

Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Prepared for

Oregon Energy Facility Siting Council

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Submitted by

Golden Hills Wind Farm LLC

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Introduction

Golden Hills Wind Project (Facility or project) is a permitted wind energy generation facility under development in Sherman County, Oregon, with electrical generating capacity of up to 400 megawatts (MW). On June 18, 2009, the Oregon Energy Facility Siting Council (EFSC or Council) issued a site certificate approving the Facility. The Facility will be located within permitted micrositing corridors on approximately 30,000 acres of privately owned, Exclusive Farm Use (EFU) land both east and west of Highway 97, between the cities of Wasco and Moro (Figure 1 in Attachment 1).

1.1 Amendment History

Golden Hills Wind Farm LLC (Certificate Holder) holds the *Second Amended Site Certificate for the Golden Hills Wind Project*, dated February 11, 2015 (Second Amended Site Certificate).

This *Request for Amendment No. 3* (amendment request) incorporates by reference the following documents:

- *Application for Site Certificate for the Golden Hills Wind Project* (Application for Site Certificate [ASC]) (Golden Hills Wind Farm LLC; May 2007 with May 2008 addendum)
- *Final Order on the Application for Site Certificate* (Final Order on the Application) (EFSC; issued May 15, 2009) and *Site Certificate for the Golden Hills Wind Project* (Site Certificate) (EFSC; fully executed on May 15, 2009)
- *Final Order on Amendment No. 1 for the Golden Hills Wind Project* (Final Order on Amendment No. 1) (EFSC; issued May 11, 2012) and *First Amended Site Certificate for the Golden Hills Wind Project* (EFSC, fully executed on May 18, 2012)
- *Final Order on Amendment No. 2 for the Golden Hills Wind Project* (Final Order on Amendment No. 2) (EFSC; issued January 30, 2015) and *Second Amended Site Certificate* (EFSC, fully executed on February 11, 2015)

1.2 Purpose of This Amendment Request

Certificate Holder requests an amendment to the Second Amended Site Certificate to (1) extend the construction start and completion deadlines for an additional 2 years, (2) change the allowed turbine height and rotor diameter in response to improvements in turbine technology, (3) modify the related and supporting facilities including eliminating the previously approved western substation and 500-kilovolt (kV) transmission line, and (4) amend the site boundary to remove approximately 2,800 acres of land that is no longer needed for the Facility design and add approximately 200 acres of land to potentially accommodate construction-related activities and related and supporting facilities. In short, this request is driven by technology updates and additional information about the project based on a refined Facility design and clarification of specific Facility requirements. These requested modifications to the Facility respond to recent changes in the wind energy market and enhance the feasibility of the proposed project, using equipment that is currently available in the market.

Certificate Holder submits this amendment request pursuant to Oregon Administrative Rule (OAR) 345-027-0050(1) and OAR 345-027-0060(1). Sections 2 through 6 address the applicable EFSC standards for amendments to the site certificate, and are supported by the following attachments:

- Attachment 1 contains four figures showing the proposed turbine layout, the change in the site boundary, protected areas, and scenic and aesthetic areas, respectively.

- Attachment 2 contains the updated property owner list required by OAR 345-027-0060(1)(g) and a set of maps showing the location of each property owner (by tax lot ID number) within 500 feet of the proposed site boundary.

1.3 Summary of Modifications

1.3.1 Extension of Construction Deadline

This is the third request to extend construction deadlines for the Facility. The First Amended Site Certificate extended the construction start deadline from June 18, 2012, to June 18, 2014, and the completion deadline from June 18, 2015, to June 18, 2017. The Second Amended Site Certificate, in connection with a change in Facility ownership, extended the construction start deadline from June 18, 2014, to June 18, 2016, and the completion deadline from June 18, 2017, to June 18, 2019. In this amendment request, Certificate Holder seeks to extend the construction start deadline from June 18, 2016, to June 18, 2018, and the completion deadline from June 18, 2019, to June 18, 2021, to allow necessary refinements to Facility components. This third amendment is driven by the need to complete the review process with the Federal Aviation Administration, and to update and refine the Facility design in order to respond to recent changes in the wind energy market and enhance the feasibility of the proposed project, using equipment that is currently available in the market.

1.3.2 Change in Turbine Height/Rotor Diameter and Reduction in Number of Turbines

EFSC previously authorized construction of up to 267 General Electric sle 1.5-MW turbines or any combination of turbines subject to specific restrictions. The maximum turbine tower height was restricted to 80 meters (263 feet) at the rotor hub, and the diameter of the rotor-swept area was restricted to 96 meters (315 feet). Certificate Holder seeks to increase the maximum turbine tower height to 95 meters (312 feet), and the diameter of the maximum rotor-swept area to 126 meters (413 feet). The change in turbine tower height and rotor diameter will result in a net reduction in the total number of turbines, to a maximum of 125 turbines. Depending on the availability of turbine components and the results of resource analyses conducted during detailed design, turbine towers less than 95 meters tall could be used. Accordingly, Certificate Holder requests a minimum ground clearance of 19.8 meters (65 feet) instead of the previously approved minimum ground clearance of 32 meters (105 feet).

The purpose of the change in turbine height and rotor diameter is to take advantage of improvements in turbine technology that allow fewer turbines to attain the previously approved maximum peak electric generating capacity of 400 MW. As previously approved, the total rotor swept area for the Facility would have been approximately 1.93 million square meters. As currently proposed, the total rotor swept area will decrease by approximately 19 percent to approximately 1.56 million square meters.

The modified 125-turbine layout results in corresponding modifications to the location of access roads, collector lines, and other project facilities, as well as construction areas such as crane paths and laydown areas. Specific locations of each of the foregoing may be modified further during detailed design within the approved site boundary.

1.3.3 Changes to Related and Supporting Facilities

Certificate Holder seeks to eliminate the previously approved 500-kV transmission line to the Bonneville Power Administration's (BPA) John Day substation and the associated construction of one of the two approved substations. These related and supporting facilities are no longer needed based on a revised and updated Facility design. The previously approved eastern substation will be relocated to the center of the site boundary and will serve as the single substation for the Facility. The location of the previously

approved 230-kV transmission line will be modified to run from the proposed centrally located substation to the Hay Canyon 230-kV transmission line located near the southeastern corner of the Facility's site boundary. From there, electricity will be transmitted using the existing Hay Canyon 230-kV line to its northernmost transmission pole structure near the Klondike Substation. From this location, Certificate Holder will construct up to approximately 700 feet of new 230-kV transmission line and associated structures and equipment to interconnect the Facility to BPA's transmission structure located approximately 300 feet north of the Klondike substation. The Council previously approved approximately 11 miles of 500-kV transmission line to the John Day Substation, and 0.7 mile of 230-kV transmission line to the Klondike Substation, for a total of approximately 11.7 miles; as modified, Certificate Holder proposes less than 8 total miles of 230-kV line. Of the 8 total miles of transmission line, approximately 3 miles are already fully constructed on the Hay Canyon transmission line and do not require any new construction. In total, only 5 miles of new 230-kV transmission line will need to be constructed for the Facility, as currently proposed.

1.3.4 Change in Site Boundary

The site boundary will be amended to remove approximately 2,800 acres of land that are no longer required for the Facility design and add approximately 200 acres of land to account for possible changes in the Facility construction methods, e.g., the relocation of related construction areas such as temporary laydown areas and crane paths, access roads, and collector lines for the proposed turbines. The amended site boundary encompasses land needed to accommodate the 230-kV transmission line and its interconnection with the Hay Canyon 230-kV transmission line and BPA network. Figure 2 shows proposed changes in the site boundary overlaid on the approved site boundary.

No changes to the approved micro-siting corridors are proposed. All proposed turbines will be located within these approved corridors.

1.3.5 Updated Temporary and Permanent Disturbance Calculations

The proposed amendment will result in a net reduction in the approved temporary and permanent impacts.¹ Additional information on the net reduction in impacts will be provided as part of a supplemental information package (Supplement) to be submitted to the Oregon Department of Energy (ODOE) in January 2016.

1.4 Regulatory Framework

This amendment request is organized in accordance with OAR 345-027-0030, OAR 345-027-0050, OAR 345-027-0060, and OAR 345-027-0070, which set forth the required contents of a request to amend a site certificate as well as additional considerations for EFSC in deciding whether to grant an amended site certificate.

¹ Final Order on the Application, p. 117-118 (May 15, 2009).

Information Required Pursuant to OAR 345-027-0030 for Extension of Construction Start and Completion Deadlines

(1) The certificate holder may request an amendment to extend the deadlines for beginning or completing construction of the facility that the Council has specified in a site certificate or an amended site certificate. The certificate holder shall submit a request that includes an explanation of the need for an extension and that conforms to the requirements of 345-027-0060 no later than six months before the date of the applicable deadline, or, if the certificate holder demonstrates good cause for the delay in submitting the request, no later than the applicable deadline.

Response: This amendment request to extend construction start and completion deadlines is timely under OAR 345-027-0030(1) because it is filed no later than six months before the current construction start date deadline of June 18, 2016. Conformance to the requirements of 345-027-0060 is described in Section 2 of this amendment request. Therefore, OAR 345-027-0030(1) is satisfied.

(2) A request within the time allowed in section (1) to extend the deadlines for beginning or completing construction suspends those deadlines until the Council acts on the request.

Response: This amendment request is timely under OAR 345-027-0030(1) and therefore the applicable construction deadlines in the Second Amended Site Certificate are suspended until EFSC acts on this amendment request.

(3) The Council shall review the request for an amendment as described in OAR 345-027-0070.

Response: Certificate Holder requests that EFSC review this amendment request without subjecting it to extended review. The proposed changes should not warrant extended review under OAR 345-027-0070(2).

(4) If the Council grants an amendment under this rule, the Council shall specify new deadlines for beginning or completing construction that are not more than two years from the deadlines in effect before the Council grants the amendment.

Response: Certificate Holder requests a two-year extension of the construction deadlines, to June 18, 2018, for beginning construction and June 18, 2021, for completing construction.

(5) To grant an amendment extending the deadline for beginning or completing construction of an energy facility subject to OAR 345-024-0550, OAR 345-024-0590, or OAR 345-024-0620, the Council must find that the facility complies with the carbon dioxide standard in effect at the time of the Council's order on the amendment.

Response: This rule is not applicable to the Facility.

Information Required Pursuant to OAR 345-027-0050(1) for Site Certificate Changes

(1) Except as allowed under sections (2) and (6), the certificate holder must submit a request to amend the site certificate to design, construct or operate a facility in a manner different from the description in the site certificate if the proposed change:

(a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource protected by Council standards;

Response: Certificate Holder maintains that the proposed amendment will not result in significant adverse impacts that the Council has not previously addressed. This request includes additional analysis to demonstrate that the proposed changes do not result in significant changes to the impacts previously reviewed.

(b) Could impair the certificate holder's ability to comply with a site certificate condition; or

Response: The proposed changes to the Facility could impair Certificate Holder's ability to comply with existing site certificate conditions and thus Certificate Holder submits this third amendment request. Please refer to Section 4.1.4 (Proposed Changes to the Site Certificate).

(c) Could require a new condition or change to a condition in the site certificate.

Response: The proposed amendments include changes to existing site certificate conditions. Please refer to Section 4.1.4 (Proposed Changes to Site Certificate).

Information Required Pursuant to OAR 345-027-0060 and OAR 345-027-0070(10) for Site Certificate Amendments

4.1 Information Required Pursuant to OAR 345-027-0060

4.1.1 OAR 345-027-0060(1)(a) Name and Mailing Address

(1) To request an amendment of a site certificate, the certificate holder shall submit a written request to the Department of Energy that includes the information described in section (2) and the following:

(a) The name and mailing address of the certificate holder and the name, mailing address and phone number of the individual responsible for submitting the request.

Name and Address of Certificate Holder:

Golden Hills Wind Farm LLC
Reid Buckley, Vice President
Orion Renewable Energy Group LLC
155 Grand Avenue, Suite 706
Oakland, CA 94612
(510) 267-8921
rbuckley@orionrenewables.com

Name, Mailing Address, and Phone Number of Individual Responsible for Submitting the Request:

Linnea Eng
CH2M HILL Engineers, Inc.
3015 126th Ave NE
Seattle, WA 98005
(425) 895-0879
linnea.eng@ch2m.com

Name, Mailing Address, and Phone Number of Orion Contact Person:

Ryan McGraw, Head of Asset Management
Orion Renewable Energy Group LLC
155 Grand Avenue, Suite 706
Oakland, CA 94612
(510) 267-9322
rmcgraw@orionrenewables.com

4.1.2 OAR 345-027-0060(1)(b) Description of Facility

(b) A description of the facility including its location and other information relevant to the proposed change.

Response: Exhibits B and C of the ASC and Section III of the Final Order on the Application described the Facility. As previously approved, the Facility would contain up to 267 wind turbine locations, each consisting of a turbine tower and foundation, turbine pad area, nacelle, rotor and blade assembly, and step-up transformer. The Facility would have a maximum peak electric generating capacity of 400 MW and an average electric generating capacity of about 133 MW.

As proposed in this request, the Facility will contain up to 125 wind turbine locations, each consisting of a turbine tower and foundation, turbine pad area, nacelle, rotor and blade assembly, and step-up transformer. The Facility will have a maximum peak electric generating capacity of 400 MW and an average electric generating capacity of about 133 MW.

The proposed wind turbines in the Facility could have a larger rotor diameter than previously approved, adjustments to the maximum tower height, changes to the related and supporting facilities, and adjustments to the site boundary to accommodate changes to the related and supporting facilities. As stated in the introduction to this amendment request, the Facility will be located on privately owned EFU land both east and west of Highway 97, between the cities of Wasco and Moro in Sherman County, Oregon.

As a part of this amendment, Certificate Holder seeks to clarify that it may conduct a phased construction and interconnection schedule based on market factors as long as the phasing has been previously reviewed by Department staff.

4.1.3 OAR 345-027-0060(1)(c) Proposed Changes to Permitted Facility

(c) A detailed description of the proposed change and the certificate holder's analysis of the proposed change under the criteria of OAR 345-027-0050(1).

Response: Please refer to Section 4.1.2 (Description of Facility) for a description of the proposed changes.

4.1.4 OAR 345-027-0060(1)(d) Proposed Changes to Site Certificate

(d) The specific language of the site certificate, including affected conditions, that the certificate holder proposes to change, add or delete by an amendment.

Response: Certificate Holder proposes to change the language of Conditions III.D.1 and III.D.2 concerning construction start and completion deadlines, and the language of conditions pertaining to other modifications proposed herein, in a redlined draft of the existing Second Amended Site Certificate to be provided as part of the January 2016 Supplement.

4.1.5 OAR 345-027-0060(1)(e) Relevant Council Standards

(e) A list of the Council standards relevant to the proposed change.

Response: The relevant Council standards to the proposed change are Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). Section 5 identifies and addresses the standards. The Facility is an electric generating facility using wind turbine technology and therefore Division 23, which applies to nongenerating facilities, does not apply. Similarly, inapplicable provisions of Division 24 (e.g., standards applicable to gas plants, gas storage, nongenerating facilities) are not discussed.

4.1.6 OAR 345-027-0060(1)(f) Applicable Laws and Council Rules

(f) An analysis of whether the facility, with the proposed change, would comply with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances if the Council amends the site certificate as requested. For the purpose of this rule, a law, rule or ordinance

is “applicable” if the Council would apply or consider the law, rule or ordinance under OAR 345-027-0070(10).

Response: Sections 5.1.1 (OAR 345-022-0000 General Standard of Review) and 6.5 (Public Health and Safety—ORS 469.310) of this amendment request contain analysis concluding that the proposed amended Facility will comply with the requirements of ORS Chapter 469, applicable EFSC rules, and applicable state and local laws, rules and ordinances if the EFSC approves this third amendment request.

4.1.7 OAR 345-027-0060(1)(g) Landowners Within or Adjacent to the Facility

(g) An updated list of the owners of property located within or adjacent to the site of the facility, as described in OAR 345-021-0010(1)(f).

Response: An updated list of property owners located within 500 feet of the proposed site boundary (i.e., the site boundary with the additions/subtractions discussed above) is provided in Attachment 2. The list includes all property owners within 500 feet of the site boundary as required by OAR 345-021-0010(1)(f)(C) for a site located within a farm or forest zone. Attachment 2 also contains a corresponding set of figures showing the location of each tax lot. The property information was obtained from Sherman County on December 4, 2015.

4.1.8 OAR 345-027-0060(2) Incorporation by Reference

(2) In a request to amend a site certificate, the certificate holder shall provide the information described in applicable subsections of OAR 345-021-0000 and OAR 345-021-0010. The certificate holder may incorporate by reference relevant information that the certificate holder has previously submitted to the Department or that is otherwise included in the Department’s administrative record on the facility.

Response: To satisfy OAR 345-027-0060(2), Certificate Holder provides the information set forth in this amendment request and incorporates by reference the information contained in the ASC and the information forming the basis for the Final Order on Amendment No. 1 and the Final Order on Amendment No. 2. In addition, the Second Amended Site Certificate is incorporated by reference.

4.1.9 OAR 345-027-0060(3) and (4) Consultation with the Department

(3) Before submitting a request to amend a site certificate, the certificate holder may prepare a draft request and may confer with the Department about the content of the request. Although the Council does not require the certificate holder to prepare a draft request and confer with the Department, the Council recommends that the certificate holder follow this procedure.

Response: Certificate Holder met with ODOE to discuss the proposed changes and necessary analysis before submitting this amendment request.

(4) The certificate holder shall submit an original and two printed copies of the amendment request to the Department. Upon a request by the Department, the certificate holder must submit printed copies of the amendment request for members of the Council. In addition to the printed copies, the certificate holder shall submit the full amendment request in a non-copy-protected electronic format acceptable to the Department. The certificate holder shall provide additional copies of the amendment request to the Department upon request and copies or access to copies to any person requesting copies. If requested by the Department, the certificate holder shall send copies of the request to persons on a mailing list provided by the Department.

Response: Certificate Holder submits an original and two printed copies of this Amendment request and will provide additional copies upon request. In addition to the printed copies, Certificate Holder submits the full amendment request in a non-copy-protected electronic format acceptable to the Department.

4.2 Information Required Pursuant to OAR 345-027-0070(10) Review of a Request for Amendment

(10) In making a decision to grant or deny issuance of an amended site certificate, the Council shall apply the applicable substantive criteria, as described in OAR 345-022-0030, in effect on the date the certificate holder submitted the request for amendment and all other state statutes, administrative rules, and local government ordinances in effect on the date the Council makes its decision. The Council shall consider the following:

(a) For an amendment that would change the site boundary or the legal description of the site, the Council shall consider, for the area added to the site by the amendment, whether the facility complies with all Council standards;

Response: As discussed in Section 1.3.4 (Change in Site Boundary), Certificate Holder seeks to amend the site boundary to remove approximately 2,800 acres of land that are no longer required for the Facility design and add approximately 200 acres of land to account for possible changes in the Facility construction methods, e.g., the relocation of related construction areas such as temporary laydown areas and crane paths, access roads, and collector lines for the proposed turbines. The amended site boundary encompasses land needed to accommodate the 230-kV transmission line, including its interconnection with the Hay Canyon 230-kV transmission line and BPA network.

No changes to the approved micro-siting corridors are proposed. All proposed turbines will be located within these approved corridors. The proposed amendment will result in a net reduction in the previously approved temporary and permanent impacts.

The legal description of the modified site boundary will change. The proposed site will occupy portions of the following parcels in the Willamette Meridian of Sherman County:

- Sections 1-17, Township 1 South, Range 17 East
- Sections 6-7, Township 1 South, Range 18 East
- Sections 29-31, Township 1 North, Range 18 East
- Sections 5-9, 14-23, and 25-36, Township 1 North, Range 17 East
- Sections 1-3, 12-14, 23-26, and 35-36, Township 1 North, Range 16 East
- Sections 29-33, Township 2 North, Range 17 East
- Sections 25-27 and 34-36, Township 2 North, Range 16 East

(b) For an amendment that extends the deadlines for beginning or completing construction, the Council shall consider:

(A) Whether the Council has previously granted an extension of the deadline;

Response: EFSC previously granted extensions of the construction deadlines when it approved the First Amended Site Certificate in May 2012, and the Second Amended Site Certificate in February 2015. A third extension to the construction deadlines is warranted because Certificate Holder has experienced unforeseen delays in the development and commencement of construction of the Facility, including federal aviation issues raised by federal agencies, which Certificate Holder believes will be addressed in the near to medium term. The site is a strong and well-documented renewable energy resource, and Certificate Holder has signed a Large Generator Interconnection Agreement with BPA. To best implement the proposed changes and prepare for construction, additional time is needed.

(B) Whether there has been any change of circumstances that affects a previous Council finding that was required for issuance of a site certificate or amended site certificate; and

Response: Since the Council approved the Facility in 2009, considerable advances in turbine technology have occurred. The newer technology allows for a more efficient and economical Facility, which in turn will help to attract buyers of electricity generated by the Facility. These changes in circumstances drive the proposed changes contained in this amendment request.

(C) Whether the facility complies with all Council standards, except that the Council may choose not to apply a standard if the Council finds that:

(i) The certificate holder has spent more than 50 percent of the budgeted costs on construction of the facility;

(ii) The inability of the certificate holder to complete the construction of the facility by the deadline in effect before the amendment is the result of unforeseen circumstances that are outside the control of the certificate holder;

(iii) The standard, if applied, would result in an unreasonable financial burden on the certificate holder; and

(iv) The Council does not need to apply the standard to avoid a significant threat to the public health, safety or the environment;

Response: The Facility complies with all EFSC standards as set forth herein.

(c) For any amendment not described above, the Council shall consider whether the amendment would affect any finding made by the Council in an earlier order.

Response: The amendment is captured under the response to OAR 345-027-0070(10)(b) and therefore subsection (c) does not apply.

(d) For all amendments, the Council shall consider whether the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

Response: Section 5.1.7 (OAR 345-022-0050 Retirement and Financial Assurance) of this amendment request discusses the bond or letter of credit and Certificate Holder's conservative approach to determining the amount required.

Information Required Pursuant to OAR 345-027-0060(1)(e) for Compliance with Applicable Council Standards, Laws, and Council Rules

This section analyzes the relevant council standards listed under OAR 345-027-0060(1)(e). The standards are organized under Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities)

(e) A list of the Council standards relevant to the proposed change.

Response: The relevant EFSC standards to the proposed amendment include Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). The Facility is a wind power generating facility. Accordingly, Division 23, which applies to nongenerating facilities, does not apply. Similarly, inapplicable provisions of Division 24 (e.g., standards applicable to gas plants, gas storage, nongenerating facilities) are not discussed.

5.1 Division 22 Standards

The following Division 22 standards are addressed:

- OAR 345-022-0000 General Standard of Review
- OAR 345-022-0010 Organizational Expertise
- OAR 345-022-0020 Structural Standard
- OAR 345-022-0022 Soil Protection
- OAR 345-022-0030 Land Use
- OAR 345-022-0040 Protected Areas
- OAR 345-022-0050 Retirement and Financial Assurance
- OAR 345-022-0060 Fish and Wildlife Habitat
- OAR 345-022-0070 Threatened and Endangered Species
- OAR 345-022-0080 Scenic Resources
- OAR 345-022-0090 Historic, Cultural and Archaeological Resources
- OAR 345-022-0100 Recreation
- OAR 345-022-0110 Public Services
- OAR 345-022-0120 Waste Minimization

The requirements of each applicable EFSC standard are outlined below, along with Certificate Holder's responses.

5.1.1 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 ORS 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to ORS

469.501 or the overall public benefits of the facility outweigh the damage to the resources protected by the 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: EFSC previously found that the Facility complies with the requirements of its statutes.² There is sufficient evidence in this amendment request upon which to base a finding that the Facility, as proposed, continues to comply with the requirements of its statutes. Thus, EFSC may rely on its previous findings and the information provided in this amendment request to determine that the Facility, as amended, satisfies OAR 345-022-0000(1).

5.1.2 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.

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program.

(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.

(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

Response:

A. Certificate Holder’s Expertise

² Final Order on Amendment No. 2, p. 16 (January 30, 2015).

EFSC previously found that the Facility, as amended, “satisfies the Organizational Expertise standard.”³ No circumstances have changed that warrant reconsideration of this prior finding. Thus, EFSC may rely on its previous findings and determine that the Facility, as amended, satisfies OAR 345-022-0010.

B. Third-Party Permits

EFSC has previously found that third parties either have any necessary permits or have a reasonable likelihood of obtaining any necessary permits.⁴ The proposed amendment does not affect this previous finding.

5.1.3 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 site as to Maximum Considered Earthquake Ground Motion identified for the site in the 2009 International Building Code and maximum probable ground motion, taking into account ground failure and amplification for the site specific soil profile under the maximum credible and maximum probable seismic events; and

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from maximum probable ground motion events. As used in this rule “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement, and subsidence;

(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 presented by the hazards identified in subsection (c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Response: OAR 345-022-0020 authorizes EFSC to issue a site certificate without making findings with respect to the Structural Standard,⁵ but the rules also authorize EFSC to impose site certificate conditions based on the requirements of OAR 345-022-0020. EFSC addressed the Structural Standard in Section V.A of the Final Order on Amendment No. 2 and imposed five conditions in Section V.A of the Second Amended Site Certificate to ensure compliance with the Structural Standard.⁶ Certificate Holder proposes to amend the site boundary to include approximately 200 acres of new land. Although not previously included in the site boundary, this land is adjacent to and in the vicinity of the existing site boundary. At the same time, Certificate Holder is removing approximately 2,800 acres of land from the site boundary. In total, the proposed amendments will reduce the size of the site boundary by approximately 2,600 acres. The original seismic analysis covers site-specific faults and regional seismicity. The additional areas will not cross any active faults and therefore will not increase the

³ Final Order on Amendment No. 2, p. 17 (January 30, 2015).

⁴ Final Order on Amendment No. 2, p. 11 (January 30, 2015).

⁵ ORS 469.501(4).

⁶ Final Order on Amendment No. 2, p. 20 (January 30, 2015).

potential for fault rupture or overall seismic hazard. No liquefiable soils are present in the additional parcels. The soil site class, underlying bedrock, and maximum credible earthquake and maximum probable earthquake within the additional parcels are consistent with those on the site and the regional and site-specific seismicity, and as such will not be subject to seismic hazards. In addition, no turbines will be constructed on the additional parcels; they are intended for possible use as construction-related laydown areas and crane paths, access roads, and collector lines.

Further, Certificate Holder is obligated to submit a preconstruction site-specific geotechnical investigation report to the Oregon Department of Geology and Mineral Industries, which will include a slope stability analysis, soil classifications, depth to rock, and recommendations for foundations, excavations, slopes, and road sections. The findings of the geotechnical analyses will be used for final micro-siting of turbines, safe foundation design, and appropriate structural design to resist earthquake damage to facilities. See Conditions V.A.1 and V.A.2. For these reasons, EFSC may conclude that the proposed amendment does not affect EFSC's ability to find that the construction and operation of the Facility will be consistent with the Structural Standard. OAR 345-022-0020 is met and no new or revised conditions of approval are necessary.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Response: This rule is not applicable.

5.1.4 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: EFSC previously found that the Facility would comply with the Soil Protection Standard.⁷ The proposed amendment will amend the site boundary to include land. The soil types and slopes in the additional parcels are consistent with soils and slopes analyzed for other areas within the site boundary. The soil in the new parcels consists primarily of Walla Walla silt loam, with slopes less than 15 percent. These soils are used for dryland wheat/alfalfa/pasture but are only considered "Prime Farmland" if irrigated. These are considered "not highly erodible." Certificate Holder's sediment and erosion control plan applies to soils with similar properties across the site, and will cover all soil disturbance. In addition, Certificate Holder is obligated to satisfy Conditions IV.E.1 through IV.E.6 which further assures that the Facility, during construction and operation, will not result in significant adverse impacts to soils. For these reasons, EFSC may conclude that the proposed amendment does not affect EFSC's ability to find that the construction and operation of the Facility will be consistent with the Soil Standard. OAR 345-022-0022 is met and no new or revised conditions of approval are necessary.

5.1.5 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:

⁷ Final Order on Amendment No. 2, p. 20 (January 30, 2015).

(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(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).

(3) As used in this rule, the “applicable substantive criteria” are criteria from the affected local government’s acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

(5) If the Council finds that applicable substantive local criteria and applicable statutes and state administrative rules 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.

(6) If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(10)(a)(C) to (E) or for a related or supporting facility that does not pass

through more than one local government jurisdiction or more than three zones in any one jurisdiction, the Council shall apply the criteria recommended by the special advisory group. If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(10)(a)(C) to (E) or a related or supporting facility that passes through more than one jurisdiction or more than three zones in any one jurisdiction, the Council shall review the recommended criteria and decide whether to evaluate the proposed facility against the applicable substantive criteria recommended by the special advisory group, against the statewide planning goals or against a combination of the applicable substantive criteria and statewide planning goals. In making the decision, the Council shall consult with the special advisory group, and shall consider:

(a) The number of jurisdictions and zones in question;

(b) The degree to which the applicable substantive criteria reflect local government consideration of energy facilities in the planning process; and

(c) The level of consistence of the applicable substantive criteria from the various zones and jurisdictions.

Response: EFSC previously concluded that the Facility complied with the Land Use Standard.⁸ No changes in the local zoning ordinance or comprehensive plan have occurred since the last amendment. This amendment request proposes changes to the Facility design and site boundary. Even with these changes, the Facility can satisfy the Land Use Standard. The proposed changes in turbine height and rotor diameter do not affect EFSC’s previous findings of compliance with the Land Use Standard because the turbines will be constructed within the previously permitted micrositing corridors and the Facility, as proposed, must still satisfy Conditions IV.D.1 through IV.D.22. Likewise, the proposed adjustments to the site boundary by removing 2,800 acres of land and adding 200 acres of land do not affect EFSC’s previous findings because all new land is zoned EFU and is largely cultivated farmland as topography allows, similar to the land within the previously approved site boundary. The proposed activities on the additional 200 acres of land are the same as those approved on EFU land. The area to be added in the southeast portion of the site boundary, as shown in Figure 2, is also in the Natural Hazards (NH) Combining Zone. The additional area does not cross any active faults that would increase the fault rupture or overall seismic hazard. No liquefiable soils are present. No turbines will be constructed on the portion in the NH zone. The aboveground 230-kV transmission line will cross the NH zone in this area, but siting transmission lines in the NH zone is consistent with the Final Order.⁹ Certificate Holder will submit a site-specific geotechnical investigation report prior to construction to comply with the requirements of the NH Combining Zone in accordance with Condition V.A.1 of the Final Order.

The January 2016 supplement will include additional analysis of specific acreage of disturbance to EFU land to support an EFSC finding that the Facility, as proposed, can comply with the Land Use Standard.

5.1.6 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:

⁸ Final Order on Amendment No. 2, p. 32 (January 30, 2015).

⁹ Final Order on the Application, pp. 43-44 (May 15, 2009).

- (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...*
 - (n) Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;*
 - (o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;*
 - (p) State wildlife areas and management areas identified in OAR chapter 635, division 8.*
- (2) Notwithstanding section (1), the Council may issue a site certificate for a transmission line or a natural gas pipeline or for a facility located outside a protected area that includes a transmission line or natural gas or water pipeline as a related or supporting facility located in a protected area identified in section (1), if other alternative routes or sites have been studied and determined by the Council to have greater impacts. Notwithstanding section (1), the Council may issue a site certificate for surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if other alternative routes or sites have been studied and determined by the Council to be unsuitable.*

(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

Response: EFSC previously found that the Facility met the Protected Areas Standard.¹⁰ EFSC concluded that the Facility would not be located in any protected areas listed in OAR 345-022-0040, and that the design, construction, and operation of the Facility, taking mitigation into account, would likely not result in significant adverse impacts to any protected area.¹¹ This amendment request proposes changes to the Facility design but as discussed below, the proposed amendment makes no changes that would alter the basis upon which EFSC may find that OAR 345-022-0040 is met. Compared to the approved Facility, the proposed amended Facility will include 142 fewer wind turbines, require approximately 2,600 fewer acres, and reduce the total amount of overhead transmission line by approximately 48 percent.

(i) Noise resulting from facility construction or operation;

Response: EFSC previously found that noise associated with the Facility would be inaudible from all protected areas listed in OAR 345-022-0040, except the Columbia Basin Agricultural Research Center. The maximum noise level at the Center would have been approximately 34 dBA, which would be audible at times at a very low level, mostly late at night. EFSC found that noise resulting from Facility construction or operation would not adversely impact the Center. In conjunction with this amendment request, Certificate Holder will submit for EFSC approval prior to construction, a complete new noise analysis for the Facility as designed. The analysis will provide a table listing each noise-sensitive property, as defined in OAR 340-035-0015(38), including the Center and the predicted maximum hourly L₅₀ noise level at each noise-sensitive property.

(ii) Increased traffic resulting from facility construction or operation would not adversely impact Protected Areas.

Response: EFSC previously found that local Facility-related road use during construction and operation would not result in a significant adverse impact to any protected area. The proposed Facility will contain up to 142 fewer turbines than the approved Facility. Because the turbines may be larger than previously approved, construction of individual turbines may require a small increase in truck traffic over construction of individual smaller turbines. Larger turbines will require a larger foundation, which will result in more concrete and steel truckloads per turbine. With added height, the larger turbines could also require more trucks per tower section. The tower section of each turbine may require one or two additional large trucks compared to the original smaller turbines, but the blades (although longer as well) will likely require the same number of trucks per turbine as the smaller turbines (three trucks per turbine). Up to approximately 95 trucks could be required for the foundation and components of each smaller turbine, while up to approximately 140 trucks could be required for each larger turbine. Even with this estimated increase in trucks per turbine, a significantly smaller number of turbines will be constructed, and the total number of estimated trucks generated during construction will be approximately 30 percent lower with the changes proposed in this amendment request.

