

2. **Amendment to Article 5 (Indemnification).** The following Section 5.8 is hereby added to Article 5 of the Conservation Easement:

“5.8 No Ownership Rights in Beneficiary; Indemnification. The Parties recognize and acknowledge that Owner will remain in control and possession of the Conservation Easement Property (Property). Owners shall pay, when and as due, any and all taxes, duties and other similar federal, state, or local tax related charges assessed in connection with the Conservation Easement Property hereunder. Owners will fully indemnify Beneficiary, its affiliates, officers, employees, agents, directors, equity holders, legal and official contractors or other related parties (“Related Parties”) against any and all claims, losses, costs, fees, liabilities, damages or injuries (“Claims”) related to the Conservation Easement Property or this Agreement due to or arising out of actions or omissions of Owner, unless such Claims arise directly as a result of actions taken at the explicit direction of Beneficiary or one of its officers. Beneficiary will fully indemnify Owners, their Related Parties against any and all Claims related to the Conservation Easement Property or this Agreement due to or arising out of actions or omissions of Beneficiary and its contractors. Beneficiary will provide proof of appropriate insurance before accessing and using the Property and Owner shall be an additional insured on general liability and other related policies. Before conducting any on-site work, Beneficiary, its agents and contractors shall consult with Owner regarding pertinent site conditions and access routes, as certain environmental conditions could fluctuate periodically (such as muddy roads, high fire danger and other field travel conditions).

3. **Assignment and Assumption of Conservation Easement.**

3.1 **Assignment and Delegation.** Beneficiary hereby assigns, transfers, conveys, and delegates to Assignee all of Beneficiary’s right, title, interest, and obligations in, to, and under the Conservation Easement.

3.2 **Assumption of Rights and Obligations.** Assignee hereby assumes, and agrees to pay and perform or discharge when due, all of Beneficiaries right, title, interest, and obligations in, to, and under the Conservation Easement that arise or accrue on or after the Effective Date.

4. **Full Force and Effect.** Except as expressly amended hereby, the Option shall continue to full force and effect as originally constituted (including any subsequent amendments thereto) and is ratified by the parties hereto.

5. **Counterparts.** This Amendment and Assignment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

6. **Severability.** If one or more provisions of this Amendment and Assignment are held to be unenforceable under applicable law, such provision shall be excluded from this Amendment and Assignment and the balance of this Amendment and Assignment shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

7. **Governing Law.** This Amendment and Assignment shall be governed by and construed under the laws of the State of Oregon without applying its conflict of law principles.

**[SIGNATURE PAGES FOLLOW]**

IN WITNESS WHEREOF, the Parties have caused their authorized representatives to execute and deliver this Amendment and Assignment on the Effective Date.

**"Owner"**

**KBC LLLP,**  
A Nevada limited liability limited  
partnership

By: Karen Kronner  
Name: KAREN KRONNER  
Title: General Partner

**"Beneficiary"**

**PACIFIC WIND DEVELOPMENT LLC,**  
an Oregon limited liability company

By: [Signature]  
Name: Rany Raviv  
Title: Authorized Representative

By: [Signature]  
Name: Scott Jacobson  
Title: Authorized Representative

LEGAL  
72

**"Assignee"**

**MONTAGUE WIND POWER FACILITY,  
LLC,**  
an Oregon limited liability company

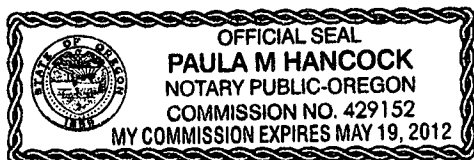
By: [Signature]  
Name: Rany Raviv  
Title: Authorized Representative

By: [Signature]  
Name: Scott Jacobson  
Title: Authorized Representative

LEGAL  
72

STATE OF Oregon )  
 ) ss.  
COUNTY OF Umatilla )

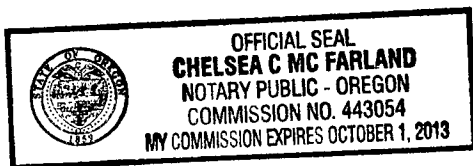
The foregoing instrument was acknowledged before me this 11th day of July, 2011 by Karen Kronner, as General Partner of KCB LLLP, a Nevada limited liability limited partnership, on its behalf.



Paula M. Hancock  
Notary Public for Oregon  
My commission expires: May 19, 2012  
Commission No.: 429152

STATE OF OREGON )  
 ) ss.  
COUNTY OF Multnomah )

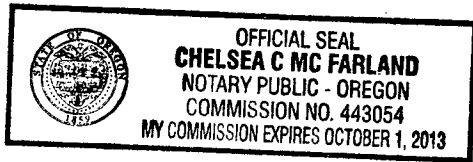
The foregoing instrument was acknowledged before me this 21st day of July, 2011 by Rany Raviv, as Authorized Rep and Scott Jacobson, as Authorized Rep of Pacific Wind Development LLC, an Oregon limited liability company, on its behalf.



Chelsea C. McFarland  
Notary Public for Oregon  
My commission expires: 10/1/2013  
Commission No.: 443054

STATE OF OREGON           )  
  ) ss.  
COUNTY OF Multnomah    )

The foregoing instrument was acknowledged before me this 27<sup>th</sup> day of July,  
2011 by Rany Raviv, as Authorized Rep and  
Scott Jacobson, as Authorized Rep of Montague Wind Power Facility,  
LLC, an Oregon limited liability company, on its behalf.



Chelsea C Farland  
Notary Public for Oregon  
My commission expires: 10/1/2013  
Commission No.: 443054



**EXHIBIT A**

**DESCRIPTION OF THE PROPERTY**

All that real property located in Morrow County, Oregon, more particularly described as follows:

In Township 2 South, Range 23 East of the Willamette Meridian:

Section 8: The Eastern 396 feet of the North Half of the Southeast Quarter (N 1/2 SE 1/4) (12 acres total)

Section 9: The Western 68 acres of the Southwest Quarter (SW 1/4)

**PREPARED AND REQUESTED BY:**

Golden Hills Wind Farm LLC  
Attention: Land Management  
1125 NW Couch, Suite 700  
Portland, OR 97209  
Telephone: 503.796.7000

**AFTER RECORDING RETURN TO:**

Winthrop & Weinstine  
Attn: Krista A. Bengtson Cook  
225 South Sixth Street, Suite 3500  
Minneapolis, MN 55402-4629  
Telephone: 612.604.6629

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**ASSIGNMENT AND ASSUMPTION AGREEMENT**

**BETWEEN**

**MONTAGUE WIND POWER FACILITY, LLC, an Oregon limited liability company,**

**AND**

**GOLDEN HILLS WIND FARM LLC, a Delaware limited liability company**

**ASSIGNMENT AND ASSUMPTION AGREEMENT**  
**(Montague Wind Power Facility, LLC to Golden Hills Wind Farm LLC)**

This ASSIGNMENT AND ASSUMPTION AGREEMENT (“**Agreement**”), dated as of \_\_\_\_\_, 2022 (“**Effective Date**”), is made by and between MONTAGUE WIND POWER FACILITY, LLC, an Oregon limited liability company (“**Montague**”), whose address is 1125 NW Couch, Suite 700, Portland, Oregon 97209, and GOLDEN HILLS WIND FARM LLC, a Delaware limited liability company (“**Golden Hills**”), whose address is 1125 NW Couch, Suite 700, Portland, Oregon 97209. Montague and Golden Hills may be collectively referred to herein as the “Parties”.

**RECITALS**

A. KBC LLLP, a Nevada limited liability limited partnership (“**KBC**”) and Pacific Wind Development LLC, an Oregon limited liability company (“**Pacific Wind**”) entered into that certain Declaration of Conservation Easement dated September 8, 2010 and recorded in the real property records of Morrow County, Oregon (the “**Public Records**”) on October 22, 2010 as Document No. 2010-26990 (the “**Original Conservation Easement**”).

B. Pursuant to the Original Conservation Easement, KBC, for the benefit of Pacific Wind, established an easement over certain real property in Morrow County, Oregon (the “**Conservation Easement Property**”) for the purposes of conservation, wildlife habitat and/or grazing purposes.

C. The Original Conservation Easement permits Pacific Wind to convey or assign all or any portion of its interest in the Original Conservation Easement without the consent of KBC.

D. KBC, Montague, and Pacific Wind entered into that certain Amendment No. 1 to Declaration of Conservation Easement and Assignment of Declaration of Conservation Easement dated July 27, 2011 and recorded in the Public Records on August 22, 2011 as Document No. 2011-28654 (the “**Amendment**”). Pursuant to the Amendment, Pacific Wind assigned all of its right, title and interest in and to the Original Conservation Easement to Montague. The Original Conservation Easement, as amended by the Amendment, are collectively referred to herein as the “**Conservation Easement**”.

E. With respect only to that portion of the Conservation Easement Property described in Exhibit A-1 and depicted on Exhibit A-2, both attached hereto and incorporated herein by this reference (the “**Assigned Property**”), Montague desires to assign all of its right, title and interest in, to and under the Conservation Easement to Golden Hills, and Golden Hills desires to assume and acquire all of Montague’s right, title and interest in and to the Conservation Easement with respect only to the Assigned Property.

F. The Parties are executing and recording this Agreement to provide public and constructive notice of (i) the assignment and conveyance by Montague to Golden Hills of Montague’s rights under the Conservation Easement as to the Assigned Property only, and (ii)

the assumption by Golden Hills of Montague's liabilities and obligations under the Conservation Easement, but only to the extent of the Assigned Property.

## **AGREEMENT**

NOW THEREFORE in consideration of the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Montague and Golden Hills agree as follows:

1. Assignment. Montague hereby transfers, assigns, conveys and delivers to Golden Hills, its successors and assigns, as of the date hereof, all of Montague's right, title and interest in, to and under the Conservation Easement, but only with respect to the Assigned Property. Montague shall retain rights under the Conservation Easement as to that portion of the Conservation Easement Property that is not the Assigned Property. Montague shall take all further actions and execute and deliver any further documents, and to cause such documents to be filed with the appropriate agencies, if necessary, as Golden Hills deems reasonably necessary to perfect Golden Hills's rights under the Conservation Easement and to implement the terms of this Agreement.

2. Assumption. Golden Hills hereby accepts the foregoing assignment and, in consideration thereof, Golden Hills hereby covenants and agrees that, on and after the date hereof, Golden Hills will assume, observe, perform, fulfill and be bound by all terms, covenants, conditions and obligations of Montague under or related to the Conservation Easement as they relate to the Assigned Property. Montague shall remain by all terms, covenants, conditions and obligations of the Conservation Easement as they relate to the Conservation Easement Property that is not the Assigned Property.

3. Successors and Assigns. This Agreement is binding upon and inures to the benefit of the Parties and their respective successors and assigns.

4. Severability. Each provision of this Agreement is intended to be severable. If any term or provision is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the legality or validity of the remainder of the Agreement.

5. Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Oregon without regard to its conflicts of law provisions.

6. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

**(SIGNATURE AND ACKNOWLEDGEMENT PAGES FOLLOW)**

IN WITNESS WHEREOF, the Parties have caused this Assignment and Assumption Agreement to be executed and delivered as of the Effective Date.

**MONTAGUE WIND POWER FACILITY, LLC,**  
an Oregon limited liability company

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF OREGON                                 )  
  ) ss.  
COUNTY OF MULTNOMAH                 )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022 by \_\_\_\_\_ and \_\_\_\_\_, as Authorized Representatives on behalf of Montague Wind Power Facility, LLC, an Oregon limited liability company.

Notary signature: \_\_\_\_\_  
Notary Public for State of Oregon  
My commission expires: \_\_\_\_\_  
Commission No.: \_\_\_\_\_



**GOLDEN HILLS WIND FARM LLC,**  
a Delaware limited liability company

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF OREGON                                 )  
  ) ss.  
COUNTY OF MULTNOMAH                     )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022 by \_\_\_\_\_ and \_\_\_\_\_, as Authorized Representatives on behalf of GOLDEN HILLS WIND FARM LLC, a Delaware limited liability company.

Notary signature: \_\_\_\_\_  
 Notary Public for State of Oregon  
 My commission expires: \_\_\_\_\_  
 Commission No.: \_\_\_\_\_

**EXHIBIT A-1**  
**to**  
**ASSIGNMENT AND ASSUMPTION AGREEMENT**  
**(DESCRIPTION OF ASSIGNED PROPERTY)**

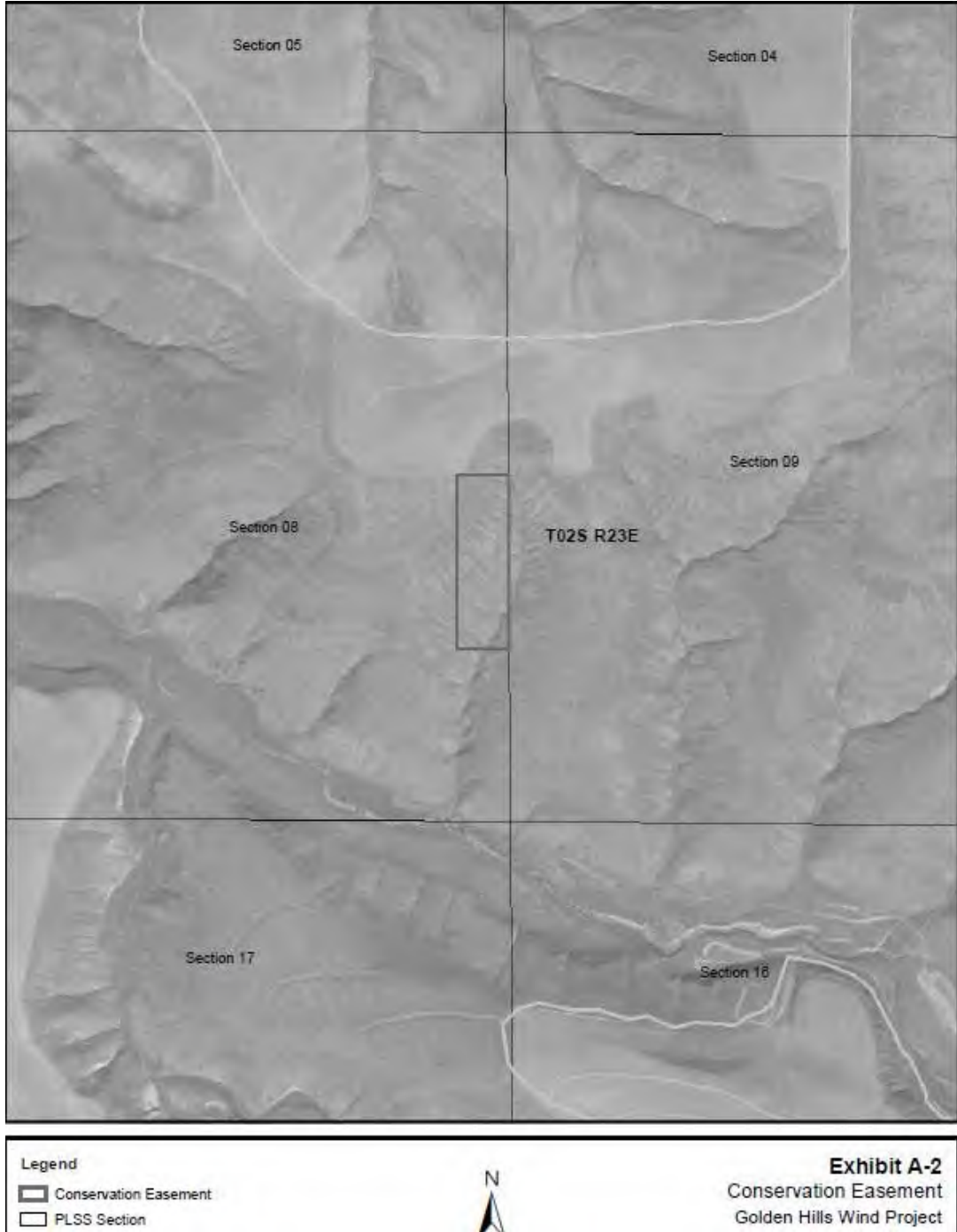
That certain real property located in the County of Morrow, State of Oregon, hereby described as follows:

Township 2 South, Range 23 East:

Section 8: The Eastern 396 feet of the North One-Half of the Southeast Quarter (12 acres total)

Portion of Tax Lot 2S230000-1200

**EXHIBIT A-2**  
**to**  
**ASSIGNMENT AND ASSUMPTION AGREEMENT**  
**(DEPICTION OF ASSIGNED PROPERTY)**



## **Attachment 16. IPaC Report**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Oregon and Washington



## Local offices

Washington Fish And Wildlife Office

☎ (360) 753-9440

📅 (360) 753-9405



510 Desmond Drive Se, Suite 102  
Lacey, WA 98503-1263

Oregon Fish And Wildlife Office

☎ (503) 231-6179

📠 (503) 231-6195

2600 Southeast 98th Avenue, Suite 100  
Portland, OR 97266-1398

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
North American Wolverine <i>Gulo gulo luscus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/5123">https://ecos.fws.gov/ecp/species/5123</a>	Proposed Threatened

## Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Fishes

NAME	STATUS
Bull Trout <i>Salvelinus confluentus</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8212">https://ecos.fws.gov/ecp/species/8212</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Bull Trout <i>Salvelinus confluentus</i> <a href="https://ecos.fws.gov/ecp/species/8212#crithab">https://ecos.fws.gov/ecp/species/8212#crithab</a>	Final

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).



For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<b>American White Pelican</b> <i>pelecanus erythrorhynchos</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/6886">https://ecos.fws.gov/ecp/species/6886</a>	Breeds Apr 1 to Aug 31
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
<b>Black Tern</b> <i>Chlidonias niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3093">https://ecos.fws.gov/ecp/species/3093</a>	Breeds May 15 to Aug 20
<b>Clark's Grebe</b> <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
<b>Evening Grosbeak</b> <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
<b>Franklin's Gull</b> <i>Leucophaeus pipixcan</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
<b>Lewis's Woodpecker</b> <i>Melanerpes lewis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9408">https://ecos.fws.gov/ecp/species/9408</a>	Breeds Apr 20 to Sep 30
<b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>	Breeds May 20 to Aug 31



Rufous Hummingbird *selasphorus rufus*

Breeds Apr 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Sage Thrasher *Oreoscoptes montanus*

Breeds Apr 15 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9433>

Western Grebe *aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

## Probability of Presence Summary

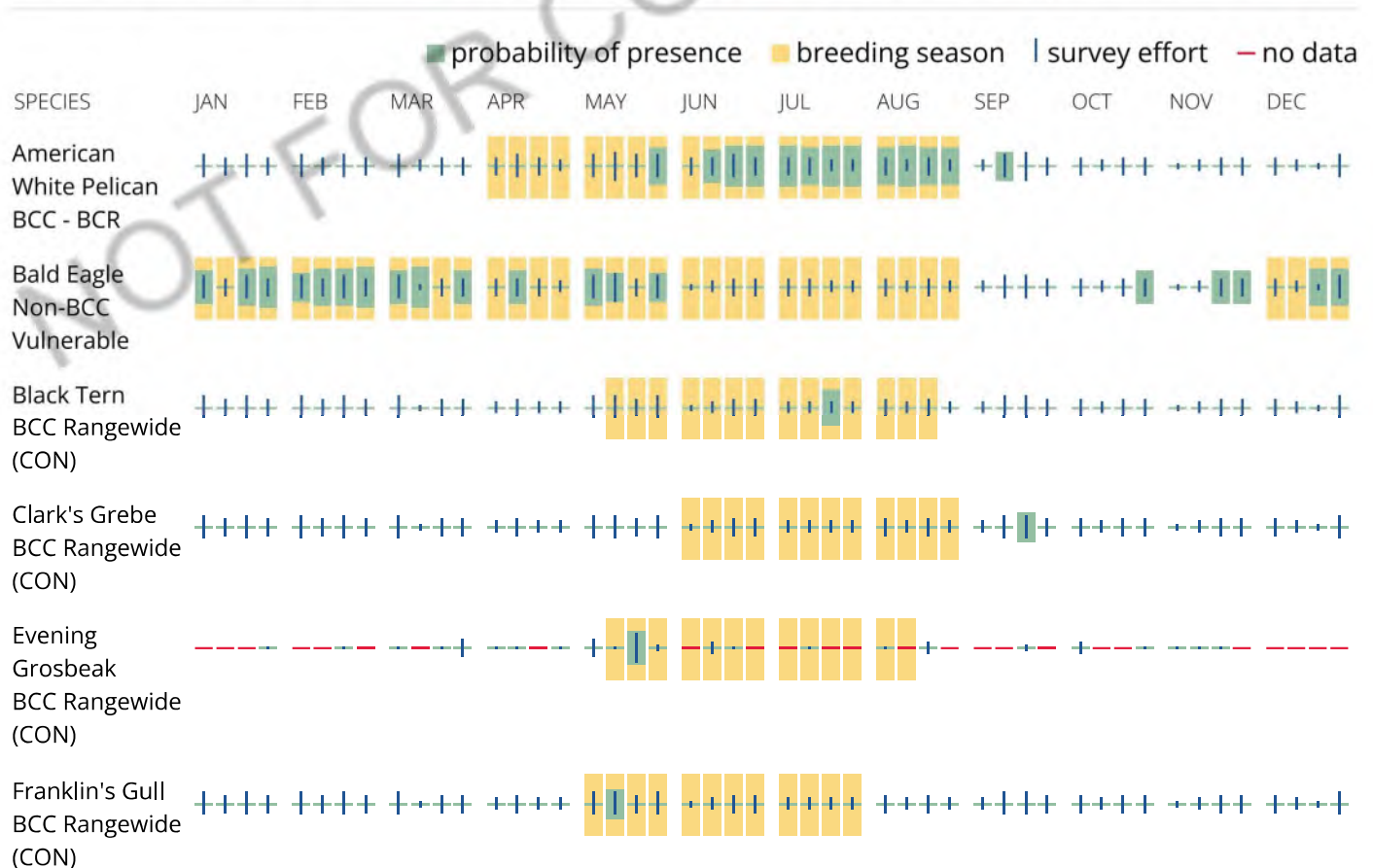
The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

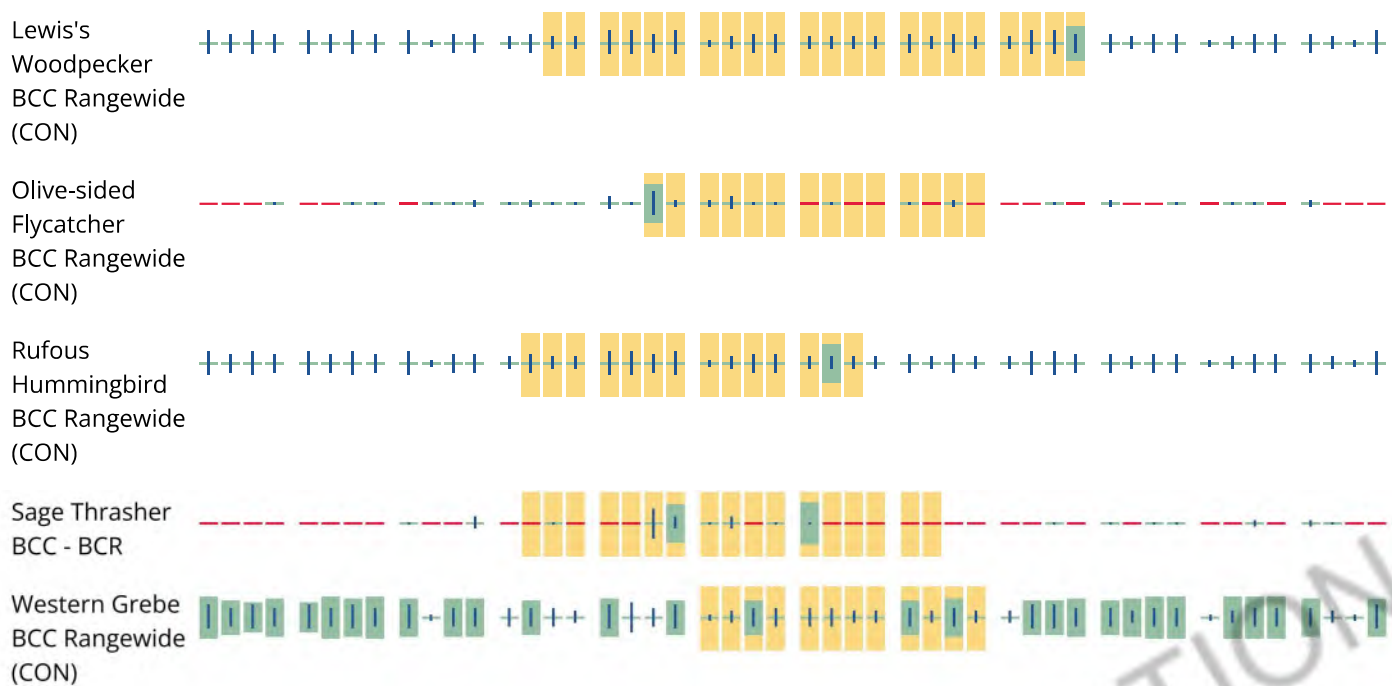
### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**



The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

## Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>



## Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

### Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

### Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

## **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

## **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

# **Attachment 17. Cultural Resources Reports**

**(Provided Under Separate Confidential Cover)**

# **Attachment 18. Draft Wildfire Mitigation Plan**

# **Oregon Trail Solar Facility Wildfire Mitigation Plan**

**Oregon Trail Solar Facility  
December 2022**

**Prepared for  
Oregon Trail Solar, LLC**

**Prepared by**



**Tetra Tech, Inc.**



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Attachment 1. ISO Certification
---------------------------------

## 1.0 Introduction

Oregon Trail Solar, LLC (Certificate Holder ), a wholly owned subsidiary of Avangrid Renewables, LLC, proposes to construct the Oregon Trail Solar Facility (OTS Facility), a solar energy generation facility and related or supporting facilities in Gilliam County, Oregon. The OTS Facility will generate up to 41 megawatts through a combination of up to 16 wind turbines and a solar photovoltaic array on up to 1,228 acres.