As was found in the Final Order on the Application, Facility-related road use during construction and operation will not result in a significant adverse impact to any protected area.

(iii) Water Use and Wastewater Disposal.

¹⁰ Final Order on Amendment No. 1, p. 19 (May 11, 2012) and Final Order on Amendment No. 2, p. 35 (January 30, 2015).

¹¹ Final Order on Amendment No. 1, p. 19 (May 11, 2012) and Final Order on Amendment No. 2, p. 34 (January 30, 2015).

Response: The smaller number of turbines will result in a net decrease in truck traffic and use of roads during construction. As a result, water use for dust suppression will be similar to or less than what would have been required for the approved Facility. Although concrete requirements for individual turbine foundations will be greater, owing to the smaller number turbines, the total amount of concrete for foundations will be less. The overall water use and wastewater disposal requirements for the proposed amended Facility will be similar to or less than the amount previously estimated for the approved Facility.

(iv) Visual Impacts.

Response: In the Final Order on the Application (May 15, 2009), EFSC found that turbines would be potentially seen from the following protected areas located within the analysis area:¹²

- John Day Federal Wild and Scenic River
- John Day State Scenic Waterway
- John Day Wildlife Refuge
- Deschutes Federal Wild and Scenic River
- Deschutes State Scenic Waterway
- Lower Deschutes Wildlife Area
- Columbia Hills Natural Area Preserve
- Columbia Basin Agriculture Research Center
- Columbia River Gorge National Scenic Area (CRGNSA) (including Columbia Hills State Park and much of the Columbia Hills Natural Area Preserve)
- Columbia Hills State Park (the Final Order on the Application stated that turbines would not be seen in the Horsethief Lake portion of the park; turbines would have been seen in the upland portions of the park near State Route 14 [SR-14])

The proposed amended Facility will have 142 fewer wind turbines than the approved Facility and will use taller turbines. This amendment request includes an updated visibility analysis of the proposed amended Facility to reflect the smaller number of taller turbines (see Figure 3). As shown in Figure 3, the turbines of the proposed amended Facility will not be seen from the John Day or Deschutes Rivers or their adjacent shorelines.

Under the proposed amendment, the taller turbines will be seen from slightly more high areas on the river's canyon rims and low areas on some canyon walls than the approved smaller turbines. However, the turbines still will not be visible from the water or the interior canyon areas of either river. Therefore, the proposed Facility will not result in significant adverse visual impact on these protected areas.

The Columbia Hills Natural Area Preserve and the Columbia Basin Agriculture Research Center are not managed for scenic quality. Therefore, the visual impact of the proposed Facility will not adversely affect these protected areas. Columbia Hills State Park does not have a management document (or master plan) that contains a visual resource section of relevance to the proposed Facility. The visual impact of the proposed Facility will not adversely affect this protected area.

EFSC previously found that public views of the approved Facility located beyond the CRGNSA from within the CRGNSA would be generally limited to locations along SR-14 in the State of Washington.¹³

¹² Final Order on the Application, p. 84-85 (May 15, 2009).

The proposed Facility will be seen from hillsides above and below SR-14, but these steep areas are not easily accessible to the general public. EFSC previously found that intervening features between the approved Facility and SR-14 (located both within and outside of the CRGNSA) that would be seen from the highway included multiple transmission lines (composed of steel lattice towers and distribution lines), radio towers, rail lines, Interstate 84, Highway 30, and rural development, all of which would have decreased the visual impact of the approved Facility from views originating from the portion of SR-14 in the CRGNSA. The proposed amended Facility will have fewer, but taller, turbines potentially seen from within the CRGNSA. As with the approved turbines, the proposed amended turbines will be seen from most of the sections of SR-14 located within the portion of the CRGNSA contained within the analysis area. They will also be seen somewhat higher on the hillsides above SR-14 and on steep hillsides located below SR-14 and above the Columbia River than the approved turbines. Intervening features between SR-14 and the proposed Facility, such as multiple transmission lines, radio towers, rail lines, I-84, Highway 30, and rural development, will decrease the visual impact of the Facility on views from SR-14. Therefore, as with the approved Facility, the proposed amended Facility will not result in significant adverse impacts on this protected area.

The taller proposed turbines will be visible from one additional protected area that was not previously identified and analyzed. This additional protected area is the Goldendale Fish Hatchery. The Goldendale Fish Hatchery does not have a management document (or master plan) that contains a visual resource section and is not managed for scenic quality. The proposed Facility will not result in significant adverse visual impacts to this protected area.

Impacts to protected areas from the Facility, as proposed, will be substantially similar to those described for the approved Facility. Therefore, for the reasons outlined herein, the proposed amendment makes no changes that would alter the basis for EFSC's earlier findings that OAR 345-022-0040 is met, and no new conditions of approval are warranted.

5.1.7 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: EFSC previously found that Certificate Holder would meet EFSC's Retirement and Financial Assurance Standard.¹⁴ This amendment request proposes to increase the turbine height, decrease the number of turbines from 267 to 125 and removes from the approved related and supporting facilities the 500-kV transmission line and one of the two substations. With the reduction in turbine count from 267 to 125 and the elimination of the 500-kV transmission line and associated substation, the amount of the bond will change from \$16,491,000 (in 2008 dollars). A revised estimate of the retirement cost will be provided in the January 2016 Supplement. Certificate Holder will also submit financial assurance that a bond or letter of credit can be obtained before construction.

(... CONTINUED)

¹³ Final Order on Amendment No. 2, p. 85 (January 30, 2015).

¹⁴ Final Order on Amendment No. 2, p. 36 (January 30, 2015).

5.1.8 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 the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.

OAR 635-415-0025 Requirements (Implementation of Department Habitat Mitigation Recommendations):¹⁵

(1) “Habitat Category 1” is irreplaceable, essential habitat for a fish or wildlife species, population, or a unique assemblage of species and is limited on either a physiographic province or site-specific basis, depending on the individual species, population or unique assemblage.

*(a) The mitigation goal for Category 1 habitat is no loss of either habitat quantity or quality. ****

(2) “Habitat Category 2” is essential habitat for a fish or wildlife species, population, or unique assemblage of species and is limited either on a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.

*(a) The mitigation goal if impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality. ****

(3) “Habitat Category 3” is essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.

*(a) The mitigation goal is no net loss of either habitat quantity or quality. ****

(4) “Habitat Category 4” is important habitat for fish and wildlife species.

*(a) The mitigation goal is no net loss in either existing habitat quantity or quality. ****

(5) “Habitat Category 5” is habitat for fish and wildlife having high potential to become either essential or important habitat.

*(a) The mitigation goal, if impacts are unavoidable, is to provide a net benefit in habitat quantity or quality. ****

(6) “Habitat Category 6” is habitat that has low potential to become essential or important habitat for fish and wildlife.

*(a) The mitigation goal is to minimize impacts. ****

Response: EFSC previously found that the Facility complies with OAR 345-022-0060, Fish and Wildlife Habitat Standard.¹⁶ Acreage impacts to each habitat category and type were depicted in Table P-10 of the ASC.

In an email dated November 18, 2015¹⁷, Jeremy Thompson, District Wildlife Biologist for the Oregon Department of Fish and Wildlife (ODFW), noted that the Golden Hills Wind Farm habitat classifications submitted in the original ASC are still valid. Updated habitat impact calculations will be provided in the January 2016 Supplement to account for the change in Facility design and the new land included in the site boundary. The adequacy of the mitigation site as approved will be evaluated.

¹⁵ The provisions cited under OAR 635-415-0025 are included only in part, rather than in their entirety, for purposes of brevity.

¹⁶ Final Order on Amendment No. 2, p. 24 (January 30, 2015).

¹⁷ Email correspondence between Joel Thompson, Wildlife Biologist and Project Manager/WEST, and Jeremy Thompson, District Wildlife Biologist/ODFW (November 18, 2015).

5.1.9 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: EFSC previously determined that the Facility complies with the Threatened and Endangered Species Standard.¹⁸

Certificate Holder reviewed current data on federal and state listed endangered, threatened, proposed, or candidate plant and wildlife species that have potential for occurrence in the analysis area. U.S. Fish and Wildlife Service (USFWS) and Oregon Department of Agriculture (ODA) data on listed species occurring in the state of Oregon were reviewed (USFWS, 2014; ODA, 2015) to assess potential changes to the status, occurrence, or impacts of the species listed in revised Table Q-1 of Attachment 5 to Certificate Holder's responses to the 2014 *Request for Additional Information* (RAI) on the second amendment (Golden Hills Wind Farm LLC, 2014). All species have maintained the same status reported in the revised Table Q-1 and no additional listed species were identified that have a potential to occur within the project area.

In 2013, WEST, Inc., reviewed a database of Rare, Threatened, and Endangered Species of Oregon (ORBIC, 2013) to assess potential changes to the status, occurrence, or impacts of the species listed in Table Q-1 of the ASC. WEST addressed changes in Attachment 5 of the 2014 RAI of the second amendment.

Based on a review of Exhibit Q of the ASC, Attachment 5 of the 2014 RAI of the second amendment, and current and applicable lists of Endangered, Threatened, Proposed, or Candidate plant and wildlife species (ODA, ORBIC, and USFWS), there is no reason to anticipate any previously unevaluated impacts on threatened and endangered species. Therefore, OAR 345-022-00070 is met.

5.1.10 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.

(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

¹⁸ Final Order on Amendment No. 2, p. 23 (January 30, 2015).

Response: EFSC previously found that Certificate Holder would meet the Scenic Resources Standard.¹⁹ This response analyzes how the proposed reduction in the number of turbines and the increased size of the turbines may change visibility of the Facility within the 10-mile analysis area and concludes that notwithstanding such changes, EFSC may find that the Facility still complies with OAR 354-022-0080.

5.1.10.1 Methodology

Two steps were taken to determine where the tallest turbines will be potentially seen from significant or important scenic resources within the 10-mile analysis area. The first step was to determine if any of the local land use, tribal land management, or federal land plans had been updated since the Final Order on the Application (May 15, 2009) (referenced in this discussion as “Final Order”) was issued. The second step was to conduct a new Zone of Visual Influence (ZVI) analysis within the 10-mile analysis area of the tallest turbines proposed in this request. Based on the ZVI, Certificate Holder analyzed the potential impacts from the proposed turbines and compared those impacts against impacts EFSC previously evaluated when it considered whether the previously approved turbines complied with OAR 354-022-0080 in the Final Order.

5.1.10.2 Analysis

This section describes the two steps performed for the scenic resources analysis.

Step 1: Verify New or Updated Local Land Use Plans, Tribal Land Management Plans, and Federal Land Management Plans. Plans that were identified in the Final Order were reviewed to see if they had been subject to updates that would be of relevance to this amendment request. Table 5-1 identifies the current plans relevant to this amendment request.

TABLE 5-1. Applicable Local Land Use, Tribal Land Management, and Federal Land Management Plans

Plans	Did Plan Identify Significant or Important Scenic Resources of Relevance to this Amendment Request?	What are the Scenic Resources?	Would Components of this Amendment Request Be Visible From the Scenic Resource and Require Impact Analysis?
Management Plan for the Columbia River Gorge National Scenic Area, September, 1992, revised May 10, 2004	Yes	Lands within the Columbia River Gorge National Scenic Area	Yes
Management and Use Plan Update Final Environmental Impact Statement Oregon National Historic Trail and Mormon Pioneer National Historic Trail, August 1999 (Record of Decision issued November 1999).	Yes	Deschutes River Crossing. Biggs Junction John Day River Crossing – McDonald Ferry	No
Lewis and Clark National Historic Trail Comprehensive Plan and Management and Use, January 1982,	No	NA	NA
Lower Deschutes River Management Plan and Final Environmental Impact Statement,	Yes	Lower Deschutes River and corridor	Yes

¹⁹ Final Order on Amendment No. 2, p. 34 (January 30, 2015).

TABLE 5-1. Applicable Local Land Use, Tribal Land Management, and Federal Land Management Plans

Plans	Did Plan Identify Significant or Important Scenic Resources of Relevance to this Amendment Request?	What are the Scenic Resources?	Would Components of this Amendment Request Be Visible From the Scenic Resource and Require Impact Analysis?
January 1993 (Record of Decision issued February 1993).			
Proposed Two Rivers Resource Management Plan Final Environmental Impact Statement, September 1985 (Record of Decision issued June 1986).	Yes (Lower part of Deschutes River in BLM administered land)	Lower Deschutes River and corridor	Yes
Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement, June 22, 1992.	No	NA	NA
Journey Through Time Scenic Byway Management Plan, April 1996 (State Scenic Byway Management Plan referenced in Sherman County Comprehensive Plan).	Yes	Portion of SR 97 passing through analysis area that is the byway	Yes
Comprehensive Plan for Wasco County [Oregon], August 25, 1983.	No	NA	NA
Gilliam County [Oregon] Comprehensive Land Use Plan, October 25.	No	NA	NA
Klickitat County [Washington] Comprehensive Plan, August, 1977	No	NA	NA
Sherman County [Oregon]— Comprehensive Land Use Plan 1994, updated June 2007.	Yes	Rock outcroppings, trees, the John Day River Canyon, the Deschutes River Canyon, and the rural nature of the Sherman County landscape	Yes
Bureau of Land Management— John Day Basin Record of Decisions and Resource Management Plan, April 2015	Yes (John Day River in BLM administered land)	John Day River and corridor	Yes

NA = not applicable

The last two plans described in Table 5-1 were the only plans to have been updated and identify new significant or important resources that must be included in the scenic resource analysis.

Sherman County Comprehensive Land Use Plan, Updated June 2007

This plan contains two new items related to scenic resources that were not previously considered in the Final Order:

- New Goal VI encourages the preservation of the rural nature of the Sherman County landscape.
- Finding X1 identifies more items as important features. It classifies rock outcroppings, trees, the John Day River Canyon, and the Deschutes River Canyon as all-important features of the Sherman County landscape.

Bureau of Land Management—John Day Basin Record of Decisions and Resource Management Plan, April 2015

This finalized resource management plan (RMP) contains several items related to scenic resources that are of particular relevance to lands managed by the BLM for the John Day River and Canyon, a portion of which is within the southeastern part of the 10-mile analysis area. Although the directives contained in the RMP do not apply to private land within, or beyond, the boundary of lands administered by the BLM, they do illustrate how important scenic resources along the John Day River are managed. The relevant management objective (Objective VR1) for scenic resources for BLM lands near much of the John Day River in the analysis area directs the BLM to manage the land to “preserve the existing character of VRM Class I landscape (for Wildernesses and Wilderness Study Areas)...”. Management Action 2 of Objective VR1 instructs the BLM to not permit activities that would result in significant, long-term, adverse effects on the visual resources of the John Day River Canyon in areas normally seen from this river.

Step 2: Conduct New ZVI Analysis. The ZVI model that was developed for the tallest, 158-meter (518-foot) turbines depicts the “worst-case” potential visibility of proposed turbines within a 10-mile radius of the site boundary (see Figure 4). Table 5-2 identifies the significant or important scenic resources within the analysis area and identifies the distance to the closest Facility turbine.

TABLE 5-2. Significant or Important Scenic Resources Within the Analysis Area

Scenic Resource	Distance to Closest Turbine(s) (miles)
Lands within the Columbia River Gorge National Scenic Area	5 miles
State Route 14 within the Columbia River Gorge National Scenic Area	7.5 miles
Lower Deschutes River and corridor	5.5 miles
John Day River and corridor	9 miles
Journey Through Time Scenic Byway	0.3 mile
Rock outcroppings, trees, the John Day River Canyon, the Deschutes River Canyon, and the rural nature of the Sherman County landscape	Rock outcroppings, trees, and the Sherman County landscape adjacent to John Day River Canyon and Deschutes River Canyon – 5 to 5.5 miles

Columbia River Gorge National Scenic Area

As was the case with the approved turbines, the proposed amended turbines will be visible from portions of the CRGNSA. As proposed, the closest turbines will be approximately 5 miles away from the CRGNSA and the most distant will be approximately 17 miles. The increased height of the proposed turbines will not make them significantly more noticeable from within the CRGNSA than the approved turbines, nor will they be seen over a much greater area. Further, the reduction in the number of turbines (from 267 to 125) means that fewer turbines will be seen from within the CRGNSA compared to

the number that EFSC previously found complied with the Scenic Resources Standard (OAR 354-022-0080).

Like with the approved turbines, the proposed amended turbines will be visible from most of the portion of SR-14 that passes through this part of the CRGNSA and serves as a primary viewpoint of the CRGNSA for many people (see Figure 4), as well as from some of the fairly remote, steep, undeveloped hillsides above and below SR-14. The proposed turbines will also be visible from areas farther above and below portions of the hillsides adjacent to SR-14. Unlike the approved turbines, the proposed turbines will be seen from the northern side of the Columbia River and nearby shoreline and from uplands starting in the area adjacent to the community of Wishram and continuing upriver to an area north of Miller Island. The Final Order, pointed out that human-made objects such as transmission lines, wind turbines, railroad tracks, and highways are clearly visible from SR 14 when looking toward the Facility site. The Final Order demonstrated that because of the existence of these human-made objects, the presence of the approved turbines would have less than significant impacts to significant or important scenic resources associated with the CRGNSA. The proposed turbines will likewise be visible from SR 14, as will the human-made objects previously described. Therefore, the proposed turbines will also have less than significant impacts to significant or important scenic resources associated with the CRGNSA.

Oregon National Historic Trail High Potential Sites (the John Day River Crossing [McDonald Ferry], Biggs Junction, and the Deschutes River Crossing)

As a result of topographic screening, the proposed turbines will not be seen from McDonald Ferry, Biggs Junction, or the Deschutes River Crossing.

Lower Deschutes River Canyon

As with the approved turbines, some of the proposed amended turbines will be seen from isolated rims of the Deschutes River Canyon. At the closest portion of the canyon rim from which turbines will be visible, the nearest turbines will be approximately 5.5 miles away. In addition, the proposed turbines will likely be seen from additional remote upper canyon walls from which the approved turbines would not be seen. The proposed turbines, however, will not be visible from the river, shoreline, or interior canyon areas. The Final Order found that the Federal Wild and Scenic Rivers and state scenic rivers and waterways are managed for outstanding scenic quality, but that the management plans for these types of rivers focus on views from the rivers, not from canyon rims.²⁰ Gordon Ridge follows the east side of the Lower Deschutes River Canyon west of the Facility, and in many locations this ridge will block views of turbines (see Photo 1). Consistent with the findings in the Final Order, the Facility, as proposed, will not result in significant impacts to significant or important scenic resources and values of the Lower Deschutes River Canyon.

²⁰ Final Order on the Application, p. 88 (May 15, 2009).



Photo 1. Gordon Ridge looking northwest from near Gordon Ridge Road. The edge of the Lower Deschutes River Canyon can be seen on the left side of the photo. The ridge slopes down on the right side to the area where the Golden Hills Wind Farm will be located and the ridge will block views of the wind farm from much of the canyon.

John Day River Canyon

The proposed turbines will be located farther from the John Day River than the Deschutes River, and will be separated from the John Day River by a number of intervening wind projects and transmission lines (see Photo 2). Turbines will be potentially visible in very remote portions of upper rims of the John Day River Canyon. No turbines will be seen from the river, its shoreline, or lower canyon areas. Consistent with the findings in the Final Order, the Facility, as proposed, will not result in significant impacts to significant or important scenic resources associated with the John Day River Canyon.



Photo 2. Northeast view from Starvation Lane of the area between the west edge (the “hill” on which the electrical transmission line towers are located) of the John Day River Canyon and the Facility project area (which is approximately 9 miles to the west) that contains wind farms and electrical transmission lines.

Journey Through Time Scenic Byway

As with the approved turbines, the proposed amended turbines will be visible in the foreground and middleground of the byway (US 97) for approximately 12 miles between south of Moro and north of Biggs. As discussed in the Final Order (page 88), the Facility will be compatible with the master plan for the Journey Through Time Scenic Byway, which does not identify any significant or important scenic values in the analysis area. Further, the amendment request supports Sherman County’s marketing efforts that promote the existing wind farms in Sherman County. These efforts include two tourist brochures titled “Get Up and Close With Oregon’s Wind Farms: Self-Guided Wind Farm Driving Tour” and “Windmills and Wheat Fields Scenic Cycling Tour through Sherman County” (Sherman County, no date). For these reasons, EFSC may conclude that the Facility, as proposed, will not result in significant impacts to the byway.

Sherman County Comprehensive Plan

The *Sherman County Comprehensive Plan* (Sherman County, June 2007 revision) identified resources such as trees, rock outcroppings, the John Day and Deschutes River canyons, and the rural nature of the Sherman County landscape. Like the approved turbines, the proposed amended turbines will not impact tree or rock outcroppings, and as described above, will not significantly impact the John Day and Deschutes River canyons. The proposed Facility will add large-scale wind generation elements to the landscape of Sherman County, but will not remove significant amounts of wheat fields, farms, or other elements that contribute the rural character of Sherman County. The proposed turbines will be similar in appearance and character to turbines featured in Sherman County tourism brochures such as *Windmills & Wheatfields: Scenic Cycling Tour Through Sherman County* (Sherman County, 2015a) and *Windmills and Wheatfields: Oregon Wind Farm Driving Tour* (Sherman County, 2015b) that celebrate the rural

character of Sherman County along with the County’s unique position as “Oregon’s #1 wind farm region.” Therefore, the Facility will be consistent with the intent of preserving the resources identified in the comprehensive plan.

5.1.10.3 Conclusions

In accordance with the Final Order and the discussion above, the construction and operation of the Facility, as proposed, will not result in significant adverse impacts to scenic resources and values identified as significant or important in local land use, tribal land management, and federal land management plans for any lands within the Facility’s analysis area. The amendment request makes no changes that would alter the basis for EFSC’s earlier findings and EFSC may conclude that OAR 345-022-0080 is met.

5.1.11 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 ORS 358.905(1)(c); and

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

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Response: EFSC previously found that the Facility satisfied the Historic, Cultural, and Archaeological Resources Standard.²¹ Prior to construction, Certificate Holder must consult with SHPO (Condition V.B.3) and provide the Department with a map showing the final design locations of the Facility in relation to areas previously surveyed (Condition V.B.4). If there are additional areas of ground-disturbing activities, Certificate Holder must consult with SHPO and determine whether there will be additional impacts to cultural resources, which could require surveying these new areas. The proposed Facility must comply with these and all other historic, cultural, and archaeological resource conditions of approval. Accordingly, the Council may find that the construction and operation of the Facility, as amended, will not result in significant adverse impacts to historical, cultural or archeological resources and OAR 345-022-0090 is satisfied.

5.1.12 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;

²¹ Final Order on Amendment No. 2, p. 85 (January 30, 2015).

(c) Outstanding or unusual qualities;

(d) Availability or rareness;

(e) Irreplaceability or irretrievability of the opportunity.

Response:

EFSC previously found that the Facility satisfied the Recreation Standard.²² This section discusses how, and if, the proposed changes to the Facility would change the basis for EFSC’s finding of compliance with OAR 345-022-0100. The analysis area for impacts on recreational opportunities encompasses the area within the site boundary and five miles beyond the site boundary.

The analysis area is modified slightly from that analyzed in the ASC and described in the Final Order²³. Generally, the analysis area is smaller, because parcels have been removed from the site boundary along the north and southeast edges. The addition of parcels in the interior of the site boundary and along the east and west edges does not have a significant impact on the analysis area. Modifications to the analysis area do not change the recreational opportunities from those identified in the ASC and Final Order.

5.1.12.1 Noise Resulting from Facility Construction or Operation

The noise analysis conducted for the Final Order on the Application indicated that the approved Facility will be inaudible from all recreational opportunities in the analysis area except the Oregon National Historic Trail, the Journey Through Time Scenic Byway, and DeMoss Springs Memorial Park.²⁴ The modifications proposed in this amendment request will still comply with noise conditions described in the site certificate. Noise from the proposed Facility will still be audible at these three recreational opportunities. However, for the same reasons previously cited by EFSC, audible noise will not adversely affect recreation in these areas.

Oregon National Historic Trail. At the Oregon National Historic Trail, EFSC previously found that there are no intact trail segments or developed facilities associated with the Trail in the analysis area, so there will be no noise impacts to recreational use of the Trail from the Facility. The proposed modifications to the Facility do not change this finding.

Journey Through Time Scenic Byway. Similarly, EFSC previously determined that because activities associated with the Journey Through Time Scenic Byway primarily involve auto touring, noise resulting from the approved Facility would not be heard from inside a moving or closed vehicle, or would be drowned out by highway noise, so no adverse noise impacts to this recreational opportunity would occur.²⁵ The proposed changes do not affect the basis for this finding.

DeMoss Springs Memorial Park. EFSC previously found that the maximum noise level at DeMoss Springs Memorial Park would be approximately 48 dBA²⁶. EFSC determined that this noise level would be audible, but would be below the Oregon Department of Environmental Quality (ODEQ) limit of 50 dBA. EFSC concluded that noise resulting from the approved Facility construction or operation would not adversely affect recreation opportunities. Because the proposed Facility will comply with noise requirements, including the 50-dBA noise limit, EFSC may rely on its previous finding that no significant

²² Final Order on Amendment No. 2, p. 42 (January 30, 2015).

²³ Final Order on the Application, p. 89 (May 15, 2009).

²⁴ Final Order on the Application, p. 89-94 (May 15, 2009).

²⁵ Final Order on the Application, p. 89 (May 15, 2009).

²⁶ Final Order on the Application, p. 94 (May 15, 2009).

adverse effect to this recreational opportunity would occur. As required under Condition VI.A.1.2, Certificate Holder will submit, for ODOE approval before construction, a complete new noise analysis for the Facility as designed. This analysis will demonstrate compliance with the relevant noise requirements and confirm that audible noise at the DeMoss Springs Memorial Park will be below ODEQ limits. Therefore, the EFSC may rely on its previous finding that noise at the DeMoss Springs Memorial Park will not adversely affect recreational opportunities.

5.1.12.2 Traffic Resulting from Facility Construction or Operation

The Final Order on the Application²⁷ concluded that temporary traffic impacts would occur to the Journey Through Time Scenic Byway during construction. These impacts could include short-term traffic delays on US 97 and local roads. However, the existence of several passing lanes on US 97 would alleviate potential impacts along the travel corridor. Traffic impacts on other recreational facilities were determined to be negligible. Although the individual turbines proposed under this amendment request will be larger and require more concrete than previously analyzed, the smaller number of turbines will result in a net decrease in truck traffic during construction of approximately 30 percent below the previous estimate, as described in Section 5.1.6 (Protected Areas). Therefore, the proposed modifications will result in lower temporary construction impacts to recreational opportunities and EFSC can rely on its previous findings that there would be no significant traffic impact to recreational facilities resulting from construction or operation of the Facility.

5.1.12.3 Visual Impacts of Facility Structures

As described in the Final Order on the Application²⁸, turbines would be visible from six of the identified recreational opportunities in the analysis area (CRGNSA, Journey Through Time Scenic Byway, Lewis and Clark National Historic Trail interpretive site at the Maryhill Museum of Art, Maryhill Museum of Art, Maryhill's Stonehenge, and DeMoss Springs Memorial Park). Visibility of the proposed turbines and the changes resulting from the modifications described in this amendment request are detailed in Section 5.1.10, Scenic Resources. Turbines described in this amendment request will still be seen from the same six recreational areas, although fewer turbines will be visible because fewer turbines will be built. The modified turbines proposed in this request will be visible from additional portions of two of the identified recreational areas: CRGNSA and the Deschutes River Corridor.

Columbia River Gorge National Scenic Area. Turbines described in this amendment request will be seen from certain areas of the CRGNSA from which the approved turbines would not have been visible. The additional areas within the CRGNSA from which turbines will now be visible include a portion of the waters, shoreline, and uplands along the north side of the Columbia River, between the community of Wishram and an area north of Miller Island. In addition, the turbines will be seen from more of the hillsides above and below SR-14. However, these steep hillsides areas are not easily accessible to the general public. EFSC previously found that existing features, including steel lattice towers, transmission lines, grain elevators, rail lines, the community of Biggs, and interstate highway and rail development affect views toward the approved Facility from viewing locations within the CRGNSA. The proposed modifications will not change this finding and EFSC may rely on its previous conclusion that the visual impacts of the proposed Facility on the CRGNSA would be negligible.²⁹

Deschutes River Corridor. As described in Section 5.1.6, Protected Areas, and Section 5.1.10, Scenic Resources, the turbines described in this amendment will be seen from the upper portions of some

²⁷ Final Order on the Application, pgs. 88-94 (May 15, 2009).

²⁸ Final Order on the Application, pgs. 88-94 (May 15, 2009).

²⁹ Final Order on the Application, p. 89 (May 15, 2009).

remote canyon rims and lower portions of some canyon walls from which the approved turbines would not be seen. However, like the approved turbines, the proposed amended turbines will not be visible from the river portion of this protected river corridor. Because turbines described in this amendment request will not be seen from the Deschutes River or the Deschutes River State Recreation Area, their presence will have negligible impacts on this important recreational opportunity.

Conclusion. For the same reasons stated in the Final Order on the Application, EFSC may rely on its previous findings to conclude that design, construction, and operation of the proposed modified Facility, taking into account mitigation and subject to the conditions previously approved, are not likely to result in significant adverse impact to important recreational opportunities in the analysis area. Therefore, OAR 345-022-0100 is met.

5.1.13 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.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Response: The proposed amendment makes no changes that would alter the basis for EFSC's earlier findings that OAR 345-022-0110 is met. An updated public service provider list was provided in Request for Amendment No. 2 and confirmed that the needed public services and public service providers were still available to serve the Facility without causing a significant adverse impact on the ability of the public and private providers. As described in this amendment request, the proposed changes will reduce the number of turbines and overall disturbance to the project area. The proposed changes will generally maintain or reduce the number of employees required for construction and operation of the Facility, and will not increase the number of people requiring housing or public services. For these reasons and based on the information provided below, the Council may find that the Facility, as proposed, satisfies the Public Services Standard, subject to Conditions V.C.1 through V.C.13.

5.1.13.1 Sewers and Sewage Treatment

No significant change to impacts on sewers or sewage treatment during construction or operations will occur based on the changes described in this amendment request. Consistent with EFSC's previous finding, no significant adverse impacts to sewers and sewage treatment are anticipated.

5.1.13.2 Water

No significant change to water use during construction or operations will occur based on the changes described in this amendment request. Although individual turbine foundations will be larger for the taller turbines, the total number of turbines will be less than half of the approved number and the total volume of concrete will be smaller than previously approved. Because construction traffic will be reduced as described in Section 5.1.13.6, water requirements for dust suppression will be similar to or less than requirements for the larger number of turbines. Therefore, overall water usage during construction will be the same or less than the amount previously approved. Water use during operations will also be similar to or less than the amount previously approved. Consistent with EFSC's previous finding, no adverse impacts to the local water supply are anticipated.

5.1.13.3 Stormwater Drainage

Construction-related stormwater drainage impacts could occur during construction of the proposed Facility, likely from road, turbine foundation, and staging area construction. The disturbance area for proposed project construction will be smaller than the previously approved disturbance area due to the decrease in turbines and modified layout, and therefore stormwater drainage impacts during construction and operations will be less than the amount previously approved. This conclusion will be confirmed in the January 2016 Supplement with the updated disturbance area calculations. However, all phases of construction of the project are subject to Condition IV.E.I of the Site Certificate, which requires Certificate Holder to conduct all construction work in compliance with an Erosion and Sediment Control Plan satisfactory to DEQ and as required under the National Pollutant Discharge Elimination System 1200-C permit.

5.1.13.4 Solid Waste Management

The quantity of solid waste generated during construction and operation of the proposed modified Facility will be similar to or less than the quantity presented in the Final Order on the Application. Although individual turbines will be larger, the reduction in number of turbines means that the total quantity of material for the project is reduced. This estimate will be confirmed in the January 2016 Supplement that will contain the updated retirement cost estimate and waste quantity calculations. At the time of the Final Order, the nearest landfill, the Columbia Ridge Recycling and Landfill, had not projected to reach capacity for at least 56 years. There has been no significant change to landfill availability or capacity since the previous finding. Therefore, no significant adverse impact on landfill operations that provide solid waste management services in the area is anticipated.

5.1.13.5 Housing

No adverse impacts to housing in the analysis area are anticipated as a result of the proposed project. The amount of temporary and permanent employees is anticipated to be similar to those presented in the Final Order.

5.1.13.6 Traffic Safety

The individual turbines proposed under this amendment request will be larger than the approved turbines. As a result, individual turbine foundations will require more concrete (and therefore, a greater number of concrete truck trips) than previously analyzed. However, the smaller number of turbines will result in a net decrease in total concrete needs, and the individual turbines will require a similar number of trucks to those previously estimated. Therefore, there will be a net decrease in construction truck traffic of approximately 30 percent below the previous estimate, as described in Section 5.1.6 (Protected Areas). The proposed modifications will result in lower temporary construction impacts on traffic safety and EFSC can rely on its previous findings that no significant traffic impacts will result from construction or operation of the Facility. All required permits for traffic impacts will be coordinated with and obtained from Sherman County and the Oregon Department of Transportation (ODOT).

5.1.13.7 Police and Fire Protection

Because there will be no significant change to construction or operations employment levels, the proposed changes to the Facility are not anticipated to result in additional adverse impacts to fire protection and emergency services, nor will the changes affect Certificate Holder's ability to comply with the conditions and requirements provided in the Final Order on Amendment No. 2.

5.1.13.8 Health Care

Because there will be no significant change to construction or operations employment levels, the proposed changes to the Facility will not result in additional impacts to medical services in the analysis

area nor affect Certificate Holder’s ability to comply with the conditions and requirements provided in the Final Order on Amendment No. 2.

5.1.13.9 Schools

Because there will be no significant change to construction or operations employment levels, the proposed changes to the Facility will not result in additional impacts to schools in the analysis area nor affect Certificate Holder’s ability to comply with the Site Certificate and fulfill the conditions and requirements as provided in the Final Order on Amendment No. 2.

5.1.14 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.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Response: Waste generated during operation of the proposed Facility will be similar to or less than the quantity analyzed previously because of the reduction in number of turbines requiring maintenance. Nonhazardous solid waste generated during construction will consist of the same elements previously analyzed: concrete and wood waste from turbine pad construction; scrap steel from turbine construction; and miscellaneous materials such as packing materials for turbine parts and electrical equipment, and erosion control materials. Although the larger individual turbines will generate more construction waste than previously estimated, the reduction in number of turbines results in a net reduction in quantity of waste materials generated. As previously described in Exhibit V of the ASC³⁰, the Certificate Holder plans to minimize construction waste through detailed estimating of materials needs and through efficient construction practices that will recycle as much as is practicable. Wastewater from vehicle washdown will be similar to or less than previously estimated because of the net reduction in total concrete needs. Wastewater from portable toilets will be similar to or less than previously estimated because the construction workforce will be similar to that previously estimated for the approved Facility. The proposed amendment makes no changes that would alter the basis for EFSC’s earlier findings nor change the Certificate Holder’s ability to comply with any requirements and conditions issued by the EFSC. Therefore, OAR 345-022-0120 is met.

5.2 Division 24 Standards

The following Division 24 standards are addressed:

³⁰ Golden Hills Wind Farm LLC. 2008. *Application for Site Certificate—Exhibit V, Waste Minimization.*

- OAR 345-024-0010 Public Health and Safety Standards for Wind Energy Facilities
- OAR 345-024-0015 Cumulative Effects Standards for Wind Energy Facilities
- OAR 345-024-0090 Transmission Lines

5.2.1 OAR 345-024-0010, Public Health and Safety Standards for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:

(1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.

(2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

Response:

EFSC previously found that the Facility complies with the Public Health and Safety Standards for Wind Energy Facilities.³¹ Although the proposed towers and blades may be taller and longer, as described in the Final Order on the Application,³² tower and blade design will be by a major wind turbine manufacturer, and the structures will be installed per manufacturer requirements. The turbines have automated cutoff devices to shut the equipment down when the wind is very strong and the turbine reaches the cutout speed. Periodic inspections of all turbine equipment will be conducted per the manufacturer's specifications.

Each turbine will be equipped with vibration sensing equipment that will shut the turbine down if abnormal levels of vibration are detected. In the unlikely event of a blade defect, the preceding vibration caused by aerodynamic or structural flaws will trigger a shut down in order to prevent the type of failure that might create a personnel hazard. During operations, all electrical components, such as the substations and turbines, will be locked and accessible only by authorized personnel. Additionally, the project changes eliminate the need for one of the two approved transmission lines, which, as described in the Final Order, can have adverse health impacts. Therefore, the changes described in the proposed amendment will not alter the basis for EFSC's earlier findings nor change the applicants ability to comply with any requirements and conditions issued by EFSC and therefore EFSC may find that OAR 345-024-0010 is satisfied.

5.2.2 OAR 345-024-0015 Cumulative Effects Standard for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

(1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.

(2) Using underground transmission lines and combining transmission routes.

(3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.

³¹ Final Order on Amendment No. 2, p. 47 (January 30, 2015).

³² Final Order on the Application, p. 95 (May 15, 2009).

(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.

(5) Designing the components of the facility to minimize adverse visual features.

(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.

Response: EFSC previously found that the Facility complies with the Siting Standards for Wind Energy Facilities.³³ The proposed changes will not change the Facility's reliance on existing roads where possible. The proposed changes in Facility layout result in a net reduction in the total length of transmission lines required for the project, and do not change the approach of using underground transmission lines where possible. The proposed amended Facility layout will combine transmission routes by use of the existing Hay Canyon 230-kV transmission line for the majority of the transmission route.

As described in Section 5.1.10 (Scenic Resources) above, although the proposed turbines will have an increased height, the changes to visual impact on protected areas or public viewing areas will not be significant. Proposed changes will not significantly affect wetlands or other waters of the state because the Facility construction will avoid impacts to wetlands through boring or rerouting facilities around these features. The proposed changes will result in a net reduction of impact to fish and wildlife habitat because there will be a net reduction in disturbance area for the project, and other construction methodologies and commitments will be met as approved. The proposed amendment makes no changes that would alter the basis for EFSC's earlier findings that OAR 345-024-0015 is met.

5.2.3 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: EFSC previously found that the Facility complies with this standard.³⁴ The proposed amendment modifies the previously approved collector line route, removes the 500-kV transmission line, and extends the 230-kV transmission line. The analysis presented in the ASC did not rely on the length or exact location of the lines, and therefore the changes proposed in this amendment request do not change the conclusions of that analysis.

As stated in Section 1.3.3 (Changes to Related and Supporting Facilities) above, EFSC previously approved approximately 11 miles of 500-kV transmission line to the John Day Substation, and 0.7 mile of 230-kV transmission line to the Klondike Substation, for a total of approximately 11.7 miles of high-voltage transmission. Certificate Holder proposes to eliminate the 500-kV transmission line and construct less than 5 total miles of 230-kV line. Further, the closest distance between the 230-kV transmission centerline route and the nearest residence is 1,600 feet, a distance that is substantially greater than the 200 feet stated in the original analysis provided in Exhibit AA of the ASC and required

³³ Final Order on Amendment No. 2, p. 20 (January 30, 2015).

³⁴ Final Order on the Application, p. 106 (May 15, 2009).

under Condition VI.A.4.1 in the Final Order. Although the collector line route has been adjusted to meet the needs of the modified turbine layout, the total length of collector line will be similar to or less than that previously authorized. Because the previous analysis did not rely on the length of transmission or collector line, and because other aspects of these lines will be the same as previously analyzed, the conclusions of the original analysis are still valid and the criteria presented in OAR 345-024-0090 will not be exceeded.

For the same reasons stated in the Final Order, EFSC may rely on its previous findings to conclude that Certificate Holder can design, construct, and operate the proposed 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, and induced currents will be as low as reasonably achievable. Therefore, OAR 345-024-0090 is met.

OAR 345-027-0060(1)(f) for Compliance with Other Applicable Requirements

This section analyzes the relevant council standards listed under OAR 345-027-0060(1)(f).

(f) An analysis of whether the facility, with the proposed change, would comply with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances if the Council amends the site certificate as requested. For the purpose of this rule, a law, rule or ordinance is “applicable” if the Council would apply or consider the law, rule or ordinance under OAR 345-027-0070(10).

Response: Certificate Holder demonstrates that the Facility, as amended, will comply with the applicable requirements outlined in OAR 345-027-0060(1)(f).

6.1 DEQ Noise Control Regulations—OAR 340-035-0035

The Oregon Department of Environmental Quality (DEQ) noise regulations for industrial and commercial noise sources are established under OAR 340-035-0035. More specifically, OAR 340-035-0035(1)(b)(B)(iii) establishes the noise standards for noise levels generated by a wind energy facility. In Section III.B.4.a of the Final Order on Amendment No. 2 (January 30, 2015, at p. 51-52), the Council found that the Facility would meet applicable DEQ noise standards, subject to four conditions of approval (Conditions VI.A.I.1 through VI.A.I.4). As noted in the Final Order on Amendment No. 2, Condition VI.A.I.2 requires a new noise analysis be submitted to the department prior to construction that demonstrates the Facility, as proposed, will comply with all relevant noise related requirements. Consistent with the record in this proceeding and in Final Orders previously issued, Certificate Holder has multiple means to demonstrate compliance, including (1) eliminating or moving turbine locations within the approved corridors, (2) altering the turbine selection, (3) documenting that the hourly L₅₀ noise levels caused by the Facility at any noise-sensitive property will not cause the hourly L₅₀ to increase by more than 10 dBA, and 4) obtaining a legally-effective easement or real covenant. Nothing in this amendment request alters the Facility’s ability to comply with OAR 340-035-0035 or the four noise-related conditions of approval (Conditions VI.A.I.1 through VI.A.I.4). Therefore, OAR 340-035-0035 is met.

6.2 Department of State Lands (DSL) Removal/Fill Regulations—ORS 196.795 to .990, OAR 141-085-0500 to -0785, and Section 404 of the Clean Water Act

The Oregon Removal-Fill Law (ORS 196.795 to .990) and regulations (OAR 141-085-0500 to -0785) adopted by DSL require a Removal/Fill Permit if 50 cubic yards or more of material is removed, filled, or altered within any “waters of the state” at the proposed site. The Council must determine whether a permit is needed. In addition to the DSL regulations, the USACE administers Section 404 of the Clean Water Act, which regulates the discharge of fill into waters of the United States (including wetlands). Under Section 404, a federal Nationwide or Individual fill permit may be required if waters of the United States are affected by project construction or operation.

The Facility can be constructed and operated without triggering the need for a Removal/Fill Permit from DSL or a Section 404 permit from the USACE because wetlands, waters of the state, and waters of the

United States will be avoided. A wetland delineation report was prepared for the Golden Hills Wind Farm in June 2007 as part of the ASC. EFSC previously found that the Facility could avoid impacts to identified wetlands by boring under identified wetland and creek crossings. These will be directionally drilled, with the bore starting 50 feet from the edge of the wetland area. Restoration will be to backfill the borehole after the cable is installed and then reseed disturbed areas as required by the Revegetation Plan. Nothing in this amendment request changes Certificate Holder’s commitment to avoid impacts to jurisdictional waters. Further, prior to construction, Certificate Holder will conduct an updated wetland delineation to confirm that the final Facility design will not have any impacts to jurisdictional waters.

Consistent with the Final Order on the Application,³⁵ EFSC may conclude that the conditions of ORS 196.795 to .990, OAR 141-085-0500 to -0785, and Section 404 of the Clean Water Act are met.

6.3 Groundwater Act of 1955—ORS 537.505 to .796, and OAR Chapter 690

Through the provisions of the Groundwater Act (GWA) of 1955, ORS 537.505 to .796, and OAR Chapter 690, the Oregon Water Resources Commission administers the rights of appropriation and use of the groundwater resources of the state. Under OAR 345-022- 0000(1), the Council must determine whether the Facility complies with these statutes and administrative rules. Section V.1(c) of the Final Order finds that Certificate Holder’s proposed use of groundwater would be consistent with (1) the GWA and Oregon Water Resources Department statutes, (2) administration regarding rights of appropriation, and (3) the uses of state groundwater resources. As described in the response to OAR 345-022- 0110 (Public Services), the amendment request does not increase the quantity of water used during construction or operation. The request does not significantly change the quantity of water used and wastewater generated during operations from what was originally authorized in the Site Certificate. As previously approved, water for operations will come from a new well at the O&M facility. The new well will provide less than 5,000 gallons per day, and because of its limited output, is not required to obtain a state water withdrawal permit. The modifications proposed in this amendment request do not affect Certificate Holder’s ability to comply with the Site Certificate, and therefore, EFSC may conclude that the conditions of OAR Chapter 690 are met.

6.4 State Highway Access and Crossings —OAR Chapter 734, Divisions 51 and 55

Under OAR Chapter 734, Division 51, ODOT regulates highway approaches and access control. In particular, pursuant to OAR 734-051-0070, an Approach Permit is required for a new approach (permanent or temporary) to a state highway. As described in the Final Order, Certificate Holder is coordinating with ODOT about one proposed new access point and improvements to two existing access points along Highway 206. As described in the Final Order, Certificate Holder is also coordinating with ODOT about one new access point and improvements to one existing access point along Highway 97. Therefore, EFSC may conclude that the conditions of OAR Chapter 734, Divisions 51 and 55 are met.

6.5 Public Health and Safety—ORS 469.310

Under ORS 469.310, the Council must ensure that the “siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety....”

³⁵ Final Order on the Application, p. 75 (May 15, 2009).

The state siting statute also provides that “the site certificate shall contain conditions for the protection of the public health and safety...” In Section VI.A.4.1-3 of the Final Order, the Council imposed conditions of approval to address public health and safety issues including and coordination with the Public Utilities Commission on design and specifications for transmission lines and with respect to fire protection. Specific public health and safety requirements for wind facilities are addressed in the response to OAR 345-024- 0010. This amendment request does not change the information presented in the Final Order or Certificate Holder’s ability to comply with the Site Certificate. Therefore, EFSC may conclude that the conditions of ORS 469.310 are met.

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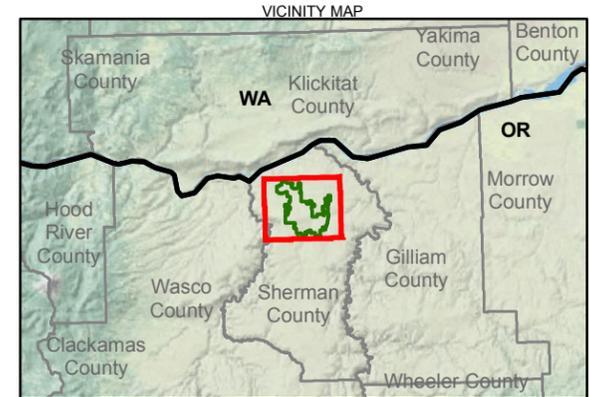
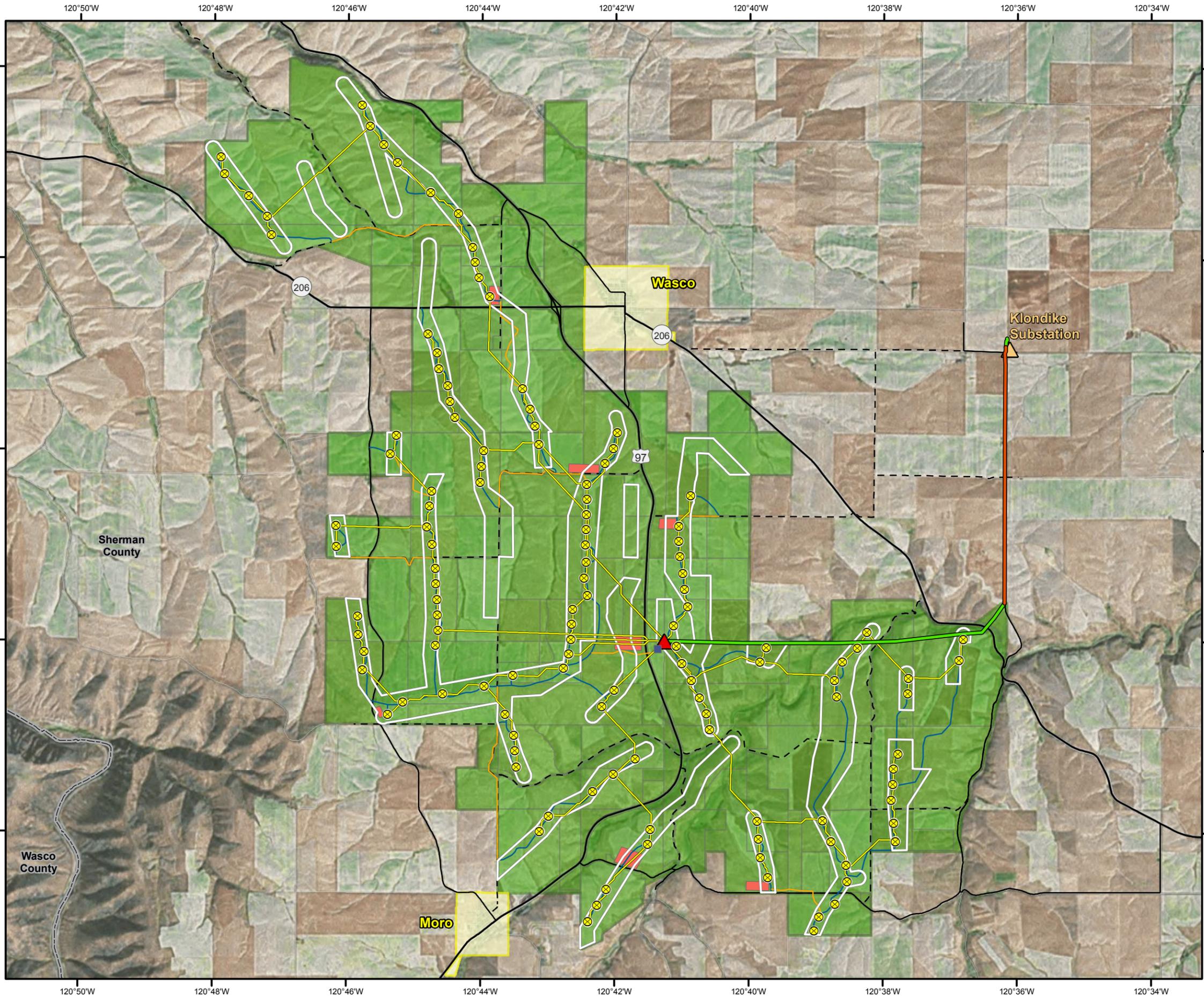
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Sherman County, Oregon. 2015b. *Windmills and Wheatfields: Oregon Wind Farm Driving Tour Through Sherman County*. www.sherman-county.com.

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http://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp.

Attachment 1
Figures Cited in Text



- Facility Site Boundary
- Wind Turbine
- Approved Micrositing Corridor
- Land Parcel Boundary
- O & M Facility
- Proposed Substation
- Existing Substation
- Proposed 230-kV Transmission Line
- Existing Hay Canyon 230-kV Transmission Line
- Low-voltage Collector System
- Crane Path
- Access Road
- Public Road (Paved)
- Public Road (Gravel)
- Temporary Laydown Area
- City Boundary
- County Boundary

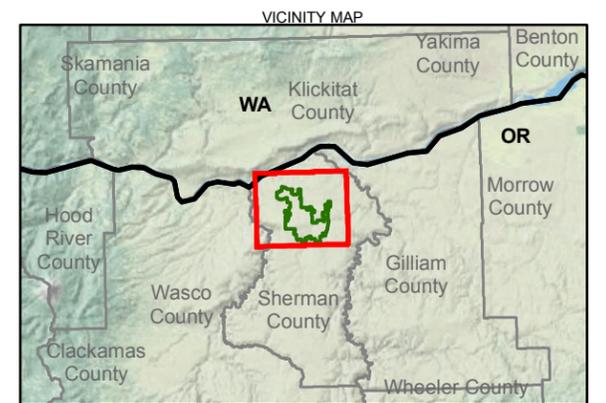
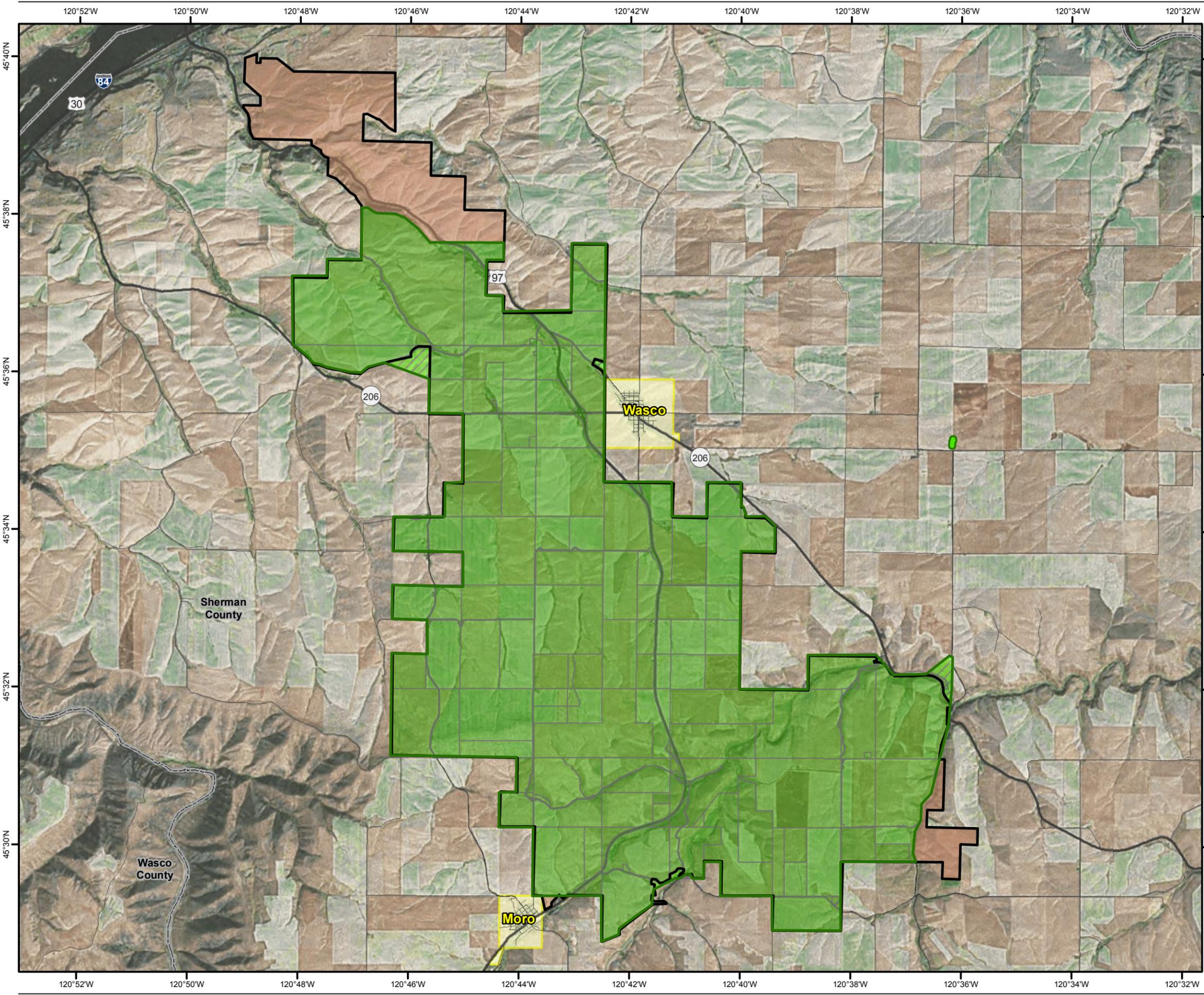
Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC,
 2015; BLM (2015); WSDOT; ODOT; US Census Bureau;
 USDA; ESRI

0 0.75 1.5 3
 Miles

1 inch equals 1.18 miles

FIGURE 1
Facility Turbine Layout
 Golden Hills Wind Project Request for Amendment No. 3



-  Proposed New Site Boundary
-  Previously Approved Site Boundary
-  Proposed Site Boundary - Transmission Line
-  Area to be Retained
-  Area to be Added
-  Area to be Removed
-  Land Parcel Boundary
-  Road
-  Interstate or Highway
-  City Boundary
-  County Boundary

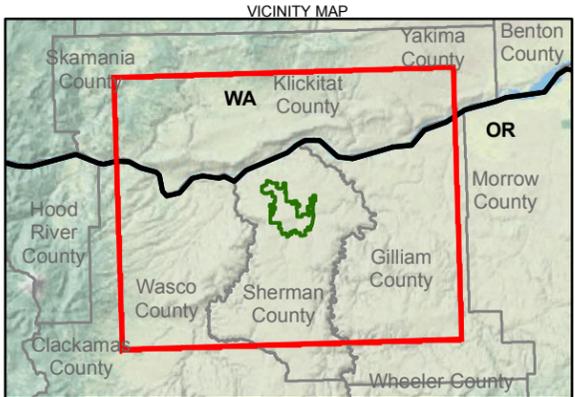
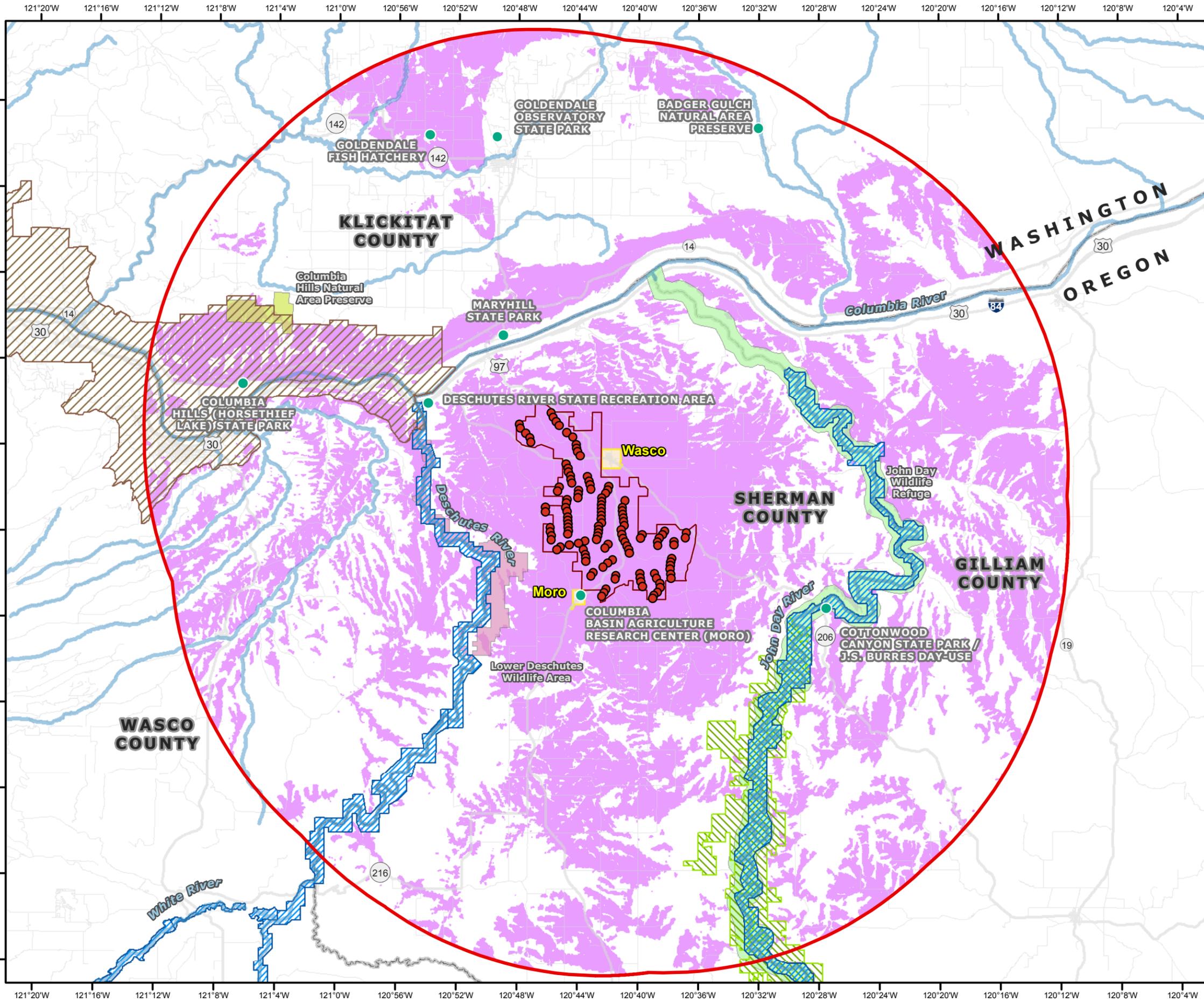
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 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC,
 2015; BLM (2015); WSDOT; ODOT; US Census Bureau;
 USDA; ESRI

0 0.75 1.5 3
 Miles

1 inch equals 1.42 miles

FIGURE 2
Proposed Change in Site Boundary
 Golden Hills Wind Project Request for Amendment No. 3



- Wind Turbine Location
 - Protected Area
 - Area of Turbine Visibility
 - Analysis Area (20 Miles)
 - Facility Site Boundary
 - Interstate or Highway
 - Major Road
 - Major River or Stream
 - Wild / Scenic River Corridor
 - Wilderness Study Area
 - Columbia River Gorge National Scenic Area
 - Columbia Hills Natural Area Preserve
 - John Day Wildlife Refuge
 - Lower Deschutes Wildlife Area
 - City Boundary
 - County Boundary
- Turbine Hub Height: 95 meters (312 feet)
 Turbine Rotor Diameter: 126 meters (413 feet)
 Worst-case Total Turbine Height: 158 meters (518 feet)
 Total Number Assessed: 125 turbines

Analysis Area: 20 miles from Site Boundary
 Assumed Viewer Height: 6-foot-tall person

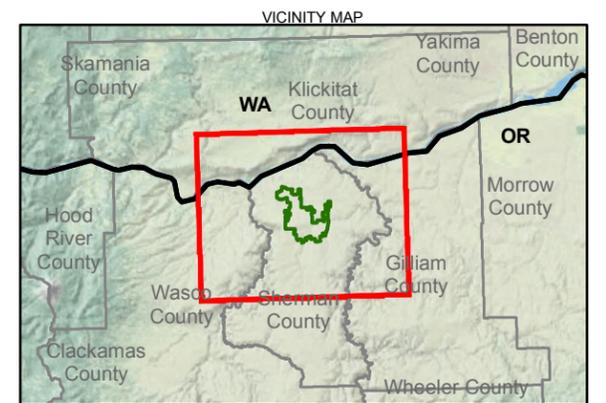
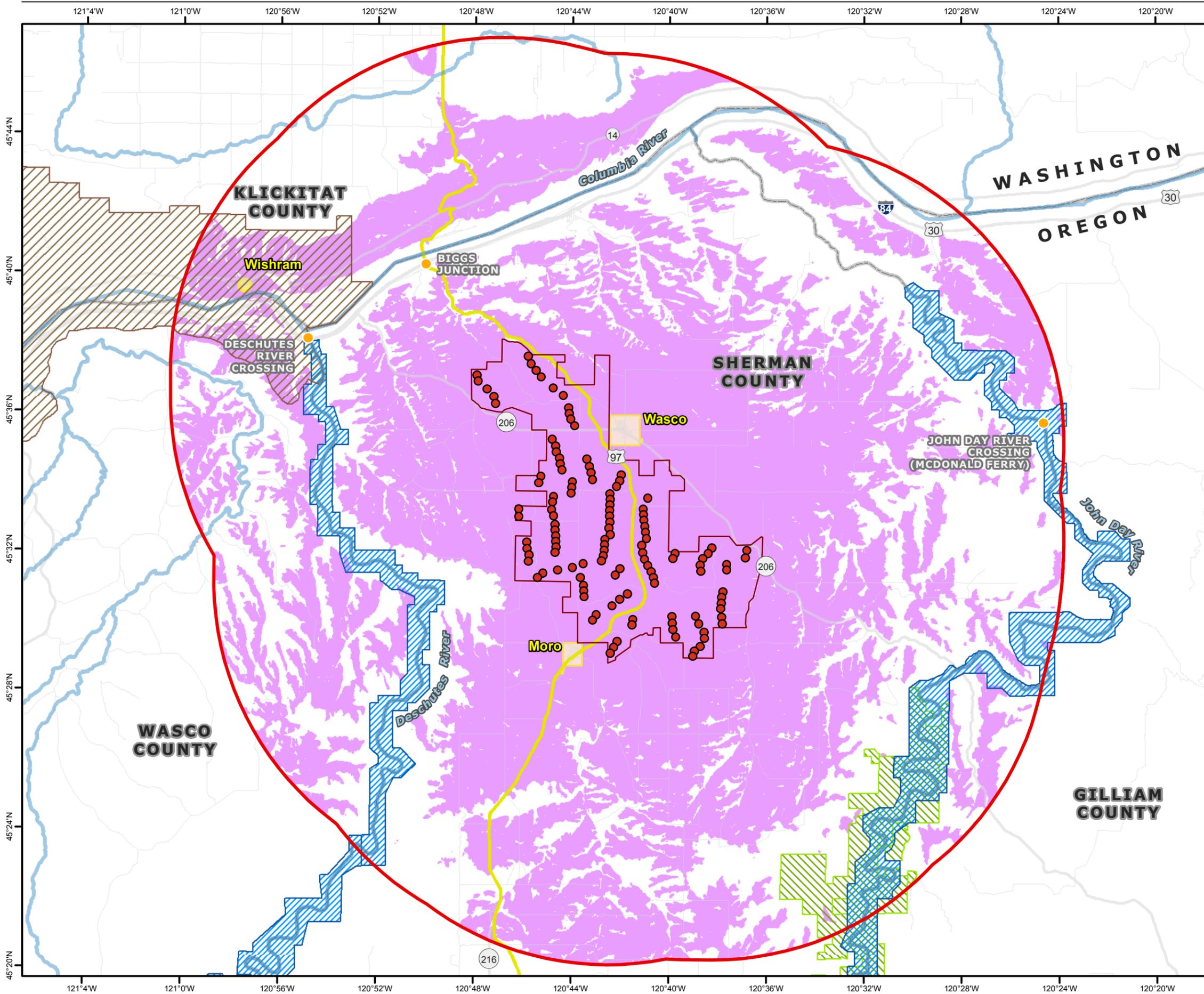
Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC,
 2015; BLM (2015); WSDOT; ODOT; US Census Bureau;
 USDA; ESRI

0 2.5 5 10
Miles

1 inch equals 5.29 miles

FIGURE 3
Protected Areas
 Golden Hills Wind Project Request for Amendment No. 3



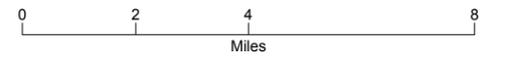
- Wind Turbine Location
- Scenic Resource
- Area of Turbine Visibility
- Analysis Area (10 Miles)
- Facility Site Boundary
- Journey Through Time Scenic Byway (US 97)
- Interstate or Highway
- Major Road
- Major River or Stream
- Wild / Scenic River Corridor
- Wilderness Study Area
- Columbia River Gorge National Scenic Area
- City Boundary / Community
- County Boundary

Turbine Hub Height: 95 meters (312 feet)
 Turbine Rotor Diameter: 126 meters (413 feet)
 Worst-case Total Turbine Height: 158 meters (518 feet)
 Total Number Assessed: 125 turbines

Analysis Area: 10 miles from Site Boundary
 Assumed Viewer Height: 6-foot-tall person

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



1 inch equals 3.24 miles

FIGURE 4
Scenic and Aesthetic Values
 Golden Hills Wind Project Request for Amendment No. 3

GOLDEN HILLS WIND FARM LLC

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Maxwell Woods
Energy Facility Siting Analyst
Oregon Department of Energy
625 Marion Street NE
Salem, OR 97301-3742
(503) 378-5050

March 18, 2016

Subject: Supplement to Golden Hills Wind Project Request for Amendment No. 3

Dear Mr. Woods,

Golden Hills Wind Farm LLC, a subsidiary of Orion Renewable Energy Group LLC, is pleased to submit the following:

- One original and two copies of *Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project* (Supplement)
- One original and two copies of *Cultural Resources Investigation for the Golden Hills Wind Project, Sherman County, Oregon* (Attachment 9 to the Supplement; provided separately as a confidential submittal with restricted distribution)
- Three CDs containing electronic files of the Supplement
- One CD containing electronic files of the confidential cultural resources report

As described in the Request for Amendment submitted to you on December 17, 2015, this supplement contains additional information that was not yet available at the time the Request for Amendment was submitted. The supplement also contains information that was required by the Department based on the December 17 submittal, including results from additional biological and cultural surveys.