## 2.0 Wildfire Risk

This Wildfire Mitigation Plan (Plan) has been prepared to meet Oregon Administrative Rules (OAR) 345-022-0115(1)(b), which requires:

***(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;***

The data sources used in the plan to identify areas of the site boundary of heightened risk wildfire are the Oregon Community Wildfire Protection Plan (CWPP 2018), and the Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan (Gilliam County, 2018). Both data sources are reputable because the CWPP is a government database developed to meet the requirements of Senate Bill 762 and associated administrative rules, and the Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan was reviewed by the Federal Emergency Management Agency (FEMA) and the plan has effective date through January 2024.

The CWPP data includes a Quantitative Wildfire Risk Assessment that is presented on the Oregon Explorer website and this data indicates that less than 1 percent of the area within the OTS Facility site boundary has a moderate wildfire risk, and more than 99 percent of the site boundary has a low wildfire risk (Figures 1 and 2). Moderate wildfire risk is associated with the existing vegetation, residential and commercial structures, and the relatively dry climate in the region. The areas with moderate risk to assets include along John Day Highway in the middle of the Site Boundary, in the southern edge along Middle Rock Creek Lane, and near intersection of Bottemiller Lane and Middle Rock Creek Lane in the western edge of the OTS Facility site boundary. Moderate risk wildfire conditions outside the OTD Facility site boundary could result in fast moving wildfire across agricultural areas that could enter the site boundary.

Areas of heightened risk are described using the CWPP Wildfire Risk to Assets (Figure 2), potential impacts to people and property (Figure 3), and potential impacts to infrastructure datasets (Figure 4). There are a few pockets of low, moderate, and high potential impact for people and property which are centered around farm and ranch buildings and infrastructure along Middle Rock Creek Lane in the west and south and John Day Highway running north to south through the middle (Figure 3).

Potential impacts to infrastructure within the OTS Facility solar microsite area include a distribution line and a residence along Bottemiller Lane. Within the OTS site boundary, there is potential for low impacts to infrastructure along John Day Highway (Figure 4). There are pockets of existing infrastructure throughout the OTS Facility's 0.5-mile wildfire analysis area that are considered areas of heightened risk for wildfire. If a wildfire occurred, the areas subject to heightened risk would be the areas associated with these structures. The distribution line poles, residences, and farming structures may be considered areas of heightened risk as they have potential for high fire hazard.

The Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan describes a county-wide risk assessment of wildfire as "high" probability, and that many areas in the county as "conducive for large and fast-moving wildfires" due to high winds typical for region, dry conditions, and terrain. The plan identifies risk factors for starting wildfires in the county as including highways, railroads, lighting, power lines, debris burning, and equipment.

The existing structures within the OTS Facility site boundary are the existing distribution lines, wind turbines, solar project, farm buildings, and a few residential properties. If a wildfire were to occur, the areas subject to heightened risk would be the areas associated with these structures. However, the OTS Facility site boundary is bisected by John Day Highway running north and south that would serve as a fire break were a wildfire to occur east or west. Baseline Road at the southeastern edge would also serve as a fire break were a wildfire to occur south of the OTS Facility site boundary.

***(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;***

The facility components that could cause electrical fires are solar inverters, wind turbines, substations, BESS, and overhead electrical lines. The Certificate Holder will inspect these components during operations as outlined in Table 1.

**Table 1. Operational Inspections for Electrical Components**

Inspection	Procedure	Standard	Time frame
Solar Inverter	Visual inspection of inverter and surrounding area.	SPCC Plan <sup>1</sup> Manufacturer's maintenance recommendations	Monthly SPCC Bi-annual Preventative Maintenance
Wind Turbine	Visual inspection of base of turbine and surrounding area.	SPCC Plan Site Certificate Condition 57	Monthly SPCC Bi-annual Preventative Maintenance
Substation	Visual inspection of MPT, APLIC measures, and surrounding area.	Manufacturer's maintenance recommendations APLIC <sup>3</sup>	Monthly Yearly (APLIC)
BESS	Visual inspection of BESS, PCS, and surrounding areas	SPCC Plan	Monthly

Inspection	Procedure	Standard	Time frame
		Manufacturer's maintenance recommendations	
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	NERC <sup>4</sup> APLIC	Bi-annual
1. The Operational Spill Prevention, Control, and Countermeasure Plan for the facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area. 2. Certificate Holder will develop an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components. 3. Avian Power Line Interaction Committee. 4. National Energy reliability Corporation (NERC), vegetation maintenance standard FAC-003-0 .			

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will install a non-flammable gravel base around solar inverters, wind turbines, substations, and BESS, and implement on-going vegetation management outlined in Table 2 to ensure that vegetation does not grow in these graveled areas.

**Table 2. Vegetation Management Procedures by Facility Component**

Vegetation Management	Procedure	Standard	Time frame
Solar Inverter	Herbicide application on gravel pad around inverter to prevent vegetation growth.	IEEE 80 NEC 70	Yearly, depending on vegetation condition.
Wind Turbine	Herbicide application on gravel pad around turbine pad and turbine access road to prevent vegetation.	Site Certificate Condition 57	Yearly, depending on vegetation condition.
Substation	Herbicide application on substation gravel pad. Highly compacted gravel foundations of substation are not suitable for vegetation ground.	IEEE 80 NEC 70	Yearly, depending on vegetation condition.
BESS	Herbicide application on gravel pad surrounding BESS. Highly compacted gravel foundations of BESS are not suitable for vegetation.	IEEE 80 NEC 70	Yearly, depending on vegetation condition.
Overhead electrical lines	Mow vegetation to achieve clearance requirements between conductor and ground.	NERC	Yearly, depending on vegetation condition.

### 3.0 Preventative Actions

***(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;***

In the design of the facility, the Certificate Holder will implement the design considerations and best practices outline in Table 3 to minimize electrical fire risk from facility components.

**Table 3. Design Considerations for Fire Safety by Facility Component**

Consideration	Solar Inverter	Wind Turbine	Substation	BESS	Overhead Lines
Electrical connections by qualified electricians	X	X	X	X	X
Inspections for mechanical integrity prior to energizations	X	X	X	X	X
Lighting protection	X	X	X	X	X
Corrosion protection	X	X	X	X	X
Strain relief of connecting cabling	X	X	X	X	X
Protection against moisture	X	X	X	X	X
Grounding systems	X	X	X	X	X
Limits on input voltage and power	X	X	X	X	X
Safety setback from structures	X <sup>2</sup>	X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>3</sup>
Technology specific design standards	X <sup>4</sup>	X <sup>5</sup>	X <sup>6</sup>	X <sup>7</sup>	X <sup>4</sup>
1. 110 percent of max turbine height setback from structures, Site Certificate Condition 41. 2. 50-foot setback from structures, Site Certificate Condition 41. 3. Vertical and horizontal clearances from structures depends on voltage of conductor. 4. NFPA 70. 5. NFPA 850. 6. IEEE 979. 7. NFPA 1, Chapter 52.					

### 4.0 Programs

The Certificate Holder will implement the following programs to minimize fire risk during operations of the Facility.



#### **4.1 OSHA-Compliant Fire Prevention Plan**

All workers, contracting employees, and other personnel performing official duties at the Facility will conduct work under a Fire Prevention Plan that meets applicable portions of 29 CFR 1910.39, 29 CFR 1910.155, 29 CFR 1910, subpart L. The plan will ensure that:

- Workers are trained in fire prevention, good housekeeping, and use of a fire extinguisher
- Workers are trained in the evacuation procedures in the event in a fire occurs in a wind turbine while workers are inside the turbine.
- Necessary equipment is available to fight incipient stage fires. Fire beyond incipient stage shall be managed using local fire response organizations.
- Provide necessary safety equipment for handling and storing combustible and flammable material.
- Ensure equipment is maintained to prevent and control sources of ignition
- Do not allow smoking or open flames in an area where combustible materials are located.
- Implement a Hot Work Procedure and permit program.

#### **4.2 Electrical Safety Program**

All operational workers will be trained in electrical safety and the specific hazards of the facility. This training will address:

- Minimum experience requirements to work on different types of electrical components
- Electrical equipment testing and troubleshooting
- Switching system
- Provisions for entering high voltage areas (e.g., substation)
- Minimum approach distances
- Required personal protective equipment

#### **4.3 Lock Out/Tag Out Program**

During maintenance activities on electrical equipment is the de-energized and physically locked or tagged in the de-energized positions to inadvertent events that could result in arc flash.

#### **4.4 ISO 45001**

The Certificate Holder's parent company, Avangrid Renewables, is certified under ISO 45001 for health and safety in the operation of renewable energy generation facilities (Attachment 1). This certification was granted after an audit of Avangrid Renewables' safety program by the International Standards Organization (ISO). This demonstrates that the Certificate Holder has the

necessary organizational expertise to implement the measures, inspections, and programs outlined in this plan.

## 5.0 Minimization Procedures

***(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and***

In addition to the measures described above, the risk of a wildfire affecting the public safety, first responders, or Council-protected resources would be minimized by the procedures listed in Table 4.

**Table 4. Procedures to Wildfire Risk**

Topic	Procedures
Public health and safety	The public will be excluded from the solar, substation, and BESS facilities by fencing. Turbine doors will be locked to prevent unauthorized entry. Ground mounted inverters near turbines, and junction boxes will be surrounded by bollards to minimized inadvertent vehicle/farm equipment collisions with electrical equipment.
First Responders	The Certificate Holder will offer annual training to local first responders. Training will cover the firefighting responses to electrical fires. Response to fires in the facility should focus on controlling spread to adjacent lands. Operational staff will be trained in the use of fire extinguishers for responding to incipient stage fires on site.
Resource Protection	Resources covered by Council standards near the project area include agricultural land, shrub steppe habitat, and cultural resources. The existing county roads will form a fire break between fields that will discourage the spread of wildlife between fields or into wildlife habitat. The two closest cultural sites are the Weatherford Barn and The Tree Site. The Weatherford Barn was deconstructed by the landowner and no longer exists, and The Tree Site is a buried resource that would not be exposed to wildfire.

## 6.0 Plan Updates

***(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.***

The Certificate Holder may consider revisions to this plan at its sole discretion to incorporate future best practices or emerging technology depending on whether the new technology is cost effective and suitable for the site conditions. The Certificate Holder will track the industry groups and applicable design standards outlined in Table 5 to identify future technologies or best practices that could be implemented at the Facility.

**Table 5. Resources for Future Best Practices**

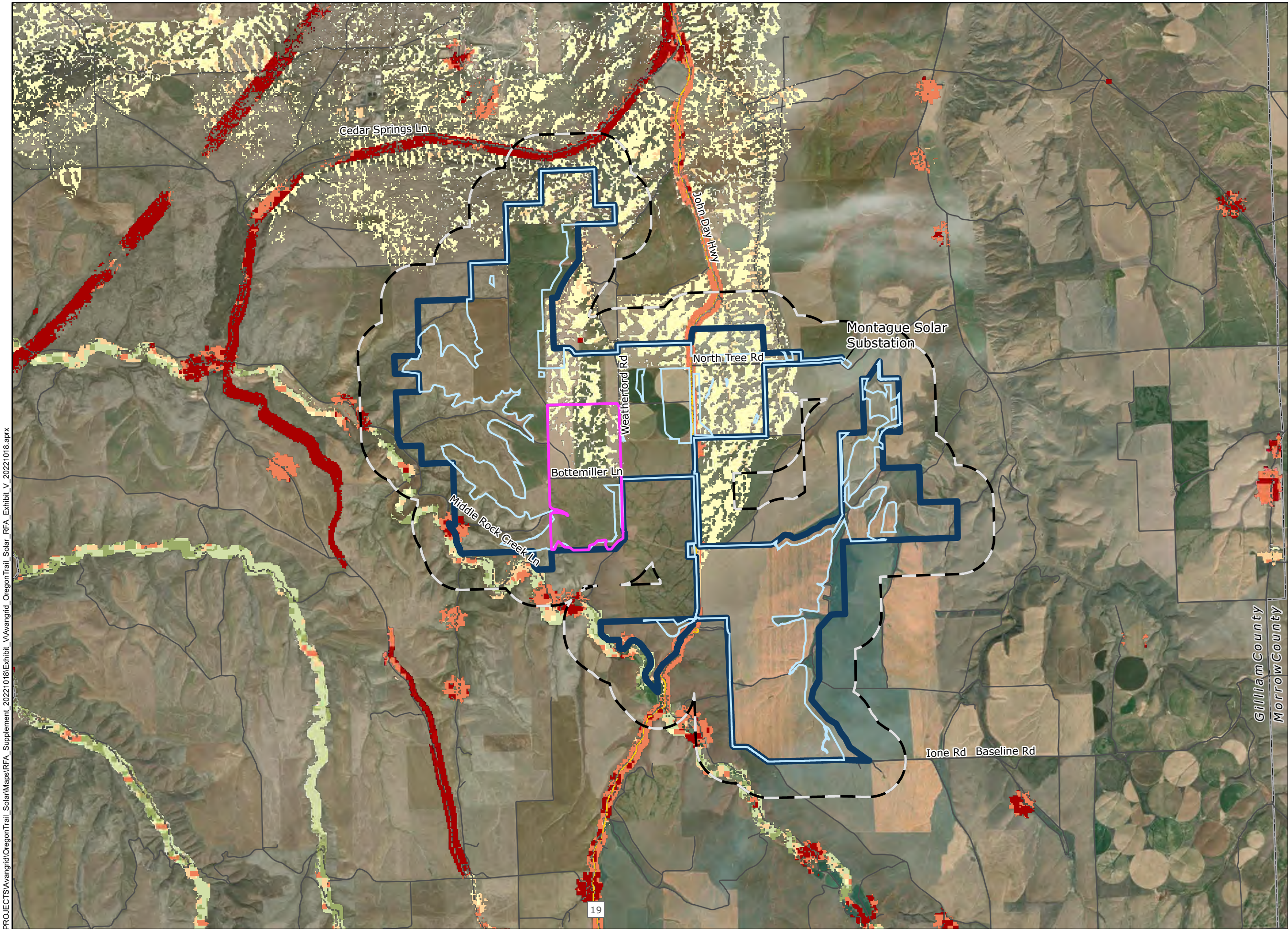
Reference	Description	Method
American Clean Power	Industry group that establishes best practices for renewable energy projects	The Certificate Holder's parent company is a member of ACP and participates in best practice development <sup>1</sup> .
National Electric Reliability Corporation (NERC)	National Energy Reliability Corporation develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines <sup>2</sup> , or updates to this standard as approved by NERC.

Reference	Description	Method
Oregon Specialty Building Codes (OSBC)	Building codes applicable to inhabitable spaces, including the O&M building and the substation enclosure.	Remodeling to the O&M and enclosure structure that requires permits will follow any updates to the OSPC at that time.
APLIC	Avian protection methods for electrical facility reduce fires related to bird/mammal nests on electrical equipment	The Certificate Holder's parent company is a member of APLIC <sup>3</sup> . An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (e.g., MBTA).
1. Link to ACP Standards & Practices: <a href="https://cleanpower.org/resources/types/standards-and-practices/">https://cleanpower.org/resources/types/standards-and-practices/</a> . 2. NERC FAC-003-0: <a href="https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf">https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf</a> . 3. Link to APLIC member organization: <a href="https://www.aplic.org/member_websites.php">https://www.aplic.org/member_websites.php</a> .		

# Figures



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# Oregon Trail Solar Facility

**Figure 1**  
**Overall Fire Risk**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Overall Wildfire Risk
  - Very High
  - High
  - Moderate
  - Low
  - Low Benefit
  - Benefit

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



## Reference Map



1:80,000

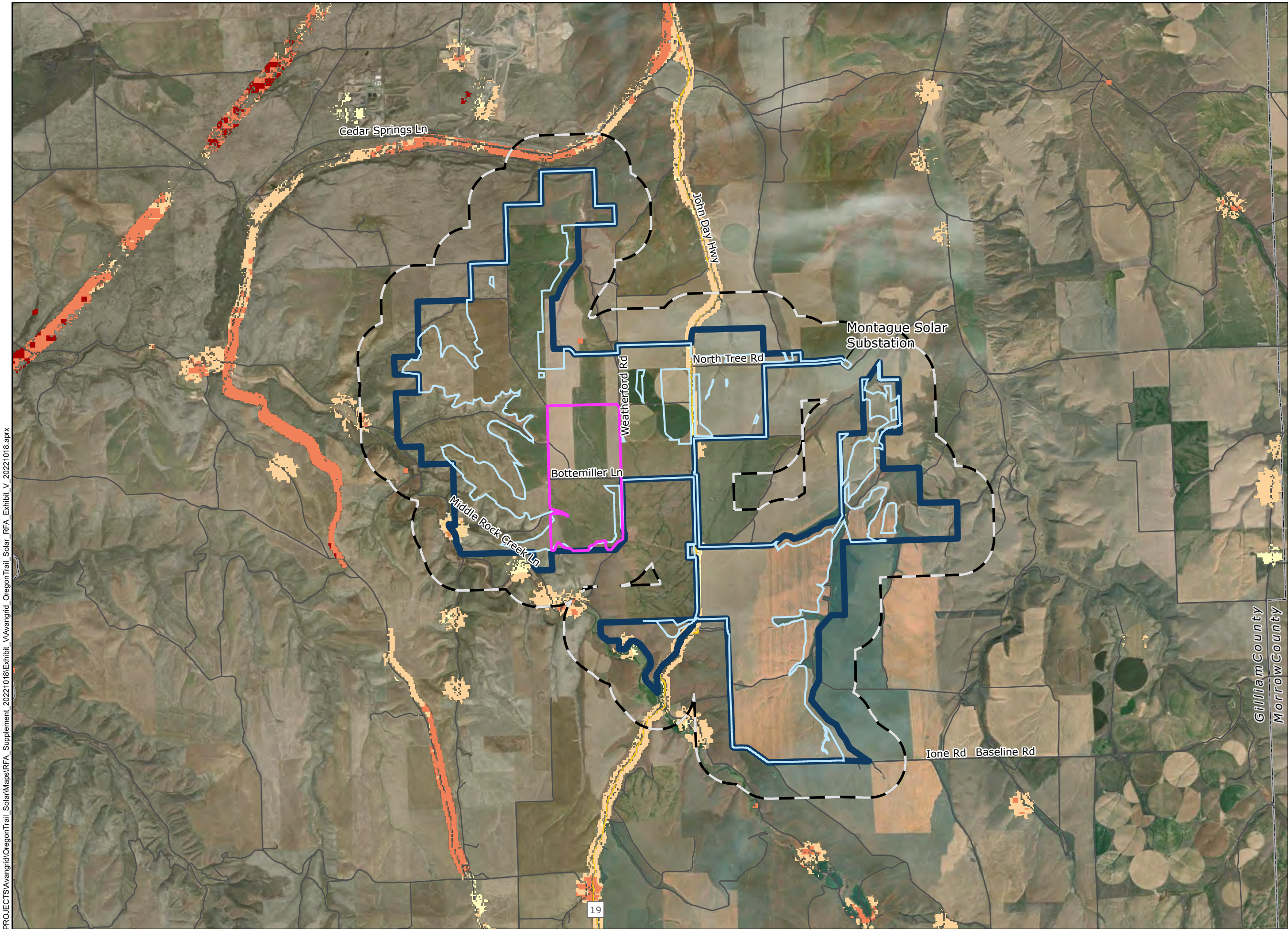
WGS 1984 UTM Zone 10N

0 2 4 8 Miles

NOT FOR CONSTRUCTION



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# Oregon Trail Solar Facility

**Figure 2**  
**Wildfire Risk to Assets**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Wildfire Risk to Assets
  - Very High
  - High
  - Moderate
  - Low

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



## Reference Map



1:80,000

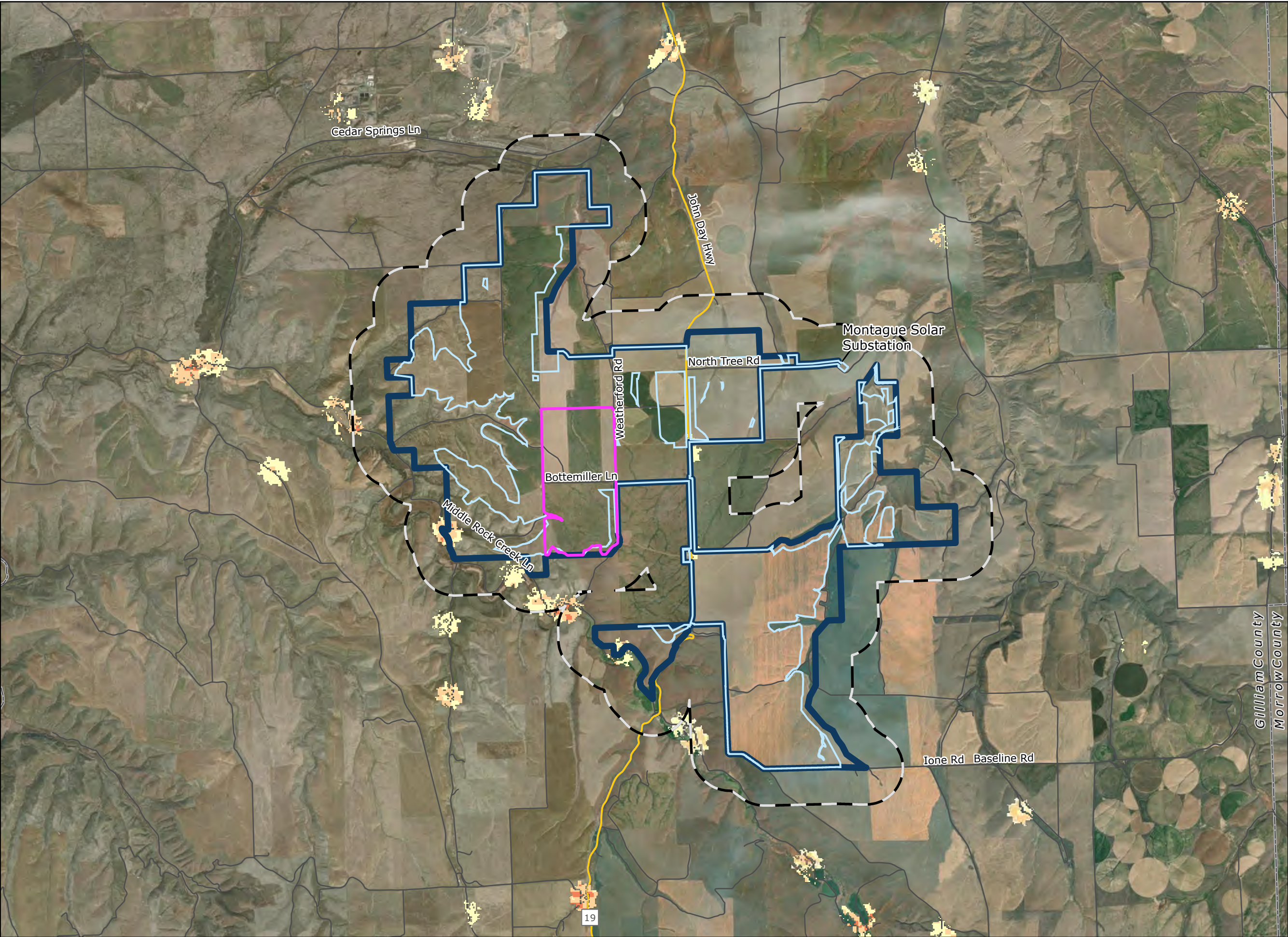
WGS 1984 UTM Zone 10N

0 2 4 8 Miles

NOT FOR CONSTRUCTION



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# Oregon Trail Solar Facility

**Figure 3**  
**Wildfire Potential Impacts to People and Property**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Approved Wind Micrositing Corridor
- Approved Solar Micrositing Area
- Analysis Area (0.5-mile Buffer)
- County Boundary
- State Highway
- Local Roads
- Potential Impact to People and Property
  - High
  - Moderate
  - Low