If you have questions or need additional information or materials, please feel free to contact me by e-mail at rmcgraw@orionrenewables.com, or by phone at (510) 267-9322. You can also contact Carrie Konkol by e-mail at carrie.konkol@ch2m.com, or by phone at (503) 872-4734.

Sincerely,

Orion Renewable Energy Group LLC



Ryan McGraw
Head of Asset Management

cc: Ginny Gustafson, Oregon Department of Energy
Reid Buckley, Orion Renewable Energy Group LLC
Carrie Konkol, CH2M HILL Engineers, Inc.
Elaine Albrich, Stoel Rives LLP

Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Prepared for

Oregon Energy Facility Siting Council

March 2016

Submitted by

Golden Hills Wind Farm LLC

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Attachments

1	Updated Figures from Amendment Request
2	Updated Property Owner Maps
3	Temporary and Permanent Disturbance Calculations
4	Redlined Second Amended Site Certificate
5	Habitat Categories and Classifications with Acreages of Impact
6	Retirement Cost Estimate and Financial Assurance Letter
7	Habitat Classifications within Proposed Site Boundary
8	Report Documenting March 2016 Biological Resources Survey Results
9	Report Documenting March 2016 Cultural Resources Survey Results [RESTRICTED DISTRIBUTION]

Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Introduction

On December 17, 2015, Golden Hills Wind Farm LLC (Certificate Holder), a subsidiary of Orion Renewable Energy Group LLC, filed *Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project* (amendment request) with the Oregon Department of Energy¹. The amendment request presented proposed modifications to the approved Golden Hills Wind Project (Facility or project). This supplemental information package (Supplement) provides additional detail to support a determination of completeness for the amendment request.

Summary of Proposed Modifications

This Supplement presents a complete summary of the proposed modifications:

- Extend the construction start and completion deadlines for an additional 2 years.
- Change the allowed turbine height and rotor diameter in response to improvements in turbine technology and correspondingly, reduce the number of previously approved turbines from 267 to 125.
- Amend the previously approved site boundary to remove approximately 2,800 acres of land that is no longer needed and add approximately 122.5 acres to the site boundary to account for modified project design.
- Eliminate the previously approved western substation and 11-mile 500-kilovolt (kV) transmission line and expand the previously approved substation from 2 to 5 acres.
- Construct up to approximately 700 feet of new 230-kV transmission line and associated structures and equipment to interconnect the project to Bonneville Power Administration's (BPA's) transmission structure located approximately 300 feet north of the Klondike substation.
- Increase the height of the six meteorological (met) towers from 85 to 95 meters.
- Expand the temporary road width from 36 to 40 feet to accommodate larger turbines during construction.

The following attachments are included in this supplement:

- Attachment 1 contains four figures, revised since the amendment request, showing the proposed turbine layout, change in site boundary, protected areas, and scenic and aesthetic areas.
- Attachment 2 contains maps showing the location of each property owner (by tax lot ID number) within 500 feet of the updated proposed site boundary. Property owners have not changed.

¹ The project consists of a permitted wind energy generation facility in Sherman County, Oregon, with electrical generating capacity of up to 400 megawatts (MW). On May 15, 2009, the Energy Facility Siting Council (EFSC) issued a site certificate for construction and operation of the project. In 2012 and 2015, respectively, EFSC approved amendments to the site certificate to extend the construction start and completion deadlines.

- Attachment 3 contains the temporary and permanent disturbance calculations.
- Attachment 4 contains the redlined Second Amended Site Certificate and updated site boundary legal description.
- Attachment 5 contains a table showing habitat categories and classifications with acreages of impact.
- Attachment 6 contains a cost estimate table for Facility site restoration and a financial assurance letter.
- Attachment 7 contains a set of maps showing habitat classifications within the site boundary.
- Attachment 8 contains a technical report documenting the biological resources investigation of the expanded substation area and extended transmission line area performed in March 2016.
- Attachment 9 (restricted distribution) contains a technical report documenting the cultural resources investigation of the expanded substation area and extended transmission line area performed in March 2016.

Description of Proposed Modifications

Changes to Related and Supporting Facilities

The Certificate Holder proposes to eliminate one of the two previously approved substations and relocate the previously approved eastern substation nearer to the center of the project to serve as a single substation location for the entire Facility. In addition to these changes to substation facilities, as part of the amendment request, the Certificate Holder seeks to expand the proposed single project substation from 2 to 5 acres. The larger substation will allow enough space to accommodate equipment for modern design standards for the full 400-MW facility capacity. The Certificate Holder also seeks to increase the maximum height of the six meteorological towers from 85 to 95 meters, in order to match the hub height of the wind turbines.

Changes in Site Boundary

The Certificate holder seeks to remove approximately 2,800 acres of land from the site boundary that is no longer required for the Facility design. The Certificate Holder seeks to add 82.5 acres to the site boundary to include land that was surveyed for the original Application for Site Certificate (ASC) (Golden Hills Wind Farm LLC, 2007) but was excluded from the previously approved site boundary because the Certificate Holder at the time did not have site control of this land. The land is needed to accommodate the portion of the Facility's 230-kV transmission line extending from the project area to the point of interconnection with the existing Hay Canyon 230-kV transmission line. See Figure B-3 (Disturbance Areas) of the ASC. The relevant biological, wetland, and cultural surveys are included in the original ASC record.

The Certificate Holder also seeks to add 40 acres to the site boundary for the transmission line connection to the BPA network near the Klondike substation adjacent to existing electrical transmission right-of-way. The 40 acres added to the site boundary include sufficient areas for temporary work to construct approximately 700 feet of new 230-kV transmission line. The 700 feet of new 230-kV transmission line and associated structures will be located within an approximately 2-acre subset of the greater 40-acre area. The area was surveyed on March 3 and 4, 2016, for biological and cultural resources. Results of the biological and cultural surveys are summarized under the applicable section below, and in the technical reports provided in Attachments 8 and 9, respectively. Attachment 1, Figure 2, shows proposed changes in the site boundary overlaid on the approved site boundary.

Temporary and Permanent Disturbance Calculations

This section supplements Section 1.3.5 of the amendment request. The proposed modifications will reduce permanent impacts from the previously approved 141 acres to approximately 132 acres. Temporary impacts will be increased slightly, from the previously approved 1,055 acres to approximately 1,069 acres, as a result of the additional 4 feet of road width necessary to accommodate larger vehicles for the larger turbines. Attachment 3 contains the temporary and permanent disturbance table.

Land Use/Exclusive Farm Use Disturbance Calculations

This section supplements Section 5.1.5 of the amendment request. No changes in the local zoning ordinance or comprehensive plan have occurred since the last amendment. The proposed changes in turbine height and rotor diameter do not affect EFSC's previous findings of compliance with the Land Use Standard because the amendment will result in fewer turbines overall, the turbines will be constructed within the previously approved micro-siting corridors, and the Facility must still comply with Land Use Conditions IV.D.1 through IV.D.22. Likewise, the proposed adjustments to the site boundary by removing 2,800 acres of land and adding two areas (one 82.5-acre and one 40-acre area) of land do not affect EFSC's previous findings because all new land is zoned exclusive farm use (EFU) by Sherman County like the rest of the land in the site boundary. Both areas will be used for transmission lines and transmission line connections: one to connect the project to the existing Hay Canyon line, and one to interconnect the project to Bonneville Power Administration's (BPA's) transmission structure. These uses were reviewed and approved on EFU land in the original site certificate (EFSC, 2009).

The project, as amended, will result in approximately 127 acres of permanent impacts⁴ to agricultural land and approximately 943 acres of temporary impacts to agricultural land, as shown in Attachment 5 (see the row for Agricultural [AG] habitat). EFU impacts are conservatively assumed to be equivalent to impacts to land categorized² "agricultural," although some land may not currently be in cultivation. Impact calculations used a "worst-case scenario," accounting for the dimension of each project feature. The worst-case scenario includes an overlap in the spatial disturbance area for some project features thus "double counting" the impacts from those features. Once built, the permanent project facilities will occupy less than 0.5 percent of the land used for agriculture within the site boundary. Although the calculated permanent impacts to EFU land are higher with this methodology than the impacts previously approved by EFSC, the percentage of agricultural land permanently occupied by project facilities is the same as the original project.

Overall, the proposed amendment will result in fewer turbines and cause less agricultural field fragmentation and fewer impacts on farm equipment maneuverability. Additionally, the substation expansion to 5 acres and design and construction of new roads with a temporarily larger width during construction of 40 feet will minimize the division of existing farm units and impacts to cultivated farmland. Ongoing coordination of project construction and operation with each landowner will minimize disruption to farming practices and operations. Generally, the project supports continued agricultural operations while simultaneously using the land for renewable energy generation. Based on this information, EFSC may find that the Facility, as amended, will satisfy the Land Use Standard in OAR 345-022-0030.

⁵ Categorized under the Oregon Department of Fish and Wildlife's Habitat Mitigation Policy - classification of a site or area based on its dominant plant, soil, and water associations or other salient features of value to fish and wildlife.

Retirement and Financial Assurance

This section supplements Section 5.1.7 of the amendment request. The Facility site restoration and retirement cost estimate will change from \$16,491,000 (in 2008 dollars) to \$14,424,936 (in 2008 dollars).³ The revised estimate and a financial assurance letter are provided in Attachment 6.

Fish and Wildlife Habitat

This section supplements Section 5.1.8 of the amendment request. EFSC previously found that the Facility complies with OAR 345-022-0060, Fish and Wildlife Habitat Standard.⁴

Updated Desktop Survey

The Certificate Holder performed an updated desktop survey of publicly and privately available resources in February 2016 to assess potential changes to the status, occurrence, and impacts of federal- and state-listed endangered, threatened, proposed, or candidate plant and wildlife species that have potential for occurrence in the two areas being added to the site boundary (the expanded substation and extended transmission line). For each of these two areas, the desktop survey area was 20 acres. Survey results demonstrate no changes in status. No additional listed species were identified that have a potential to occur within the survey area.

Field Survey

The Certificate Holder performed field surveys on March 4, 2016, in the expanded substation and extended transmission line survey areas. The field survey area was 20 acres for each of these two areas. Survey results determined that habitats in these areas consist entirely of actively farmed dryland wheat fields (AG) and existing facilities (roads, transmission line, and a substation). Survey results demonstrate that the risk of impacting sensitive species in the survey area is very low because no suitable habitat exists that could support these species. Therefore, no additional analysis related to fish and wildlife habitat is warranted.

Updated Habitat Impact Calculations

Updated habitat impacts resulting from the changes in site boundary are provided in Attachment 5 and summarized as follows:

- There are no impacts to Category 1 habitat.
- Category 2 habitat impacts are reduced from 25.1 to 2.9 acres of temporary impact and from 0.91 to zero permanent impact.
- Category 3 habitat impacts are reduced from 216.3 to 57.0 acres of temporary impact and from 10.3 to 5.5 acres of permanent impact.
- Category 4 habitat impacts are reduced from 37.5 to 6.5 acres of temporary impact and from 1.0 to 0.1 acre of permanent impact.
- No Category 5 habitat has been identified within the site boundary.
- Category 6 habitat impacts increase from 775.8 to 1,002.2 acres of temporary impact and permanent impacts are slightly reduced from 129.0 to 126.7 acres.

³ Oregon Department of Energy guidance for retirement cost estimates uses 2010 unit costs. The 2010 dollars were adjusted to 2008 dollars for consistency with the site certificate. The 2016 dollar equivalent is \$17,321,000.

⁴ Final Order on Amendment No. 2, p. 24 (January 30, 2015).

Attachment 7 contains a set of maps showing habitat classifications within the Facility site boundary. Attachment 8 contains a technical report documenting the biological resources identified within the expanded substation and extended transmission line areas.

Threatened and Endangered Species

This section supplements Section 5.1.9 of the amendment request.

The Certificate Holder performed a desktop survey of publicly and privately available resources in February 2016 for federal- and state-listed endangered, threatened, proposed, or candidate plant and wildlife species that have potential for occurrence in the two areas being added to the site boundary. The desktop survey area for the expanded substation and extended transmission line was 20 acres, respectively. Desktop survey results demonstrate no additional listed species were identified that have a potential to occur within the survey area beyond those identified during previous surveys. None of the identified species had status changes from previous surveys.

The Certificate Holder performed field surveys on March 4, 2016, in the expanded substation and extended transmission line survey areas. The field survey area for the expanded substation and extended transmission line was 20 acres, respectively. Field survey results indicate that the risk of impacting federal- or state-listed endangered, threatened, proposed, or candidate plant and wildlife species is very low because no suitable habitat exists that could support these species. Therefore, no additional analysis related to threatened and endangered species is warranted at this time. Attachment 8 contains a technical report documenting the survey results.

Historic, Cultural, and Archaeological Resources

This section supplements Section 5.1.11 of the amendment request. New ground-disturbing activities associated with changes in this amendment request include expanding the previously permitted substation from 2 to 5 acres and extending the previously permitted 230-kV transmission line by approximately 700 feet to interconnect to BPA's transmission structure. These areas were surveyed for cultural resources. No resources were identified. Attachment 9 (restricted distribution) contains a technical report documenting the cultural resources survey results. The proposed Facility, as amended, must comply with all other historic, cultural, and archaeological resource conditions of approval. Accordingly, EFSC may find that the construction and operation of the Facility, as amended, will not result in significant adverse impacts to historical, cultural, or archaeological resources and OAR 345-022-0090 is satisfied.

Stormwater Drainage

This section supplements Section 5.1.13.3 of the amendment request. As discussed above, the Facility, as amended, will temporarily disturb approximately 1,069 acres. All phases of project construction are subject to Soil Protection Condition IV.E.1 to Condition IV.E.6 of the site certificate, which includes a requirement for the Certificate Holder to conduct construction work in compliance with an Erosion and Sediment Control Plan satisfactory to the Oregon Department of Environmental Quality and as stipulated under the National Pollutant Discharge Elimination System 1200-C permit. Because the impact acreage is similar in size to the previously approved disturbance area, the project ground-disturbing activities are comparable and the temporary disturbance acreages are comparable. Further, the project must still comply with the Soil Protection Conditions identified above. For these reasons, EFSC may rely on this information and prior record to find that the soil protection standard is met.

Solid Waste Management

This section supplements Section 5.1.13.4 of the amendment request. Individual turbines will be larger, but the reduction in number of turbines will result in less material required, as verified by the updated

retirement cost estimate and supporting waste quantity calculations shown in Attachment 6. The Facility, as amended, will result in significantly less waste: 42,000 tons of steel rather than 86,508 net tons and 4,713 cubic yards of concrete turbine foundation rather than 8,811 cubic yards. Additionally, the amended project will have one less substation.

According to the Columbia Ridge Recycling and Landfill fact sheet dated 2015 and accessed from the Waste Management website (www.wmnorthwest.com/landfill), the remaining permitted capacity for the landfill as of 2015 was 329 million tons. The landfill processes 2 tons annually. At this rate, the landfill would have capacity for another 164 years. Additionally, the amended project will still generate the same type of solid waste materials outlined in the original submittal. Recycling of these materials will occur as specified in compliance with Waste Minimization Conditions V.D.1 and V.D.2 in the Final Order on the Application (EFSC, 2009).

The proposed project will not alter the operations and maintenance facility or its previously permitted onsite septic system, in compliance with Sherman County permit requirements and Condition V.D.4, which stipulates that discharge must be less than 5,000 gallons per day. Construction wastewater discharge will be the same as previously approved and the construction activities will be the same. Construction wastewater will be monitored and mitigated for by following Soil Protection Conditions IV.E.1 through IV.E.6.

References

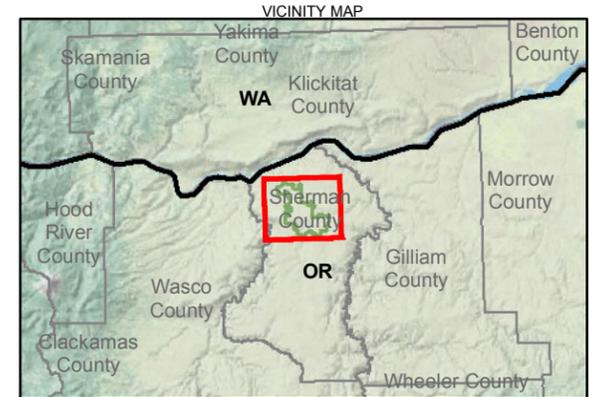
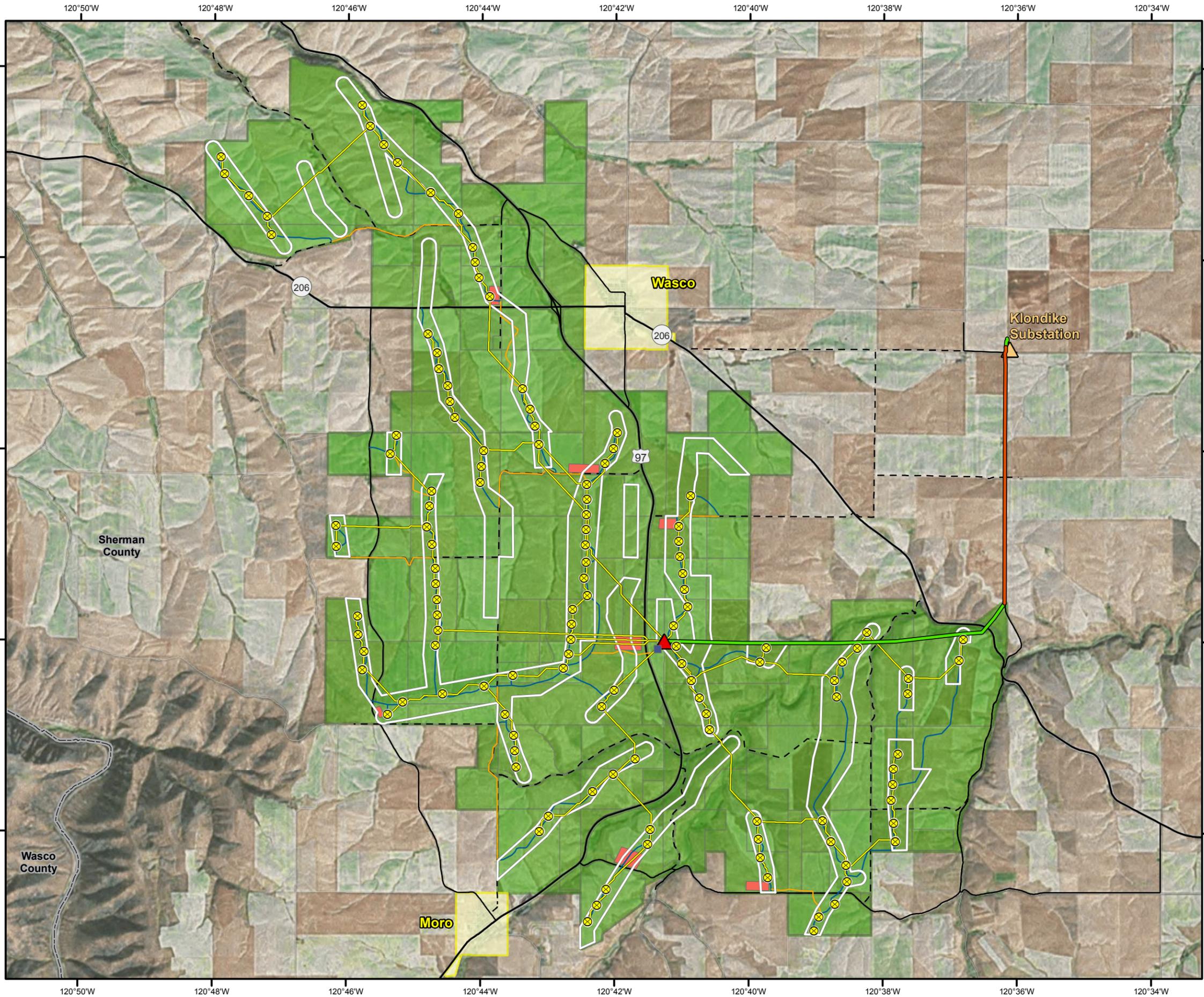
Golden Hills Wind Farm LLC. 2007. *Application for Site Certificate for the Golden Hills Wind Project*. May 2007 with May 2008 addendum.

Golden Hills Wind Farm LLC. 2014. *Golden Hills Wind Project Amendment #2—Response to Requests for Additional Information dated August 13, 2014*. September 12, 2014.

Oregon Department of Energy, Energy Facility Siting Council (EFSC). 2009. *Final Order on the Application for Site Certificate and Site Certificate for the Golden Hills Wind Project*. Fully executed on May 15, 2009.

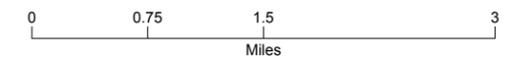
Oregon Department of Energy, Energy Facility Siting Council (EFSC). 2015. *Final Order on Amendment No. 2 for the Golden Hills Wind Project* (issued January 30, 2015) and *Second Amended Site Certificate* (fully executed on February 11, 2015).

Attachment 1
Updated Figures from Amendment
Request



- Facility Site Boundary
- Wind Turbine
- Approved Micrositing Corridor
- Land Parcel Boundary
- Operations and Maintenance Facility
- Proposed Substation
- Existing Substation
- Proposed 230-kV Transmission Line
- Existing Hay Canyon 230-kV Transmission Line
- Low-voltage Collector System
- Crane Path
- Access Road
- Public Road (Paved)
- Public Road (Gravel)
- Temporary Laydown Area
- City Boundary
- County Boundary

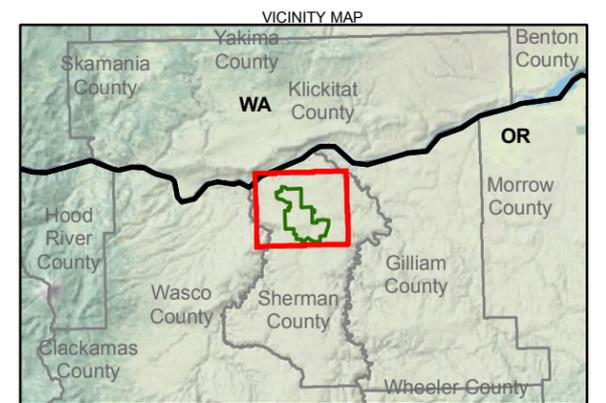
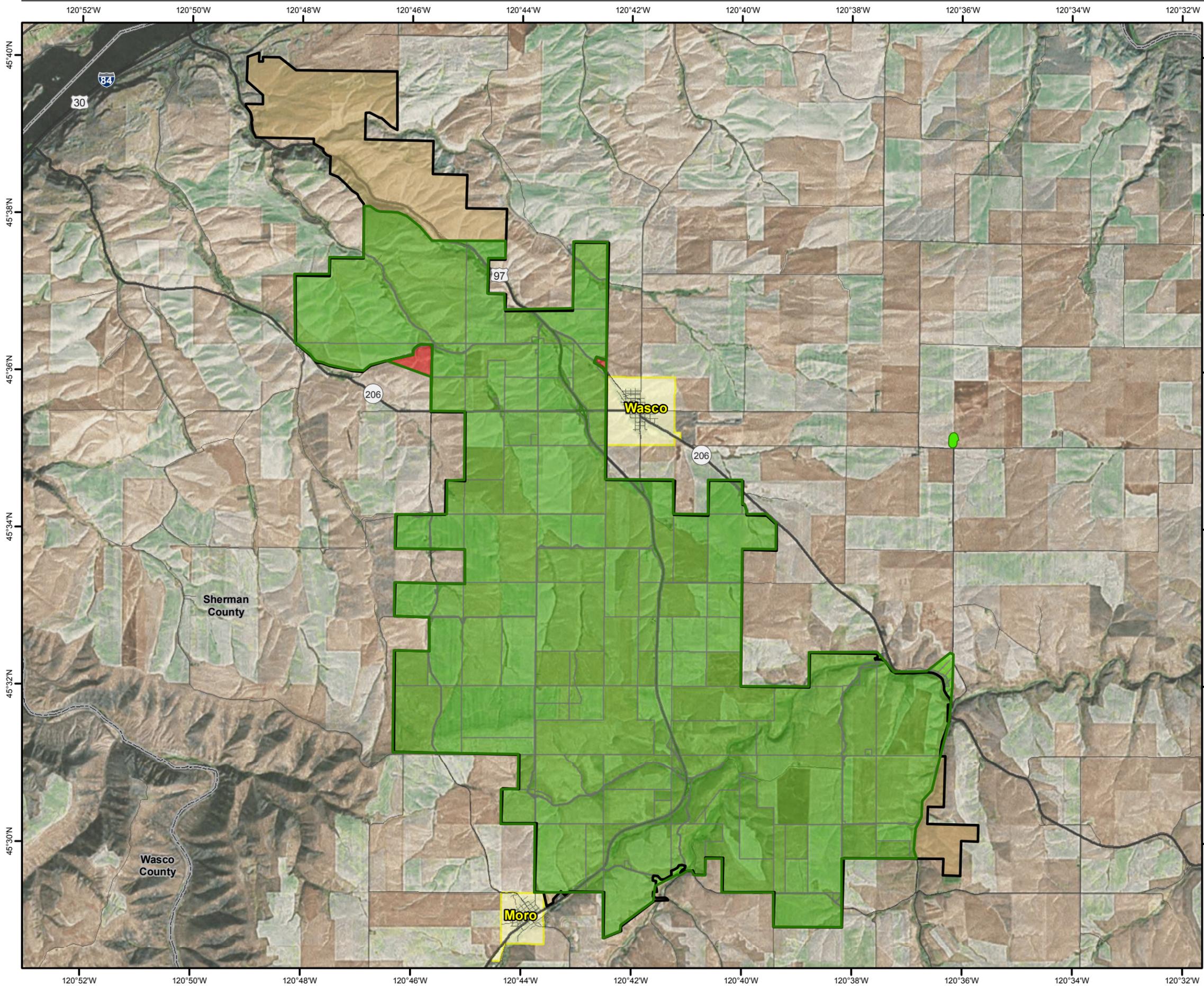
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 FIPS 3601 Feet Intl
 Data Sources: Orion Renewable Energy Group LLC,
 2015; BLM (2015); WSDOT; ODOT; US Census Bureau;
 USDA; ESRI



1 inch equals 1.18 miles

FIGURE 1 (REVISED)
Facility Turbine Layout
 Supplement to Golden Hills Wind Project Request for Amendment No. 3





-  Proposed New Site Boundary
-  Previously Approved Site Boundary
-  Proposed New Site Boundary - Transmission Line
-  Area to be Retained from Previously Approved Site Boundary
-  Area to be Added to Previously Approved Site Boundary
-  Area to be Removed
-  Area No Longer Part of Request for Amendment No. 3
-  Land Parcel Boundary
-  Road
-  Interstate or Highway
-  City Boundary
-  County Boundary

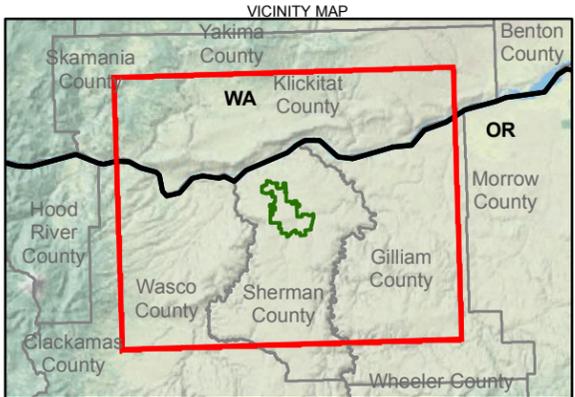
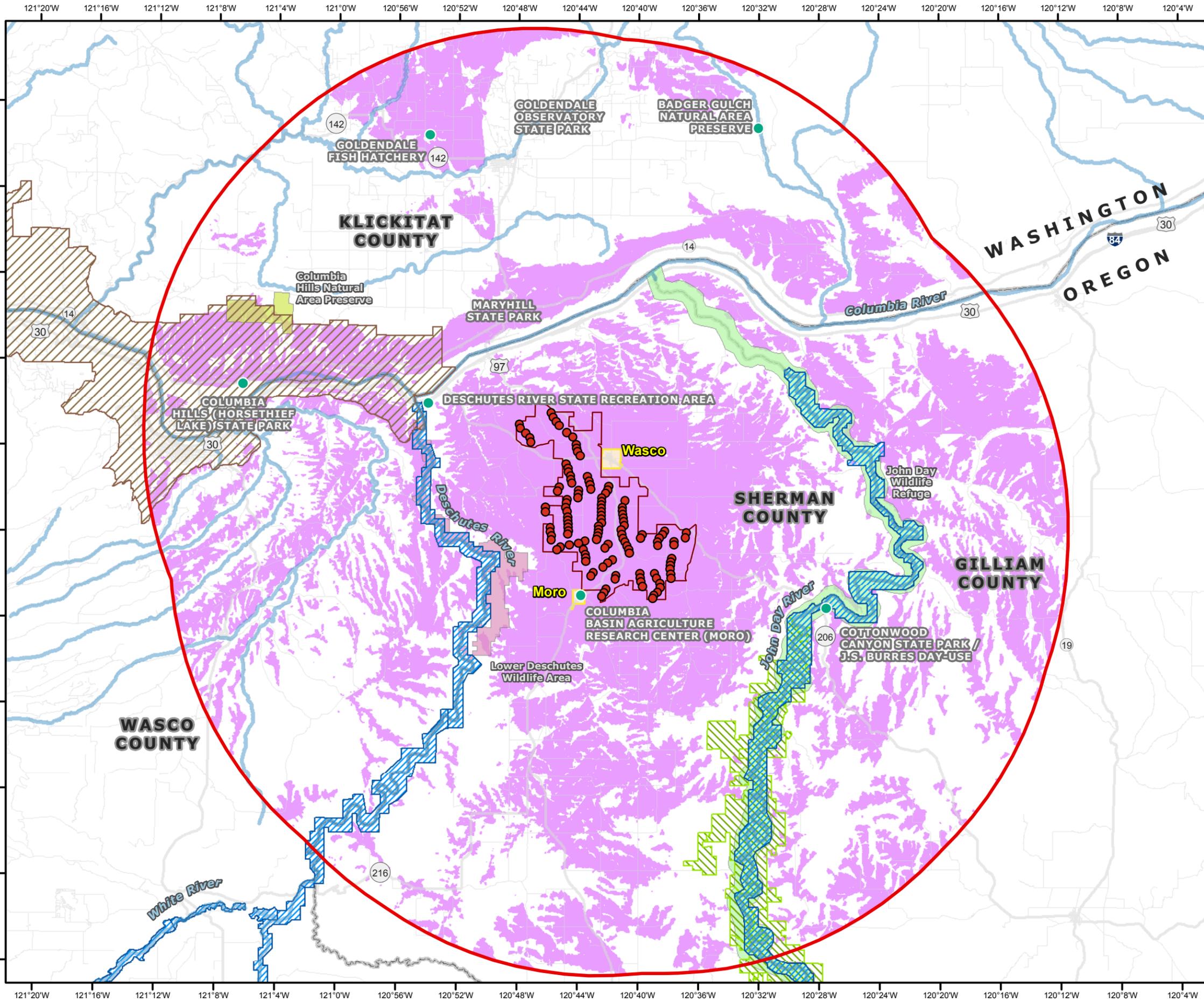
Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC,
 2015; BLM (2015); WSDOT; ODOT; US Census Bureau;
 USDA; ESRI

0 0.75 1.5 3
 Miles

1 inch equals 1.42 miles

FIGURE 2 (REVISED)
Proposed Change in Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3



- Wind Turbine Location
 - Protected Area
 - Area of Turbine Visibility
 - Analysis Area (20 Miles)
 - Facility Site Boundary
 - Interstate or Highway
 - Major Road
 - Major River or Stream
 - Wild / Scenic River Corridor
 - Wilderness Study Area
 - Columbia River Gorge National Scenic Area
 - Columbia Hills Natural Area Preserve
 - John Day Wildlife Refuge
 - Lower Deschutes Wildlife Area
 - City Boundary
 - County Boundary
- Turbine Hub Height: 95 meters (312 feet)
 Turbine Rotor Diameter: 126 meters (413 feet)
 Worst-case Total Turbine Height: 158 meters (518 feet)
 Total Number Assessed: 125 turbines

Analysis Area: 20 miles from Site Boundary
 Assumed Viewer Height: 6-foot-tall person

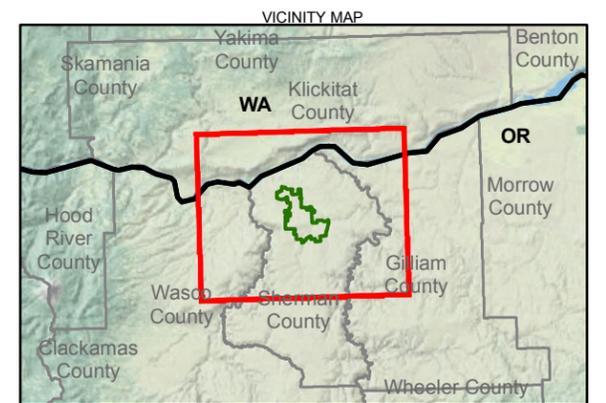
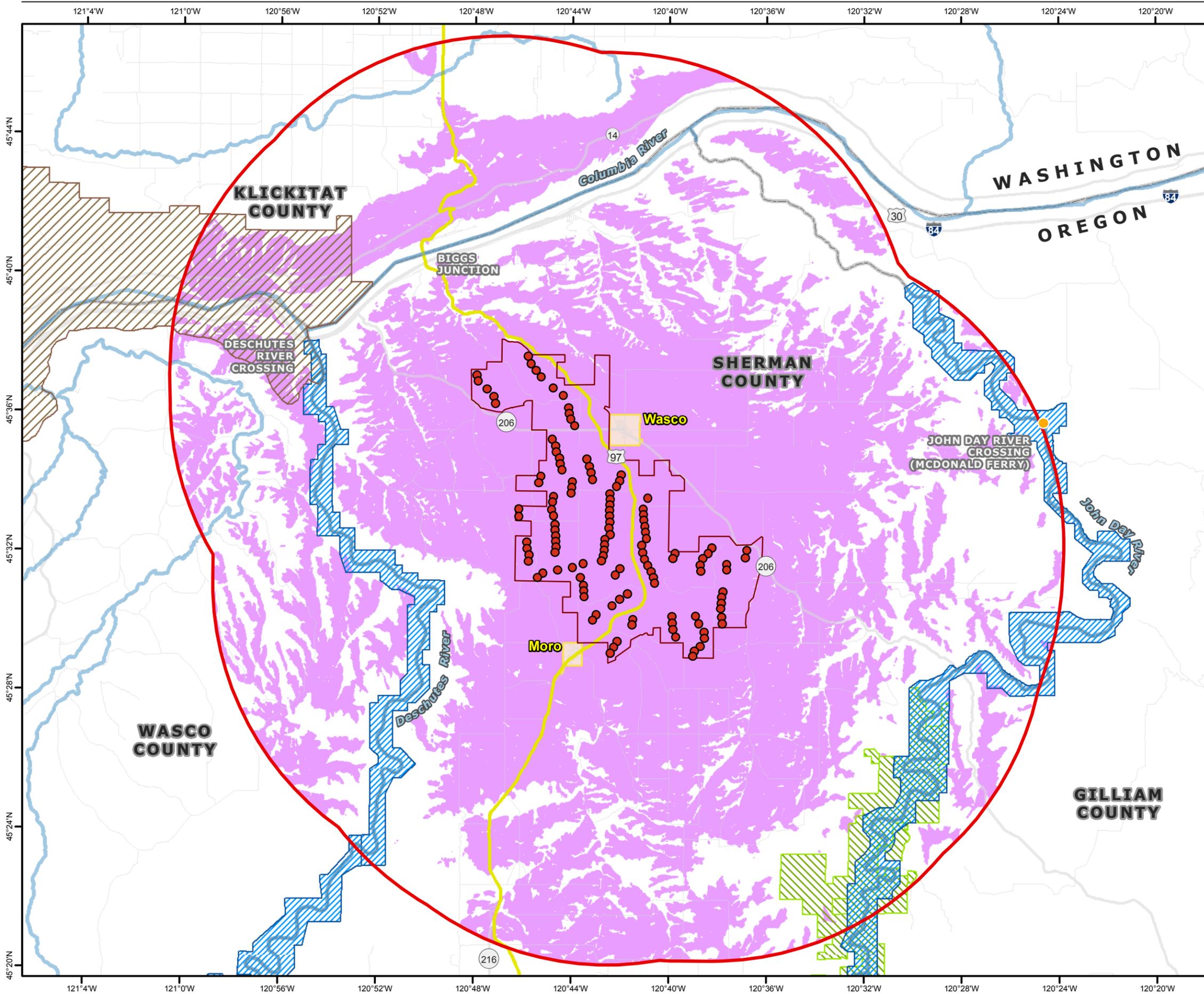
Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC,
 2015; BLM (2015); WSDOT; ODOT; US Census Bureau;
 USDA; ESRI

0 2.5 5 10
Miles

1 inch equals 5.29 miles

FIGURE 3 (REVISED)
Protected Areas
 Supplement to Golden Hills Wind Project Request for Amendment No. 3



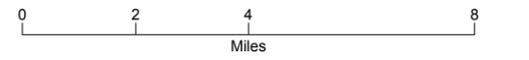
- Wind Turbine Location
- Scenic Resource
- Area of Turbine Visibility
- Analysis Area (10 Miles)
- Facility Site Boundary
- Journey Through Time Scenic Byway (US 97)
- Interstate or Highway
- Major Road
- Major River or Stream
- Wild / Scenic River Corridor
- Wilderness Study Area
- Columbia River Gorge National Scenic Area
- City Boundary / Community
- County Boundary

Turbine Hub Height: 95 meters (312 feet)
 Turbine Rotor Diameter: 126 meters (413 feet)
 Worst-case Total Turbine Height: 158 meters (518 feet)
 Total Number Assessed: 125 turbines

Analysis Area: 10 miles from Site Boundary
 Assumed Viewer Height: 6-foot-tall person

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

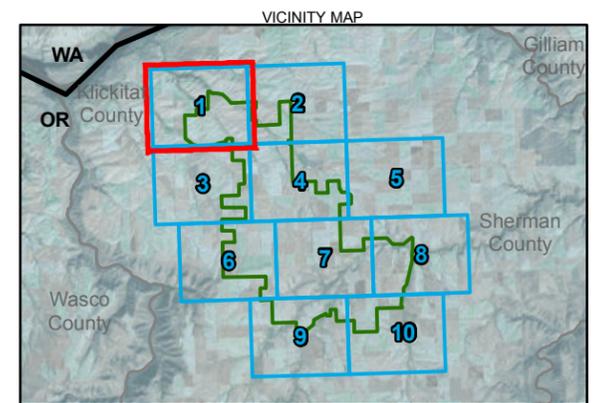
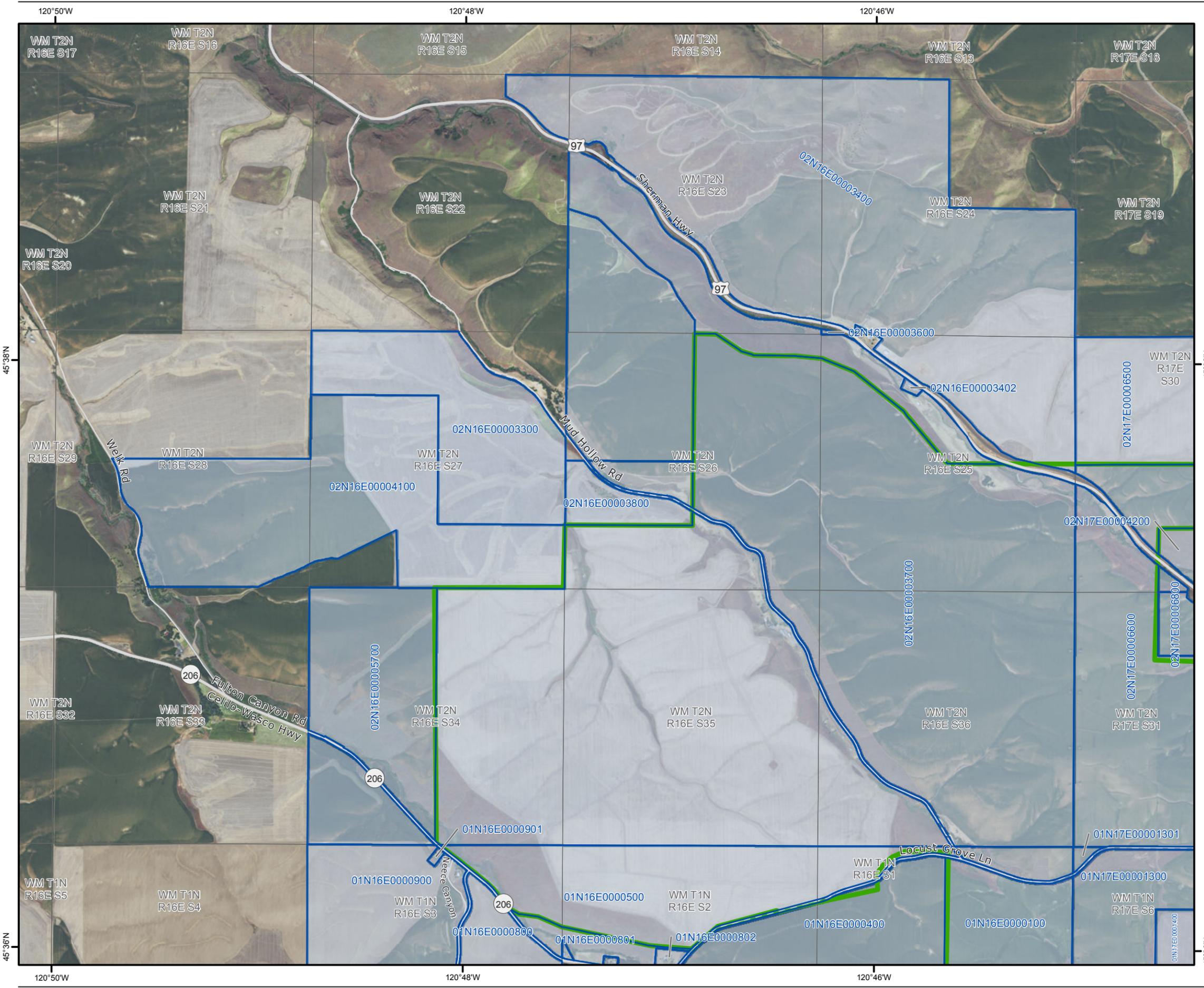


1 inch equals 3.24 miles

FIGURE 4 (REVISED)
Scenic and Aesthetic Values

Supplement to Golden Hills Wind Project Request for Amendment No. 3

Attachment 2
Updated Property Owner Maps

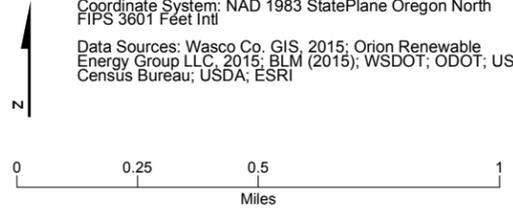


-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Notes:
 1. Sherman County property owner data obtained on December 4, 2015.
 2. Property owner names, addresses, and tax lot IDs can be found in Attachment 2.

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl

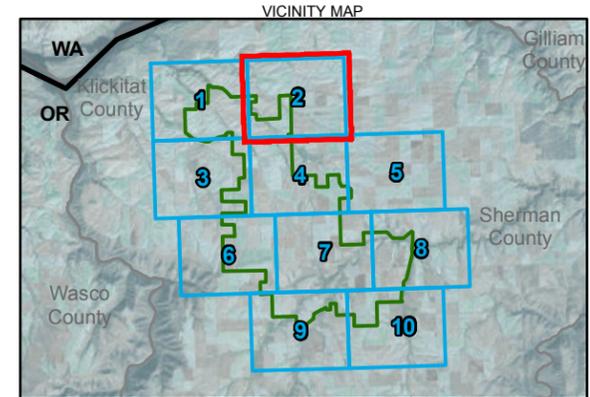
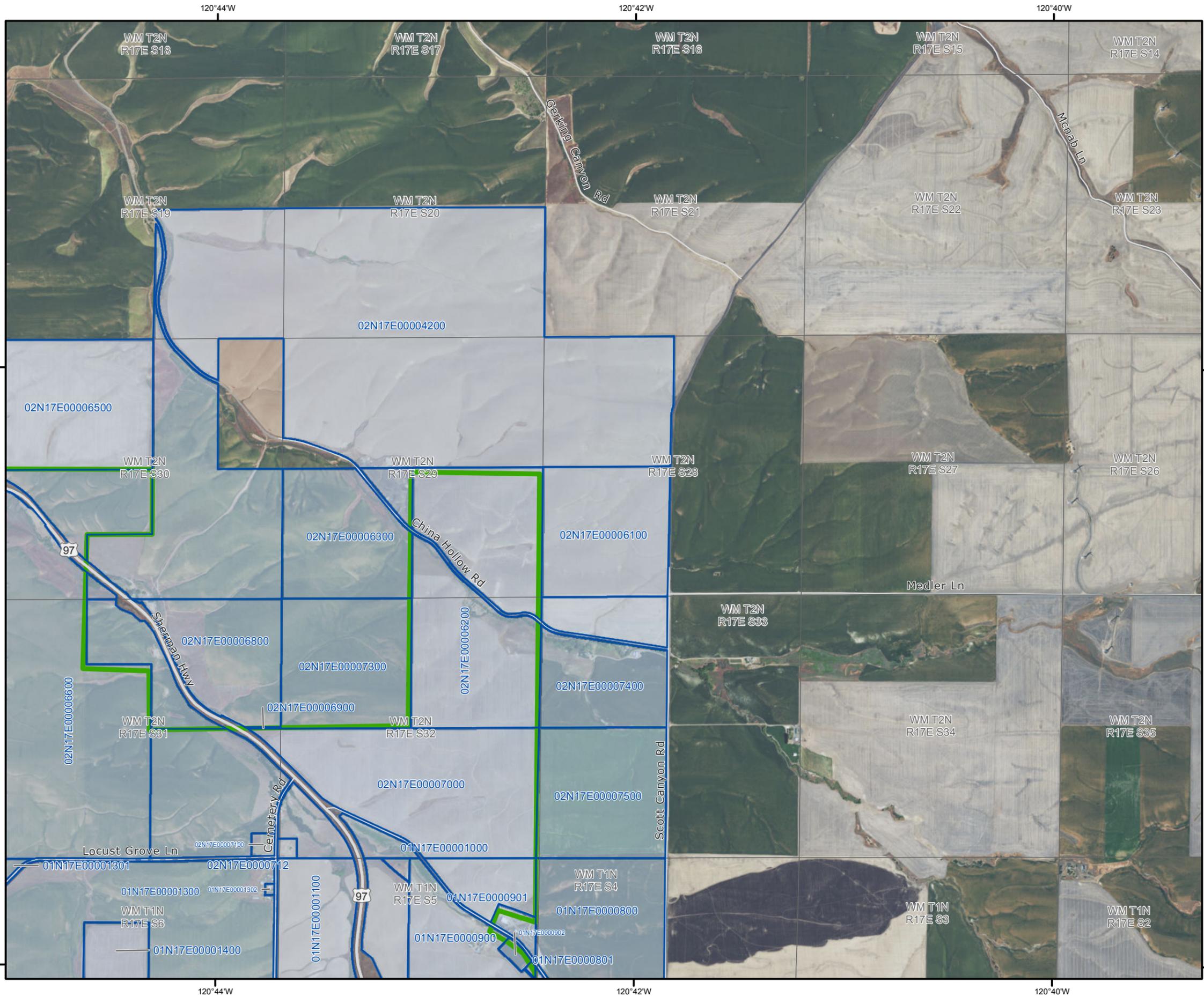
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



1 inch equals 0.38 miles

ATTACHMENT 2 (REVISED) - Page 1 of 10
Sherman County Property Owners
within 500 feet of Proposed Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3



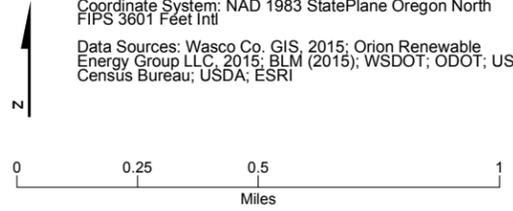


-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

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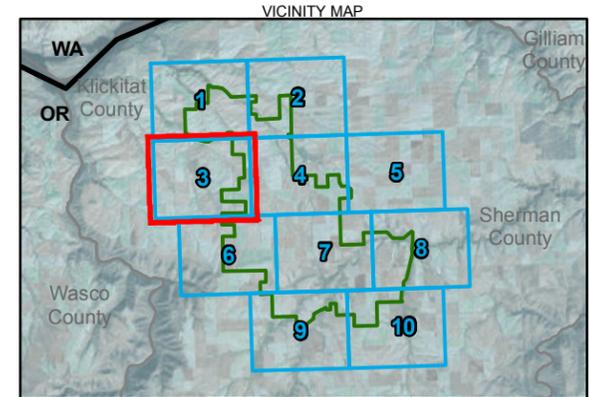
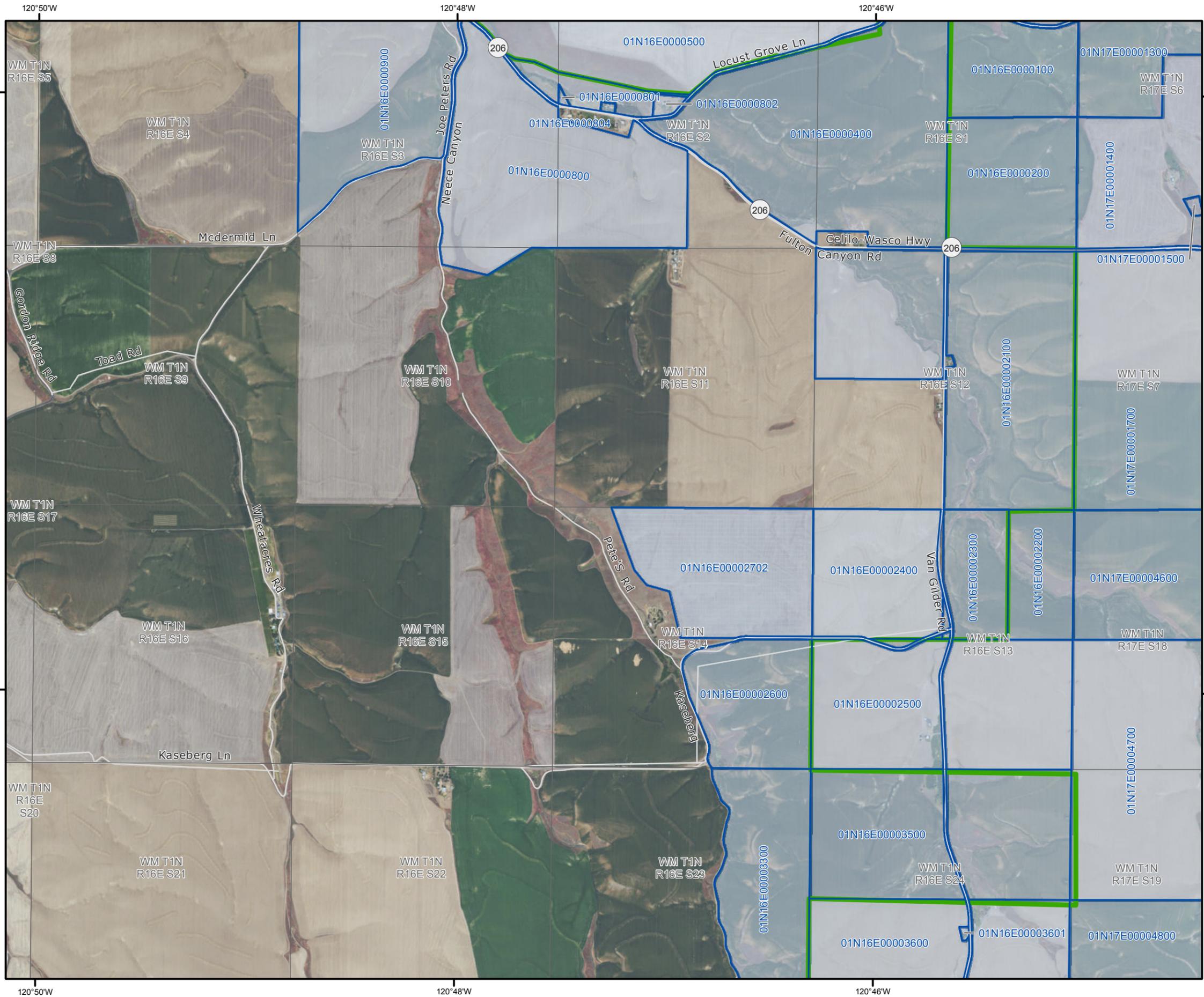
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1 inch equals 0.38 miles



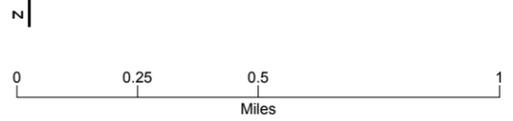


-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
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-  Public Lands Survey Section

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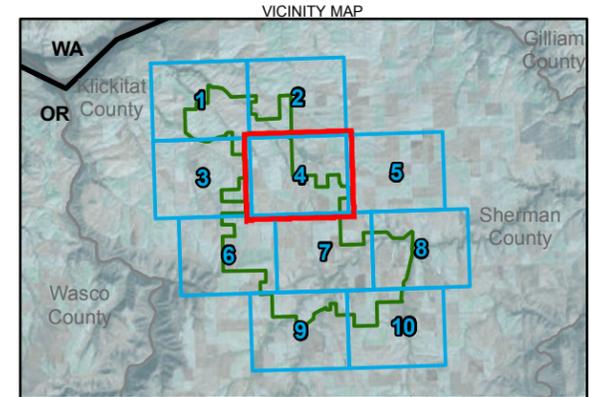
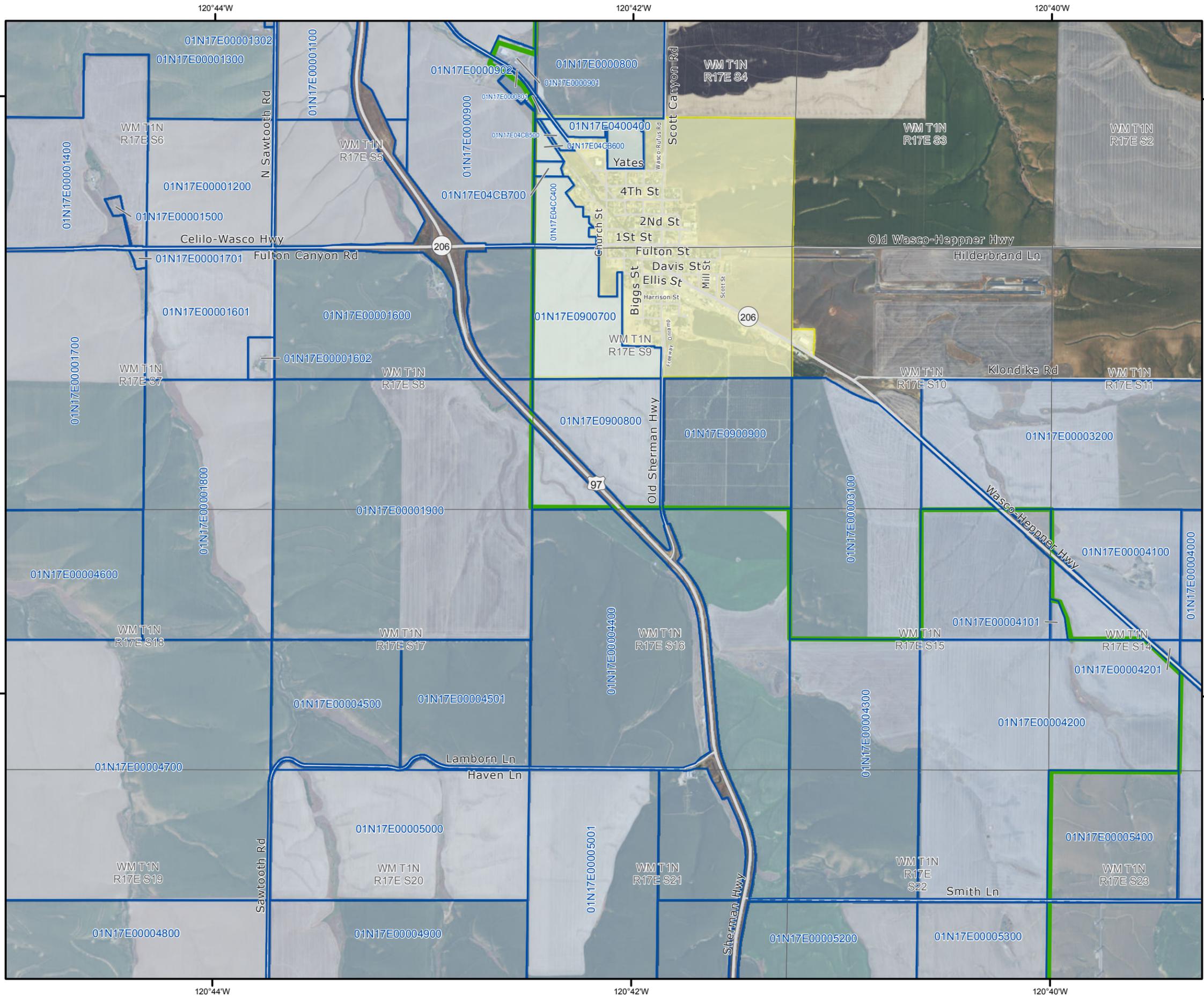
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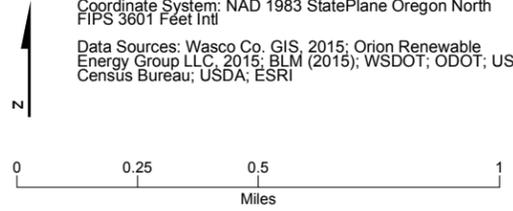


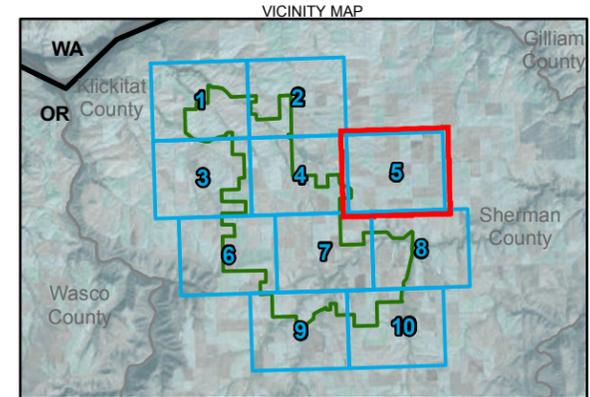
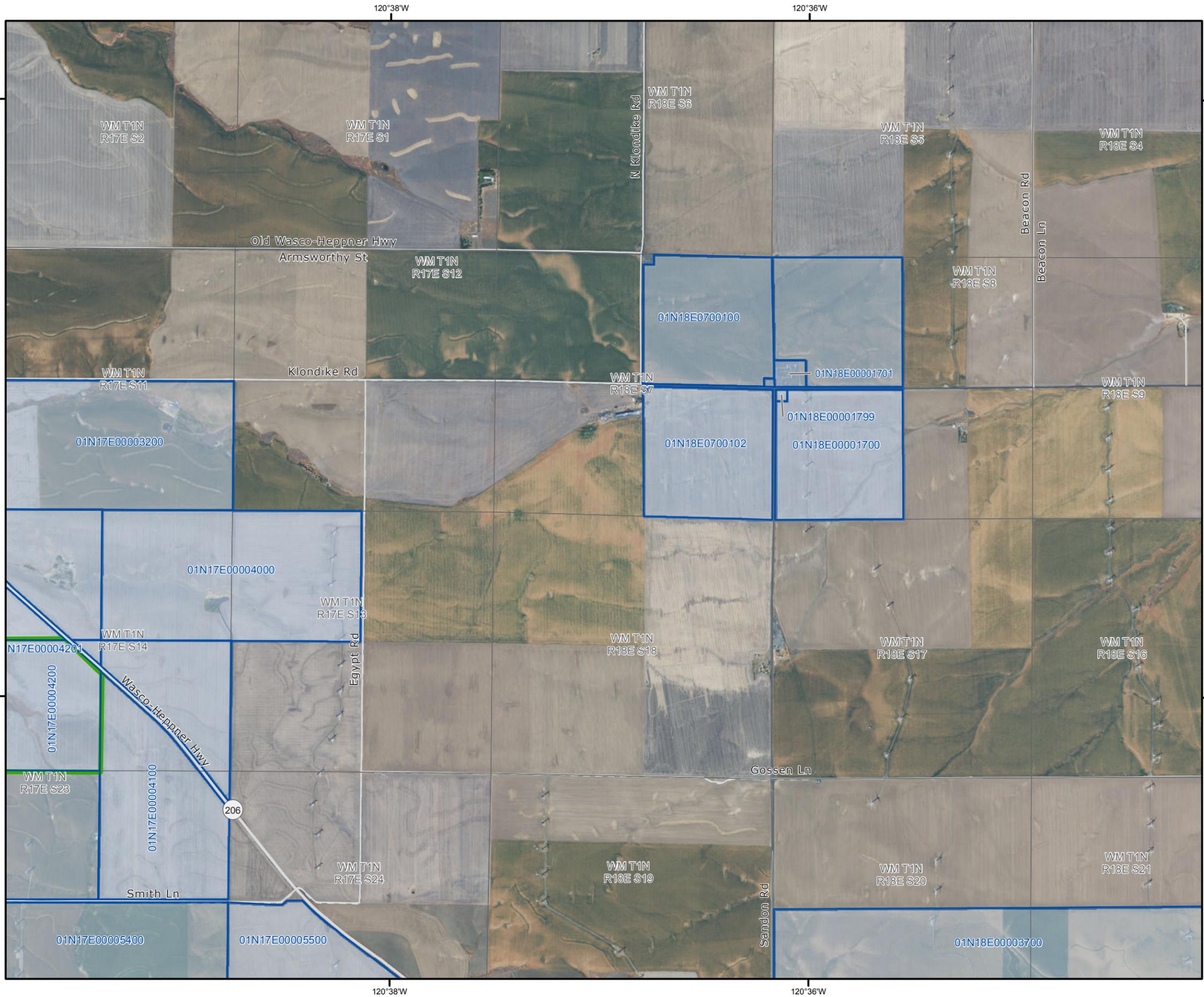
-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
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-  City Boundary
-  County Boundary
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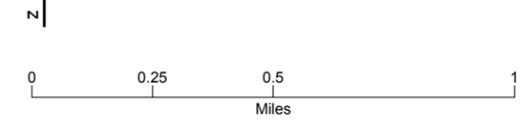