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



## Reference Map



1:80,000

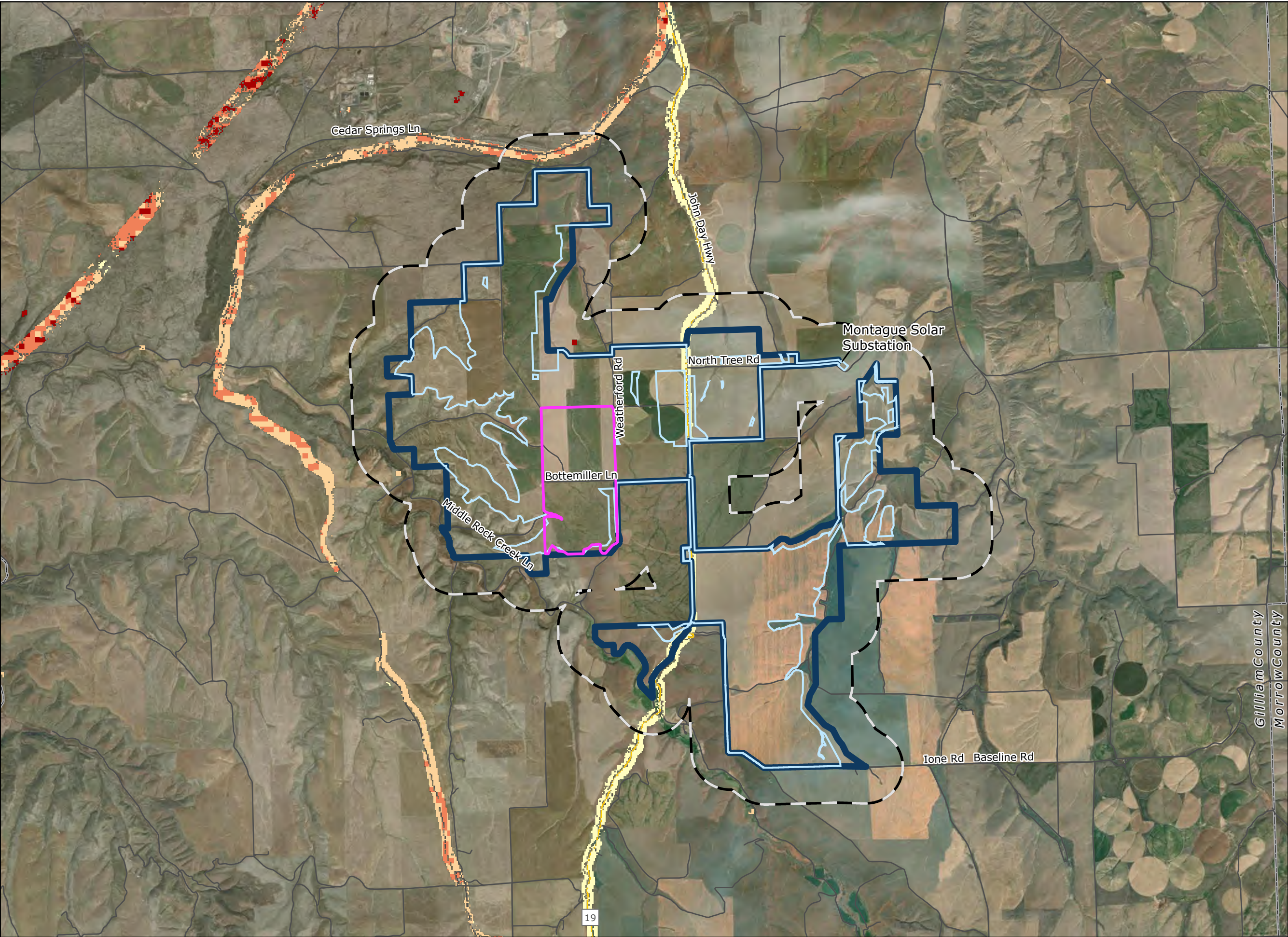
WGS 1984 UTM Zone 10N

0 2 4 8 Miles

NOT FOR CONSTRUCTION





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# Oregon Trail Solar Facility

## Figure 4 Wildfire Potential Impacts to Infrastructure

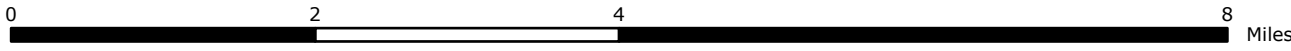
GILLIAM COUNTY, OR

- Site Boundary Area
  - Subject to Request for Amendment 1
  - Approved Wind Micrositing Corridor
  - Approved Solar Micrositing Area
  - Analysis Area (0.5-mile Buffer)
  - County Boundary
  - State Highway
  - Local Roads
- Potential Impact to Infrastructure\*
- Very High
  - High
  - Moderate
  - Low
- \* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.
-  TETRA TECH
-  AVANGRID RENEWABLES



1:80,000

WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



# Attachment 1. ISO Certification



# Certificate

Standard **ISO 45001:2018**

Certificate Registr. No. **01 213 1718978**

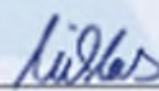
Certificate Holder: **AVANGRID RENEWABLES, INC**  
1125 NW Couch St, Suite 700  
Portland, OR 97209-4129  
USA  
  
including the branch offices according to annex

Scope: **Electrical Power Generation from Renewable Sources, primarily  
Wind and Solar**

Proof has been furnished by means of an audit that the  
requirements of ISO 45001:2018 are met.

Validity: **The certificate is valid from 2021-11-12 until 2024-11-11.  
First certification 2018**

2021-12-21

  
TÜV Rheinland Cert GmbH  
Am Grauen Stein • 51105 Köln

[www.tuv.com](http://www.tuv.com)



# **Attachment 19. Oregon Trail Solar Noise Model Input**

**(Provided Under Separate Confidential Cover)**

## **Attachment 20. 2022 Wetlands and Non-wetland Waters Delineation**

## WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with [applicable review fee](#), are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

**Ways to submit report:**

- ❖ **Under 50MB** - A single unlocked PDF can be emailed to: [wetland.delineation@dsl.oregon.gov](mailto:wetland.delineation@dsl.oregon.gov).
- ❖ **50MB or larger** - A single unlocked PDF can be uploaded to [DSL's Box.com](#) website. After upload notify DSL by email at: [wetland.delineation@dsl.oregon.gov](mailto:wetland.delineation@dsl.oregon.gov).
- ❖ **OR** a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

**Ways to pay review fee:**

- ❖ By credit card on [DSL's epayment portal](#) after receiving the unique file number from DSL's emailed confirmation.
- ❖ By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy **OR** attached to the complete signed cover form if report submitted electronically.

**Contact and Authorization Information**

☒ Applicant ☐ Owner Name, Firm and Address:

Kristen Goland, Avangrid Renewables  
2701 NW Vaughn Street, Suite 300  
Portland, Oregon 97210

Business phone # (508) 397-6130  
Mobile phone # (optional)  
E-mail: kristen.goland@avangrid.com

☐ Authorized Legal Agent, Name and Address (if different):

Business phone #  
Mobile phone # (optional)  
E-mail:

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

**Typed/Printed Name:** Kristen Goland

**Signature:**

Date: 7/11/2022

Special instructions regarding site access:

F5FB6650B1D6459...

**Project and Site Information**

Project Name: Oregon Trail Solar Facility

Latitude: 45.33'25.80"

Longitude: -120.11'04'.84"

**decimal degree** - centroid of site or start & end points of linear project

Proposed Use:  
Construction of Solar Power Facility

Tax Map # 01N21E

Tax Lot(s) 804,806,805,802,1500

Tax Map #

Project Street Address (or other descriptive location):

Facility site is located south of Arlington, Oregon.

Tax Lot(s)

Township 01N Range 21E Section 21 QQ

Use separate sheet for additional tax and location information

City: Arlington, Oregon

County: Gilliam

Waterway: N/A

River Mile: N/A

**Wetland Delineation Information**

Wetland Consultant Name, Firm and Address:

Claudia Steinkoenig, Jacobs Engineering Group Inc.  
2020 SW 4th Avenue  
Portland, Oregon 97201

Phone # (503) 432-7610

Mobile phone # (if applicable)

E-mail: claudia.steinkoenig@jacobs.com

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

**Consultant Signature:**

Steinkoenig, Claudia  
AAB00085906

Digitally signed by Steinkoenig, Claudia AAB00085906  
DN: cn=Steinkoenig, Claudia AAB00085906, ou=Users,  
email=Claudia.Steinkoenig@jacobs.com  
Date: 2022.05.20 15:22:28 -0700

Date: 05/20/2022

**Primary Contact** for report review and site access is ☐ Consultant ☒ Applicant/Owner ☐ Authorized Agent

Wetland/Waters Present?

☐ Yes ☒ No

Study Area size: 1267.5

Total Wetland Acreage: 0.0000

**Check Applicable Boxes Below**

☐ R-F permit application submitted

☒ Fee payment submitted \$ 500.00

☐ Mitigation bank site

☐ Resubmittal of rejected report (\$100)

☐ EFSC/ODOE Proj. Mgr: \_\_\_\_\_

☐ Request for Reissuance. See eligibility criteria. (no fee)

☐ Wetland restoration/enhancement project (not mitigation)

DSL # \_\_\_\_\_ Expiration date \_\_\_\_\_

☐ Previous delineation/application on parcel

☐ LWI shows wetlands or waters on parcel

If known, previous DSL # \_\_\_\_\_

Wetland ID code \_\_\_\_\_

**For Office Use Only**

DSL Reviewer: \_\_\_\_\_

Fee Paid Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

DSL WD # \_\_\_\_\_

Date Delineation Received: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

DSL App.# \_\_\_\_\_



## **Oregon Trail Solar Facility**

### **2022 Wetlands and Nonwetland Waters Delineation**

Draft

June 2022

Avangrid Renewables, LLC, on behalf of subsidiary  
Oregon Trail Solar, LLC







## **Oregon Trail Solar Facility**

Project No: D3625100 A.CS.EV.01-01  
Document Title: 2022 Wetlands and Nonwetland Waters Delineation  
Document No.: PPS0525221030PDX  
Revision: Draft  
Date: June 2022  
Client Name: Avangrid Renewables, LLC, on behalf of subsidiary Oregon Trail Solar, LLC  
Project Manager: Carrie Andrews/Jacobs  
Authors: Emma McGinty/Jacobs and Claudia Steinkoenig/Jacobs

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## Acronyms and Abbreviations

amsl	above mean sea level
Facility	Oregon Trail Solar Facility
HUC	hydrologic unit code
Jacobs	Jacobs Engineering Group Inc.
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
OAR	Oregon Administrative Rule
PJD	preliminary jurisdictional determination
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey



## **1. Introduction**

Jacobs Engineering Group Inc. (Jacobs) was retained by Avangrid Renewables, LLC, on behalf of its subsidiary Oregon Trail Solar, LLC, to conduct a wetland delineation of the proposed Oregon Trail Solar Facility (Facility). Jacobs conducted the delineation on April 21, 2022, where permanent components are planned or where construction disturbance may occur (study area) (Figure 1 in Appendix A).

Various areas were surveyed over the years as Facility components were developed. Figure 5a in Appendix A identifies the previous surveys conducted and the DSL number assigned to each survey report. WD 2020-0587 is the last survey that received concurrence. The concurrence is still current; however, the purpose of this report is to consolidate the previous survey areas and the April 2022 survey area into one complete area.

## **2. Summary of Results**

The 2022 delineation of 1,267.5 acres identified no wetlands and one nonwetland waterway.

## **3. Description of Site, Landscape Setting, and Current Land Uses**

The proposed facility is located in the Columbia Plateau physiographic region, primarily in the Pleistocene Lake Basins Level IV ecoregion, with the extreme southern portions located in the Umatilla Plateau ecoregion (Thorson et al. 2003). The landscape consists of gentle rolling hills, plateaus, and occasional high buttes, rocky outcrops, sand dunes, and shallow exposed bedrock. These areas are regularly dissected by gently sloped to steep headwater gullies, relict drainages, ravines, and shallow vegetated swales. Area elevations range from approximately 600 feet above mean sea level (amsl) in Eightmile Canyon to approximately 1,500 feet amsl on the Umatilla Plateau southern of the site. Vegetation communities in the site are primarily agricultural land with some relic shrub-steppe, grassland. Historical land use was dominated by wheat farming and livestock grazing. Current land use includes wheat and hay farming, livestock grazing, and lands in the Conservation Reserve Program. Wheat crops are grown on the plateaus and gentler upper slopes of ridges and rolling hills.

The regional climate is arid, with average annual precipitation of approximately 9 inches (NRCS 2022a). The site is located within two watersheds – China Creek (hydrologic unit code [HUC] 170701011402) on the north and east sections of the site and French Charlie Canyon-Rock Creek (HUC 170702041205) on the west and south portions of the site. The surrounding canyon (Alkali Canyon) consists of discontinuous drainage north to China Creek. Both China Creek and Rock Creek are Columbia River tributaries.

## **4. Site Alterations**

Vegetation throughout the site has been altered by historical and ongoing farming. The headwaters of drainages in much of the site are currently or were historically managed as wheat fields with regular plowing and planting as part of the agricultural operations, eliminating most traces of drainages in these areas. Drainages that traverse steeper unfarmed areas (because of slope or rocky soils) have more developed channels, apparently as the result of natural erosive processes. Additional site alterations include residences and farms, many of which are abandoned, asphalt and gravel roads, and dirt farm access roads.

## **5. Precipitation Data and Analyses**

Fieldwork was conducted on April 21, 2022. Precipitation data for the period through April 2022 were obtained for the Arlington weather station, approximately 5 miles northwest of the site (NRCS 2022a).

The daily and monthly weather summary data and WETS data from Arlington station (NRCS 2022a) were used to compare actual precipitation amounts against normal ranges for the study area.

Average annual precipitation for the Arlington weather station is 9.10 inches, including average annual snowfall of 4.4 inches (NRCS 2022a). The normal range for annual precipitation is 4.25 to 8.94 inches. Total precipitation for the water year prior to the fieldwork (October 2021 through April 2022) was 8.52 inches. Total precipitation for the 2 weeks prior to the fieldwork was 1.17 inch.

Table 1 presents the precipitation data for the dates of the field investigation and for the 2-week period preceding the field investigation. Table 2 presents the monthly precipitation data for the water year October 2021 through April 2022.

**Table 1. Daily and 2 Weeks Prior to Field Investigation Precipitation: Arlington, Oregon Station**  
2022 Wetlands and Nonwetland Waters Delineation, Oregon Trail Solar Facility

Date	Daily Precipitation During Field Investigation (inches)	Precipitation 2 Weeks Prior to Field Investigation (inches)
April 6 – April 20, 2022		1.17
April 21, 2022	0.30	
<b>Totals</b>	<b>0.30</b>	<b>1.17</b>

Sources: AccuWeather 2022; NRCS 2022a

**Table 2. Monthly Precipitation Data for the Water Year (October 2021 – April 2022): Arlington, Oregon Station**  
2022 Wetlands and Nonwetland Waters Delineation, Oregon Trail Solar Facility

Date	Actual Precipitation <sup>a</sup>	Normal Range <sup>b</sup>	Precipitation Outside Average Range
<b>-- inches --</b>			
October 2021	0.67	0.54-1.02	-
November 2021	1.16	0.56-1.29	+0.10
December 2021	1.89	1.09-2.10	+0.15
January 2022	1.13	0.91-1.61	-
February 2022	0.10	0.39-1.09	-
March 2022	1.15	0.45-1.04	+0.30
April 2022	2.42	0.31-0.79	+1.78
<b>Totals</b>	<b>8.52</b>	<b>4.25-8.94</b>	<b>-</b>

<sup>a</sup> Source: AccuWeather 2022.

<sup>b</sup> Source: NRCS 2022a.

Note: - = not applicable

## 6. Methods

Jacobs performed a desktop study and field investigation to complete the delineation.

### 6.1 Desktop Study

A review of existing literature, maps, and other materials was conducted to identify potential wetlands and other waters of the United States within the study area before initiating the field study. Existing documents reviewed included the following:

- HDR Engineering, Inc. 2017a. *Wetlands and Other Waters Delineation Report, Montague Wind Power Facility, Gilliam County, Oregon*.
- HDR Engineering, Inc. 2017b. *Supplemental Delineation Report for Reissuance of Expired WD#2011-0364, Montague II Wind Power Facility*. July.
- Tax Lot Maps (geographic information system data for Gilliam County May 2022) (Figure 2 in Appendix A)
- *National Wetlands Inventory* (NWI) (USFWS 2022) (Figure 3 in Appendix A)
- U.S. Geological Survey (USGS) Topographic Map (USGS 2022a)
- USGS 100K National Hydrography Dataset (NHD) – digital watercourse data (USGS 2022b)
- *Web Soil Survey* (NRCS 2022b) (Figure 4 in Appendix A)
- Color Aerial Photography (ESRI Aerial Imagery 2022) (Figures 5a and 5b in Appendix A)
- WETS Table: Arlington, Oregon Station (NRCS 2022a)
- AccuWeather Observed Weather (2022)

### 6.2 Field Investigation

The field investigation was conducted by a Jacobs wetland scientist on April 21, 2022. Based on information obtained from the desktop study, the entire study area was field-verified to determine whether it contained stream channels, wetlands, or other waters. Additionally, the study area was walked to identify isolated wetlands or other waters outside of drainages.

### 6.3 Wetlands

Field investigation of wetlands followed procedures in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008). Wetland biologists used *The National Wetland Plant List: 2016 Wetland Ratings* (Lichvar et al. 2016) to determine the wetland indicator status of vegetation. Because no wetlands were identified within the study area, sample plot analyses and preliminary jurisdictional determinations were not performed.

### 6.4 Nonwetland Waters

Jacobs conducted field verification of drainages using the *Streamflow Duration Assessment Method* (Nadeau 2015) to determine if they had ephemeral, intermittent, or perennial flow regimes or showed signs of geomorphology, hydrology, and biology. One drainage was identified within the study area.

Areas identified as potential nonwetland waters by the USGS NHD were investigated. One of these potential waterways consisted of upland areas previously documented as potential waters in the 2017 (HDR 2017b) field investigation. There has been no change in land use and these areas remain cultivated in agricultural use. The areas not determined to be a nonwetland water are upland vegetated swales and gullies. These swales and gullies are generally vegetated, with agricultural crops or predominately with



*Artemisia tridentata* (UPL), *Chrysothamnus viscidiflorus* (UPL), *Bromus tectorum* (UPL), and other upland shrub-steppe species common to the area. They do not have bed and bank characteristics, ordinary high water marks, or other indicators of recent flow. Ground-level photographs of these drainages are in Appendix B and photograph locations are identified on Figures 5a and 5b (Appendix A).

## 7. Description of Wetlands and Nonwetland Waters

No wetlands and one nonwetland waterway (stream channels) were identified within the study area (Figures 5a and 5b).

### 7.1 Delineated Wetlands

No wetlands were identified within the study area.

### 7.2 Nonwetland Waters

One drainage identified as SD3052 and originally mapped in WD#2017-0111 was identified onsite. During the time of the site visit, the drainage was ponded adjacent to a culvert outlet. The drainage itself has no defined bed or bank and extends approximately 3 feet to the northwest.

No additional drainage characteristics were observed within the site boundary. A prior survey conducted in 2017 (April 11, 2017) (HDR 2017b) mapped SD2018 with an ephemeral flow regime. No evidence of this drainage was observed during the 2022 field survey despite recent heavy rain events. The area of SD2018 is documented with photos (Photos 8, 9, 10, 11, and 12 in Appendix B) and a sample plot (Appendix C data forms). The photo of the SD2018 feature identified in the WD 2017-1111 wetland report shows a recently plowed field void of vegetation. These conditions may have resulted in erosional features from a recent rain event; however, there was no visible bed and bank. Current site conditions do not show any evidence of a drainage in this location.

Table 3 summarizes the water resources (nonwetland waters) identified within the study area.

<b>Table 3. Water Resources Identified within Study Area</b> <i>2022 Wetlands and Nonwetland Waters Delineation, Oregon Trail Solar Facility</i>				
Stream ID	Flow Regime	Maximum Width at Ordinary High Water Elevation (feet)	Clean Water Act Section 404 Jurisdiction (PJD) <sup>a</sup>	Oregon Removal-Fill Law Jurisdiction (PJD) <sup>a</sup>
SD3052	Ephemeral	<1.0	Yes	No

<sup>a</sup> Preliminary jurisdictional determinations (PJDs) are advisory only. Final jurisdictional determinations are made by the regulatory agencies.

## 8. Deviation from Local Wetlands Inventory/National Wetlands Inventory

No Local Wetlands Inventory has been compiled for the study area. No NWI-mapped features are located within the study area.

## 9. Mapping Methods

Wetlands and nonwetland waters boundaries and sample plot and photo point locations were surveyed using a tablet computer that had the above-mentioned base maps uploaded and a wireless connection to a GPS unit with submeter accuracy and real-time correction as well as a hand-held Trimble GNSS receiver. The boundaries and sample plot and photo point locations were post-processed using

differential correction by Environmental Systems Research Institute Collector for ArcGIS (ESRI 2022) and delineated with submeter accuracy.

## **10. Results and Conclusions**

No wetlands and one ephemeral water were identified in the study area during the wetland field investigation. This drainage is not considered federally jurisdictional under the recent Waters of the United States ruling (EPA and USACE 2022) because it is an ephemeral, isolated drainage.

## **11. Disclaimer**

This report documents the investigation, best professional judgment, and conclusions of the investigators. It should be used at the reader's own risk until it has been approved in writing by the Oregon Department of State Lands in accordance with Oregon Administrative Rule (OAR) 141-090-0005 through 141-090-0055, and the U.S. Army Corps of Engineers in accordance with Section 404 of the Clean Water Act (OAR 141-090-0035 [7][k]).