- Sherman County Tax Lot within 500 feet
- Facility Site Boundary
- Interstate or Highway
- Public Road (Paved)
- Public Road (Gravel)
- County Boundary
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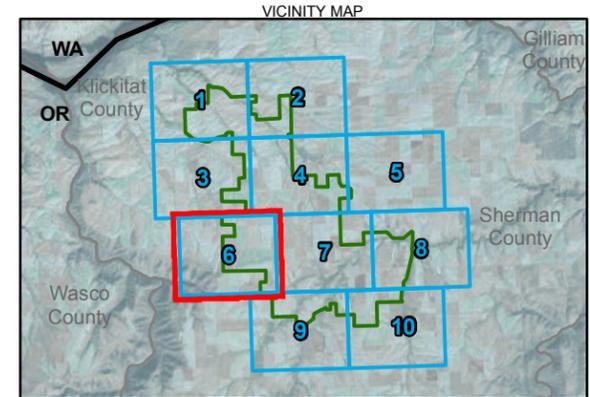
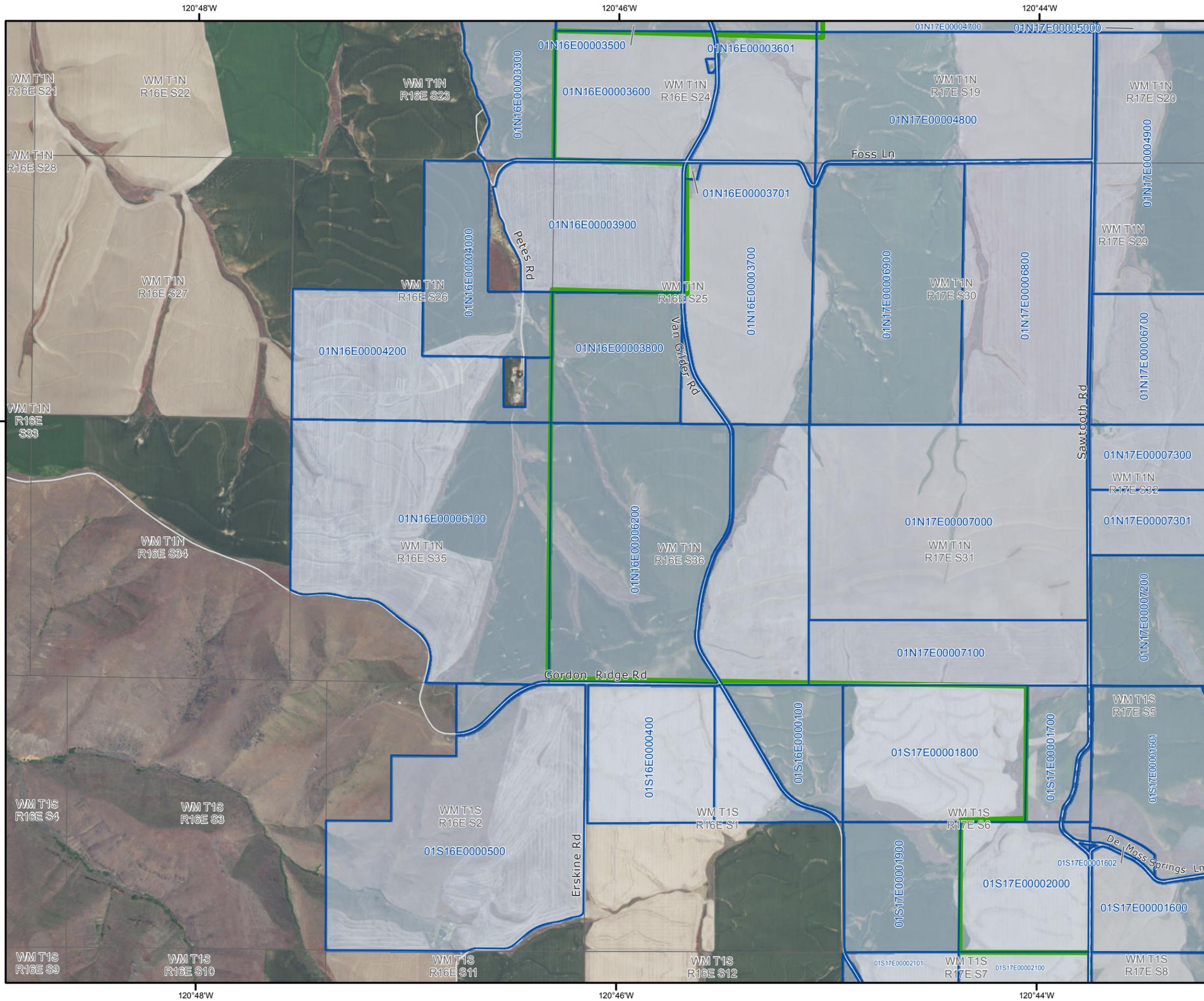
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



1 inch equals 0.38 miles

ATTACHMENT 2 (REVISED) - Page 5 of 10
Sherman County Property Owners
within 500 feet of Proposed Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3





-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Public Road (Paved)
-  Public Road (Gravel)
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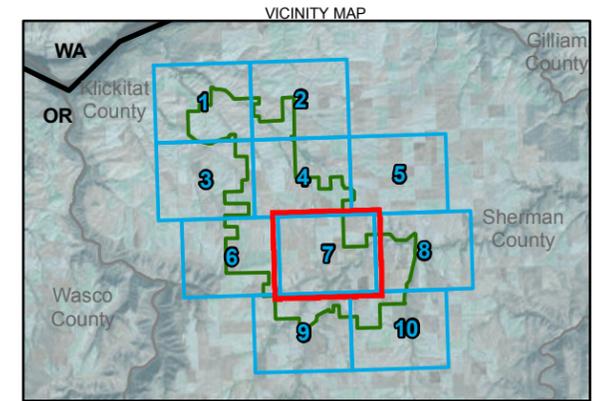
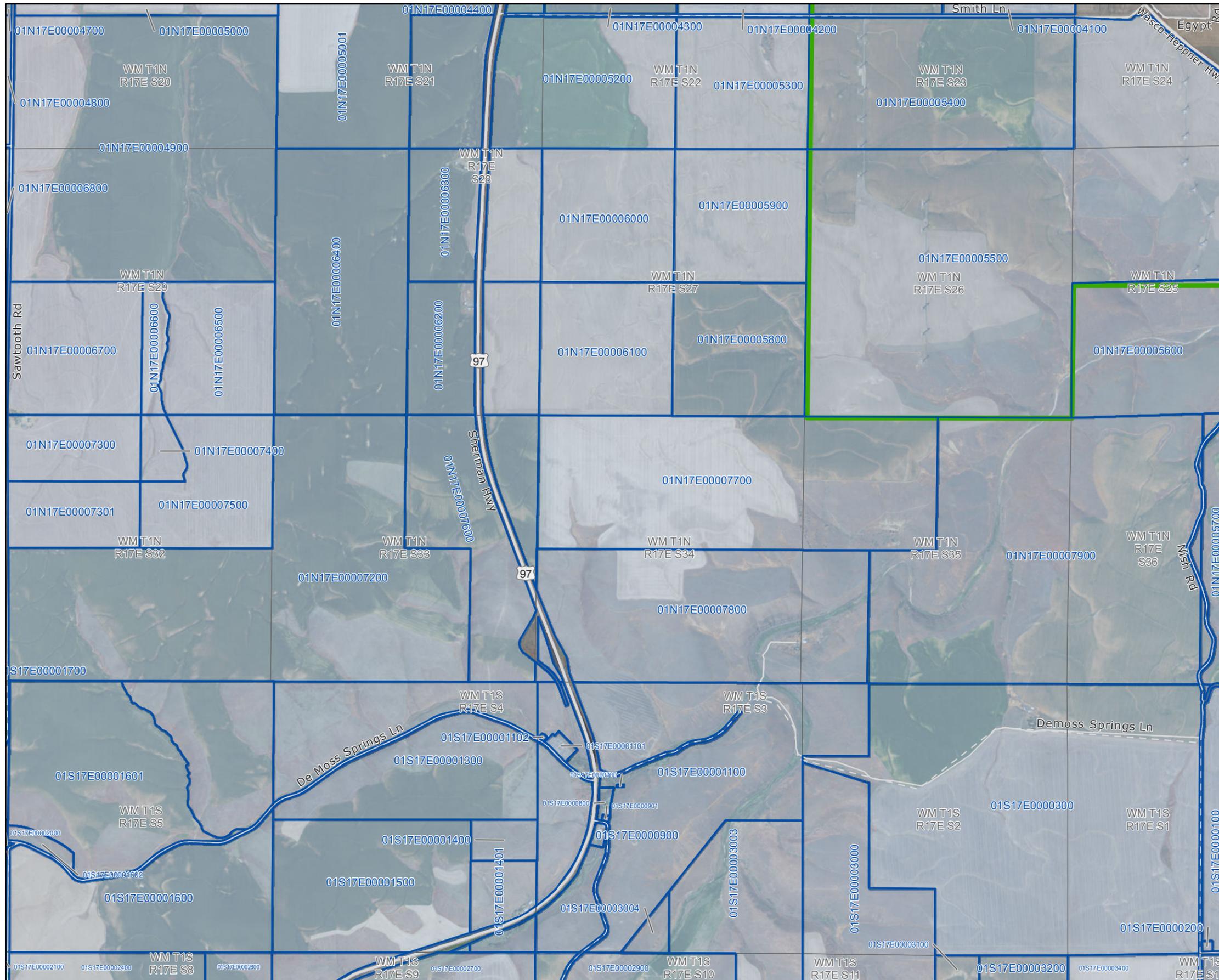
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Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

0 0.25 0.5 1
Miles

1 inch equals 0.38 miles



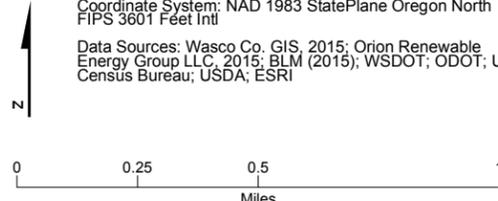


-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
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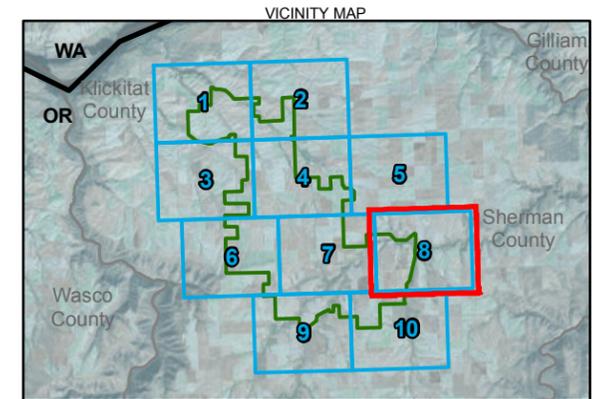
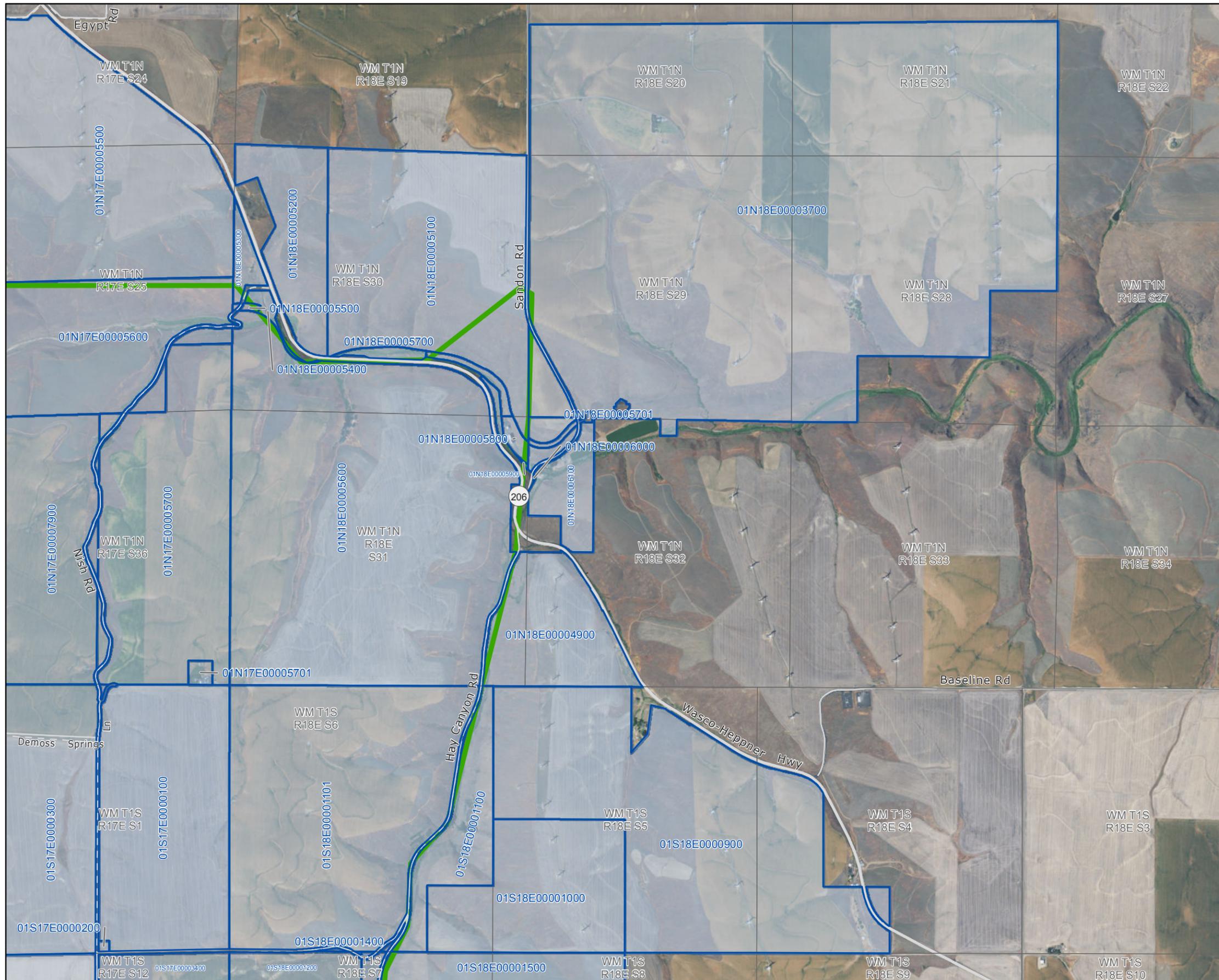
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Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



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Miles

1 inch equals 0.38 miles

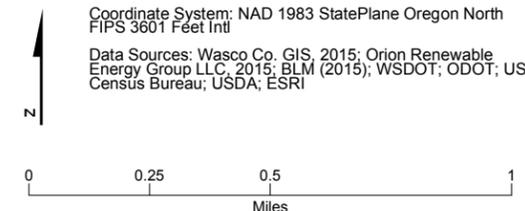


-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
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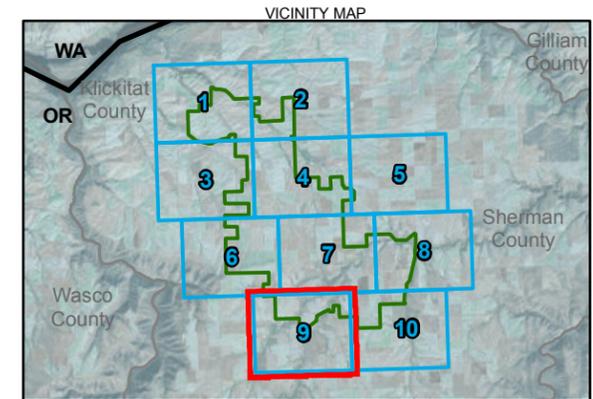
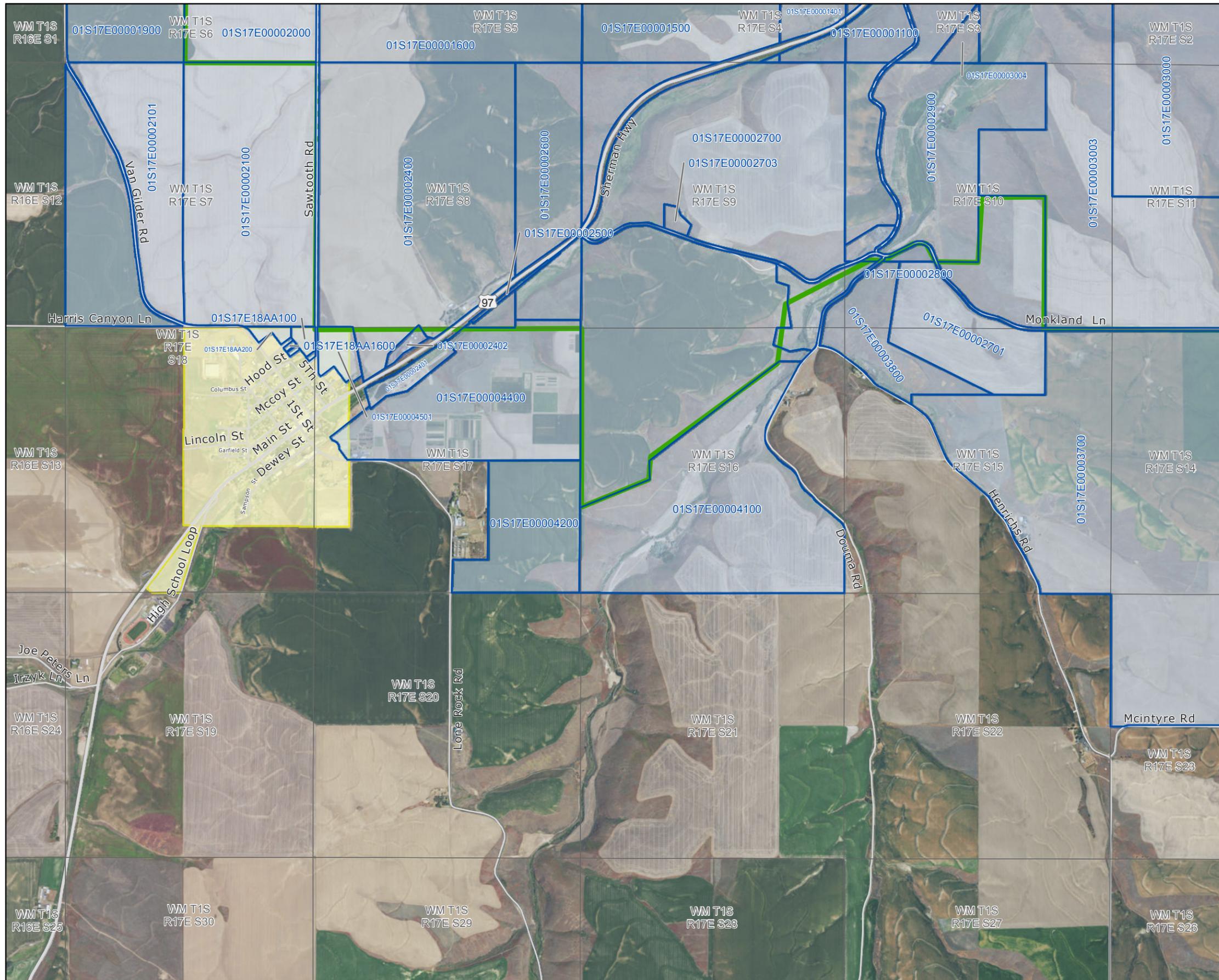
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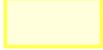
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



1 inch equals 0.38 miles

ATTACHMENT 2 (REVISED) - Page 8 of 10
Sherman County Property Owners
within 500 feet of Proposed Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3



-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
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 2. Property owner names, addresses, and tax lot IDs can be found in Attachment 2.

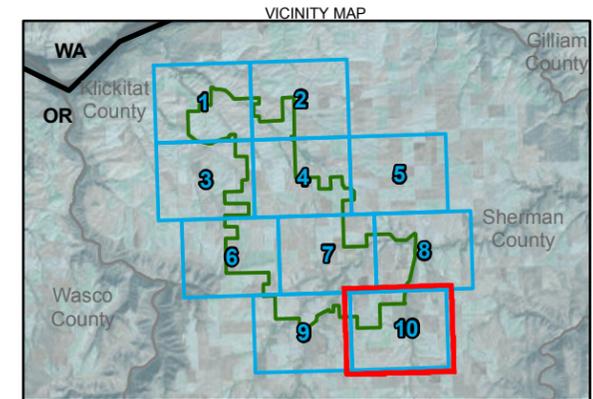
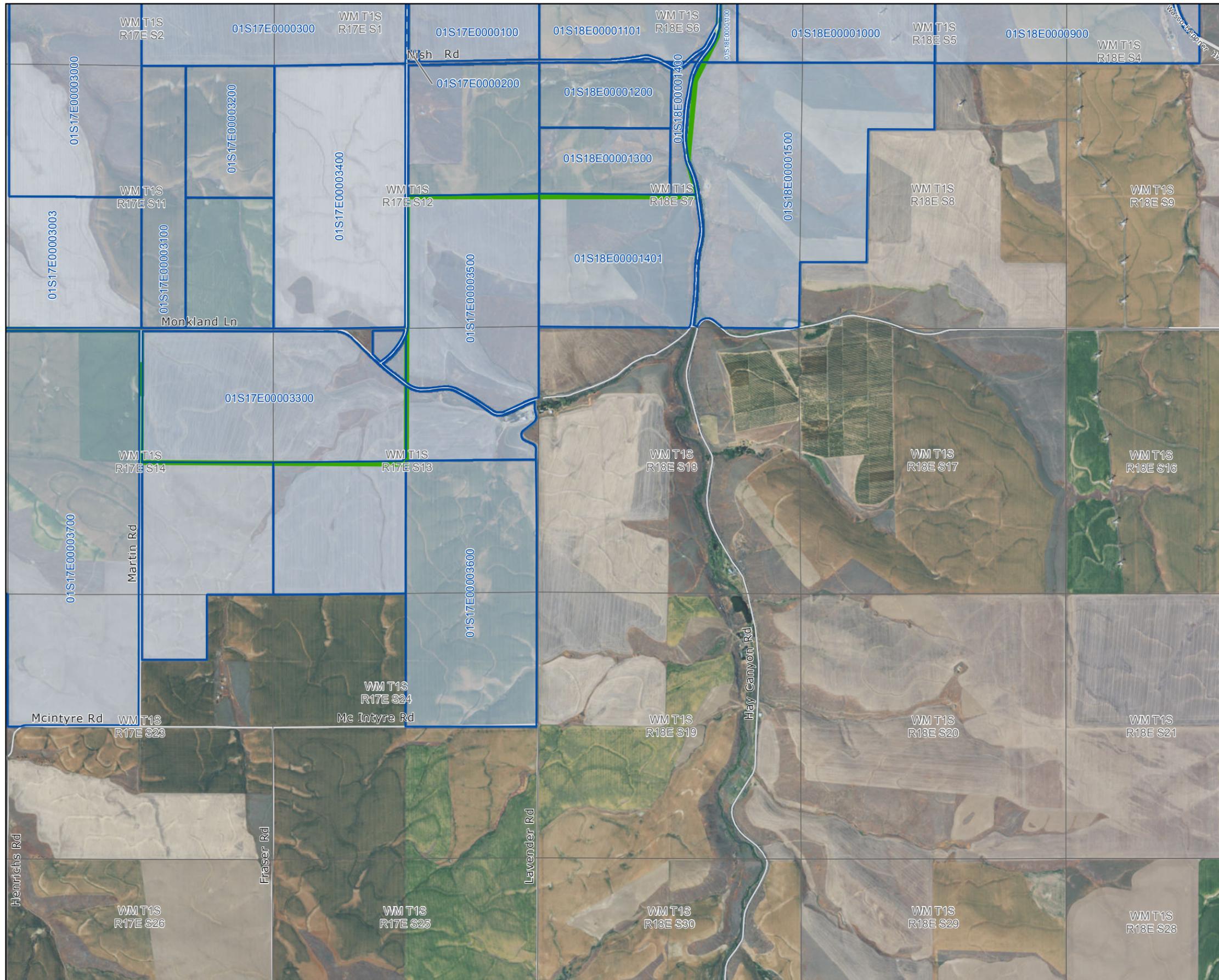
Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl

Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

0 0.25 0.5 1
Miles

1 inch equals 0.38 miles



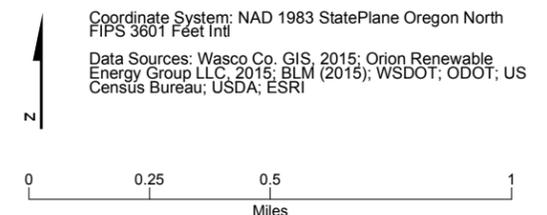


-  Sherman County Tax Lot within 500 feet
-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Notes:
 1. Sherman County property owner data obtained on December 4, 2015.
 2. Property owner names, addresses, and tax lot IDs can be found in Attachment 2.

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl

Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



1 inch equals 0.38 miles

ATTACHMENT 2 (REVISED) - Page 10 of 10
Sherman County Property Owners
within 500 feet of Proposed Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3

Attachment 3
Temporary and Permanent
Disturbance Calculations

TABLE 1. GOLDEN HILLS TEMPORARY DISTURBANCE CALCULATIONS

Facilities	Notes	Units of Measurement	Golden Hills			
			Dimensions per Unit	Number of Units	Acres	Miles
Turbine Construction/Laydown Areas						
Principal laydown areas	1	Acres	N/A	7	152	N/A
Laydown areas at each tower site		Square feet per tower site	196,250	125	563	N/A
Meteorological Towers (self-supporting)		Square feet per tower	1100	6	0.2	N/A
Electrical Systems						
Northern transmission line segment	2	Acres	40	1	40	N/A
230-kV transmission line	3	Feet of width per linear foot	10	22,646	5	4.29
34.5-kV collector line	3	Feet of width per linear foot	10	291,720	67	55.25
Roads						
Temporarily disturbed area during road construction						
New junction and turning radius improvements (new roads intersecting existing roads)		Acres	1.5	52	78	N/A
Tunaround		Acres	0.4	27	11	N/A
New 16-foot roads with 2-foot shoulders (temporarily widened to 36 feet)		Square feet disturbed area per linear foot of road	20	215,679	99	41.00
Crane Paths		Feet of width per linear foot	40	58,608	54	11.07
Total Temporarily Disturbed Area					1069	Acres

This table is based on the worst-case locations for Facility components, as shown on Figure 1 (Facility Turbine Layout) in the amendment request. Notes:

1. Dimensions of laydown areas and acreages vary by site. Acreage ranges from 5.78 to 35.94.
2. Additional 230-kilovolt transmission line and associated facilities to connect the Hay Canyon transmission line to Bonneville Power Administration's existing transmission tower structure just north of Klondike substation.
3. Assumes an average disturbance corridor width of 10 feet.

N/A = not applicable

TABLE 2. GOLDEN HILLS PERMANENT DISTURBANCE CALCULATIONS

Facilities	Notes	Units of Measurement	Golden Hills				
			Dimensions per Unit	Number of Units	Acres	Miles	
Turbine Pads/Towers		Square feet per tower	7,850	125	23	N/A	
Substation/Operations and Maintenance Facility							
Collector Substation	1	Acres	5	1	5	N/A	
O&M Facility	2	Acres	5	1	5	N/A	
Meteorological Towers (self-supporting)		Square feet per tower	900	6	0	N/A	
Electrical System Structures							
Northern Transmission Line Segment	3	Acres	0.5	1	0.5	N/A	
230-kV Transmission line	4	Square feet per pole	4	58	0	4.29	
Overhead 34.5-kV Collector Line Structures	5, 6	Square feet per pole	4	54	0	2.76	
Access Roads and Turnarounds							
New 16-foot roads with 2-foot shoulders		Square feet disturbed area per linear foot of road	20	215,679	99	41.00	
Total Permanently Disturbed Area					132	acres	

This table is based on the worst-case locations for Facility components as shown on Figure 1 (Facility Turbine Layout) in the amendment request Notes:

1. Includes substation/station and surrounding gravel within the fenced property. No temporary disturbance will occur outside the fenced area.
2. Includes building and graveled parking and storage areas. No temporary disturbance will occur outside the fenced area.
3. Additional 230-kilovolt transmission line and associated facilities to connect the Hay Canyon transmission line to Bonneville Power Administration's existing transmission tower structure just north of Klondike substation.
4. Assumes 398 feet average distance between poles.
5. Assumes worst-case scenario with 2.76 miles of overhead collectors, which is equal to 5 percent of the total miles (55.25) of collector
6. Assumes 269 feet average distance between poles.

N/A = not applicable

Attachment 4
Redlined Second Amended Site
Certificate

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~~THIRD SECOND~~-AMENDED SITE CERTIFICATE
FOR THE
GOLDEN HILLS WIND PROJECT

Issued by

OREGON ENERGY FACILITY SITING COUNCIL
625 Marion Street NE
Salem, OR 97301-3737

PHONE: 503-378-4040

FAX: 503-373-7806

Amending the
Site Certificate for the Golden Hills Wind Project
of ~~January 30, 2015~~ May 18, 2012

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**SECOND AMENDED SITE CERTIFICATE
FOR THE
GOLDEN HILLS WIND PROJECT**

I. INTRODUCTION

This site certificate for the Golden Hills Wind Project (“Golden Hills”) is issued and executed in the manner provided by ORS Chapter 469, by and between the State of Oregon (the “State”), acting by and through its Energy Facility Siting Council (the “Council”), and Golden Hills Wind Farm LLC (“GHWF” or the “certificate holder”).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the Council’s Final Order in the Matter of the Application for a Site Certificate for the Golden Hills Wind Project (the “Final Order on the Application” or “Final Order”) issued on May 15, 2009, the Council’s Final Order in the Matter of the Request for Amendment #1 of the Site Certificate for the Golden Hills Wind Project (“Final Order on Amendment #1”) issued May 11, 2012, the Council’s Final Order in the Matter of the Request for Amendment #2 of the Site Certificate for the Golden Hills Wind Project (“Final Order on Amendment #2”), the Council’s Amended Site Certificate dated January 30, 2015, the Council’s Final Order in the Matter of the Request for Amendment #3 of the Council’s Site Certificate for the Golden Hills Wind Project (“Final Order on Amendment #3”) and incorporated herein by this reference. In interpreting this site certificate, any ambiguity shall be clarified by reference to the following, in order of priority: (1) this site certificate; (2) the Final Order on Amendment #~~3~~²; (3) the Final Order on Amendment #~~2~~¹; (4) the Final Order on Amendment #1; ~~(5)~~ the Final Order on the Application; and (5) the record of the proceedings that led to all the Final Orders.

The definitions used in ORS 469.300 and OAR 345-001-0010 apply to terms used in this site certificate, except where otherwise stated or where the context clearly indicates otherwise.

II. SITE CERTIFICATION

1. To the extent authorized by State law and subject to the conditions set forth herein, the State approves and authorizes the certificate holder to construct, operate and retire a wind energy facility, together with certain related or supporting facilities, at the site in Sherman County, Oregon, as described in Section III of this site certificate. ORS 469.401(1).
2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in effect on the date that termination is sought, or until the site certificate is revoked under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS 469.401(1).
3. This site certificate does not address, and is not binding with respect to, matters that were not addressed in the Council’s Final Order on the Application for the facility. Such matters include, but are not limited to: (1) building code compliance; wage, hour and other labor regulations; local government fees and charges; and other design or operational issues that do not relate to siting the facility (ORS 469.401(4)); and (2) permits issued under statutes and rules for which the decision on compliance has been

1 delegated by the federal government to a State agency other than the Council.
2 ORS 469.503(3).

3 4. Both the State and the certificate holder shall abide by local ordinances and State law and
4 the rules of the Council in effect on the date this site certificate is executed.
5 ORS 469.401(2). In addition, upon a clear showing of a significant threat to the public
6 health, safety or the environment that requires application of later-adopted laws or rules,
7 the Council may require compliance with such later-adopted laws or rules.
8 ORS 469.401(2).

9 5. For a permit, license or other approval addressed in and governed by this site certificate,
10 the certificate holder shall comply with applicable State and federal laws adopted in the
11 future to the extent that such compliance is required under the respective State agency
12 statutes and rules. ORS 469.401(2).

13 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities
14 and political subdivisions in Oregon as to the approval of the site and the construction,
15 operation and retirement of the facility as to matters that are addressed in and governed
16 by this site certificate. ORS 469.401(3).

17 7. Each affected State agency, county, city and political subdivision in Oregon with
18 authority to issue a permit, license or other approval addressed in or governed by this site
19 certificate shall, upon submission of the proper application and payment of the proper
20 fees, but without hearings or other proceedings, issue such permit, license or other
21 approval subject only to conditions set forth in this site certificate. ORS 469.401(3).

22 8. After issuance of this site certificate, each State agency or local government agency that
23 issues a permit, license or other approval for the facility shall continue to exercise
24 enforcement authority over such permit, license or other approval. ORS 469.401(3).

25 9. After issuance of this site certificate, the Council shall have continuing authority over the
26 site and may inspect, or direct the Oregon Department of Energy (“ODOE” or the
27 “Department”) to inspect, or request another State agency or local government to inspect,
28 the site at any time in order to ensure that the facility is being operated consistently with
29 the terms and conditions of this site certificate. ORS 469.430.

30 **III. DESCRIPTION**

31 **A. THE FACILITY**

32 **1. The Energy Facility**

33 ORS 469.300(11)(a)(J) defines the “energy facility” in this case as ~~lain-an~~ electric power
34 generating plant with an average electric generating capacity of 35 megawatts or more if the
35 power is produced from ... wind energy at a single energy facility.” The proposed “electric
36 power generating plant” would consist of up to ~~125267~~ wind turbine locations, each consisting
37 of a turbine tower and foundation, turbine pad area, nacelle, rotor and blade assembly, and step-
38 up transformer. Wind turbines would be placed in survey corridors as shown in the Application

1 for a Site Certificate. Golden Hills would have a peak electric generating capacity of up to 400
2 MW and an average electric generating capacity of about 133 MW.

3 GHWF has not yet selected the wind turbine model or models that would be installed in
4 the facility. GHWF is requesting a site certificate that would allow the installation of up to 125
5 ~~267 GE 1.5 MW~~ turbines ~~or any combination of turbines subject to specific restrictions.~~
6 ~~Under maximum conditions, with~~ turbine towers ~~measuring would measure~~ up to 95 ~~80~~-meters
7 (~~3125263~~ feet) at the rotor hub, and the diameter of the rotor-swept area ~~measuring up to would~~
8 ~~be 126~~ 96-meters (413 ~~315~~ feet).