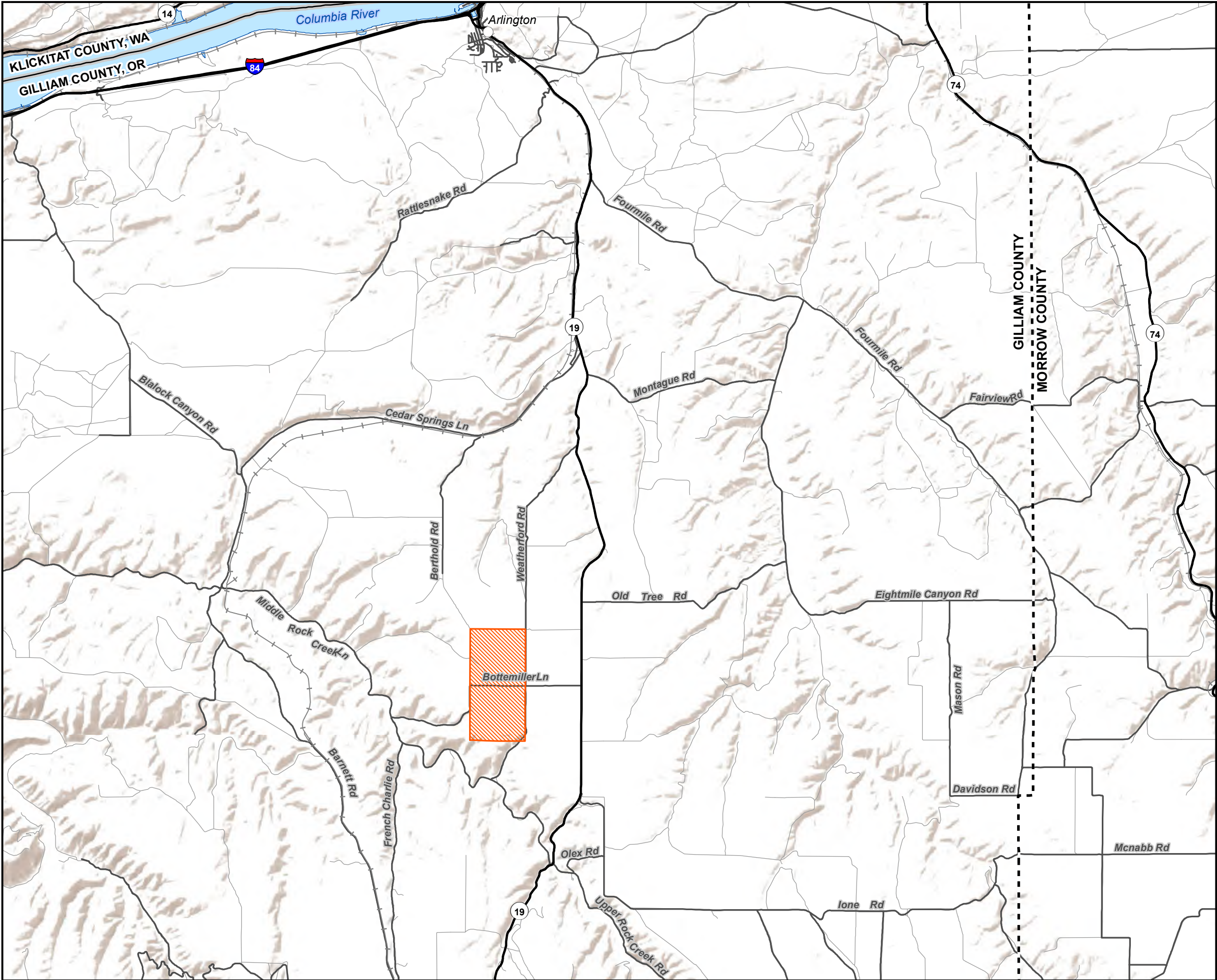






## **Appendix A**

### **Figures**




**Figure 1**  
**Wetland Survey Location**  
*Oregon Trail Solar Facility*

**Legend**

 2022 Wetland Survey Corridor

**Basemap Features**

 Interstate/Highway

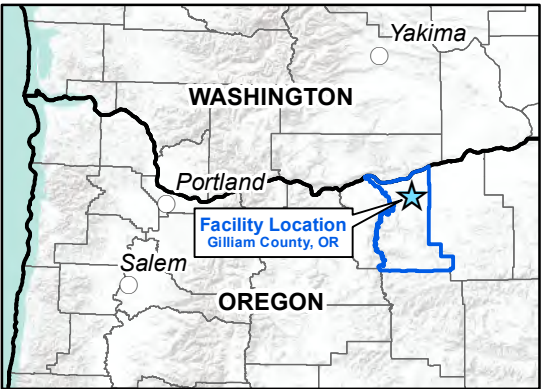
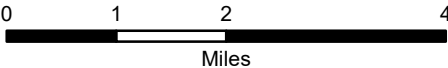
 Public Road

 Other Road

 Major Railroad Line

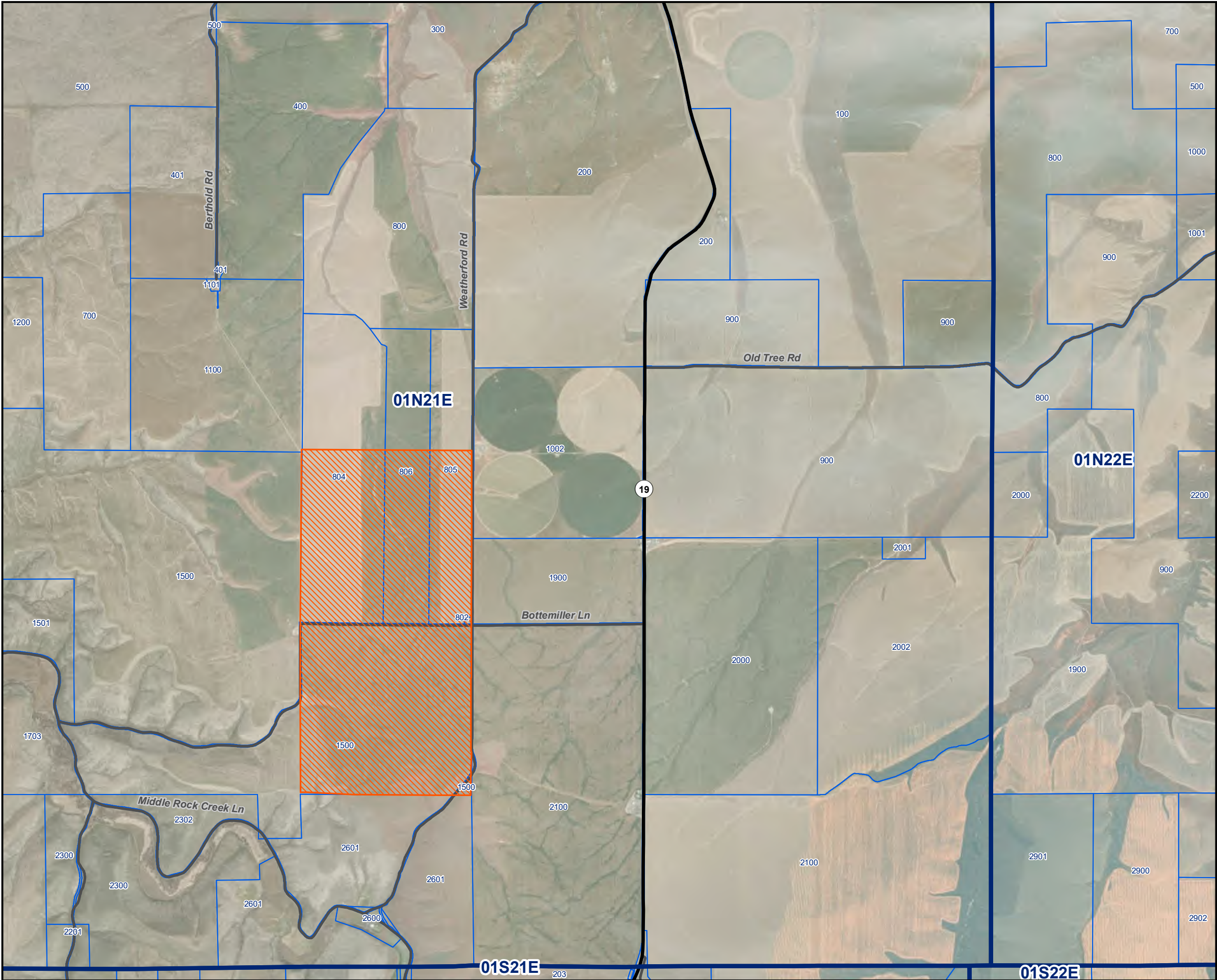
 State Boundary

 County Boundary








**Jacobs**



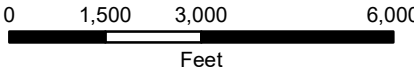


**Figure 2**  
**Wetland Survey**  
**Tax Lots**  
*Oregon Trail Solar Facility*

**Legend**

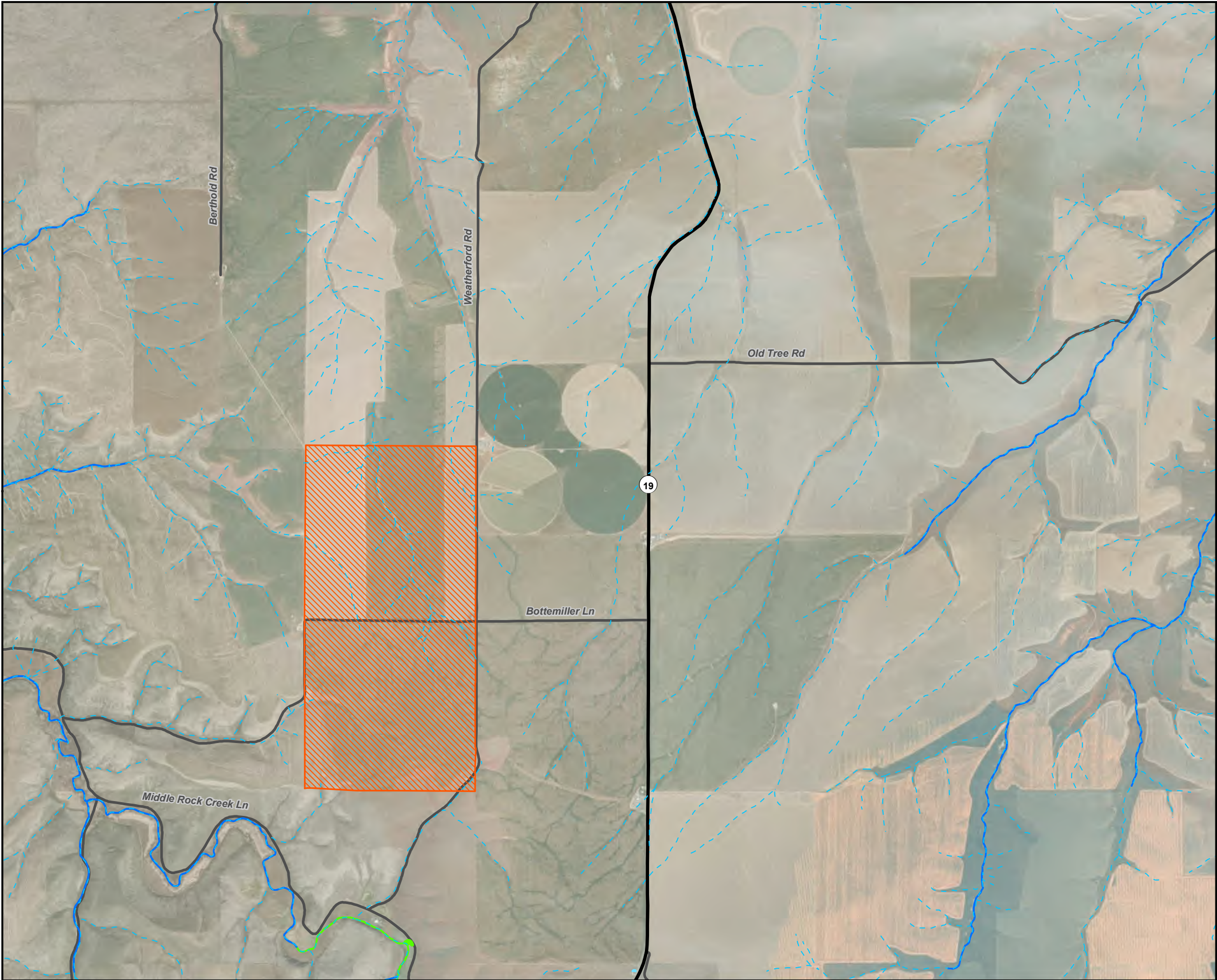
-  2022 Wetland Survey Corridor
-  Public Land Survey System Township Range Boundary
-  Gilliam County Tax Lot Boundary
- Basemap Features**
-  Interstate/Highway
-  Public Road

- Tax lot GIS data for Gilliam County downloaded on 3/18/2020.









**Jacobs**



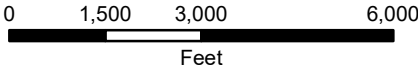


**Figure 3**  
**Wetland Survey**  
**NHD and NWI Map**  
*Oregon Trail Solar Facility*

**Legend**

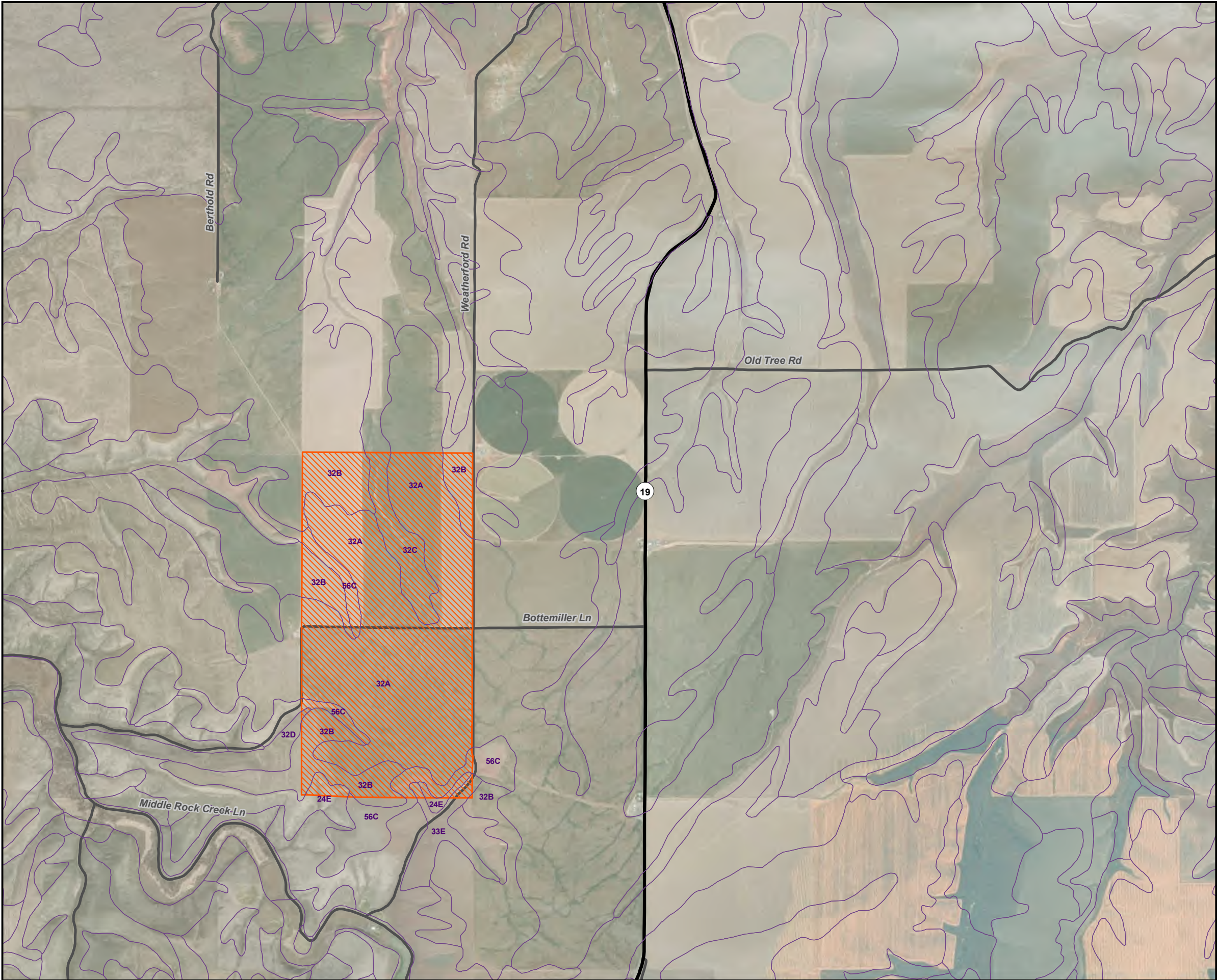
-  2022 Wetland Survey Corridor
- National Hydrography Dataset**
  -  Stream/River
- National Wetlands Inventory**
  -  Freshwater Forested/Shrub Wetland
  -  Riverine
- Basemap Features**
  -  Interstate/Highway
  -  Public Road

- National Hydrography Dataset (NHD) data downloaded on 9/22/2020.  
- National Wetlands Inventory (NWI) data downloaded on 9/22/2020.







**Jacobs**





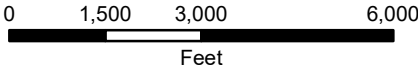
**Figure 4**  
**Wetland Survey**  
**Soils Map**  
**Oregon Trail Solar Facility**

**Legend**

-  2022 Wetland Survey Corridor
-  Soil Map Unit\*
- Basemap Features**
-  Interstate/Highway
-  Public Road

\*Soil Map Unit Descriptions:  
24E - Olex gravelly silt loam, 20 to 40 percent slopes  
32A - Ritzville silt loam, 0 to 2 percent slopes  
32B - Ritzville silt loam, 2 to 7 percent slopes  
32C - Ritzville silt loam, 7 to 12 percent slopes  
32D - Ritzville silt loam, 12 to 20 percent slopes  
33E - Ritzville silt loam, 20 to 40 percent north slopes  
56C - Willis silt loam, 5 to 12 percent slopes

- NRCS soil map unit data downloaded on 9/22/2020.



**Jacobs**



**Figure 5a**  
**Wetland Survey**  
**Wetlands and Waterways**  
**Overview Map**  
*Oregon Trail Solar Facility*

**Legend**

- 2022 Wetland Survey Corridor
- Public Land Survey System Township Range Boundary
- Gilliam County Tax Lot Boundary
- ➡ Field Data Point and Photo Direction
- Sample Point
- Culvert

**Previous Wetland Surveys**

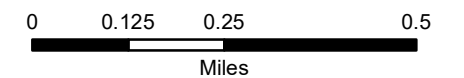
- WD #2011-0364R
- WD #2017-0111
- WD #2018-0597
- WD #2018-0660
- WD #2020-0587

- Field Verified Ordinary High Water

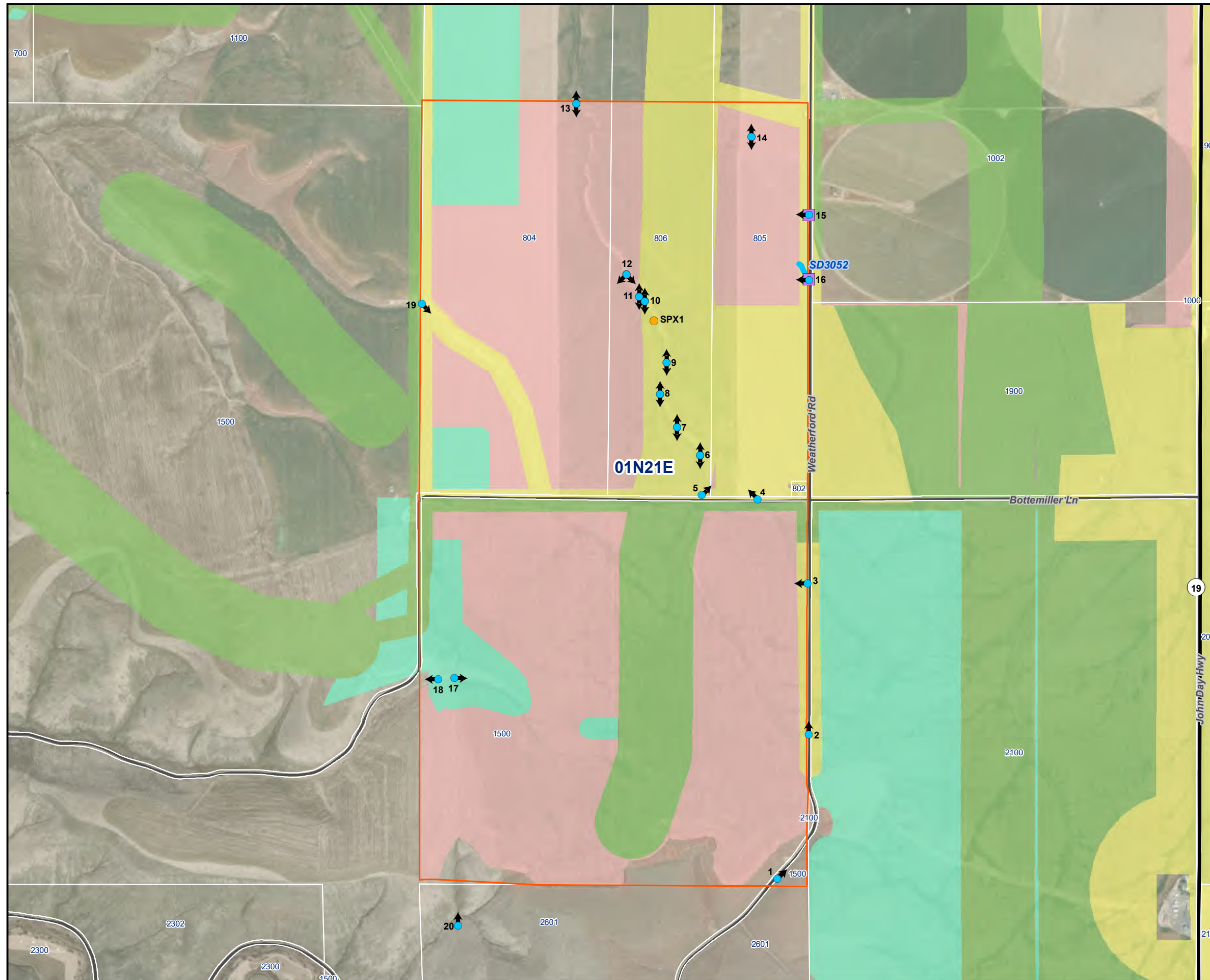
**Basemap Features**

- Interstate/Highway
- Public Road

Wetland and other water boundaries and sample plot locations were surveyed using a map grade hand held global navigation satellite system (GNSS) receiver with submeter accuracy using real-time differential correction.



**Jacobs**





**Figure 5b**  
**Wetland Survey**  
**Wetlands and Waterways**  
**Survey Detail Map**  
*Oregon Trail Solar Facility*

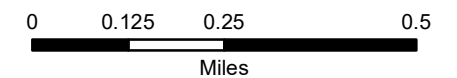
**Legend**

- 2022 Wetland Survey Corridor
- Public Land Survey System Township Range Boundary
- Gilliam County Tax Lot Boundary
- ➡ Field Data Point and Photo Direction
- Sample Point
- Culvert
- Field Verified Ordinary High Water

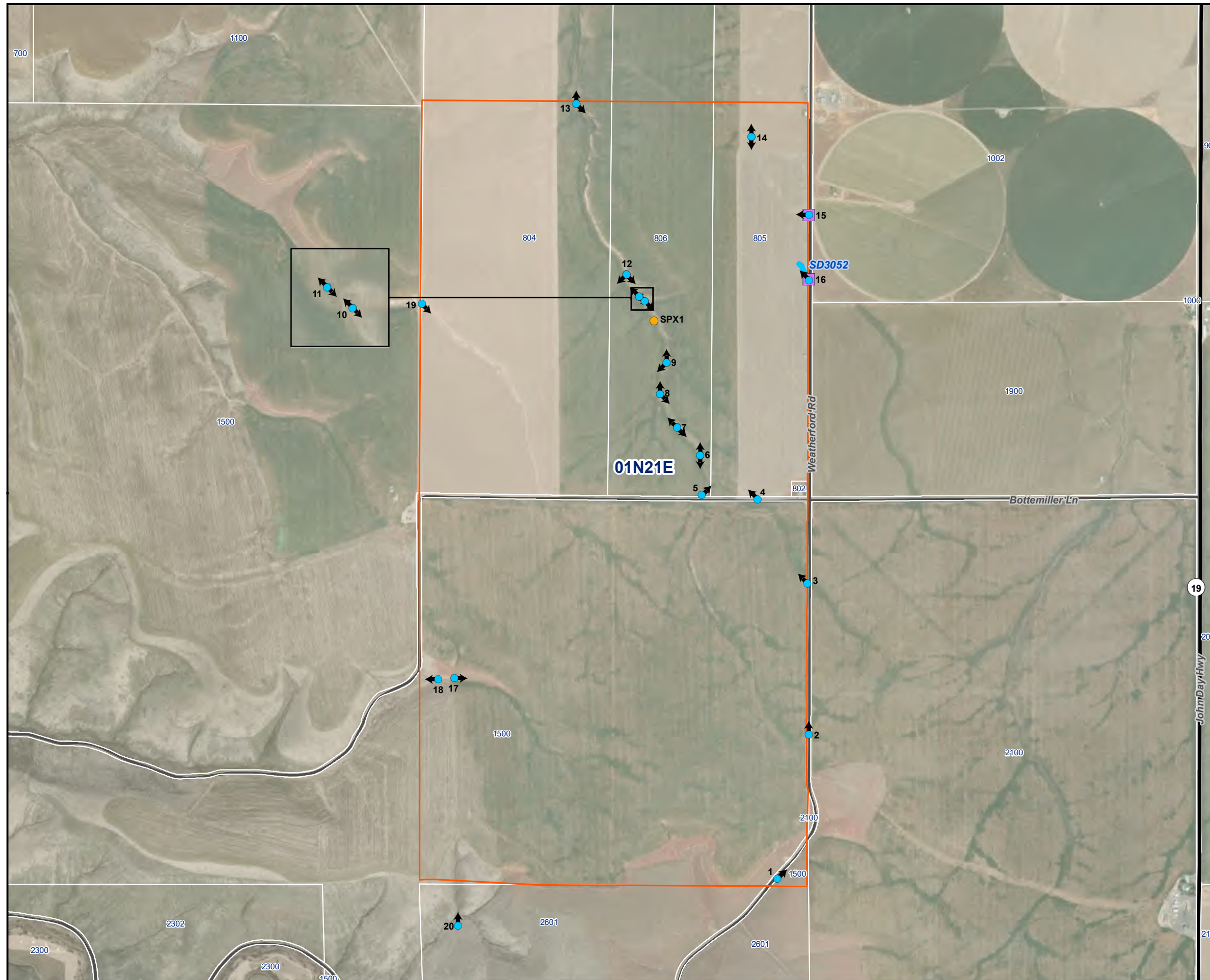
**Basemap Features**

- Interstate/Highway
- Public Road

Wetland and other water boundaries and sample plot locations were surveyed using a map grade hand held global navigation satellite system (GNSS) receiver with submeter accuracy using real-time differential correction.