9 A wind turbine features a nacelle mounted on a tubular steel tower. The nacelle houses
10 the generator and gearbox and supports the rotor and blades at the hub. The turbine tower
11 supports and provides access to the nacelle. Each turbine unit sits on a concrete pad that
12 accommodates the turbine pedestal, a step-up transformer and a turnout area for service vehicles.
13 The purpose of the step-up transformer is to increase the output voltage of the wind turbine to the
14 voltage of the power collection system. Underlying the pad would be a deep concrete turbine
15 foundation with a surface area dependent upon the type and size of wind turbine selected.

16 2. Related or Supporting Facilities

17 GHWF proposes to construct the following related or supporting facilities:

- 18 · Power collection system
- 19 · Substations
- 20 · 230-kV transmission line
- 21 ~~—500-kV transmission line~~
- 22 · Meteorological towers
- 23 · Supervisory Control and Data Acquisition (“SCADA”) System
- 24 · O&M facility
- 25 · Access roads
- 26 · Temporary laydown areas

27 **Power Collection System.** About 62 ~~55~~ miles of power collection system, operating at
28 34.5 kV, would transport the power from the wind turbines to the substations. Some portion of
29 the power collection system may be installed above ground to avoid impacts or to accommodate
30 unforeseen geotechnical conditions.

31 **Substations.** The proposed facility would include ~~two~~ one substations, ~~located in~~ near the
32 ~~center one in the eastern section~~ of the Golden Hills site ~~and another in the western section of the~~
33 ~~Golden Hills site.~~ Each ~~The~~ substation would occupy a graveled and fenced area about 2 ~~5~~ acres
34 in size to facilitate ~~a~~ transformers, switching equipment and a parking area.

35 **230-kV Transmission Line.** An approximately 5-mile 230-kV transmission line would
36 interconnect ~~The substation in the eastern section of the Golden Hills site would interconnect~~
37 with an to the existing Hay Canyon 230-kV PPM Energy transmission line by means of an
38 aboveground 0.7-mile 230-kV transmission line. From there, electricity would be transmitted
39 using the existing Hay Canyon 230-kV line to the northern most transmission pole structure near

1 the Klondike Substation where up to approximately 700 feet of new 230-kV transmission line
2 will be constructed along with associated structures and equipment necessary to interconnect the
3 Facility to BPA’s transmission structure located approximately 300 feet north of the Klondike
4 Substation.

5 ~~**500-kV Transmission Line.** The substation in the western section of the Golden Hills~~
6 ~~site would interconnect with the existing BPA John Day Substation by means of an aboveground~~
7 ~~500-kV transmission line about 11 miles long.~~

8 **Meteorological Towers.** GHWF proposes to install up to six permanent meteorological
9 towers (“met towers”). The met towers would be unguyed tubular structures about ~~85-95~~
10 (~~279-3152~~ feet) tall and set in concrete foundations.

11 **SCADA System.** A fiber optic communications network would link the wind turbines to
12 a central computer at the O&M facility. The SCADA system would collect operating and
13 performance data from each wind turbine and Golden Hills as a whole and provide for remote
14 operation of the wind turbines.

15 **O&M Facility.** A 5,000-square-foot operations and maintenance (“O&M”) building
16 would be constructed at one or the other of two locations proposed by GHWF. The O&M
17 building would house office and workshop areas, a control room for the SCADA system, and a
18 kitchen, bathroom and shower. The five-acre O&M facility site would include parking for
19 vehicles. Domestic water use would not exceed 5,000 gallons per day, and domestic water
20 would be obtained from an on-site well. Domestic wastewater would be drained into an on-site
21 septic system.

22 **Access Roads.** Approximately ~~50-41~~ miles of new roads would be constructed to
23 provide access to the turbine strings and other facility components. Access roads would connect
24 to graveled turbine pad areas at the base of each wind turbine. The roads would be 20 feet wide
25 and constructed with crushed gravel. In addition, GHWF would improve and widen some
26 existing county and farm roads.

27 **Temporary Laydown Areas.** Up to seven principal, temporary laydown areas would be
28 used to stage construction and store supplies and equipment during construction. In addition,
29 temporary laydown areas would be required at the base of each proposed wind turbine. The
30 laydown areas would be covered with gravel, and the gravel would be removed and the areas
31 would be restored to their pre-construction conditions following completion of construction.

32 The certificate holder shall satisfy the following administrative condition:

33 (III.A.1) The certificate holder shall construct a facility substantially as described in the
34 site certificate and may select ~~up to 125 GE sle 1.5 megawatt or some~~
35 ~~combination of other~~ turbines, subject to the following restrictions and
36 compliance with other site certificate conditions. Before beginning construction,
37 the certificate holder shall provide to the Department a description of the turbine
38 types selected for the facility demonstrating compliance with this condition.

- 1 (a) The total number of turbines at the facility must not exceed ~~267~~125
2 turbines.
- 3 (b) The combined peak generating capacity of the facility must not exceed
4 400 megawatts.
- 5 (c) The turbine hub height must not exceed ~~95~~80-meters and the maximum
6 blade tip height must not exceed ~~128~~158 meters.
- 7 (d) The minimum blade tip clearance must be ~~19.832~~ meters above ground.
- 8 (e) The maximum combined weight of metals in the tower (including ladders
9 and platforms) and nacelle must not exceed ~~324~~336 U.S. tons per turbine.
- 10 (f) [ODOE: Recommend deleting this condition because whether an
11 amendment is triggered is governed by statute and rule.] ~~The certificate~~
12 ~~holder shall request an amendment of the site certificate to increase the~~
13 ~~combined peak generating capacity of the facility beyond 400 megawatts,~~
14 ~~to increase the number of wind turbines to more than 267 turbines, to~~
15 ~~install wind turbines with a hub height greater than 80 meters or a blade~~
16 ~~tip height greater than 128 meters, or to install turbines with a maximum~~
17 ~~combined weight of metals in the tower (including ladders and platforms)~~
18 ~~and nacelle greater than 324 U.S. tons per turbine.~~

19 B. LOCATION OF THE FACILITY

20 The facility will occupy about ~~2930,000~~29,500 acres and be located near Wasco in
21 Sherman County, Oregon. More particularly, the site would occupy portions of Sections 1-17,
22 Township 1 South, Range 17 East, Sections 6-7, Township 1 South, Range 18 East, Sections 29-
23 31, Township 1 North, Range 18 East, Sections 5-9, 14-23, and 25-36, Township 1 North, Range
24 17 East, Sections 1-3, 12-14, 23-26, and 35-36, Township 1 North, Range 16 East, Sections 29-
25 32, Township 2 North, Range 17 East, Sections 25-27 and 34-36, Township 2 North, Range 16
26 East, Sections 9, 10, 14-16, 22-26 and 34-36, Township 2 North, Range 16 East, Sections 29-32,
27 Township 2 North, Range 17 East, Sections 1-3, 13, 24, 25 and 36, Township 1 North, Range 16
28 East, Sections 5-8, 14-22, 25 and 27-36, Township 1 North, Range 17 East, Sections 1-14, 16
29 and 17, Township 1 South, Range 17 East, and Sections 6-8, Township 1 South, Range 18 East,
30 Willamette Meridian, Sherman County, Oregon.

31 C. THE SITE AND SITE BOUNDARY

32 The certificate holder shall satisfy the following administrative condition:

- 33 (III.C.1) Before beginning construction and after considering all micro-siting factors, the
34 certificate holder shall provide to the Department, the Oregon Department of Fish
35 and Wildlife (“ODFW”) and the Planning Director of Sherman County detailed
36 maps of the facility site, showing the final locations where the certificate holder
37 proposes to build facility components and a table showing the acres of temporary
38 and permanent habitat impact by habitat category and subtype. The maps shall
39 include the locations of temporary laydown areas and areas of temporary ground
40 disturbance associated with the construction of all Facility

~~component transmission lines~~. The detailed maps of the final facility layout site shall indicate the habitat categories of all areas that would be affected during construction. In classifying the affected habitat into habitat categories, the certificate holder shall consult with ODFW. The certificate holder shall not begin ground disturbance in an affected area until the habitat assessment has been approved by the Department. The Department may employ a qualified contractor to confirm the habitat assessment by on-site inspection.

D. CONSTRUCTION DEADLINES

The certificate holder shall satisfy the following administrative conditions:

(III.D.1) The certificate holder shall begin construction of the facility within by June 18, 201~~86~~. Under OAR 345-015-0085(9), an amended site certificate is effective upon execution by the Council Chair and the applicant. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendment 2]

(III.D.2) The certificate holder shall complete construction of the facility by June 18, 202~~14~~¹⁹. 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. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendment 2]

(III.D.3) 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(6), 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.

IV. SPECIFIC FACILITY CONDITIONS

The conditions listed in this section include conditions based on representations in the Application for a Site Certificate and supporting record. These conditions are required under OAR 345-027-0020(10). The certificate holder must comply with these conditions in addition to the conditions listed in Sections III, V, VI and VII. 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 the 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.

A. [PLACEHOLDER]

1 **B. ORGANIZATIONAL EXPERTISE**

- 2 (IV.B.1) The certificate holder shall report promptly to the Department any change in its
3 corporate relationship with Orion Renewable Energy Group LLC. The certificate
4 holder shall report promptly to the Department any change in its access to the
5 resources, expertise and personnel of Orion Renewable Energy Group LLC.
- 6 (IV.B.2) Before beginning construction, the certificate holder shall notify the Department
7 of the identity and qualifications of the major design, engineering and
8 construction contractor(s) for the facility. The certificate holder shall select
9 contractors that have substantial experience in the design, engineering and
10 construction of similar facilities. The certificate holder shall report to the
11 Department any change of major contractors.
- 12 (IV.B.3) If the certificate holder chooses a third-party contractor to operate the facility, the
13 certificate holder shall submit to the Council the identity of the contractor so the
14 Council may review the qualifications and capability of the contractor to meet the
15 standards of OAR 345-022-0010. If the Council finds that a new contractor meets
16 these standards, the Council shall not require an amendment to the site certificate
17 for the certificate holder to hire the contractor.
- 18 (IV.B.4) Any matter of noncompliance under the site certificate shall be the responsibility
19 of the certificate holder. Any notice of violation issued under the site certificate
20 shall be issued to the certificate holder. Any civil penalties assessed under the site
21 certificate shall be levied on the certificate holder.
- 22 (IV.B.5) The certificate holder shall contractually require the engineering and procurement
23 contractor and all independent contractors and subcontractors involved in the
24 construction and operation of the facility to comply with all applicable laws and
25 regulations and with the terms and conditions of the site certificate. Such
26 contractual provision shall not operate to relieve the certificate holder of
27 responsibility under the site certificate.
- 28 (IV.B.6) The certificate holder shall obtain, or shall ensure that its contractors obtain,
29 necessary federal, State and local permits or approvals required for the
30 construction, operation and retirement of the facility. The certificate holder shall
31 work with local and State fire officials to ensure compliance with all fire code
32 regulations regarding public buildings.
- 33 (IV.B.7) During construction, the certificate holder shall have an on-site assistant
34 construction manager who is qualified in environmental compliance to ensure
35 compliance with all construction-related site certificate conditions. During
36 operation, the certificate holder shall have a facility manager who is qualified in
37 environmental compliance to ensure compliance with all ongoing site certificate
38 conditions. The certificate holder shall notify the Department of the name,
39 telephone number, fax number and e-mail address of these managers and shall
40 keep the Department informed of any change in this information.

1 (IV.B.8) Within 72 hours after discovery of conditions or circumstances that may violate
2 the terms or conditions of the site certificate, the certificate holder shall report the
3 conditions or circumstances to the Department.

4 **C. RETIREMENT AND FINANCIAL ASSURANCE**

5 (IV.C.1) The certificate holder shall retire the facility if the certificate holder permanently
6 ceases construction or operation of the facility. The certificate holder shall retire
7 the facility according to a final retirement plan approved by the Council, as
8 described in OAR 345-027-0110, and prepared pursuant to Condition (IV.C.2).

9 (IV.C.2) Two years before closure of the energy facility, the certificate holder shall submit
10 to the Department a proposed final retirement plan for the facility and site,
11 pursuant to OAR 345-027-0110, including:

12 (a) A plan for retirement that provides for completion of retirement within
13 two years after permanent cessation of operation of the energy facility and
14 that protects the public health and safety and the environment;

15 (b) A description of actions the certificate holder proposes to take to restore
16 the site to a useful, non-hazardous condition suitable for agricultural use;
17 and

18 (c) A detailed cost estimate, a comparison of that estimate with the dollar
19 amount secured by a bond or letter of credit and any amount contained in a
20 retirement fund, and a plan for assuring the availability of adequate funds
21 for completion of retirement.

22 (IV.C.3) The certificate holder shall prevent the development of any conditions on the site
23 that would preclude restoration of the site to a useful, non-hazardous condition to
24 the extent that prevention of such site conditions is within the control of the
25 certificate holder.

26 (IV.C.4) Before beginning construction, the certificate holder shall submit to the State
27 through the Council a bond or letter of credit in the amount described herein
28 naming the State, acting by and through the Council, as beneficiary or payee. If
29 the certificate holder elects to build the facility in a single phase, the initial bond
30 or letter of credit amount is ~~\$14,084,425,000~~ ~~\$16,491,000~~ (in 2008 dollars),
31 adjusted to the date of issuance as described in (b), or the amount determined as
32 described in (a). If the certificate holder elects to build the facility in more than
33 one phase, the amount of the initial bond or letter of credit for each phase of
34 construction shall be the amount determined as described in (a). The certificate
35 holder shall adjust the amount of each bond or letter of credit on an annual basis
36 thereafter as described in (b).

37 (a) The certificate holder may adjust the amount of each bond or letter of
38 credit based on the final design configuration of the facility by applying
39 the unit costs and general costs illustrated in Table IV.C.1 of the Final
40 Order on the Application to the final design and calculating the financial

1 assurance amount as described in that order, adjusted to the date of
2 issuance as described in (b) and subject to approval by the Department.

3 (b) The certificate holder shall adjust the amount of each bond or letter of
4 credit, using the following calculation and subject to approval by the
5 Department:

6 (i) Adjust the subtotal component of the bond or letter of credit
7 amount (expressed in 2008 dollars) to present value, using the
8 U.S. Gross Domestic Product Implicit Price Deflator, Chain-
9 Weight, as published in the Oregon Department of Administrative
10 Services' "Oregon Economic and Revenue Forecast" or by any
11 successor agency (the "Index") and using the annual average index
12 value for 2008 dollars and the quarterly index value for the date of
13 issuance of the new bond or letter of credit. If at any time the
14 Index is no longer published, the Council shall select a comparable
15 calculation to adjust 2008 dollars to present value.

16 (ii) Calculate the adjusted performance bond amount as 1 percent of
17 the new subtotal (i).

18 (iii) Add the subtotal (i) to the adjusted performance bond amount
19 (ii) for the adjusted gross cost.

20 (iv) Calculate the adjusted administration and project management
21 costs as 10 percent of the adjusted gross cost (iii).

22 (v) Calculate the adjusted future developments contingency as
23 10 percent of the adjusted gross cost (iii).

24 (vi) Add the adjusted gross cost (iii) to the sum of adjusted
25 administration and project management costs (iv) and the adjusted
26 future developments contingency (v) and round the resulting total
27 to the nearest \$1,000 to determine the adjusted financial assurance
28 amount.

29 (c) The certificate holder shall use a form of bond or letter of credit approved
30 by the Council.

31 (d) The certificate holder shall use an issuer of the bond or letter of credit
32 approved by the Council.

33 (e) The certificate holder shall describe the status of the bond or letter of
34 credit in the annual report submitted to the Council under Condition
35 (VII.21.a.ii).

36 (f) The bond or letter of credit shall not be subject to revocation or reduction
37 before retirement of the facility site.

38 (IV.C.5) If the certificate holder elects to use a bond to meet the requirements of Condition
39 (IV.C.4), the certificate holder shall ensure that the surety is obligated to comply
40 with the requirements of applicable statutes, Council rules and this site certificate
41 when the surety exercises any legal or contractual right it may have to assume

1 construction, operation or retirement of the energy facility. The certificate holder
2 shall also ensure that the surety is obligated to notify the Council that it is
3 exercising such rights and to obtain any Council approvals required by applicable
4 statutes, Council rules and this site certificate before the surety commences any
5 activity to complete construction, operate or retire the energy facility.

6 (IV.C.6) The certificate holder shall report to the Department any release of hazardous
7 substances, pursuant to Oregon Department of Environmental Quality (“DEQ”)
8 regulations, within one working day after the discovery of such release. This
9 obligation shall be in addition to any other reporting requirements applicable to
10 such a release.

11 (IV.C.7) If the certificate holder has not remedied a release consistent with applicable
12 Oregon DEQ standards within six months after the date of the release, the
13 certificate holder shall submit to the Council for its approval an independently
14 prepared estimate of the additional cost of remediation or correction within such
15 six-month period.

- 16 (a) Upon approval of an estimate by the Council, the certificate holder shall
17 increase the amount of its bond or letter of credit by the amount of the
18 estimate.
- 19 (b) In no event, however, shall the certificate holder be relieved of its
20 obligation to exercise all due diligence in remedying a release of
21 hazardous substances.

22 (IV.C.8) All funds received by the certificate holder from the salvage of equipment and
23 buildings shall be committed to the restoration of the energy facility site to the
24 extent necessary to fund the approved site restoration and remediation.

25 (IV.C.9) The certificate holder shall pay the actual cost to restore the site to a useful, non-
26 hazardous condition at the time of retirement, notwithstanding the Council’s
27 approval in the site certificate of an estimated amount required to restore the site.

28 (IV.C.9) If the Council finds that the certificate holder has permanently ceased
29 construction or operation of the facility without retiring the facility according to a
30 final retirement plan approved by the Council, as described in OAR 345-027-0110
31 and prepared pursuant to Condition (IV.C.2), the Council shall notify the
32 certificate holder and request that the certificate holder submit a proposed final
33 retirement plan to the Department within a reasonable time not to exceed 90 days.

- 34 (a) If the certificate holder does not submit a proposed final retirement plan
35 by the specified date or if the Council rejects the retirement plan that the
36 certificate holder submits, the Council may direct the Department to
37 prepare a proposed a final retirement plan for the Council’s approval.
- 38 (b) Upon the Council’s approval of the final retirement plan prepared pursuant
39 to (a), the Council may draw on the bond or letter of credit described in
40 Condition (IV.C.4) and shall use the funds to restore the site to a useful,

1 non-hazardous condition according to the final retirement plan, in addition
2 to any penalties the Council may impose under OAR Chapter 345,
3 Division 29.

4 (c) If the amount of the bond or letter of credit is insufficient to pay the actual
5 cost of retirement, the certificate holder shall pay any additional cost
6 necessary to restore the site to a useful, non-hazardous condition.

7 (d) After completion of site restoration, the Council shall issue an order to
8 terminate the site certificate if the Council finds that the facility has been
9 retired according to the approved final retirement plan.

10 **D. LAND USE**

11 (IV.D.1) The certificate holder shall construct the public road improvements described in
12 the Application for a Site Certificate to meet or exceed road standards for the road
13 classifications in the County’s Transportation System Plan and Zoning Ordinance
14 because roads will require a more substantial section to bear the weight of the
15 vehicles and turbine components than would usually be constructed by the
16 County.

17 (IV.D.2) The certificate holder shall ensure that no equipment or machinery is parked or
18 stored on any county road except while in use.

19 (IV.D.3) The site certificate holder shall, in consultation with affected landowners, design
20 and construct private access roads to minimize the division of existing farm units.

21 (IV.D.4) The certificate holder shall not locate any aboveground facility structure
22 (including wind turbines, O&M building, substations and met towers, but not
23 including aboveground power collection and transmission lines and poles and
24 junction boxes) within 50 feet from any property line or within 50 feet from the
25 right of way of any arterial or major collector road.

26 (IV.D.5) Aboveground transmission line structures shall not occupy areas that show gross
27 indicators of landslide activity or marginal stability.

28 (IV.D.6) Collector lines in the Natural Hazards Combining Zone (“NH zone”) shall be
29 placed under ground except in instances where it is more practical to install
30 aboveground power collection lines and provided that the aboveground power
31 collection lines will be designed to minimize slope stability and other NH zone
32 hazards. The site-specific geotechnical investigation required prior to
33 construction shall address native soil and bedrock stability concerns at cuts, fills
34 and culvert crossings, and shall include design and construction recommendations
35 to minimize the potential for destabilizing marginally stable slopes and the
36 potential for stream erosion.

37 (IV.D.7) Prior to start of construction, the certificate holder shall submit for Sherman
38 County Planning Department concurrence the plans and profiles described at
39 SCZO 3.7.5(e).

- 1 (IV.D.8) Construction staging areas shall be limited to areas outside the NH zone.
- 2 (IV.D.9) Roads or streets in the NH zone shall be stabilized by planking, gravel or
3 pavement as deemed necessary, and roadways shall be built without installation of
4 excessive fill, diversion of water or excessive cuts unless the site investigation
5 determines that such conditions will not be detrimental to the area or create
6 unwarranted maintenance problems or additional hazards.
- 7 (IV.D.10) The certificate holder shall locate access roads and temporary construction
8 laydown and staging areas, including those associated with construction of
9 transmission lines or placement of conductors on third-party transmission lines, to
10 minimize disturbance with farming practices and, wherever feasible, as
11 determined in consultation with affected landowners, shall place turbines and
12 transmission interconnection lines along the margins of cultivated areas to reduce
13 the potential for conflict with farm operations. The certificate holder shall place
14 aboveground transmission and collector lines and poles and junction boxes along
15 property lines and public road rights-of-way to the extent practicable.
- 16 (IV.D.11) During operation of the facility, the certificate holder, in cooperation with
17 landowners, shall avoid impact on cultivated land to the extent reasonably
18 possible when performing facility repair and maintenance activities.
- 19 (IV.D.12) Where necessary and feasible, the certificate holder shall provide access across
20 construction trenches to fields within the facility site and otherwise provide
21 adequate and timely access to properties during critical periods in the farming
22 cycle, such as harvest.
- 23 (IV.D.13) Before beginning construction of the facility, the certificate holder shall record a
24 Farm Management Easement covering the properties on which the certificate
25 holder locates wind power generation facilities. The certificate holder shall
26 record the easements in the real property records of Sherman County and shall file
27 a copy of the recorded easement with the Sherman County Planning Director.
- 28 (IV.D.14) The certificate holder shall remove from Special Farm Assessment the portions of
29 parcels on which facilities are located and shall pay all property taxes due and
30 payable after the Special Farm Assessment is removed from such properties.
- 31 (IV.D.15) Within 90 days after beginning operation, the certificate holder shall provide to
32 the Department and to the Sherman County Planning Director the actual latitude
33 and longitude location or Stateplane NAD 83(91) coordinates of each turbine
34 tower, connecting lines and transmission lines. In addition, the certificate holder
35 shall provide to the Department and to the Sherman County Planning Director, a
36 summary of as-built changes in the facility compared to the original plan, if any.
- 37 (IV.D.16) The certificate holder shall work with the Sherman County Weed Control
38 manager to take appropriate measures to prevent the invasion, during and after the
39 facility's construction, of any weeds on the Sherman County noxious weed list.

- 1 (IV.D.17) The certificate holder shall cooperate with the Sherman County Road Department
2 to ensure that any unusual damage or wear caused by the use of the county's
3 roads by the developer during the construction of the facility will be the
4 responsibility of the developer. The Road Department will provide an assessment
5 of road conditions in the facility area prior to the start of construction of the
6 facility and an evaluation of the roads following completion of the facility to
7 determine any significant change in condition. In addition, no equipment or
8 machinery of the developers shall be parked or stored on any county road except
9 while in use.
- 10 (IV.D.18) Prior to start of construction, the certificate holder shall, in consultation with
11 Sherman County, assign a 9-1-1 5-digit rural address to every tower road that
12 intersects a State or county road. The county will provide and install the signage
13 for these addresses.
- 14 (IV.D.19) Prior to beginning construction, the certificate holder will:
- 15 (a) Designate a route or routes for the transport of wind turbine construction
16 material (including water, aggregate, concrete, machinery and tower
17 pieces), with the intention of minimizing damage to non-designated roads,
18 and provide these designations to the County Road Master;
- 19 (b) Provide to the County Road Master a written summary of possible
20 anticipated road damage to the designated route or routes, and an estimate
21 of the cost of repair to the designated route or routes;
- 22 (c) Establish and maintain an escrow account for so long as construction is
23 ongoing, funded in an amount equal to the estimated cost to repair the
24 designated route or routes consistent with the estimate provided in (b); and
- 25 (d) Conduct an inspection of the roads along the designated route or routes
26 before and after construction with a representative of the Sherman County
27 Road Department and an independent third party with the required
28 expertise to inspect and evaluate paved and graveled roads. In the event a
29 dispute arises, the third party shall be the final arbiter. The cost of the
30 hiring of the third party shall be borne by the applicant.
- 31 (IV.D.20) Before beginning construction of facility access roads, the certificate holder shall
32 confer with the Sherman County Road Master regarding any utility permits
33 needed for county road right-of-ways and obtain permits for construction of all
34 approach roads onto county roads, all in accordance with Sherman County
35 Ordinance No. 35-2007.
- 36 (IV.D.21) The certificate holder shall comply with Sherman County Zoning Ordinance
37 Section 4.14.4, Access Connection and Driveway Design, in connection with
38 construction of the O&M facility and substations.
- 39 (IV.D.22) Prior to construction, Certificate Holder shall demonstrate that the final location
40 of turbines within the micro-siting corridors approved by the Council will satisfy

1 setback requirements prescribed by Section 4 of the Sherman County Wind
2 Setback Ordinance (Ordinance No. 39-2007) unless the Council or Oregon
3 Department of Energy has approved a variance to such setback for the turbine or
4 the Certificate Holder has negotiated a setback agreement with the affected
5 adjacent property owner or wind project developer. [Amendment #1]

6 **E. SOIL PROTECTION**

7 (IV.E.1) The certificate holder shall conduct all construction work in compliance with an
8 Erosion and Sediment Control Plan (the “ESCP”) satisfactory to the Oregon DEQ
9 and as required under the National Pollutant Discharge Elimination System Storm
10 Water Discharge General Permit #1200-C. The certificate holder shall include in
11 the ESCP any procedures necessary to meet local erosion and sediment control
12 requirements or storm water management requirements.

13 (IV.E.2) Where temporary impacts will occur in cultivated areas, the certificate holder
14 shall salvage approximately three feet of topsoil and stockpile this topsoil in
15 windrows. The certificate holder shall protect the windrows with plastic sheeting
16 or mulch. Upon removal of the temporary features, the certificate holder shall
17 cultivate the subsoil to a depth of at least 12 inches (except where bedrock
18 prohibits achieving this depth) and then redistribute the salvaged topsoil to match
19 adjacent grades.

20 (IV.E.3) During facility operation, the certificate holder shall routinely inspect and
21 maintain all roads, pads and trenched areas and, as necessary, maintain or repair
22 erosion control measures. The certificate holder shall restore areas that are
23 temporarily disturbed during facility maintenance or repair activities to
24 predisturbance condition or better.

25 (IV.E.4) During construction and operation of the facility, the certificate holder shall
26 implement a plan, developed in consultation with the Sherman County Weed
27 Control manager, to control the introduction and spread of noxious weeds.

28 (IV.E.5) During construction, the certificate holder shall ensure that the wash down of
29 concrete trucks occurs only at a contractor-owned batch plant or at tower
30 foundation locations. If such wash down occurs at tower foundation locations,
31 then the certificate holder shall ensure that wash down wastewater does not run
32 off the construction site into otherwise undisturbed areas and that the wastewater
33 is disposed of on backfill piles and buried underground with the backfill over the
34 tower foundation.

35 (IV.E.6) During facility operation, if blade-washing becomes necessary, the certificate
36 holder shall ensure that there is no runoff of wash water from the site or
37 discharges to surface waters, storm sewers or dry wells. The certificate holder
38 shall not use acids, bases or metal brighteners with the wash water. The
39 certificate holder may use biodegradable, phosphate-free cleaners sparingly.

1 **F. PROTECTED AREAS**

2 [No conditions]

3 **G. SCENIC RESOURCES**

4 (IV.G.1) To reduce the visual impact of the facility, the certificate holder shall:

- 5 (a) Mount nacelles on smooth steel structures painted uniformly in a neutral
6 color to blend with the surrounding landscape;
- 7 (b) Paint substation structures in a neutral color to blend with the surrounding
8 landscape;
- 9 (c) Not allow any advertising to be used on any part of the facility;
- 10 (d) Use only those signs required for facility safety or required by law, except
11 that the certificate holder may erect a sign to identify the facility; and
- 12 (e) Maintain any signs allowed under this condition in good repair.

13 (IV.G.2) The certificate holder shall design and construct the O&M facility to be generally
14 consistent with the character of similar buildings used by commercial farmers or
15 ranchers in the area and shall paint the building in a neutral color to blend with the
16 surrounding landscape.

17 (IV.G.3) During operation of the facility, the certificate holder shall not use exterior
18 nighttime lighting except:

- 19 (a) The minimum turbine tower lighting required or recommended by the
20 Federal Aviation Administration (the “FAA”);
- 21 (b) Security lighting at the O&M facility and substations, provided that such
22 lighting is shielded or directed downward to reduce glare;
- 23 (c) Minimum lighting necessary for repairs or emergencies; and
- 24 (d) As otherwise required by federal, State or local law.

25 **H. RECREATION**

26 [No conditions]

27 **I. PUBLIC HEALTH AND SAFETY STANDARDS**

28 (IV.I.1) The certificate holder shall follow manufacturer’s recommended handling
29 instructions and procedures to prevent damage to turbine or turbine tower
30 components that could lead to failure.

31 (IV.1.2) The certificate holder shall install and maintain self-monitoring devices on each
32 turbine, connected to a fault annunciation panel or SCADA system at the O&M
33 facility to alert operators to potentially dangerous conditions. The certificate

holder shall equip each turbine with vibration-sensing equipment that will shut down the turbine in the event of abnormal levels of vibration.

(IV.I.3) The certificate holder shall construct turbine towers with no exterior ladders or access to the turbine blades and shall install locked tower access doors. The certificate holder shall keep tower access doors locked at all times except when authorized personnel are present.

(IV.1.4) The certificate holder shall have an operational safety-monitoring program and shall inspect all turbines and turbine tower components on a regular basis. The certificate holder shall maintain or repair turbine and turbine tower components as necessary to protect public safety.

(IV.1.5) For turbine types having pad-mounted step-up transformers, the certificate holder shall install the transformers 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.

(IV.1.6) To protect the public from electrical hazards, the certificate holder shall enclose the facility substations with appropriate fencing and locked gates.

(IV.1.7) Before beginning construction, the certificate holder shall submit to the FAA and the Oregon Department of Aviation (“ODA”) a Notice of Proposed Construction or Alteration identifying the proposed final locations of the turbines and related or supporting facilities and shall provide a copy of this notice to the Department. The certificate holder shall notify the Department of the FAA’s and ODA’s responses as soon as they have been received.

(IV.I.8) The certificate holder shall construct all facility components in compliance with the following setback requirements:

- (a) 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.
- (b) 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.
- (c) 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 boundary of the certificate holder’s lease area.

J. SITING STANDARDS FOR WIND ENERGY FACILITIES

[No conditions]

1 **K. SITING STANDARDS FOR TRANSMISSION LINES**

2 (IV.K.1) The certificate holder shall install the underground segments of the 34.5-kV
3 collector system at a minimum depth of three feet.

4 **L. THREATENED AND ENDANGERED SPECIES**

5 (IV.L.1) The certificate holder shall report the results of the database review and
6 consultation to the Department and to ODFW and, if there have been new
7 documentations of nesting bald eagles or peregrine falcons within two miles of
8 the facility, the certificate holder shall implement appropriate measures to protect
9 the species from adverse impact, as approved by the Department and ODFW.

10 (IV.L.2) The certificate holder shall implement measures to mitigate impacts to sensitive
11 wildlife habitat during construction including, but not limited to, the following:

12 (a) Preparing maps to show sensitive areas, such as nesting or denning areas
13 for sensitive wildlife species, that are off limits to construction personnel;

14 (b) Ensuring that a qualified person instructs construction personnel to be
15 aware of wildlife in the area and to take precautions to avoid injuring or
16 destroying wildlife or significant wildlife habitat; and

17 (c) Avoiding unnecessary road construction, temporary disturbance and
18 vehicle use.

19 (IV.L.3) Prior to the beginning of construction of the facility the certificate holder shall
20 perform new field surveys for threatened and endangered species following the
21 survey protocol set forth in the Application for Site Certificate. The certificate
22 holder shall report the results of the field surveys to the Department, ODFW, and
23 the Oregon Department of Agriculture. If the surveys identify the presence of
24 threatened or endangered species within the site boundary, the certificate holder
25 shall implement appropriate measures to avoid a significant reduction in the
26 likelihood of survival or recovery of the species, as approved by the Department,
27 ODFW, and the Oregon Department of Agriculture.