**Jacobs**



## **Appendix B**

### **Ground-level Photographs**

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<b>Project Title</b>	<b>Oregon Trail Solar Facility</b>
<b>Location</b>	Gilliam County, Oregon
<b>Date</b>	May 26, 2022

---



**Photograph 1: Facing northeast and mapped NHD flowline.**

***Taken by: C. Steinkoenig and E. McGinty/PWS***

***Date taken: 04/21/2022***





**Photograph 2: Reference photo of recent rain event.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*





**Photograph 3: Facing northwest and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*



**Photograph 4: Facing northwest and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*



**Photographs 5: Facing northeast and mapped NHD flowlines.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*





**Photograph 6: Facing south and north, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*



**Photograph 7: Facing southeast and northwest, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*





**Photograph 8: Facing southeast and north, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*



**Photograph 9: Facing southwest and north, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*





**Photograph 10: Facing southeast and northwest, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*



**Photograph 11: Facing southeast and northwest, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*





**Photograph 12: Facing southeast and southwest and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*





**Photograph 13: Facing southeast and north, and mapped NHD flowline.**

*Taken by: C. Steinkoenig and E. McGinty/PWS*

*Date taken: 04/21/2022*



**Photograph 14: Facing north and south, and mapped NHD.**

***Taken by: C. Steinkoenig and E. McGinty/PWS      Date taken: 04/21/2022***





**Photograph 15: Facing west, on top of culvert, and mapped NHD flowline.**

***Taken by: C. Steinkoenig and E. McGinty/PWS      Date taken: 04/21/2022***



**Photograph 16: Facing northwest, on top of culvert, and mapped NHD flowline (SD3052).**

***Taken by: C. Steinkoenig and E. McGinty/PWS      Date taken: 04/21/2022***





**Photograph 17: Facing east toward study area. Land has not changed, prior photo used.**

***Taken by: Forrest Parsons, PWS***

***Date taken: 8/5/2020***



**Photograph 18 (OLD PP14): Facing west toward north corner of study area and mapped NHD flowline. Land has not changed, prior photo used.**

***Taken by: Forrest Parsons/PWS***

***Date taken: 08/05/2020***





**Photograph 19 (OLD PP16): Facing southeast toward study area and mapped NHD flowline. Land has not changed, prior photo used.**

***Taken by: Forrest Parsons/PWS***

***Date taken: 08/05/2020***



**Photograph 20 : Facing north toward the wheat field on the southern edge of the study area visible as a light yellow color at the very top of the photo.**

***Taken by: Forrest Parsons/PWS***

***Date taken: 08/05/2020***



## **Appendix C**

### **Data Forms**

*No wetland or stream data forms are enclosed as no aquatic features were identified or mapped within the facility study area.*

# Streamflow Duration Field Assessment Form

Project # / Name Oregon Trail Solar Facility		Assessor C.Steinkoenig								
Address		Date 4/21/2022								
Waterway Name SD3052		Coordinates at Lat. 45.556 N								
Reach Boundaries Edge of roadway culvert		downstream end (ddd.mm.ss) Long. -120.1859 W								
Precipitation w/in 48 hours (cm) 0.762	Channel Width (m) <1 FT	<input checked="" type="checkbox"/> Disturbed Site / Difficult Situation (Describe in "Notes")								
Observed Hydrology	% of reach w/observed surface flow 0									
	% of reach w/any flow (surface or hyporheic) 0									
	# of pools observed 1									
Observations	Observed Wetland Plants (and indicator status): None		Observed Macroinvertebrates:							
			<table border="1"> <thead> <tr> <th>Taxon</th> <th>Indicator Status</th> <th>Ephemer-optera?</th> <th># of Individuals</th> </tr> </thead> <tbody> <tr> <td colspan="4">None</td> </tr> </tbody> </table>	Taxon	Indicator Status	Ephemer-optera?	# of Individuals	None		
Taxon	Indicator Status	Ephemer-optera?	# of Individuals							
None										
Indicators	1. Are aquatic macroinvertebrates present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
	2. Are 6 or more individuals of the Order Ephemeroptera present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
	3. Are perennial indicator taxa present? (refer to Table 1) <input type="checkbox"/> Yes <input type="checkbox"/> No									
	4. Are FACW, OBL, or SAV plants present? (Within 1/2 channel width) <input type="checkbox"/> Yes <input type="checkbox"/> No									
	5. What is the slope? (In percent, measured for the valley, not the stream) 1 %									
Conclusions										
	Single Indicators: <input type="checkbox"/> Fish <input type="checkbox"/> Amphibians	<b>Finding:</b> <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial								

## Streamflow Duration Field Assessment Form

**Notes:** single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)

**Difficult Situation:**

Describe situation. For disturbed streams, note extent, type, and history of disturbance.

☐ Prolonged Abnormal Rainfall / Snowpack

☐ Below Average

☐ Above Average

☒ Natural or Anthropogenic Disturbance      Surrounding area is plowed and planted to wheat.

☐ Other: \_\_\_\_\_

**Additional Notes:** (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.

Located adjacent to roadway culvert. No stream bed or bank observed. Drainage does not extend further than a few feet and then dissipates.



**Ancillary Information:**

☐ Riparian Corridor      None

☐ Erosion and Deposition      None

☐ Floodplain Connectivity      None

**Observed Amphibians, Snake, and Fish:**

Taxa	Life History Stage	Location Observed	Number of Individuals Observed
None			

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: \_\_\_\_\_ City/County: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
Applicant/Owner: \_\_\_\_\_ State: \_\_\_\_\_ Sampling Point: \_\_\_\_\_  
Investigator(s): \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_\_

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No _____
Hydric Soil Present? Yes _____ No _____	
Wetland Hydrology Present? Yes _____ No _____	
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Herb Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks:				



**SOIL**

Sampling Point: \_\_\_\_\_

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5) (**LRR C**)  
☐ 1 cm Muck (A9) (**LRR D**)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

☐ 1 cm Muck (A9) (**LRR C**)  
☐ 2 cm Muck (A10) (**LRR B**)  
☐ Reduced Vertic (F18)  
☐ Red Parent Material (TF2)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No \_\_\_\_\_

Remarks:

**HYDROLOGY****Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1) (**Nonriverine**)  
☐ Sediment Deposits (B2) (**Nonriverine**)  
☐ Drift Deposits (B3) (**Nonriverine**)  
☐ Surface Soil Cracks (B6)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Water-Stained Leaves (B9)

☐ Salt Crust (B11)  
☐ Biotic Crust (B12)  
☐ Aquatic Invertebrates (B13)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres along Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (**Riverine**)  
☐ Sediment Deposits (B2) (**Riverine**)  
☐ Drift Deposits (B3) (**Riverine**)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Shallow Aquitard (D3)  
☐ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

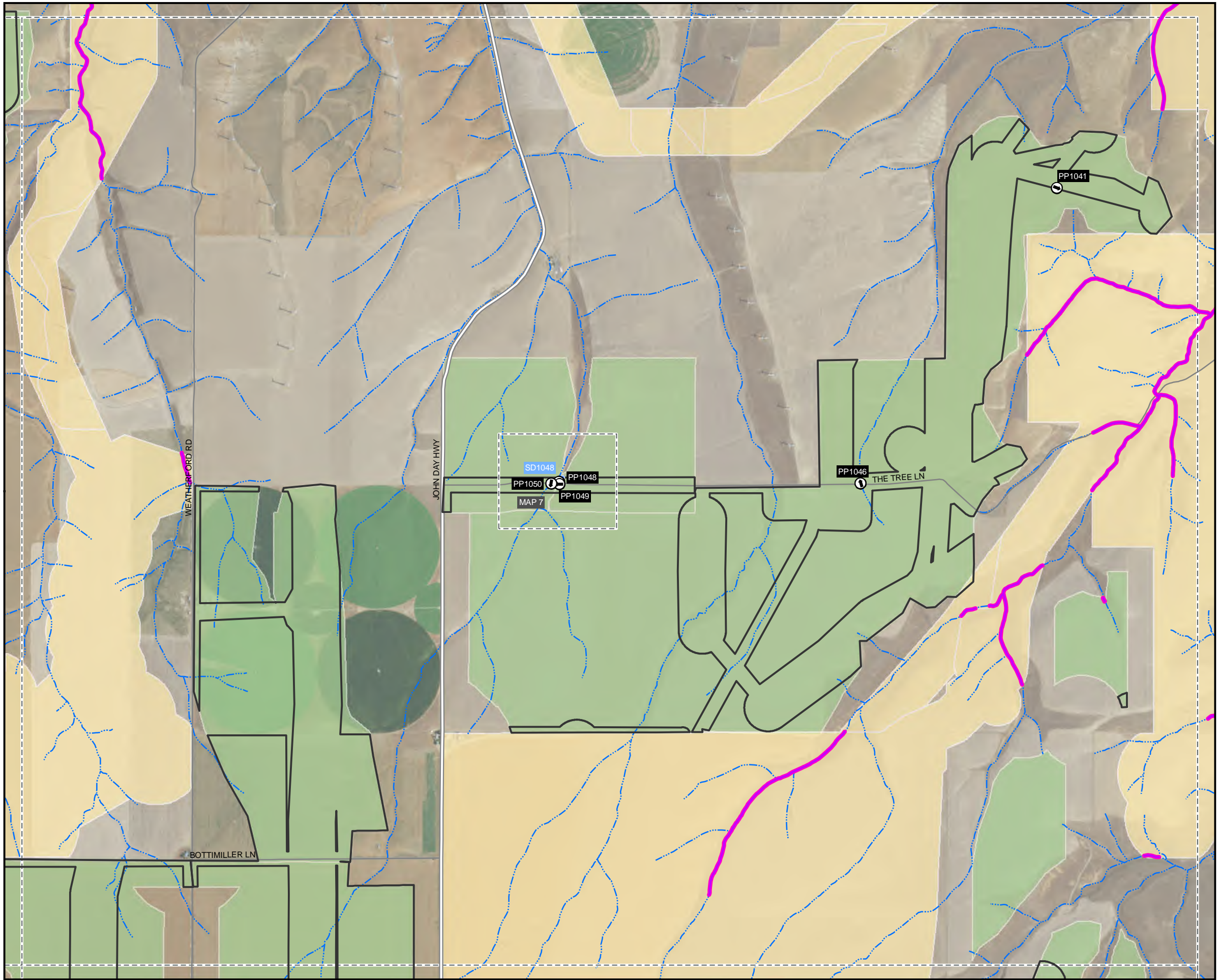
Saturation Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)**Wetland Hydrology Present?** Yes \_\_\_\_\_ No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## **Appendix D**

### **Additional Information**



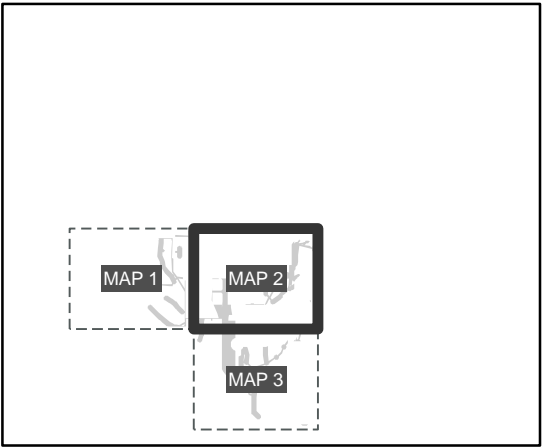
**Figure 5.2**  
**Wetland Survey**  
**Wetland and Waterways**  
**Survey Detail Map 2**  
**Montague Wind Power Facility -**  
**Proposed Expansion**

**Legend**

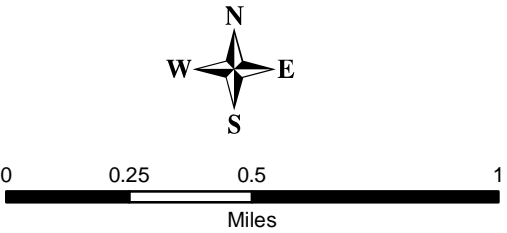
- 2017 Wetland Survey Corridor
- 2017 Sample Point
- 2017 Field Verified Ordinary High Water
- 2017 Surveyed Wetland
- 2017 Photo Point
- Previously Surveyed Wetland\*
- Previously Field Verified Ordinary High Water\*
- Detail Map Index
- NHD Flowline
- Montague JD 2010-0083 Survey Area
- Baseline JD 2011-0364 Survey Area

\*Previously surveyed wetland and ordinary high water delineated and concurred with as part of WD# 2011-0364.

Data Source: OR Spatial Data Library (2017),  
ESRI (2017)  
Basemap Source: ESRI World Imagery - NAIP (June, 2016)



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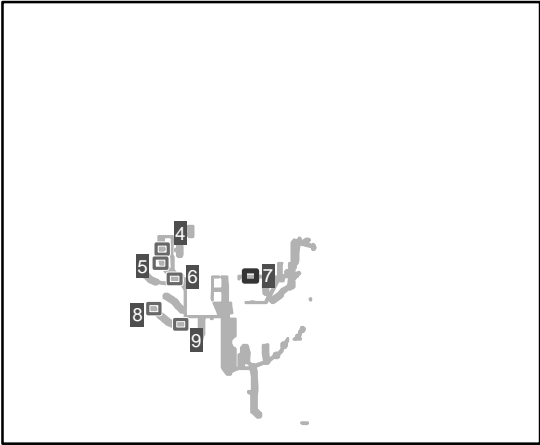


**Figure 5.7**  
**Wetland Survey**  
**Wetland and Waterways**  
**Survey Map 7**  
*Montague Wind Power Facility -*  
*Proposed Expansion*

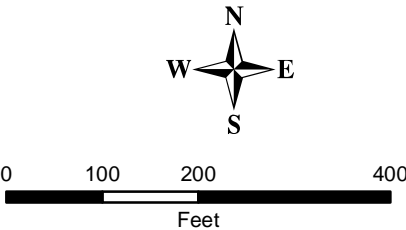
- Legend**
- 2017 Wetland Survey Corridor
  - 2017 Sample Point
  - 2017 Field Verified Ordinary High Water
  - 2017 Surveyed Wetland
  - 2017 Photo Point
  - Previously Surveyed Wetland\*
  - Previously Field Verified Ordinary High Water\*
  - Detail Map Index
  - NHD Flowline

\*Previously surveyed wetland and ordinary high water delineated and concurred with as part of WD# 2011-0364.

Data Source: OR Spatial Data Library (2017),  
ESRI (2017)  
Basemap Source: ESRI World Imagery - NAIP (June, 2016)



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# Streamflow Duration Field Assessment Form

Project # / Name <b>Montague Wind Power Facility - Proposed Expansion</b>		Assessor <b>Cleveland; Dalzell</b>									
Address			Date <b>04-12-17</b>								
Waterway Name <b>SD1048</b>		Coordinates at downstream end (ddd.mm.ss)	Lat. <b>45°34'5.50"</b> N Long. <b>120°9'20.19"</b> W								
Reach Boundaries											
Precipitation w/in 48 hours (cm) <b>0.05</b>	Channel Width (m) <b>1</b>	<input type="checkbox"/> Disturbed Site / Difficult Situation (Describe in "Notes")									
<b>Observed Hydrology</b>	% of reach w/observed surface flow <u>  0  </u>										
	% of reach w/any flow (surface or hyporheic) <u>  0  </u>										
	# of pools observed <u>  0  </u>										
<b>Observations</b>	<b>Observed Wetland Plants (and indicator status):</b>  None.	<b>Observed Macroinvertebrates:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Taxon</th> <th style="width: 20%;">Indicator Status</th> <th style="width: 20%;">Ephemeroptera?</th> <th style="width: 30%;"># of Individuals</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">None</td> </tr> </tbody> </table>		Taxon	Indicator Status	Ephemeroptera?	# of Individuals	None			
	Taxon	Indicator Status	Ephemeroptera?	# of Individuals							
None											
<b>Indicators</b>	1. Are aquatic macroinvertebrates present? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>										
	2. Are 6 or more individuals of the Order Ephemeroptera present? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>										
	3. Are perennial indicator taxa present? (refer to Table 1) <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>										
	4. Are FACW, OBL, or SAV plants present? (Within ½ channel width) <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>										
	5. What is the slope? (In percent, measured for the valley, not the stream) <span style="float: right;"><u>  1  </u> %</span>										
<b>Conclusions</b>											
	<b>Single Indicators:</b> <input type="checkbox"/> Fish <input type="checkbox"/> Amphibians	<b>Finding:</b> <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial									

**Notes:** (explanation of any single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)

**Difficult Situation:**

Describe situation. For disturbed streams, note extent, type, and history of disturbance.

☐ Prolonged Abnormal Rainfall / Snowpack

☐ Below Average

☐ Above Average

☐ Natural or Anthropogenic Disturbance

☐ Other: \_\_\_\_\_

**Additional Notes:** (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.

This location was reviewed in September 2010 and no stream was identified. Recent culvert installation (18" CMP) has occurred and road has been graded and graveled. Downstream side appears to be a stream but the upstream side is also the location of an access road to a field and no defined channel exists on the upstream end of the culvert.

**Ancillary Information:**

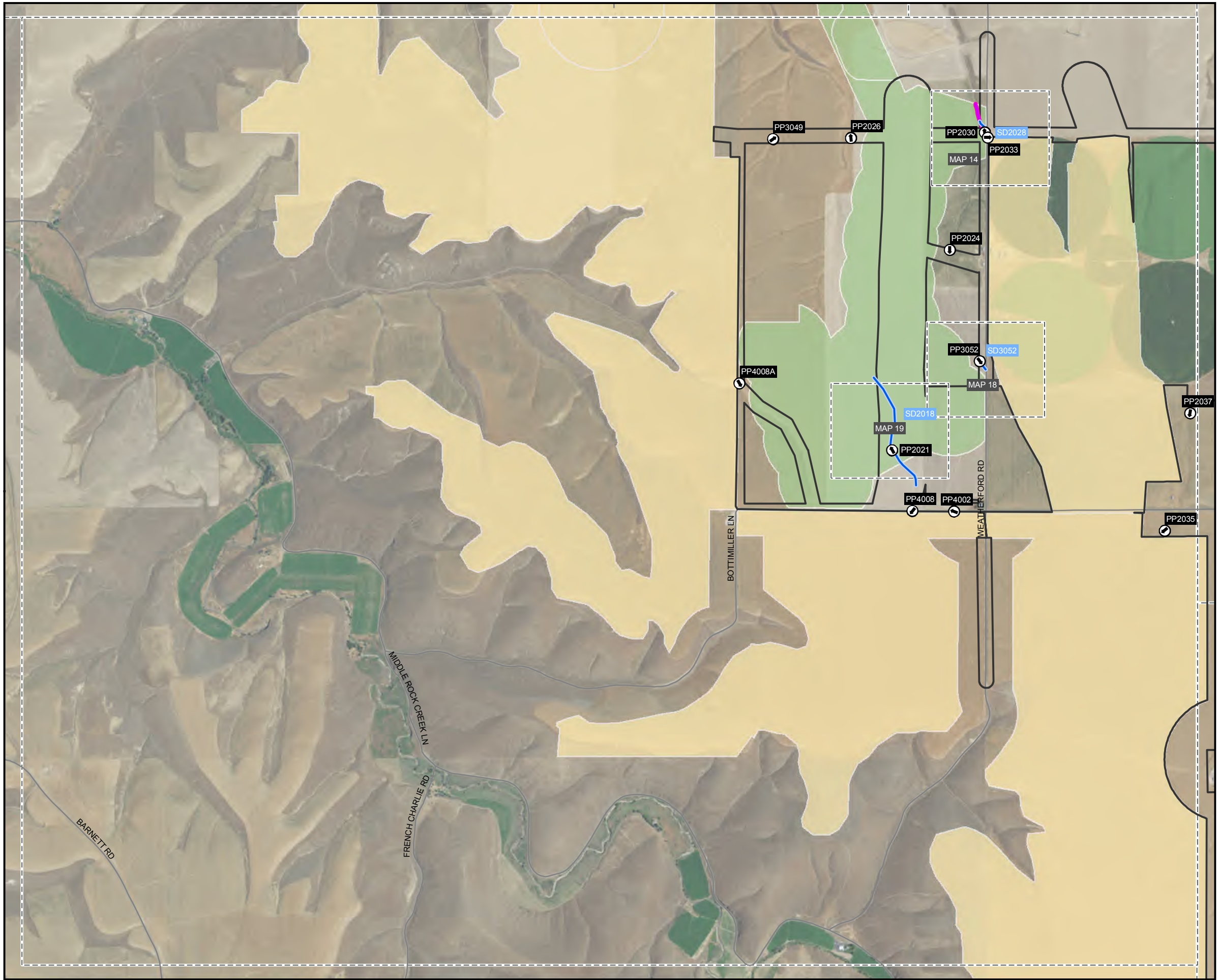
☐ Riparian Corridor – cropland, planted as wheat at time of visit.

☐ Erosion and Deposition –defined bed and bank; small gravel from road in channel but may be left over from recent construction. Downstream shows signs of moderate erosion.

☐ Floodplain Connectivity

**Observed Amphibians, Snake, and Fish:**

Taxa	Life History Stage	Location Observed	Number of Individuals Observed



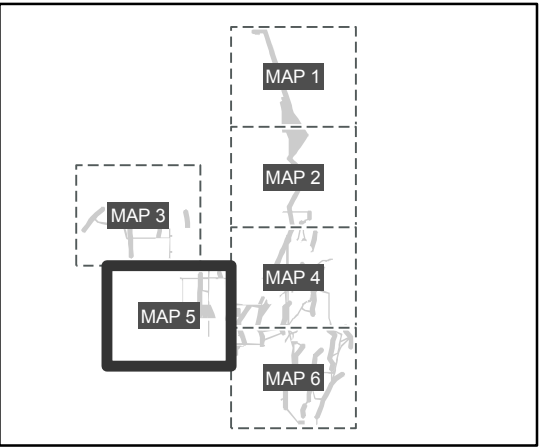
**Figure 5.5**  
**Wetland Survey**  
**Wetland and Waterways**  
**Survey Detail Map 5**  
**Montague Wind Power Facility**

**Legend**

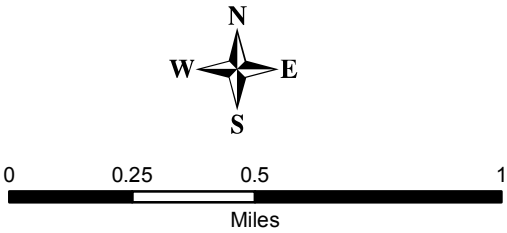
- 2017 Wetland Survey Corridor
- 2017 Sample Point
- 2017 Field Verified Ordinary High Water
- 2017 Surveyed Wetland
- 2017 Photo Point
- Previously Surveyed Wetland\*
- Previously Field Verified Ordinary High Water\*
- Detail Map Index
- NHD Flowline
- Montague JD 2010-0083 Survey Area
- Baseline JD 2011-0364 Survey Area

\* Previously surveyed wetland and ordinary high water delineated and concurred with as part of WD# 2010-0083.

Data Source: OR Spatial Data Library (2017),  
 ESRI (2017)  
 Basemap Source: ESRI World Imagery - NAIP (June,2016)



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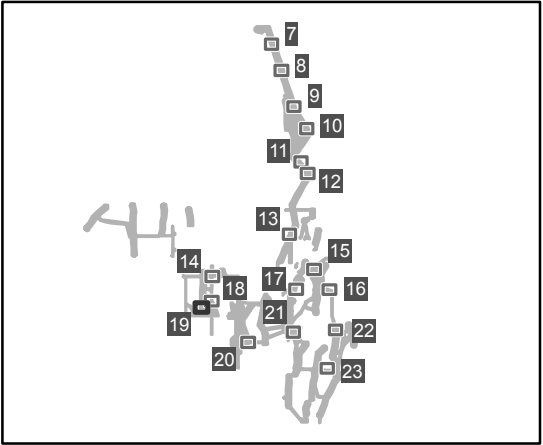
**Figure 5.19**  
**Wetland Survey**  
**Wetland and Waterways**  
**Survey Map 19**  
**Montague Wind Power Facility**

**Legend**

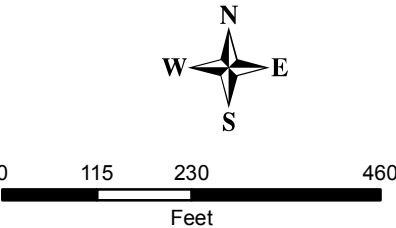
- 2017 Wetland Survey Corridor
- 2017 Sample Point
- 2017 Field Verified Ordinary High Water
- 2017 Surveyed Wetland
- 2017 Photo Point
- Previously Surveyed Wetland\*
- Previously Field Verified Ordinary High Water\*
- Detail Map Index
- NHD Flowline

\* Previously surveyed wetland and ordinary high water delineated and concurred with as part of WD# 2010-0083.

Data Source: OR Spatial Data Library (2017),  
ESRI (2017)  
Basemap Source: ESRI World Imagery - NAIP (June, 2016)



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# Streamflow Duration Field Assessment Form

Project # / Name		Montague Wind Power Facility		Assessor		Danielski									
Address						Date		04-11-17							
Waterway Name				SD2018		Coordinates at downstream end		Lat. 45°33'3.47" N							
Reach Boundaries						Long. 120°11'37.34" W									
Precipitation w/in 48 hours (cm)			0.13		Channel Width (m)		1.5								
					<input type="checkbox"/> Disturbed Site / Difficult Situation (Describe in "Notes")										
Observed Hydrology	% of reach w/observed surface flow <u>0</u>														
	% of reach w/any flow (surface or hyporheic) <u>0</u>														
	# of pools observed <u>0</u>														
Observations	Observed Wetland Plants (and indicator status):				Observed Macroinvertebrates:										
	None				<table border="1"> <thead> <tr> <th>Taxon</th> <th>Indicator Status</th> <th>Ephemeroptera?</th> <th># of Individuals</th> </tr> </thead> <tbody> <tr> <td colspan="4">None</td> </tr> </tbody> </table>				Taxon	Indicator Status	Ephemeroptera?	# of Individuals	None		
Taxon	Indicator Status	Ephemeroptera?	# of Individuals												
None															
Indicators	1. Are aquatic macroinvertebrates present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	2. Are 6 or more individuals of the Order Ephemeroptera present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	3. Are perennial indicator taxa present? (refer to Table 1) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	4. Are FACW, OBL, or SAV plants present? (Within ½ channel width) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	5. What is the slope? (In percent, measured for the valley, not the stream) <u>1</u> %														
Conclusions	<pre> graph TD     I1[Are aquatic macroinvertebrates present? (Indicator 1)] -- YES --&gt; I2[If YES: Are 6 or more individuals of the Order Ephemeroptera present? (Indicator 2)]     I1 -- NO --&gt; I4[If NO: Are SAV, FACW, or OBL plants present? (Indicator 4)]     I2 -- YES --&gt; I3[If YES: Are perennial indicator taxa present? (Indicator 3)]     I2 -- NO --&gt; I5_1[If NO: What is the slope? (Indicator 5)]     I3 -- YES --&gt; P1[If YES: PERENNIAL]     I3 -- NO --&gt; I5_1     I5_1 -- YES --&gt; I5_2[Slope &lt; 16%: INTERMITTENT]     I5_1 -- NO --&gt; P2[Slope &gt;= 16%: PERENNIAL]     I4 -- YES --&gt; I5_3[If YES: What is the slope? (Indicator 5)]     I4 -- NO --&gt; P3[If NO: EPHEMERAL]     I5_3 -- YES --&gt; I5_4[Slope &lt; 10.5%: INTERMITTENT]     I5_3 -- NO --&gt; I5_5[Slope &gt;= 10.5%: EPHEMERAL]       </pre>														
	Single Indicators:				Finding:										
<input type="checkbox"/> Fish <input type="checkbox"/> Amphibians				<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial											

**Notes:** (explanation of any single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)

**Difficult Situation:**

Describe situation. For disturbed streams, note extent, type, and history of disturbance.

☐ Prolonged Abnormal Rainfall / Snowpack

☐ Below Average

☒ Above Average

☐ Natural or Anthropogenic Disturbance

☐ Other: \_\_\_\_\_

**Additional Notes:** (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.

Drainage in plowed field. Evidence of scour, debris racking. No streambed substrate. Vegetation has been mowed/sprayed. Checked soils in low depression – 10YR 4/3 with no redox in upper 12 inches.

**Ancillary Information:**

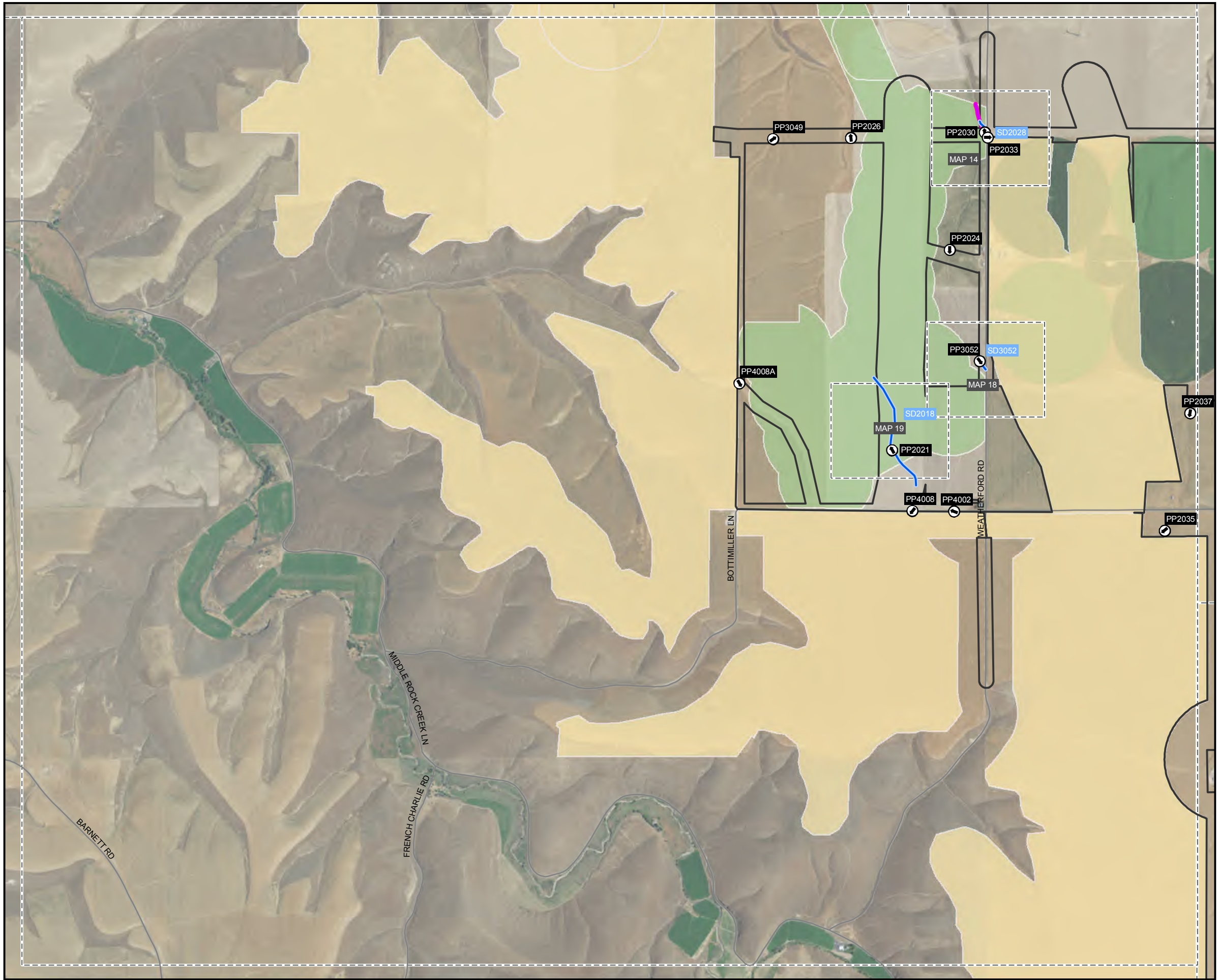
☐ Riparian Corridor

☐ Erosion and Deposition

☐ Floodplain Connectivity

**Observed Amphibians, Snake, and Fish:**

Taxa	Life History Stage	Location Observed	Number of Individuals Observed



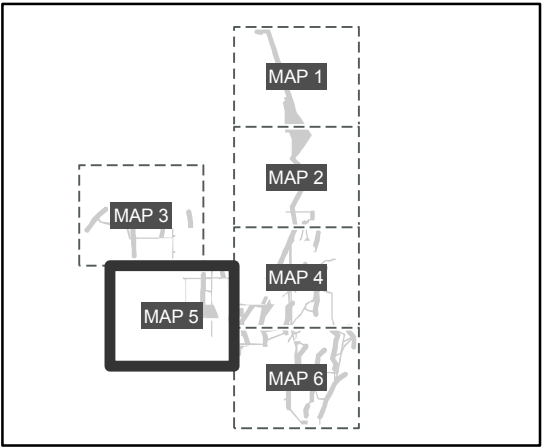
**Figure 5.5**  
**Wetland Survey**  
**Wetland and Waterways**  
**Survey Detail Map 5**  
**Montague Wind Power Facility**

**Legend**

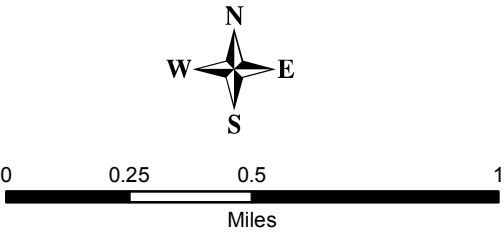
- 2017 Wetland Survey Corridor
- 2017 Sample Point
- 2017 Field Verified Ordinary High Water
- 2017 Surveyed Wetland
- 2017 Photo Point
- Previously Surveyed Wetland\*
- Previously Field Verified Ordinary High Water\*
- Detail Map Index
- NHD Flowline
- Montague JD 2010-0083 Survey Area
- Baseline JD 2011-0364 Survey Area

\* Previously surveyed wetland and ordinary high water delineated and concurred with as part of WD# 2010-0083.

Data Source: OR Spatial Data Library (2017),  
ESRI (2017)  
Basemap Source: ESRI World Imagery - NAIP (June,2016)




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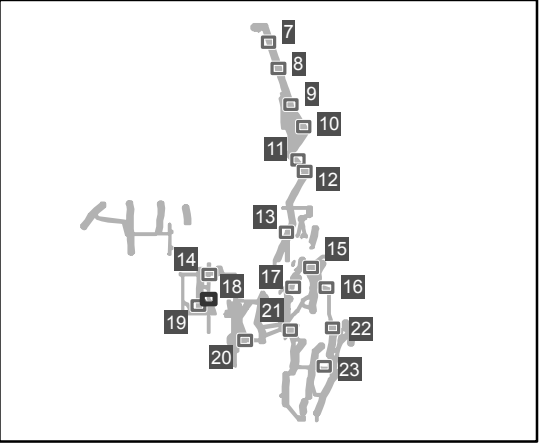
**Figure 5.18**  
**Wetland Survey**  
**Wetland and Waterways**  
**Survey Map 18**  
*Montague Wind Power Facility*

**Legend**

-  2017 Wetland Survey Corridor
-  2017 Sample Point
-  2017 Field Verified Ordinary High Water
-  2017 Surveyed Wetland
-  2017 Photo Point
-  Previously Surveyed Wetland\*
-  Previously Field Verified Ordinary High Water\*
-  Detail Map Index
-  NHD Flowline

\* Previously surveyed wetland and ordinary high water delineated and concurred with as part of WD# 2010-0083.

Data Source: OR Spatial Data Library (2017),  
ESRI (2017)  
Basemap Source: ESRI World Imagery - NAIP (June, 2016)



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0 100 200 400  
Feet





**Notes:** (explanation of any single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)

**Difficult Situation:**

Describe situation. For disturbed streams, note extent, type, and history of disturbance.

☐ Prolonged Abnormal Rainfall / Snowpack

☐ Below Average

☐ Above Average

☐ Natural or Anthropogenic Disturbance : Excavated drainage feature

☐ Other: \_\_\_\_\_

**Additional Notes:** (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.

Drainage formed from stormwater discharge from road culvert.

**Ancillary Information:**

☐ Riparian Corridor

☒ Erosion and Deposition – scour, sediment deposits, and debris racking

☐ Floodplain Connectivity

**Observed Amphibians, Snake, and Fish:**

Taxa	Life History Stage	Location Observed	Number of Individuals Observed

# Streamflow Duration Field Assessment Form

Project # / Name		Montague Wind Power Facility		Assessor		Danielski									
Address						Date		04-27-17							
Waterway Name				SD3052		Coordinates at downstream end		Lat. 45°33'17.54" N							
Reach Boundaries						Long. 120°11'10.54" W									
Precipitation w/in 48 hours (cm)			0.20		Channel Width (m)			<1m							
								<input type="checkbox"/> Disturbed Site / Difficult Situation (Describe in "Notes")							
Observed Hydrology	% of reach w/observed surface flow <u>0</u>														
	% of reach w/any flow (surface or hyporheic) <u>0</u>														
	# of pools observed <u>0</u>														
Observations	Observed Wetland Plants (and indicator status):				Observed Macroinvertebrates:										
					<table border="1"> <thead> <tr> <th>Taxon</th> <th>Indicator Status</th> <th>Ephemeroptera?</th> <th># of Individuals</th> </tr> </thead> <tbody> <tr> <td colspan="4">None</td> </tr> </tbody> </table>				Taxon	Indicator Status	Ephemeroptera?	# of Individuals	None		
Taxon	Indicator Status	Ephemeroptera?	# of Individuals												
None															
Indicators	1. Are aquatic macroinvertebrates present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	2. Are 6 or more individuals of the Order Ephemeroptera present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	3. Are perennial indicator taxa present? (refer to Table 1) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	4. Are FACW, OBL, or SAV plants present? (Within ½ channel width) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
	5. What is the slope? (In percent, measured for the valley, not the stream) <u>1</u> %														
Conclusions	<pre> graph TD     I1[Are aquatic macroinvertebrates present? (Indicator 1)] -- YES --&gt; I2[If YES: Are 6 or more individuals of the Order Ephemeroptera present? (Indicator 2)]     I1 -- NO --&gt; I4[If NO: Are SAV, FACW, or OBL plants present? (Indicator 4)]     I2 -- YES --&gt; I3[If YES: Are perennial indicator taxa present? (Indicator 3)]     I2 -- NO --&gt; I5a[If NO: What is the slope? (Indicator 5)]     I3 -- YES --&gt; P1[If YES: PERENNIAL]     I3 -- NO --&gt; I5a     I5a -- "Slope &lt; 16%:" --&gt; I5b[INTERMITTENT]     I5a -- "Slope ≥ 16%:" --&gt; P2[PERENNIAL]     I4 -- YES --&gt; I5c[If YES: What is the slope? (Indicator 5)]     I4 -- NO --&gt; E1[If NO: EMPHEMERAL]     I5c -- "Slope &lt; 10.5%:" --&gt; I5d[INTERMITTENT]     I5c -- "Slope ≥ 10.5%:" --&gt; E2[EPHEMERAL]     </pre>														
	Single Indicators: <input type="checkbox"/> Fish <input type="checkbox"/> Amphibians				Finding: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial										

## Photos from 2017 Delineation



PP2021: Waterway (SD2018) looking NW (Phase 1)



PP3052: Waterway (SD3052) looking SE (HDR WD# 2017-0111 (Phase 1)



PP1048: Waterway SD1048 Looking NE (HDR WD# 2018-0660 (Phase 2))



## **Appendix E**

### **Literature Cited**

## Appendix E. Literature Cited

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Thorson, T. D., S. A. Bryce, D. A. Lammers, A. J. Woods, J. M. Omernik, J. Kagan, D. E. Pater, and J. A. Comstock. 2003. *Ecoregions of Oregon* (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,500,000).

U.S. Army Corps of Engineers (USACE). 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory. Vicksburg, MS., U.S. Army Engineer Research and Development Center, ERDC/EL TR-08-28. September.

U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE). 2022. *Federal Register* Vol. 85, No. 77, pp. 22250- 22342. "The Navigable Waters Protection Rule: Definition of "Waters of the United States." May 6, 2022. <https://www.federalregister.gov/documents/2020/04/21/2020-02500/the-navigable-waters-protection-rule-definition-of-waters-of-the-united-states>.

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U.S. Geological Survey (USGS). 2022b. *Hydrography: NHD-Plus High Resolution National Hydrography Dataset*. Accessed May 2022. <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>.

## **Attachment 21. Property Owner List and Tax Lot Map**

**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01N21E0000-01000	ATHEARN ROBERT F	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N21E0000-00900	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N22E0000-00800	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N21E0000-00900	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N21E0000-00900	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N21E0000-00900	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N21E0000-00900	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N22E0000-00800	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N21E0000-01900	ATHEARN ROBERT F LIVING TRUS	333 ROSE CT	MOUNT VERNON	WA	98273	333 ROSE CT MOUNT VERNON WA, 98273
01N22E0000-01701	CARR JERRY A & WANDA R	69838 W WILSON RD	BOARDMAN	OR	97818	69838 W WILSON RD BOARDMAN OR, 97818
01N22E0000-01701	CARR JERRY A & WANDA R	69838 W WILSON RD	BOARDMAN	OR	97818	69838 W WILSON RD BOARDMAN OR, 97818
02N21E0000-01802	COLUMBIA BASIN ELEC CO-OP INC	PO BOX 398	HEPPNER	OR	97836	PO BOX 398 HEPPNER OR, 97836
01S21E0000-00201	COLUMBIA BASIN ELEC CO-OP INC	PO BOX 398	HEPPNER	OR	97836	PO BOX 398 HEPPNER OR, 97836
01S22E0000-00300	CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-01600	EASTERN Z FARMS LLC	12423 RIVER RD	GERVAIS	OR	97026	12423 RIVER RD GERVAIS OR, 97026
01S22E0000-00500	G1 LLC	70595 DAVE RIETMANN RD	IONE	OR	97843	70595 DAVE RIETMANN RD IONE OR, 97843
01N22E0000-02900	G1 LLC	70595 DAVE RIETMANN RD	IONE	OR	97843	70595 DAVE RIETMANN RD IONE OR, 97843
01N22E0000-02901	G1 LLC	70595 DAVE RIETMANN RD	IONE	OR	97843	70595 DAVE RIETMANN RD IONE OR, 97843



**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01N22E0000-02902	G1 LLC	70595 DAVE RIETMANN RD	IONE	OR	97843	70595 DAVE RIETMANN RD IONE OR, 97843
01S22E0000-00501	G1 LLC	70595 DAVE RIETMANN RD	IONE	OR	97843	70595 DAVE RIETMANN RD IONE OR, 97843
01S22E0000-00502	G1 LLC	70595 DAVE RIETMANN RD	IONE	OR	97843	70595 DAVE RIETMANN RD IONE OR, 97843
02N21E0000-01104	GILLIAM COUNTY (INDUSTRIAL PA	PO BOX 427	CONDON	OR	97823	PO BOX 427 CONDON OR, 97823
01S21E0000-00401	WILKINS THOMAS J ET AL	707 SW WASHINGTON ST ST	PORTLAND	OR	97205	707 SW WASHINGTON ST STE 1440 PORTLAND, OR 97205
01S21E1100-00300	GRITSKI ROBERT & KRONNER KAR	66174 UPPER ROCK CREEK R	ARLINGTON	OR	97812	66174 UPPER ROCK CREEK RD ARLINGTON OR, 97812
01N21E0000-01703	HABBERSTAD JOHN L	10530 W LAKE FOREST LP	RATHDRUM	ID	83858	10530 W LAKE FOREST LP RATHDRUM ID, 83858
01N21E0000-01707	HABBERSTAD JOHN L	10530 W LAKE FOREST LP	RATHDRUM	ID	83858	10530 W LAKE FOREST LP RATHDRUM ID, 83858
01N22E0000-02500	HAGUEWOOD KELWAYNE O	59610 BASEY CANYON RD	HEPPNER	OR	97836	59610 BASEY CANYON RD HEPPNER OR, 97836
01N22E0000-01700	HAGUEWOOD KEVEN O	64396 MCNAB LN	IONE	OR	97843	64396 MCNAB LN IONE OR, 97843
01N21E0000-00100	HAGUEWOOD KEVEN O	64396 MCNAB LN	IONE	OR	97843	64396 MCNAB LN IONE OR, 97843
01N22E0000-00700	HAGUEWOOD KEVEN O	64396 MCNAB LN	IONE	OR	97843	64396 MCNAB LN IONE OR, 97843
02N21E0000-02400	HAGUEWOOD KEVEN O	64396 MCNAB LN	IONE	OR	97843	64396 MCNAB LN IONE OR, 97843
01N22E0000-02300	HAGUEWOOD KELWAYNE O	59610 BASEY CANYON RD	HEPPNER	OR	97836	59610 BASEY CANYON RD HEPPNER OR, 97836
01N21E0000-00400	HARPER RICHARD E	PO BOX 8	IONE	OR	97843	PO BOX 8 IONE OR, 97843
01S22E0000-00503	HARPER RICHARD E	PO BOX 8	IONE	OR	97843	PO BOX 8 IONE OR, 97843
01S22E0000-00400	HARPER RICHARD E	PO BOX 8	IONE	OR	97843	PO BOX 8 IONE OR, 97843
01N21E0000-00300	HOLTZ TIMOTHY H & DEBORAH L	PO BOX 224	IONE	OR	97843	PO BOX 224 IONE OR, 97843
01N21E0000-00804	HOLTZ TIMOTHY H & DEBORAH L	PO BOX 224	IONE	OR	97843	PO BOX 224 IONE OR, 97843

**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01N21E0000-00806	HOLTZ TIMOTHY H & DEBORAH L	PO BOX 224	IONE	OR	97843	PO BOX 224 IONE OR, 97843
01N21E0000-00300	HOLTZ TIMOTHY H & DEBORAH L	PO BOX 224	IONE	OR	97843	PO BOX 224 IONE OR, 97843
02N21E0000-01704	HOLTZ TIMOTHY H & DEBORAH L	PO BOX 224	IONE	OR	97843	PO BOX 224 IONE OR, 97843
02N21E0000-01701	HOLZAPFEL HERBERT R & VIRGINI	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
02N20E0000-02800	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
02N21E0000-02100	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
02N21E0000-02100	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
01N21E0000-00500	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
01N21E0000-00500	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
01N20E0000-00100	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
01N21E0000-00500	HOLZAPFEL LAND & CATTLE LP	PO BOX 1027	WILLOWS	CA	95988	PO BOX 1027 WILLOWS CA, 95988
02N21E0000-01700	KLEINBACH HAROLD G	3410 S GREEN LP	KENNEWICK	WA	99337	3410 S GREEN LP KENNEWICK WA, 99337
01S21E0000-00500	KLEINBACH HAROLD G	3410 S GREEN LP	KENNEWICK	WA	99337	3410 S GREEN LP KENNEWICK WA, 99337
01S21E0000-00700	LYDA ROGER K & DEBRA K	64494 HWY 19	ARLINGTON	OR	97812	64494 HWY 19 ARLINGTON OR, 97812
01N21E0000-01400	MARICK JASON T & BEVERLY K	14394 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	14394 MIDDLE ROCK CREEK LN. ARLINGTON OR, 97812
01N20E0000-02100	MARICK JASON T & BEVERLY K	14394 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	14394 MIDDLE ROCK CREEK LN. ARLINGTON OR, 97812
01N20E0000-02100	MARICK JASON T & BEVERLY K	14394 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	14394 MIDDLE ROCK CREEK LN. ARLINGTON OR, 97812
01N21E0000-01600	MARICK JASON T & BEVERLY K	14394 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	14394 MIDDLE ROCK CREEK LN. ARLINGTON OR, 97812

**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01N20E0000-01000	MARICK JASON T & BEVERLY K	14394 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	14394 MIDDLE ROCK CREEK LN. ARLINGTON OR, 97812
01N21E0000-01600	MARICK JASON T & BEVERLY K	14394 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	14394 MIDDLE ROCK CREEK LN. ARLINGTON OR, 97812
01N22E0000-03100	MASON CHRISTOPHER KB TRUSTE	PO BOX 605	VICTOR	ID	83455	PO BOX 605 VICTOR ID, 83455
01N22E0000-00500	MILLER RC & GAYLEEN	PO BOX 490	ARLINGTON	OR	97812	PO BOX 490 ARLINGTON OR, 97812
01N22E0000-02200	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-01100	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-01001	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-01000	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-01001	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-00900	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-00900	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-01100	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01N22E0000-00900	MONTY CRUM RANCHES LLC	PO BOX 67	IONE	OR	97843	PO BOX 67 IONE OR, 97843
01S21E1100-00700	OLSEN CARROLL W	65848 UPPER ROCK CREEK R	ARLINGTON	OR	97812	65848 UPPER ROCK CREEK RD ARLINGTON OR, 97812
01S21E0000-02700	OLSEN CARROLL W	65848 UPPER ROCK CREEK R	ARLINGTON	OR	97812	65848 UPPER ROCK CREEK RD ARLINGTON OR, 97812
02N21E0000-01801	OREGON WASTE SYSTEMS INC	PO BOX 1450	CHICAGO	IL	60690	PO BOX 1450 CHICAGO IL, 60690
02N21E0000-01101	OREGON WASTE SYSTEMS INC	PO BOX 1450	CHICAGO	IL	60690	PO BOX 1450 CHICAGO IL, 60690
02N21E0000-01800	OREGON WASTE SYSTEMS INC	PO BOX 1450	CHICAGO	IL	60690	PO BOX 1450 CHICAGO IL, 60690
01N21E0000-01300	RAMSAY RANCH & CO LLC	13270 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	13270 MIDDLE ROCK CREEK LN ARLINGTON OR, 97812
01N20E0000-00800	RAMSAY RANCH & CO LLC	13270 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	13270 MIDDLE ROCK CREEK LN ARLINGTON OR, 97812
01S21E0000-00300	REBAL JAMES S ET AL	18048 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	18048 MIDDLE ROCK CREEK LN ARLINGTON OR, 97812

**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01S21E1000-00500	REBAL JAMES S ET AL	18048 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	18048 MIDDLE ROCK CREEK LN ARLINGTON OR, 97812
01S21E0000-00400	REBAL JAMES S ET AL	18048 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	18048 MIDDLE ROCK CREEK LN ARLINGTON OR, 97812
01S21E0000-00203	REBAL JAMES S ET AL	18048 MIDDLE ROCK CREEK	ARLINGTON	OR	97812	18048 MIDDLE ROCK CREEK LN ARLINGTON OR, 97812
02N21E0000-01703	RIETMANN JERRY L & LISA G	PO BOX 224	IONE	OR	97843	PO BOX 224 IONE OR, 97843
01S21E0000-02600	RIPER BARBARA J TRUSTEE	1670 EDGEWOOD DR	PALO ALTO	CA	94303	
01S22E0000-01200	RIPER BARBARA J TRUSTEE	1670 EDGEWOOD DR	PALO ALTO	CA	94303	1670 EDGEWOOD DR PALO ALTO CA, 94303
01S22E0000-01100	RUCKER FARMING	69064 WEATHERFORD RD	ARLINGTON	OR	97812	69064 WEATHERFORD RD ARLINGTON OR, 97812
01N21E0000-01200	RUCKER JIMMY I & SARAH D TRUS	69064 WEATHERFORD RD	ARLINGTON	OR	97812	69064 WEATHERFORD RD ARLINGTON OR, 97812
01N21E0000-01100	RUCKER JIMMY I & SARAH D TRUS	69064 WEATHERFORD RD	ARLINGTON	OR	97812	69064 WEATHERFORD RD ARLINGTON OR, 97812
01N21E0000-01002	RUCKER JIMMY I & SARAH D TRUS	69064 WEATHERFORD RD	ARLINGTON	OR	97812	69064 WEATHERFORD RD ARLINGTON OR, 97812
01N21E0000-00700	RUNCKEL LLC	24801 SW LADD HILL RD	SHERWOOD	OR	97140	24801 SW LADD HILL RD SHERWOOD OR, 97140
01N21E0000-00401	RUNCKEL LLC	24801 SW LADD HILL RD	SHERWOOD	OR	97140	24801 SW LADD HILL RD SHERWOOD OR, 97140
01N21E0000-01101	RUNCKEL LLC	24801 SW LADD HILL RD	SHERWOOD	OR	97140	24801 SW LADD HILL RD SHERWOOD OR, 97140
01N21E0000-00401	RUNCKEL LLC	24801 SW LADD HILL RD	SHERWOOD	OR	97140	24801 SW LADD HILL RD SHERWOOD OR, 97140
01S21E0000-02601	SKINNER ROBERT C JR & KATHRYN	PO BOX 393	ARLINGTON	OR	97812	PO BOX 393 ARLINGTON OR, 97812
01S21E1100-00100	SMITH MICHAEL & LAURA	PO Box 354	Fossil	OR	0	44238 HEPPNER SPRAY HWY SPRAY OR, 0
01S21E1100-00100	SMITH MICHAEL & LAURA	PO Box 354	Fossil	OR	0	44238 HEPPNER SPRAY HWY SPRAY OR, 0
02N21E0000-02500	SUMNER ARTHUR MARK & SUMN	71667 HWY 19	ARLINGTON	OR	97812	



**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
02N22E0000-02600	SUMNER ARTHUR MARK & SUMN	71667 HWY 19	ARLINGTON	OR	97812	71667 HWY 19 ARLINGTON OR, 97812
01N21E0000-00800	SUTTON ROBERT K	7707 WISCONSIN AVE #1102	BETHESDA	MD	20814	7707 WISCONSIN AVE #1102 BETHESDA MD, 20814
01N21E0000-00800	SUTTON ROBERT K	7707 WISCONSIN AVE #1102	BETHESDA	MD	20814	7707 WISCONSIN AVE #1102 BETHESDA MD, 20814
01N21E0000-01501	TEYEMA LEWIS SAMUEL	PO BOX 15204	PORTLAND	OR	97293	PO BOX 15204 PORTLAND OR, 97293
01N22E0000-01800	UNDERHILL B LAVELLE TRUSTEE	PO BOX 266	DUFUR	OR	97021	PO BOX 266 DUFUR OR, 97021
01N22E0000-02100	USA	3050 NE 3RD ST	PRINEVILLE	OR	97754	3050 NE 3RD ST PRINEVILLE OR, 97754
01N22E0000-03000	USA	3050 NE 3RD ST	PRINEVILLE	OR	97754	3050 NE 3RD ST PRINEVILLE OR, 97754
01N21E0000-00600	USA	UNDETERMINED PARTY_ADD	UNDETERMINED		0	UNDETERMINED PARTY_ADDRESS UNDETERMINED CITY , 0
01N22E0000-02800	USA	3050 NE 3RD ST	PRINEVILLE	OR	97754	3050 NE 3RD ST PRINEVILLE OR, 97754
01N21E0000-00200	WALTERS DONALD K & SHERYL A	69759 19 HWY	ARLINGTON	OR	97812	69759 19 HWY ARLINGTON OR, 97812
01N21E0000-00200	WALTERS DONALD K & SHERYL A	69759 19 HWY	ARLINGTON	OR	97812	69759 19 HWY ARLINGTON OR, 97812
02N21E0000-02300	WALTERS DONALD K & SHERYL A	69759 19 HWY	ARLINGTON	OR	97812	69759 19 HWY ARLINGTON OR, 97812
01N21E0000-00200	WALTERS DONALD K & SHERYL A	69759 19 HWY	ARLINGTON	OR	97812	69759 19 HWY ARLINGTON OR, 97812
02N21E0000-02103	WASTE MANAGEMENT	PO BOX 1450	CHICAGO	IL	60690	PO BOX 1450 CHICAGO IL, 60690
01N21E0000-00805	WEATHERFORD FLORES ANN	4240 WILLS BLVD	PUEBLO	CO	81008	4240 WILLS BLVD PUEBLO CO, 81008
01N21E0000-02601	WEATHERFORD JAMES EARL LIV T	16050 N IDAHO CENTER BLV	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687

**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01S21E0000-00600	WEATHERFORD JAMES EARL LIV T	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01S21E0000-00301	WEATHERFORD MORRIS TRUSTEE	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01N21E0000-00802	WEATHERFORD ROBERT M & CAT	68766 WEATHERFORD RD	ARLINGTON	OR	97812	68766 WEATHERFORD RD ARLINGTON OR, 97812
01N22E0000-02000	WEATHERFORD SHUTLER PROPER	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01S21E0000-00200	WEATHERFORD SHUTLER PROPER	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01N21E0000-02001	WEATHERFORD SHUTLER PROPER	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01N21E0000-02000	WEATHERFORD SHUTLER PROPER	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01N21E0000-02002	WEATHERFORD SHUTLER PROPER	16050 N IDAHO CENTER BLVD	NAMPA	ID	83687	16050 N IDAHO CENTER BLVD NAMPA ID, 83687
01N21E0000-01500	WEEDMAN BROTHERS	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01N21E0000-01500	WEEDMAN BROTHERS	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01N21E0000-01500	WEEDMAN BROTHERS	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01N21E0000-02100	WEEDMAN FARMS LLC	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01S21E0000-00100	WEEDMAN FARMS LLC	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01N21E0000-02100	WEEDMAN FARMS LLC	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01N21E0000-02100	WEEDMAN FARMS LLC	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065
01N22E0000-01900	WEEDMAN FARMS LLC	PO BOX 386	WASCO	OR	97065	PO BOX 386 WASCO OR, 97065

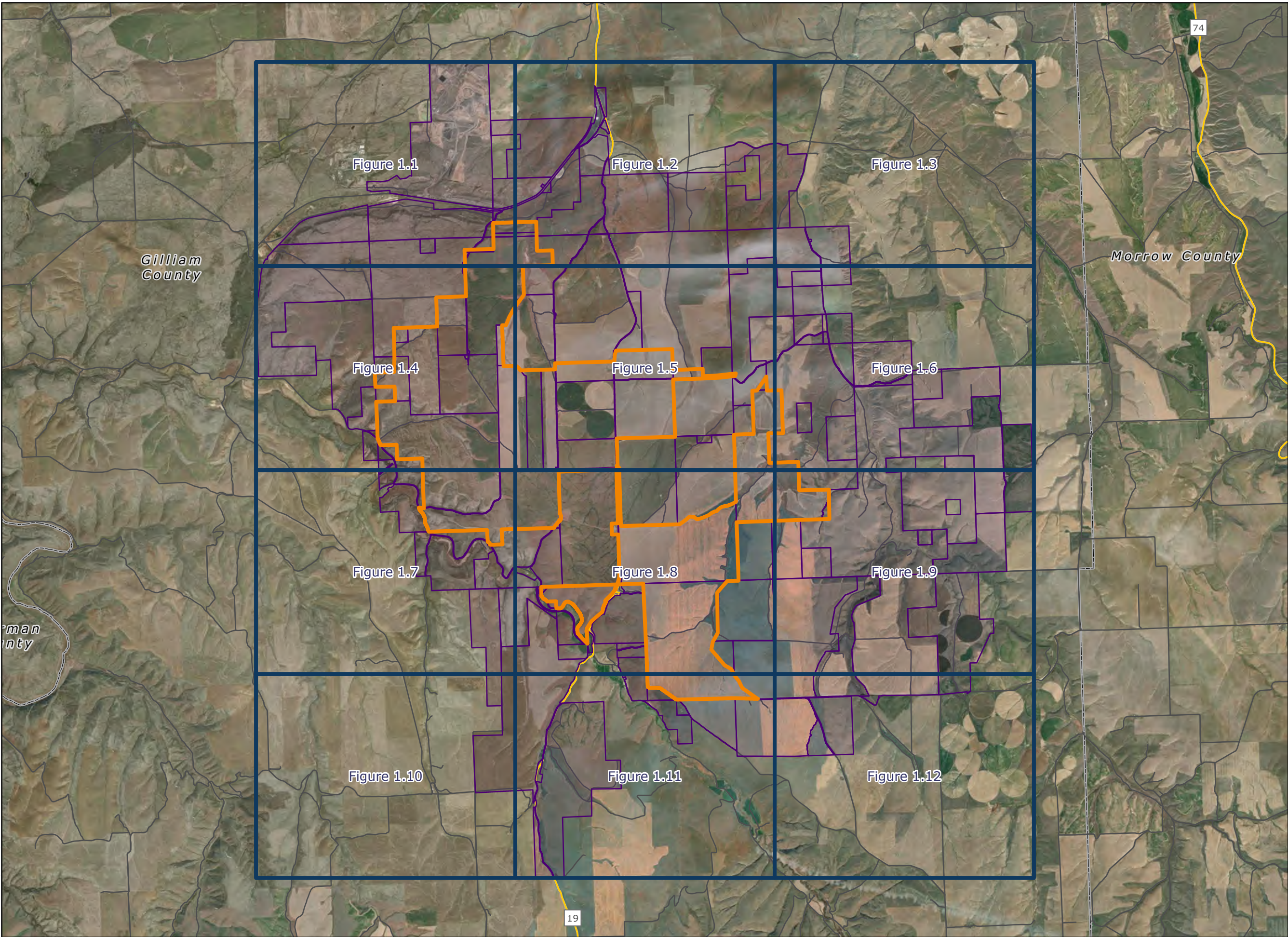
**Request for Amendment No. 1 to the Site Certificate for the Oregon Trail Solar Facility**

Property Owner List and Tax Lot Map - County Assessor Data from November 17, 2022

MapTaxlot	OWNER	Mail Address	Mail City	State	Zip Code	Full Address
01N21E0000-02302	WILKINS CHET R	66979 FRENCH CHARLIE ROAD	ARLINGTON	OR	97812	66979 FRENCH CHARLIE ROAD ARLINGTON OR, 97812
01N21E0000-02300	WILKINS CHET R	66979 FRENCH CHARLIE ROAD	ARLINGTON	OR	97812	66979 FRENCH CHARLIE ROAD ARLINGTON OR, 97812



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# Oregon Trail Solar Facility

## Attachment 21 Figure 1 Taxlot Index Map

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- State Boundary
- County Boundary
- State Highway
- Local Roads
- Grid Index
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



### Reference Map



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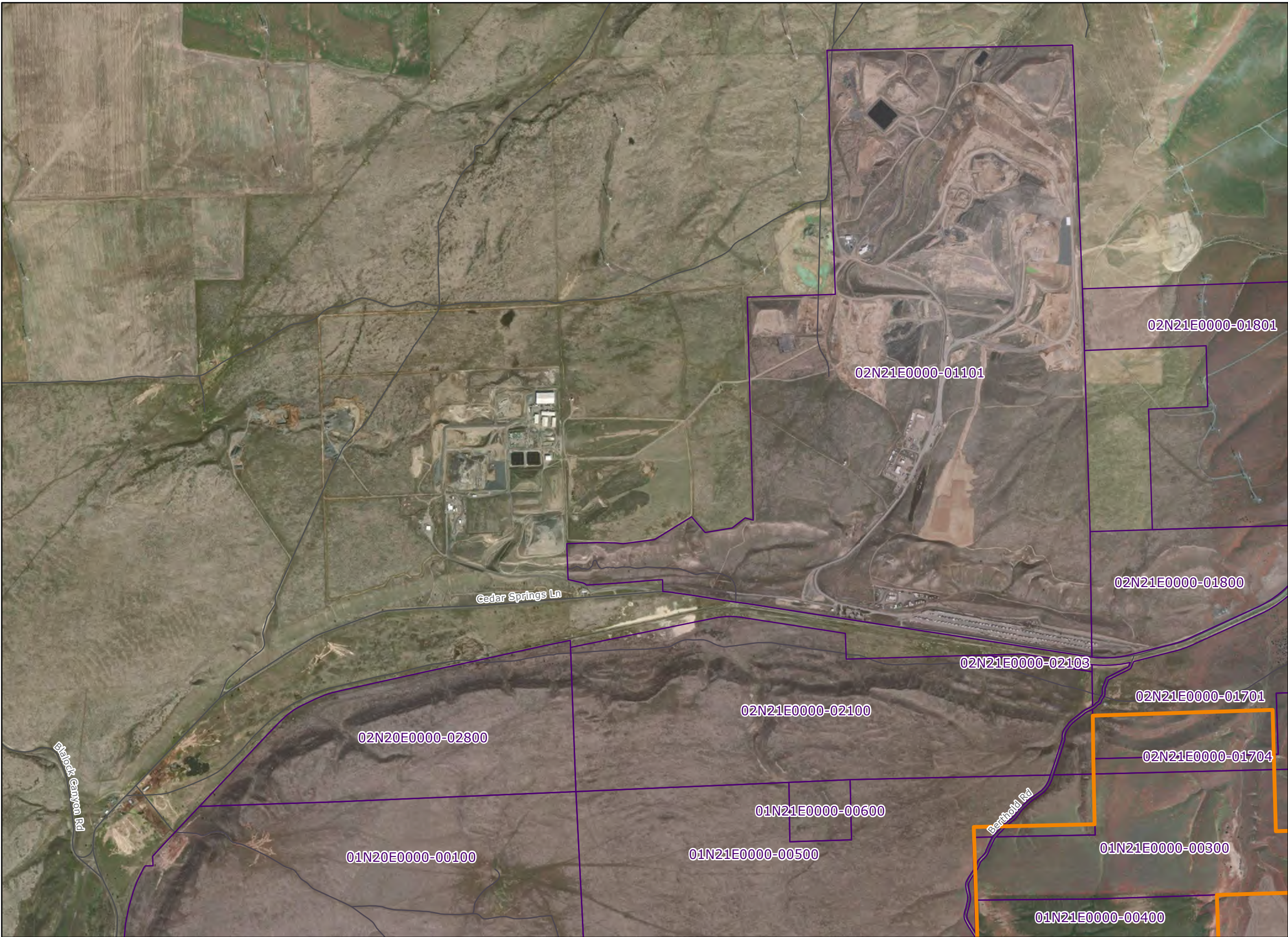
WGS 1984 UTM Zone 10N

0 1 2 4 6 8 Miles

NOT FOR CONSTRUCTION



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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.1  
Taxlots**

**GILLIAM COUNTY, OR**

- Site Boundary Area  
Subject to Request for  
Amendment 1
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam  
County on November 17, 2022.



**Reference Map**

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



1:24,000

WGS 1984 UTM Zone 10N

0 0.5 1 Miles

NOT FOR CONSTRUCTION



Oregon Trail Solar Facility

Attachment 21  
Figure 1.2  
Taxlots

GILLIAM COUNTY, OR

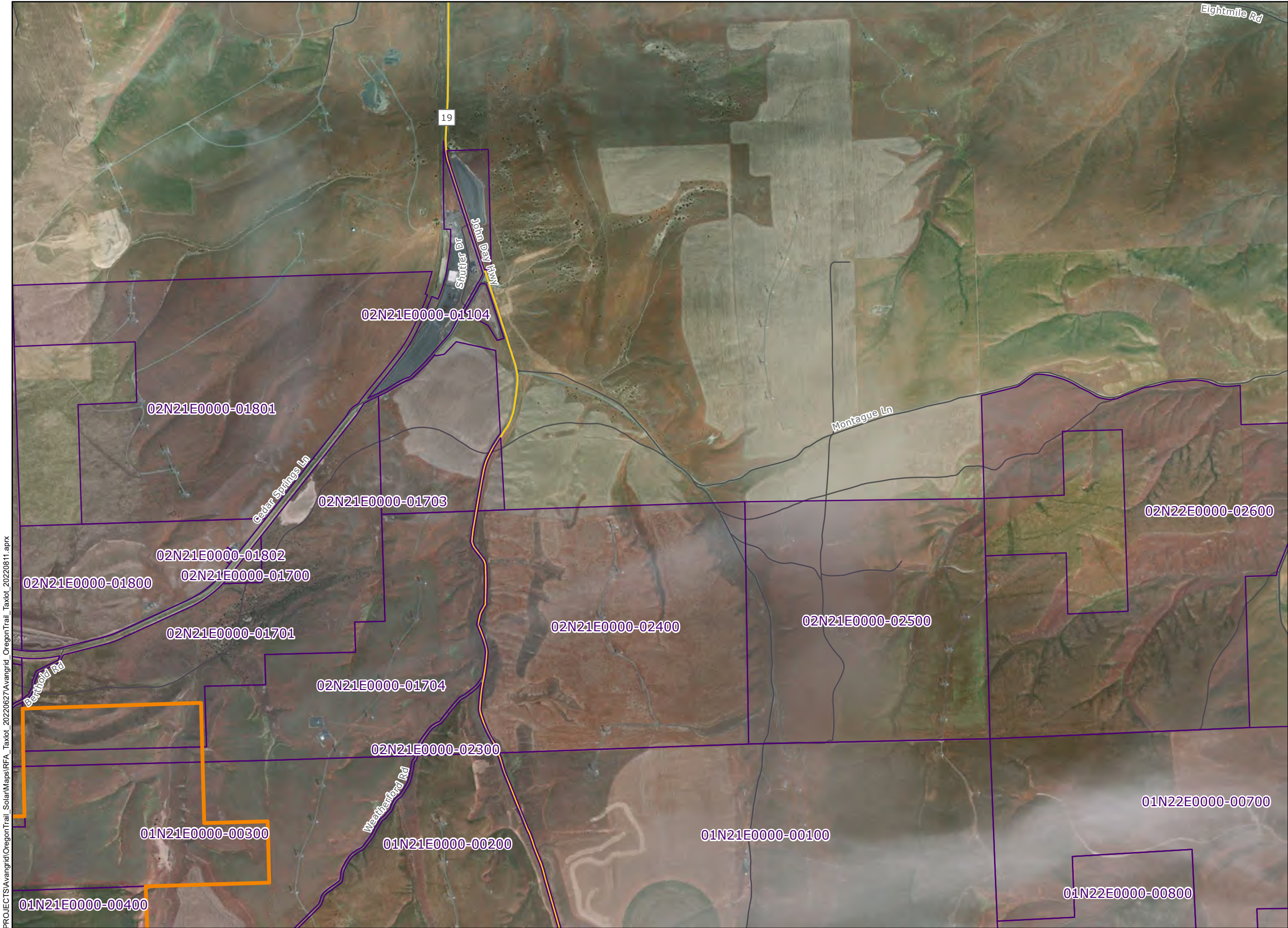
- Site Boundary Area
- Subject to Request for Amendment 1
- State Highway
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



Reference Map

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.3  
Taxlots**

**GILLIAM COUNTY, OR**

-  Site Boundary Area  
Subject to Request for  
Amendment 1
-  Local Roads
-  Taxlot Boundary\*

\*Data obtained from Gilliam  
County on November 17, 2022.



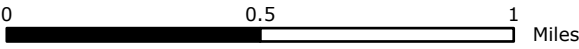
**Reference Map**

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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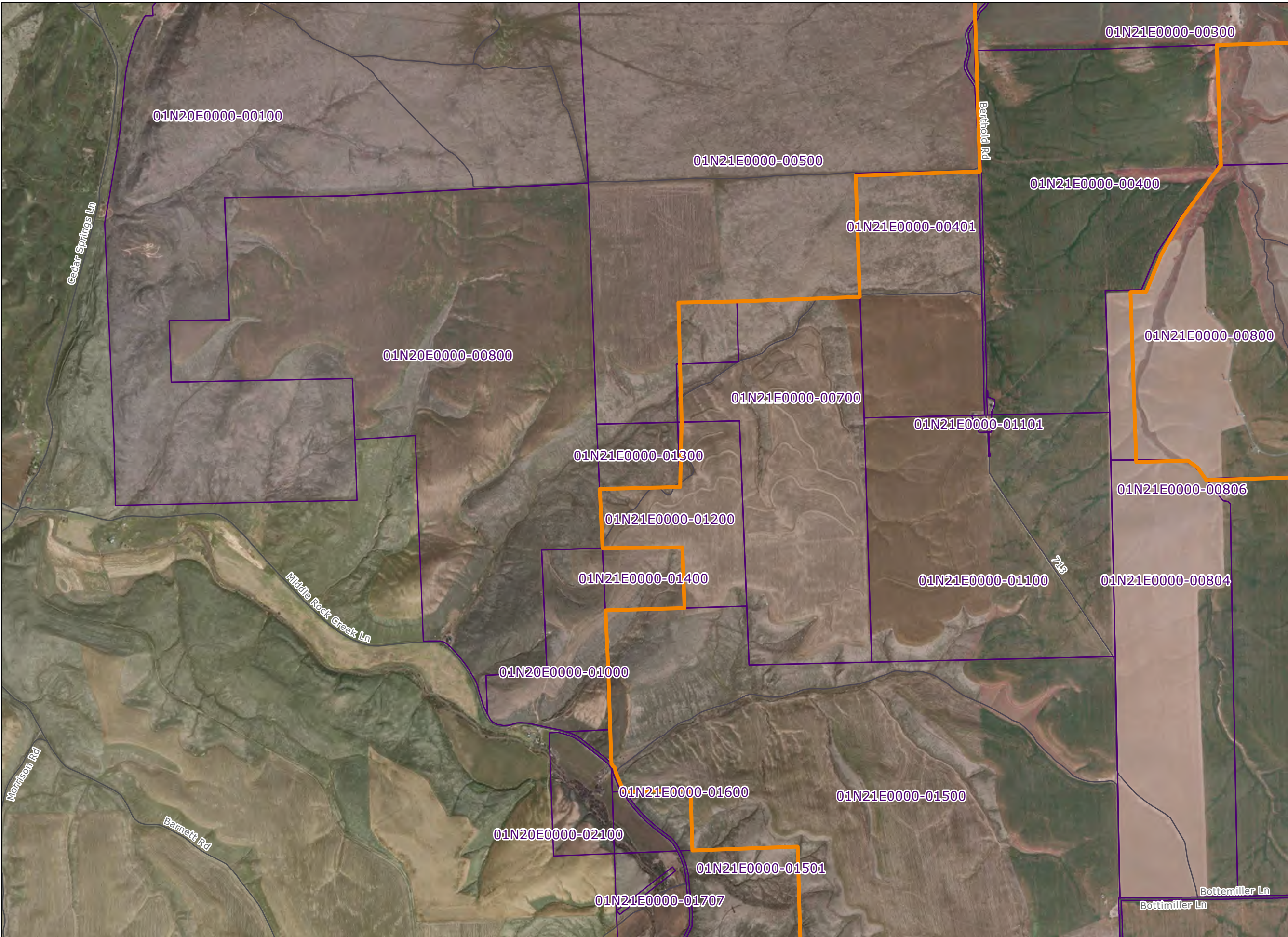
WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.4  
Taxlots**

**GILLIAM COUNTY, OR**

- Site Boundary Area  
Subject to Request for  
Amendment 1
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam  
County on November 17, 2022.



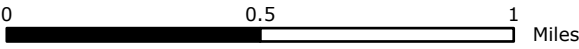
**Reference Map**

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



1:24,000

WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



Oregon Trail  
Solar Facility

Attachment 21  
Figure 1.5  
Taxlots

GILLIAM COUNTY, OR

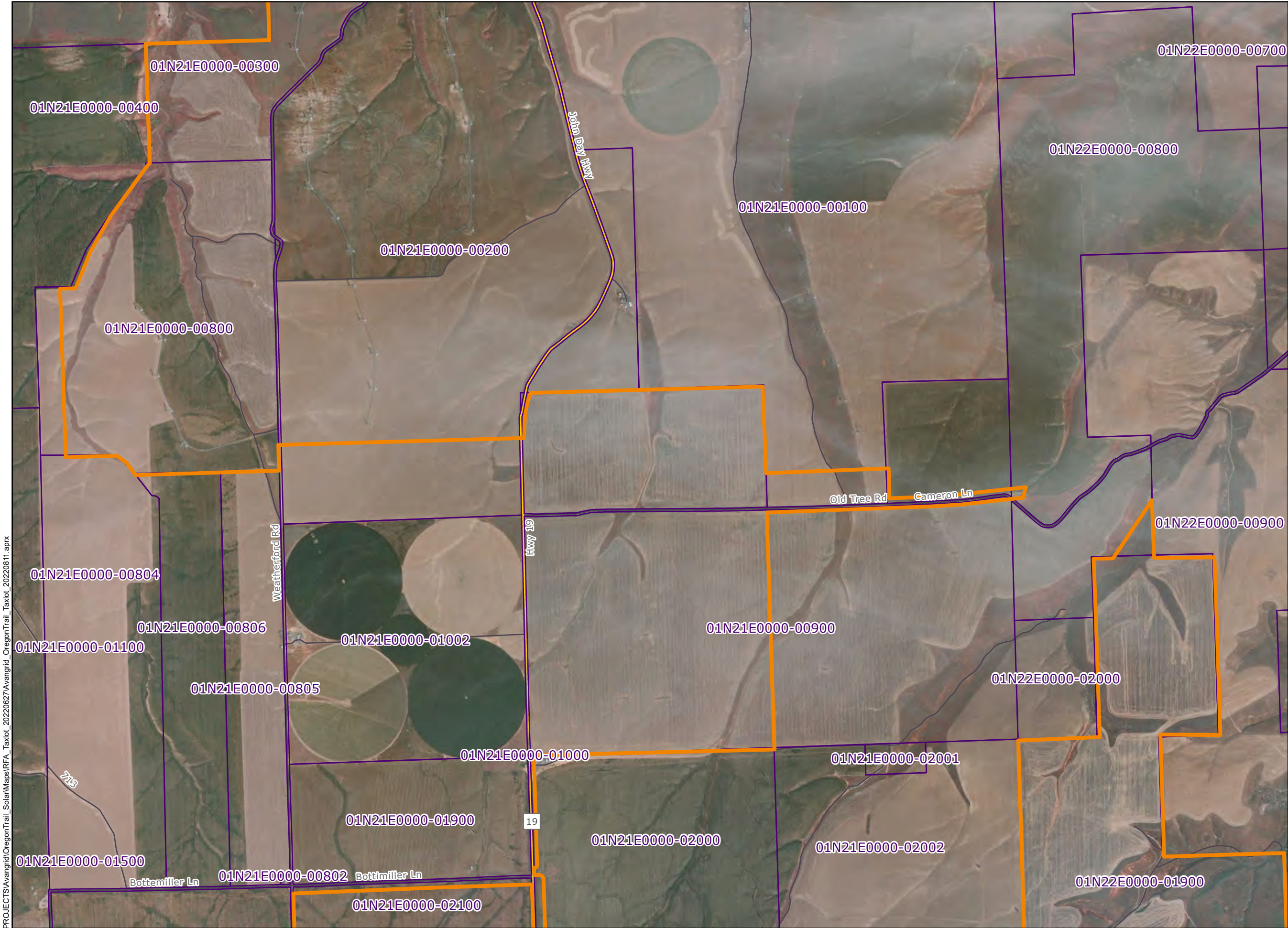
- Site Boundary Area
- Subject to Request for Amendment 1
- State Highway
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



Reference Map

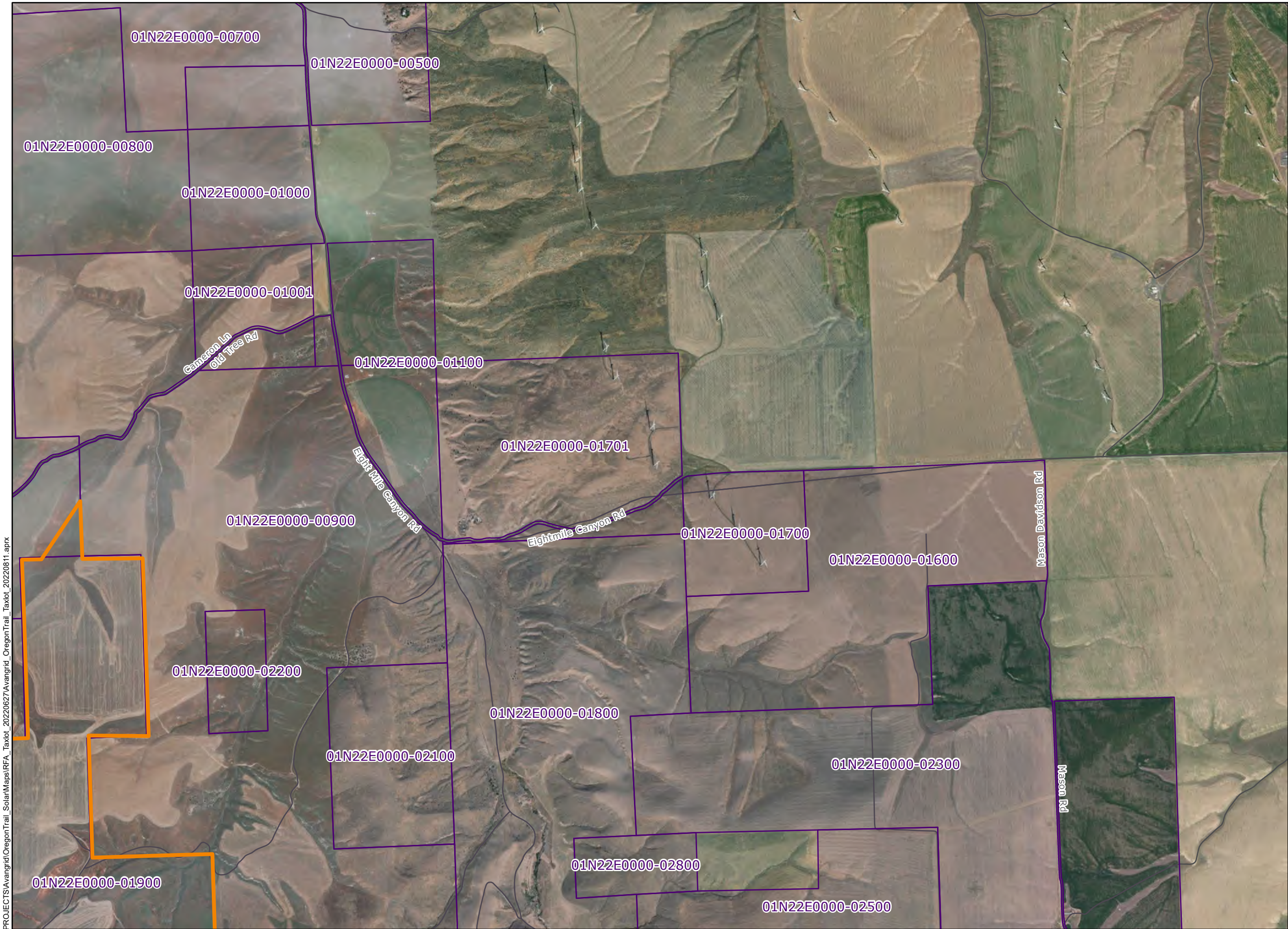
Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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# Oregon Trail Solar Facility

## Attachment 21 Figure 1.6 Taxlots

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



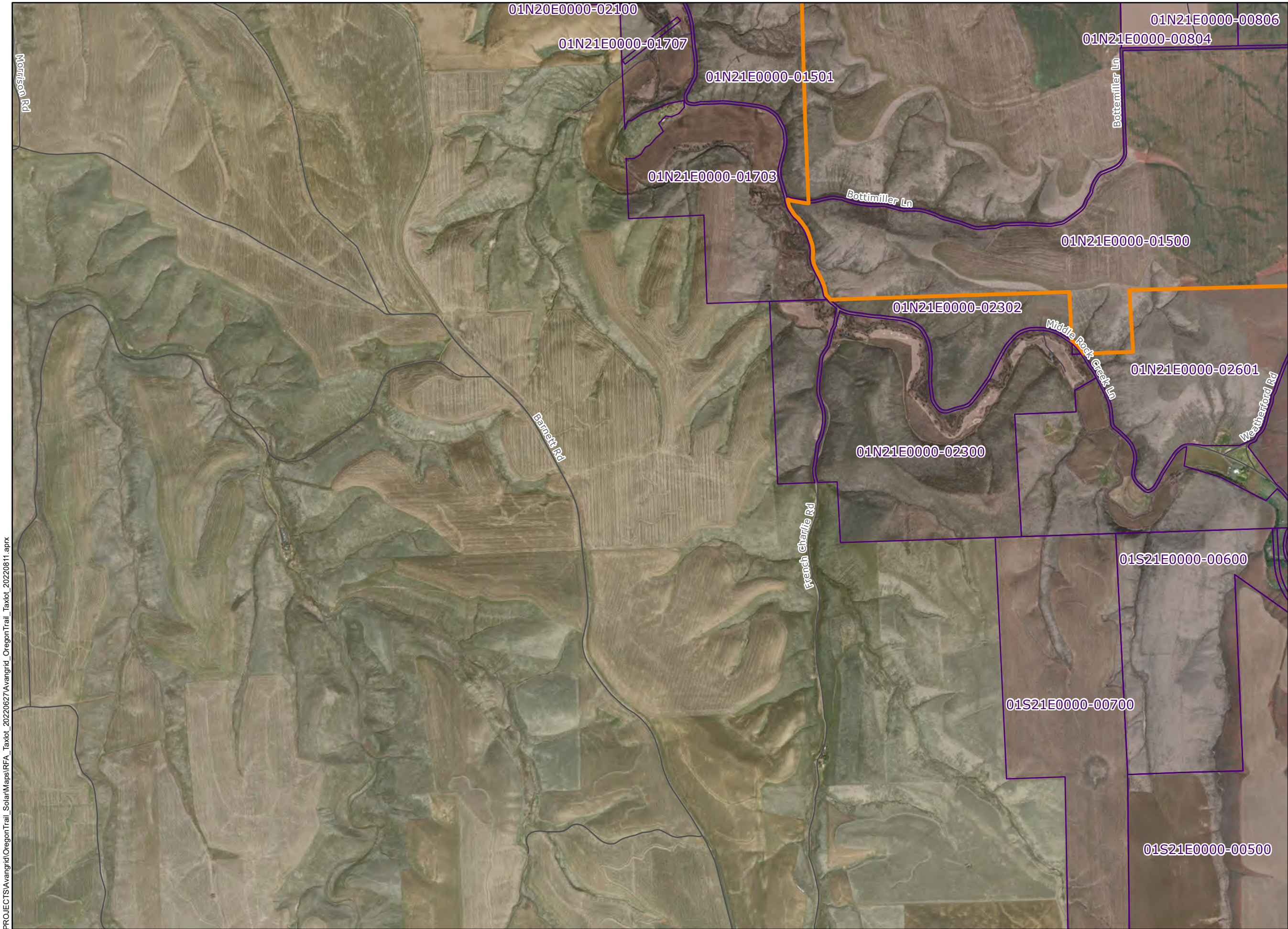
### Reference Map

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12

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# Oregon Trail Solar Facility

## Attachment 21 Figure 1.7 Taxlots

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



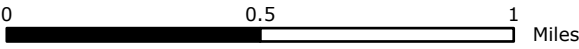
### Reference Map

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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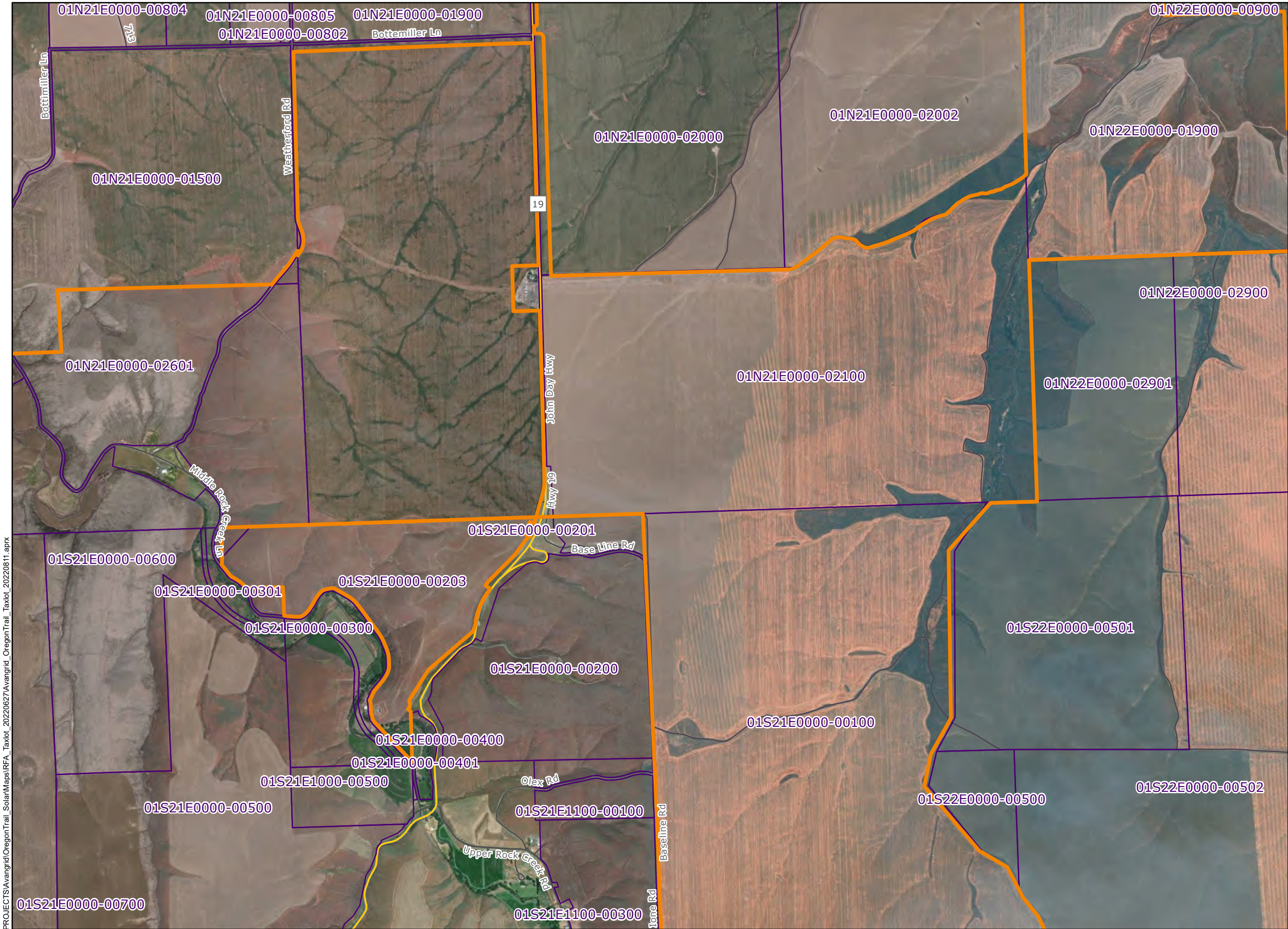
WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



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# Oregon Trail Solar Facility

## Attachment 21 Figure 1.8 Taxlots

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- State Highway
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



### Reference Map

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



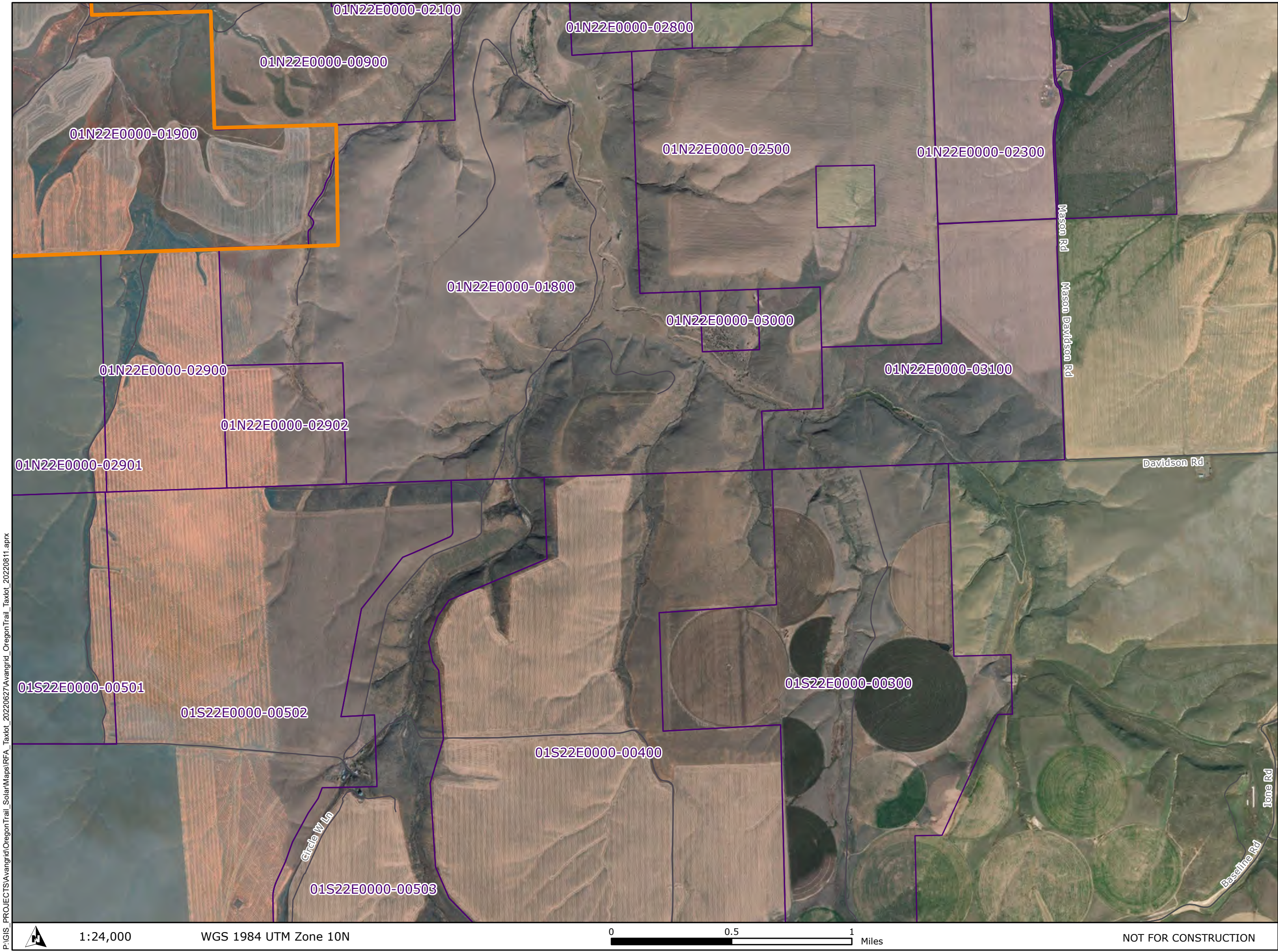
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WGS 1984 UTM Zone 10N

0 0.5 1 Miles

NOT FOR CONSTRUCTION





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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.9  
Taxlots**

**GILLIAM COUNTY, OR**

- Site Boundary Area  
Subject to Request for  
Amendment 1
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam  
County on November 17, 2022.



**Reference Map**

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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WGS 1984 UTM Zone 10N

0 0.5 1 Miles

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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.10  
Taxlots**

**GILLIAM COUNTY, OR**

- Site Boundary Area  
Subject to Request for  
Amendment 1
- State Highway
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam  
County on November 17, 2022.



**Reference Map**

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
<b>Figure 1.10</b>	Figure 1.11	Figure 1.12



1:24,000

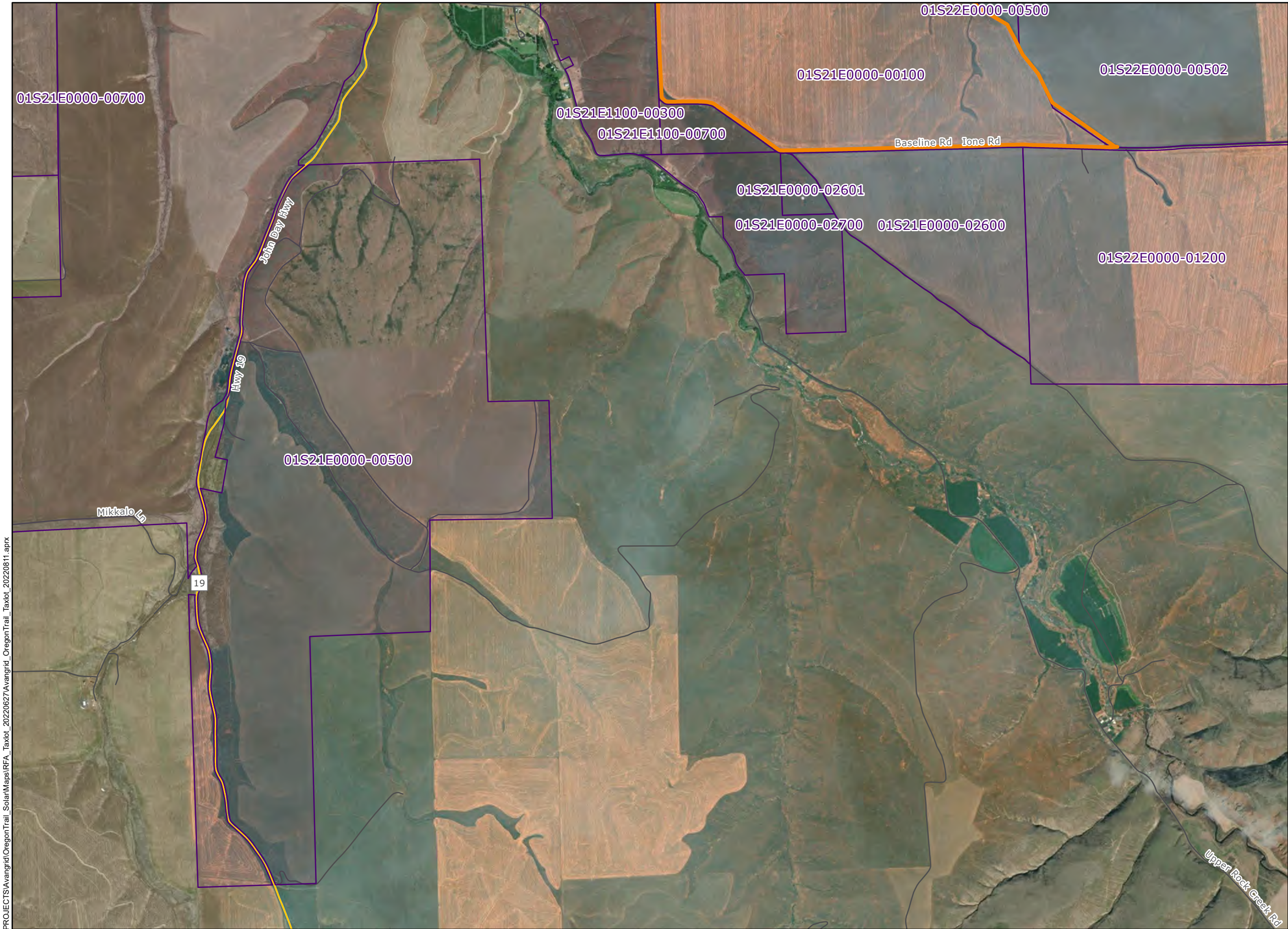
WGS 1984 UTM Zone 10N

0 0.5 1 Miles

NOT FOR CONSTRUCTION



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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.11  
Taxlots**

GILLIAM COUNTY, OR

- Site Boundary Area
- Subject to Request for Amendment 1
- State Highway
- Local Roads
- Taxlot Boundary\*

\*Data obtained from Gilliam County on November 17, 2022.



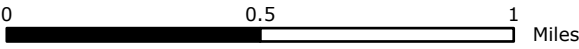
Reference Map

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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WGS 1984 UTM Zone 10N



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**Oregon Trail  
Solar Facility**

**Attachment 21  
Figure 1.12  
Taxlots**

**GILLIAM COUNTY, OR**

-  Site Boundary Area  
Subject to Request for  
Amendment 1
-  Local Roads
-  Taxlot Boundary\*

\*Data obtained from Gilliam  
County on November 17, 2022.



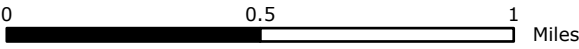
**Reference Map**

Figure 1.1	Figure 1.2	Figure 1.3
Figure 1.4	Figure 1.5	Figure 1.6
Figure 1.7	Figure 1.8	Figure 1.9
Figure 1.10	Figure 1.11	Figure 1.12



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WGS 1984 UTM Zone 10N



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