28 **M. FISH AND WILDLIFE HABITAT**

29 (IV.M.1) The certificate holder shall implement the Habitat Mitigation and Revegetation
30 Plan submitted by the certificate holder in its August 2008 application supplement
31 and attached to the Final Order as Attachment B, as amended from time to time.
32 Prior to start of construction, the certificate holder shall acquire the legal right to
33 create, enhance, maintain and protect a habitat mitigation area so long as the site
34 certificate is in effect by means of outright purchase, conservation easement or
35 similar conveyance and shall provide a copy of the documentation to the
36 Department. The nominal lease term shall be at least 30 years, with an option to
37 extend if the facility continues operations past year 30. The mitigation area shall
38 be as shown in figures 1, 2 and 3 of Attachment B to the Final Order. Any

1 different mitigation area shall require prior approval of the Department in
2 consultation with ODFW.

3 (IV.M.2) The certificate holder shall restore areas outside the permanent footprint that are
4 disturbed during construction according to the methods and monitoring
5 procedures described in the revegetation plan included in the Final Order as
6 Attachment B and as amended from time to time. Mitigation and restoration
7 requirements in the plan shall apply to all laydown areas and other areas of
8 temporary disturbance, including those associated with construction of
9 transmission lines.

10 (IV.M.3) Permanent met towers shall not have guy wires.

11 (IV.M.4) The certificate holder shall survey the status of known raptor nests within 0.5
12 miles before ground-disturbing activities begin. If an active nest is found, and
13 ground-disturbing activities are scheduled to begin before the end of the sensitive
14 nesting and breeding season (mid-April to mid-August), the certificate holder will
15 not engage in ground-disturbing activities within a 0.25-mile buffer around the
16 nest until the nest fledges young or the nest fails, unless ODFW approves an
17 alternative plan. If ground-disturbing construction activities continue into the
18 sensitive nesting and breeding season for the following year, the certificate holder
19 will not engage in ground-disturbing activities within the 0.25-mile buffer if the
20 nest site is found to be active until the nest fledges young or the nest fails, unless
21 ODFW approves an alternate plan.

22 (IV.M.5) The certificate holder will survey the status of known loggerhead shrikes nests
23 and visit sites where non-nesting loggerhead shrikes were observed in order to
24 determine old and new nest sites. Ground-disturbing activities will be sequenced
25 with active raptor nests, using a 150-meter buffer.

26 (IV.M.6) Trees in Category 3 upland tree habitat shall not be physically harmed or
27 removed.

28 (IV.M.7) The certificate holder shall conduct wildlife monitoring as described in the
29 Wildlife Monitoring and Mitigation Plan that is included as Attachment A to the
30 Final Order and as amended from time to time.

31 (IV.M.8) The certificate holder shall design and construct all aboveground transmission line
32 support structures following the practices suggested by the Avian Powerline
33 Interaction Committee (APLIC 1996, referenced in the Application for a Site
34 Certificate, at P-33) and shall install anti-perching devices on transmission pole
35 tops and cross arms where the poles are within the site or are located within one-
36 quarter mile of any wind turbine.

37 (IV.M.9) The certificate holder may construct turbines and other facility components within
38 the 900-foot corridors shown on Figures P-1 through P-10 of the Application for a
39 Site Certificate and August 2008 supplement, subject to the following
40 requirements addressing potential habitat impact:

- (a) The certificate holder shall not construct any facility components within areas of Category 1 or Category 2 habitat and shall avoid temporary disturbance of Category 1 or Category 2 habitat, except for those acreages allowed in Table IV.M.1 in the Final Order.
- (b) The certificate holder shall design and construct facility components that are the minimum size needed for safe operation of the energy facility.

(IV.M.10) During construction, the certificate holder shall protect the area within a 1300-foot buffer around any active nests of the following species during the sensitive period, as provided in this condition:

Species	Sensitive Period	Early Release Date
Swainson's hawk	April 1 to August 15	May 31
Golden eagle	February 1 to August 31	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

The 1300-foot buffer may be reduced, with Department approval, if there is an adequate physical barrier between the nest site and the construction impacts such that a 1300-foot buffer proves to be excessive.

During the year in which construction of any phase occurs, the certificate holder shall use a protocol approved by 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. If a nest is occupied by any of these species after the beginning of the sensitive period, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) or allow high levels of construction traffic within 1300 feet of the nest site, or such lesser distance as may be approved by the Department in the event there is an adequate physical barrier between the nest site and the construction impacts.

In addition, the certificate holder shall flag the boundaries of the 1300-foot buffer area, or such lesser distance as may be approved by the Department in the event there is an adequate physical barrier between the nest site and the construction impacts, and shall instruct construction personnel to avoid any unnecessary activity within the buffer area. The certificate holder shall direct a qualified independent third-party biological monitor, as approved by the Department, to observe the active nest sites during the sensitive period for signs of disturbance and to notify the Department of any noncompliance with this condition. If the monitor 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 high-impact construction activities before the ending day of the sensitive period if any known nest site is not occupied by the early release date. If a nest site is occupied, then the certificate holder may begin or resume high-impact construction before the ending

1 day of the sensitive period with the approval of ODFW, but after the young are
2 fledged. The certificate holder shall use a protocol approved by ODFW to
3 determine when the young are fledged (meaning the young are independent of the
4 core nest site).

5 (IV.M.11) The certificate holder shall conduct two (2) years of raptor nest surveys with at
6 least one (1) year of the surveys occurring prior to the beginning of construction.
7 The raptor nest surveys shall be conducted following the instructions set forth in
8 the Raptor Nest Survey Protocol for Golden Hills Wind Project included as
9 Attachment C to the Second Amended Site Certificate.

10 **V. STANDARDS NOT APPLICABLE TO SITE CERTIFICATE ELIGIBILITY**

11 Under ORS 469.501(4), the Council may issue a site certificate without making the
12 findings required by the standards discussed in this section (Structural Standard; Historic,
13 Cultural and Archaeological Resources Standard; Public Services Standard; and Waste
14 Minimization Standard). Nevertheless, the Council may impose site certificate conditions based
15 on the requirements of these standards.

16 **A. STRUCTURAL STANDARD**

17 (V.A.1) The certificate holder shall submit a site-specific geotechnical investigation report
18 to the Oregon Department of Geology & Mineral Industries (“DOGAMI”). The
19 investigation and report shall conform to the Oregon State Board of Geologist
20 Examiners guidelines titled “Guidelines for Engineering Geologic Reports” and
21 “Guidelines for Site-Specific Seismic Hazard Reports for Essential and
22 Hazardous Facilities and Major and Special-Occupancy Structures in Oregon.”
23 The certificate holder shall provide the Department with the report and with
24 evidence of concurrence by DOGAMI prior to start of construction.

25 (V.A.2) The certificate holder shall instruct the consulting geologist and engineer to study
26 slope stability issues and include conclusions and recommendations about slope
27 stability in the site-specific geotechnical report.

28 (V.A.3) The certificate holder shall design and construct the facility in accordance with
29 requirements set forth by the State’s Building Code Division and any other
30 applicable codes and design procedures.

31 (V.A.4) The certificate holder shall design, engineer and construct the facility to avoid
32 dangers to human safety presented by non-seismic hazards. As used in this
33 condition, “non-seismic hazards” include settlement, landslides, flooding and
34 erosion.

35 (V.A.5) The certificate holder shall ensure that wind turbine corridors and major structures
36 are constructed with sufficient setbacks from all steeper slopes to minimize the
37 potential for creating unstable or marginally stable conditions.

1 **B. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES STANDARD**

2 (V.B.1) The certificate holder shall design the facility to avoid impacts to sites 35SH217,
3 35SH220, GH site 6 (above ground resource), 35SH219 and GH Isolate 6.

4 (V.B.2) For sites 35SH215, 35SH216 and 35SH221, the certificate holder shall avoid
5 impacts to these sites during construction and subsequent operations. The
6 certificate holder shall develop a Cultural Resource Management Plan (the
7 “CRMP”) that includes a 30-meter buffer area around these listed sites designated
8 as a “no-work zone” for all ground-disturbing activities. The certificate holder
9 shall submit the CRMP to the State Historic Preservation Office (the “SHPO”) for
10 concurrence and shall provide to the Department documentation confirming
11 SHPO concurrence prior to start of construction.

12 (V.B.3) The certificate holder shall consult with the SHPO regarding the development of a
13 CRMP that will address the protection of aboveground historic resources and
14 belowground archeological resources. The CRMP shall include established
15 protocol and procedures for unanticipated discoveries, such as the discovery of
16 new archeological sites or Native American human remains during ground-
17 disturbing activities, and shall document how these protocols will follow State
18 laws and rules at ORS 358.905-961, ORS 390.235, OAR 736-051-0090 and
19 ORS 97.740-760 as in effect on the date of this site certificate.

20 (V.B.4) Before beginning construction of any phase of the facility, the certificate holder
21 shall provide to the Department a map showing the final design locations of all
22 components of that phase of the facility and areas that would be temporarily
23 disturbed during construction, and also showing the areas surveyed by Tetra Tech
24 in preparing the Archeological Inventory for Golden Hills Wind Energy
25 Development included in the Application for a Site Certificate as Attachment S-1.
26 If there are any additional areas where ground-disturbing activities will occur that
27 were not part of the original facility area, the certificate holder shall contact the
28 SHPO to determine whether there will be additional impacts to cultural resources.

29 (V.B.5) The certificate holder shall ensure that a qualified archaeologist instructs
30 construction personnel on the identification of cultural resources

31 (V.B.6) If any cultural resources are discovered during construction activities, all work at
32 that location shall cease immediately and the certificate holder shall contact the
33 SHPO to determine whether it is necessary to have an archeologist travel to the
34 worksite and assess the discovery or monitor construction activities.

35 (V.B.7) “No access” buffers shall be identified on construction plans and temporarily
36 demarcated in the field before and during construction. The facility
37 Environmental Inspector shall monitor flagged “no access” buffers around
38 archeological sites during construction to prevent accidental damage to cultural
39 resources. These flags or markers shall not be moved or removed during

1 construction activities, and construction personnel shall be advised of these
2 restrictions.

3 (V.B.8) The certificate holder shall ensure that construction personnel cease all ground-
4 disturbing activities in the immediate area if any archaeological or cultural
5 resources are found during construction of the facility until a qualified
6 archaeologist can evaluate the significance of the find. No construction personnel
7 will be allowed in the discovery area except for facility management in
8 consultation with the SHPO. The certificate holder shall notify the Department
9 and the SHPO of the find. If the SHPO determines that the resource is significant,
10 the certificate holder shall make recommendations to the Council for mitigation,
11 including avoidance or data recovery, in consultation with the Department, the
12 SHPO, the appropriate Oregon tribes and other appropriate parties. The
13 certificate holder shall not restart work in the affected area until the certificate
14 holder has demonstrated to the Department that it has complied with State
15 archaeological protection and archaeological permit laws in coordination with the
16 SHPO.

17 (V.B.9) The certificate holder shall ensure that construction personnel proceed carefully in
18 the vicinity of the mapped alignment of the Oregon Trail. If any intact physical
19 evidence of the trail is discovered, the certificate holder shall avoid any
20 disturbance to the intact segments by redesign, reengineering or restricting the
21 area of construction activity. The certificate holder shall promptly notify the
22 Department and the SHPO of the discovery. The certificate holder shall consult
23 with the Department and with the SHPO to determine appropriate mitigation
24 measures.

25 (V.B.10) Upon completion of construction, the certificate holder shall consult with the
26 Oregon Historic Trails Advisory Council regarding the appropriate content of an
27 interpretive sign. After such consultation, the certificate holder shall place in a
28 publicly accessible location a sign giving notice of the historic background of the
29 facility site and surrounding areas.

30 **C. PUBLIC SERVICES STANDARD**

31 (V.C.1) During operation of the facility, the certificate holder shall obtain water for on-
32 site use from one well located at the O&M facility, subject to compliance with
33 applicable permit requirements. During operation of the facility, the certificate
34 holder shall not use more than 5,000 gallons of water per day from the on-site
35 well.

36 (V.C.2) During construction and operation of the facility, the certificate holder shall install
37 on-site security and shall require on-site security personnel to establish a line of
38 communication with the Sherman County Sheriff's Office to regularly report on
39 the status of on-site security operations.

1 (V.C.3) Before beginning construction the certificate holder shall develop and implement
2 a fire safety and response plan for both construction and operation phases in
3 consultation with the Oregon State Fire Marshal, the Sherman County Emergency
4 Services, North Sherman Fire and Rescue, Moro Rural Fire Protection District
5 and other first-response agencies the facility will rely upon for fire protection
6 services. A copy of the plan must be provided to the Department at least 30 days
7 before beginning construction. The plan must be updated at least annually by the
8 agencies identified in (a) below and a copy provided to the agencies identified in
9 (a), (b), and (c) and to the Department within 30 days of the update. The fire
10 safety and response plan shall address, at a minimum, the following:

- 11 a. Identification of agencies that participated in developing the plan;
- 12 b. Identification of agencies that are designated as first response agencies or
13 are included in any mutual aid agreements with the facility;
- 14 c. A list of any other mutual aid agreements or fire protection associations in
15 the vicinity of the facility;
- 16 d. Complete contact information for each agency listed in (a), (b), and
17 (c) above, including at least two facility contacts available on a 24-hour
18 basis;
- 19 e. Communication protocols for both routine and emergency events and the
20 incident command system to be used in the event a fire response by
21 multiple agencies is needed at the facility;
- 22 f. Access and fire response at the facility site during construction and
23 operations. Fire response plans during construction shall address regular
24 and frequent communication amongst the agencies regarding the number
25 and location of construction sites within the site boundary, access roads
26 that are completed and those still under construction, location of water
27 receptacles, and a temporary signage system until permanent addresses
28 and signs are in place;
- 29 g. The minimum designated time period of the fire season (i.e., May 1
30 through October 15) and the criteria to modify the designated fire season
31 to respond to changing conditions;
- 32 h. The number, size, and location of onsite water receptacles to be staged
33 around the facility site for firefighting purposes during the fire season; and
- 34 i. Training needs (both for facility personnel and for first responders).
- 35 j. Copies of mutual aid, fire protection association, or other agreements
36 entered into concerning fire protection at the facility site.

37 (V.C.4) During construction of the facility, the certificate holder shall ensure that
38 construction vehicles and equipment are operated on graveled areas to the extent
39 possible and that open flames, such as cutting torches, are kept away from grassy
40 areas.

- 1 (V.C.5) During construction and operation of the facility, the certificate holder shall
2 ensure that the O&M facility and all service vehicles are equipped with shovels
3 and portable fire extinguishers of a 4A50BC or equivalent rating.
- 4 (V.C.6) During construction of the facility, the certificate holder shall maintain a water
5 truck on site to respond to potential fire incidents.
- 6 (V.C.7) The certificate holder shall construct turbines on concrete pads with a minimum
7 of 10 feet of nonflammable and non-erosive ground cover on all sides. The
8 certificate holder shall cover turbine pad areas with nonflammable, non-erosive
9 material immediately following exposure during construction and shall maintain
10 the pad area covering during operation of the facility.
- 11 (V.C.8) During operation of the facility, the certificate holder shall ensure that all on-site
12 employees receive annual fire prevention and response training, including tower
13 rescue training, from qualified instructors or members of local fire districts and
14 shall ensure that all employees are instructed to keep vehicles on roads and off dry
15 grassland, except when off-road operation is required for emergency purposes.
- 16 (V.C.9) Upon beginning operation of the facility, the certificate holder shall provide to
17 North Sherman Fire Protection District and Moro Rural Fire Protection District a
18 site plan indicating the identification number assigned to each turbine and the
19 location of all facility structures. During operation of the facility, the certificate
20 holder shall ensure that appropriate district personnel have an up-to-date list of the
21 names and telephone numbers of facility personnel available to respond on a 24-
22 hour basis in case of an emergency on the facility site.
- 23 (V.C.10) Before and during beginning construction of the facility, the certificate holder
24 shall develop and implement a construction-phase traffic management plan with
25 all affected local jurisdictions.
- 26 (V.C.11) During construction of the facility, the certificate holder shall implement
27 measures to reduce traffic impacts, including:
- 28 (a) Providing notice to all affected local jurisdictions in advance of deliveries;
29 (b) Providing notice to adjacent landowners and residents of Biggs Junction in
30 advance of deliveries; and
31 (c) Requiring flaggers to be at appropriate locations at appropriate times
32 during construction to direct traffic and reduce accident risks.
- 33 (V.C.12) Prior to start of construction, the certificate holder shall obtain from the Sherman
34 County Road Department an assessment of road conditions in the facility area
35 prior to the start of construction of the facility. The certificate holder shall also
36 obtain from the county road department an evaluation of the roads following
37 completion of the facility to determine any significant change in condition. The
38 certificate shall cooperate with the Sherman County Road Department to ensure
39 that any unusual damage or wear caused by the use of the county's roads by the

1 developer during the construction of the facility will be the responsibility of the
2 developer. In addition, no equipment or machinery of the developers shall be
3 parked or stored on any county road except while in use.

4 (V.C.13) Prior to beginning construction, the certificate holder will

- 5 (a) Designate a route or routes for the transport of wind turbine construction
6 material (including water, aggregate, concrete, machinery and tower
7 pieces), with the intention of minimizing damage to non-designated roads,
8 and provide these designations to the County Road Master;
- 9 (b) Provide to the County Road Master a written summary of possible
10 anticipated road damage to the designated route or routes, and an estimate
11 of the cost of repair to the designated route or routes;
- 12 (c) Establish and maintain an escrow account for so long as construction is
13 ongoing funded in an amount equal to the estimated cost to repair the
14 designated route or routes consistent with the estimate provided in (b); and
- 15 (d) Conduct an inspection of the roads along the designated route or routes
16 before and after construction with a representative of the Sherman County
17 Road Department and an independent third party with the required
18 expertise to inspect and evaluate paved and graveled roads. In the event a
19 dispute arises, the third party shall be the final arbiter. The cost of the
20 hiring of the third party shall be borne by the certificate holder.

21 (V.C.14) The certificate holder shall work with Sherman County Emergency Manager to
22 assign a 9-1-1 5-digit rural address to every tower road that intersects a State or
23 county road. The county will provide and install the signage for these addresses.

24 **D. WASTE MINIMIZATION STANDARD**

25 (V.D.1) During construction, the certificate holder shall implement a waste management
26 plan that includes, but is not limited to, the following measures:

- 27 (a) Recycling steel and other metal scrap;
- 28 (b) Recycling wood waste;
- 29 (c) Recycling packaging wastes, such as paper and cardboard;
- 30 (d) Collecting non-recyclable waste for transport to a landfill; and
- 31 (e) Segregating all hazardous wastes, such as used oil, oily rags and oil-
32 absorbent materials, lubricant and cleaning solution containers, mercury-
33 containing lights, and lead-acid and nickel-cadmium batteries, for disposal
34 by a licensed firm specializing in the proper recycling or disposal of
35 hazardous wastes.

36 (V.D.2) During operation, the certificate holder shall implement a waste management plan
37 that includes, but is not limited to, the following measures:

- 38 (a) Training employees to minimize and recycle solid waste;

- 1 (b) Recycling paper products, metals, glass and plastics;
- 2 (c) Recycling used oil and hydraulic fluid;
- 3 (d) Collecting non-recyclable waste for transport to a landfill; and
- 4 (e) Segregating all hazardous wastes, such as used oil, oily rags and oil-
- 5 absorbent materials, oil and cleaning solution containers, mercury-
- 6 containing lights, and lead-acid and nickel-cadmium batteries, for disposal
- 7 by a licensed firm specializing in the proper recycling or disposal of
- 8 hazardous wastes.

9 (V.D.3) During construction, the certificate holder shall provide portable toilets for on-site
10 sewage handling and shall ensure that they are pumped and cleaned regularly by a
11 licensed contractor.

12 (V.D.4) During operation, the certificate holder shall discharge sanitary wastewater
13 generated at the O&M facility to a licensed on-site septic system in compliance
14 with county permit requirements. The certificate holder shall design the septic
15 system with a discharge capacity of less than 5,000 gallons per day.

16 **VI. OTHER APPLICABLE REGULATORY REQUIREMENTS**

17 **A. REQUIREMENTS UNDER COUNCIL JURISDICTION**

18 **1. NOISE CONTROL REGULATIONS**

- 19 (VI.A.1.1) To reduce noise impacts at nearby residential areas, the certificate holder shall:
- 20 (a) Confine the noisiest operation of heavy construction equipment to the
 - 21 daylight hours;
 - 22 (b) Require contractors to install and maintain exhaust mufflers on all
 - 23 combustion engine-powered equipment; and
 - 24 (c) Establish a complaint response system at the construction manager’s
 - 25 office to address noise complaints.

26 (VI.A.1.2) The certificate holder shall submit, for Department approval prior to construction,
27 a complete new noise analysis for the facility ~~based on the final design layout as~~
28 ~~designed~~ and generate a new table listing each noise-sensitive property, as defined
29 in OAR 340-035-0015(38), and the predicted maximum hourly L₅₀ noise level at
30 each noise-sensitive property. In addition, the certificate holder shall provide the
31 predicted sound levels contributed by each turbine at each noise-sensitive
32 property that does not provide a waiver of the ambient noise rule. The certificate
33 holder shall perform the analysis using the CADNA/A by DataKustik GmbH of
34 Munich, Germany, and shall base the analysis on the final facility design
35 including final choice of turbine and location of all facility components. The
36 analysis shall demonstrate to the satisfaction of the Department that each of the
37 following requirements have been met:

- 1 (a) For any noise-sensitive property, the certificate holder shall identify the
 2 final design locations of all turbines to be built and perform a noise
 3 analysis demonstrating, in accordance with OAR
 4 340-035-0035(1)(b)(B)(iii)(IV), that the total hourly L₅₀ noise level
 5 generated by the facility would not exceed 50 dBA at the appropriate
 6 measurement point. The certificate holder shall assume the following
 7 input parameters:
- 8 · The maximum sound power level warranted by the manufacturer or
 9 confirmed by other means acceptable to the Department;
 - 10 · The exact locations of the proposed turbines;
 - 11 · Attenuation of sound due to absorption to be calculated using a
 12 methodology satisfactory to the Department;
 - 13 · The use of 50° F temperature and 70 percent relative humidity in the
 14 analysis;
 - 15 · A 2dB safety margin shall be added to turbine sound power levels;
 - 16 · No credit for shielding of any residence by terrain; and
 - 17 · All receptors treated as simultaneously downwind of all turbines.
- 18 (b) If the hourly L₅₀ noise levels caused by the facility at any noise-sensitive
 19 property would increase the ambient noise level at any noise-sensitive
 20 property over the full set of wind conditions ranging from cut in to full
 21 load by more than 10 dBA, the certificate holder shall obtain a legally
 22 effective easement or real covenant from that property owner pursuant to
 23 which the owner of the property authorizes the certificate holder's
 24 operation of the facility to increase ambient statistical noise levels L₅₀ and
 25 L₅₀ by more than 10 dBA at the appropriate measurement point. A legally
 26 effective easement or real covenant shall (i) include a legal description of
 27 the burdened property (the noise-sensitive property); (ii) be recorded in the
 28 real property records of the county; (iii) expressly benefit the certificate
 29 holder; (iv) expressly run with the land and bind all future owners, lessees
 30 or holders of any interest in the burdened property; and (v) not be subject
 31 to revocation without the certificate holder's written approval.
- 32 (c) If, for any noise-sensitive property where the hourly L₅₀ noise levels
 33 caused by the facility would increase by more than 10 dBA above the
 34 ambient level over the full range of wind conditions measured for that
 35 property and where the certificate holder has not obtained a legally
 36 effective easement or real covenant as described in (b), the certificate
 37 holder shall identify measures to reduce noise at that property either by
 38 eliminating or moving turbines, and shall perform the noise analysis again
 39 to demonstrate, in accordance with OAR 340-035-0035(1)(b)(B)(iii)(IV),
 40 that the total noise generated by the facility would meet the ambient noise
 41 degradation test at the appropriate measurement point at that noise-

1 sensitive property. The certificate holder shall obtain Department
2 concurrence of the new analysis prior to start of construction.

3 (VI.A.1.3) During operation, the certificate holder shall maintain a complaint response
4 system to address noise complaints. The certificate holder shall promptly notify
5 the Department of any complaints received regarding facility noise and of any
6 actions taken by the certificate holder to address those complaints. Prior to start
7 of commercial operation, the certificate holder shall notify, in writing, the owners
8 of potentially affected noise-sensitive properties identified in Exhibit X of the
9 completed Application for a Site Certificate. The notice shall inform the property
10 owners of the procedure and contact information for filing a complaint regarding
11 the noise level from the facility once it is operating. The certificate holder shall
12 document the issuance of this notice and provide that documentation to the
13 Department.

14 (VI.A.1.4) Prior to start of commercial operation, the certificate holder shall submit a plan
15 for complaint-based operational noise monitoring to the Department. Commercial
16 operation shall not commence until the Department has concurred in writing with
17 the complaint-based noise monitoring protocol. The plan shall provide for testing
18 at houses whose owners or occupants submit a complaint to the Council or the
19 Department. The plan shall include a schedule for completion of required testing
20 and a date certain by which written results shall be provided to the Council. If the
21 owner of the property that filed the complaint refuses to grant access for the
22 purpose of performing the noise test described in this condition after reasonable
23 attempts are made by the certificate holder to receive permission for access, then
24 the Department shall not require further corrective action.

25 **2. REMOVAL FILL LAW**

26 [No conditions]

27 **3. GROUND WATER ACT**

28 [No conditions]

29 **4. PUBLIC HEALTH AND SAFETY**

30 (VI.A.4.1) The certificate holder shall take reasonable steps to reduce or manage human
31 exposure to electric and magnetic fields, including, but not limited to:

- 32 (a) Constructing all aboveground transmission lines at least 200 feet from any
33 residence or other occupied structure, measured from the centerline of the
34 transmission line;
- 35 (b) Fencing all areas near the facility substations to ensure that substation
36 equipment is not accessible to the public;
- 37 (c) Providing to landowners a map of underground and overhead transmission
38 lines on their property and advising landowners of possible health risks;
39 and

1 (d) Designing and maintaining all transmission lines so that alternating
2 current electric fields do not exceed 9 kV per meter at one meter above the
3 ground surface in areas accessible to the public.

4 (VI.A.4.2) In advance of, and during, preparation of detailed design drawings and
5 specifications for 230-kV, 500-kV and 34.5-kV transmission lines, the certificate
6 holder shall consult with the Utility Safety and Reliability Section of the Oregon
7 Public Utility Commission to ensure that the designs and specifications are
8 consistent with applicable codes and standards.

9 (VI.A.4.3) Prior to start of construction, the certificate holder shall submit to ODOE a
10 procedure for coordinating, with all affected local electric service utilities and
11 transmission service providers, crane movements under electric transmission lines
12 during construction and maintenance of the facility. The procedure shall address
13 subjects including, but not limited to, minimum advance notification prior to any
14 crane movement under an electric transmission or distribution line, protocols for
15 determining adequate line clearance and specific crane path locations. With the
16 procedure, the certificate holder shall provide evidence of concurrence by each
17 affected electric service utility or transmission service provider. The certificate
18 holder shall ensure that all employees, construction contractors and subcontractors
19 adhere to this procedure throughout construction and maintenance of the facility.

20 **VII. CONDITIONS REQUIRED BY COUNCIL RULES**

21 This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in
22 Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028
23 (Monitoring Conditions), and OAR Chapter 345, Division 26 (Construction and Operation Rules
24 for Facilities). These conditions should be read together with the specific facility conditions
25 listed in Sections III, W, V, and VI to ensure compliance with the siting standards of OAR
26 Chapter 345, Divisions 22 and 24, and to protect the public health and safety. In these
27 conditions, the definitions in OAR 345-001-0010 apply.

28 The obligation of the certificate holder to report information to the Department or the
29 Council under the conditions listed in this section and in Sections III, W, V, and VI is subject to
30 the provisions of ORS 192.502 et seq. and ORS 469.560. To the extent permitted by law, the
31 Department and the Council will not publicly disclose information that may be exempt from
32 public disclosure if the certificate holder has clearly labeled such information and stated the basis
33 for the exemption at the time of submitting the information to the Department or the Council. If
34 the Department or the Council receives a request for the disclosure of the information, the
35 Department or the Council, as appropriate, will make a reasonable attempt to notify the
36 certificate holder and will refer the matter to the Attorney General for a determination of whether
37 the exemption is applicable, pursuant to ORS 192.450.

38 In addition to these conditions, the certificate holder is subject to all conditions and
39 requirements contained in the rules of the Council and in local ordinances and State laws in
40 effect on the date the site certificate is executed. Under ORS 469.401(2), upon a clear showing
41 of a significant threat to the public health, safety or the environment that requires application of

1 later-adopted laws or rules, the Council may require compliance with such later-adopted laws or
2 rules.

3 The Council recognizes that many specific tasks related to the design, construction,
4 operation, and retirement of the facility will be undertaken by the certificate holder's agents or
5 contractors. Nevertheless, the certificate holder is responsible for ensuring compliance with all
6 provisions of the site certificate.

7 (VII.1) OAR 345-027-0020(1): The Council shall not change the conditions of the site
8 certificate except as provided for in OAR Chapter 345, Division 27.

9 (VII.2) OAR 345-027-0020(2): The certificate holder shall submit a legal description of
10 the site to the Department of Energy within 90 days after beginning operation of
11 the facility. The legal description required by this rule means a description of
12 metes and bounds or a description of the site by reference to a map and
13 geographic data that clearly and specifically identifies the outer boundaries that
14 contain all parts of the facility.

15 (VII.3) OAR 345-027-0020(3): The certificate holder shall design, construct, operate,
16 and retire the facility:

- 17 (a) Substantially as described in the site certificate;
- 18 (b) In compliance with the requirements of ORS Chapter 469, applicable
19 Council rules, and applicable state and local laws, rules and ordinances in
20 effect at the time the site certificate is issued; and
- 21 (c) In compliance with all applicable permit requirements of other state
22 agencies.

23 (VII.4) OAR 345-027-0020(4): The certificate holder shall begin and complete
24 construction of the facility by the dates specified in the site certificate. [*See*
25 *Conditions (III.D.1) and (III.D.2).*]

26 (VII.5) OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise
27 allowed for wind energy facilities, transmission lines or pipelines under this
28 section, the certificate holder shall not begin construction, as defined in OAR
29 345-001-0010, or create a clearing on any part of the site until the certificate
30 holder has construction rights on all parts of the site. For the purpose of this rule,
31 "construction rights" means the legal right to engage in construction activities.
32 For wind energy facilities, transmission lines or pipelines, if the certificate holder
33 does not have construction rights on all parts of the site, the certificate holder may
34 nevertheless begin construction, as defined in OAR 345-001-0010, or create a
35 clearing on a part of the site if the certificate holder has construction rights on that
36 part of the site and:

- 37 (a) The certificate holder would construct and operate part of the facility on
38 that part of the site even if a change in the planned route of the
39 transmission line or pipeline occurs during the certificate holder's
40 negotiations to acquire construction rights on another part of the site; or

- 1 (b) The certificate holder would construct and operate part of a wind energy
2 facility on that part of the site even if other parts of the facility were
3 modified by amendment of the site certificate or were not built.
- 4 (VII.6) OAR 345-027-0020(6): If the Council requires mitigation based on an
5 affirmative finding under any standards of Division 22 or Division 24 of OAR
6 Chapter 345, the certificate holder shall consult with affected state agencies and
7 local governments designated by the Council and shall develop specific mitigation
8 plans consistent with Council findings under the relevant standards. The
9 certificate holder must submit the mitigation plans to the Office and receive
10 Office approval before beginning construction or, as appropriate, operation of the
11 facility.
- 12 (VII.7) OAR 345-027-0020(7): The certificate holder shall prevent the development of
13 any conditions on the site that would preclude restoration of the site to a useful,
14 non-hazardous condition to the extent that prevention of such site conditions is
15 within the control of the certificate holder.
- 16 (VII.8) OAR 345-027-0020(8): Before beginning construction of the facility, the
17 certificate holder shall submit to the State of Oregon, through the Council, a bond
18 or letter of credit in a form and amount satisfactory to the Council to restore the
19 site to a useful, non-hazardous condition. The certificate holder shall maintain a
20 bond or letter of credit in effect at all times until the facility has been retired. The
21 Council may specify different amounts for the bond or letter of credit during
22 construction and during operation of the facility. *[See Condition IV.C.4.]*
- 23 (VII.9) OAR 345-027-0020(9): The certificate holder shall retire the facility if the
24 certificate holder permanently ceases construction or operation of the facility.
25 The certificate holder shall retire the facility according to a final retirement plan
26 approved by the Council, as described in OAR 345-027-0110. The certificate
27 holder shall pay the actual cost to restore the site to a useful, non-hazardous
28 condition at the time of retirement, notwithstanding the Council's approval in the
29 site certificate of an estimated amount required to restore the site.
- 30 (VII.10) OAR 345-027-0020(10): The Council shall include as conditions in the site
31 certificate all representations in the site certificate application and supporting
32 record the Council deems to be binding commitments made by the applicant.
- 33 (VII.11) OAR 345-027-0020(11): Upon completion of construction, the certificate holder
34 shall restore vegetation to the extent practicable and shall landscape all areas
35 disturbed by construction in a manner compatible with the surroundings and
36 proposed use. Upon completion of construction, the certificate holder shall
37 remove all temporary structures not required for facility operation and dispose of
38 all timber, brush, refuse and flammable or combustible material resulting from
39 clearing of land and construction of the facility.

- 1 (VII.12) OAR 345-027-0020(12): The certificate holder shall design, engineer and
2 construct the facility to avoid dangers to human safety presented by seismic
3 hazards affecting the site that are expected to result from all maximum probable
4 seismic events. As used in this rule “seismic hazard” includes ground shaking,
5 landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement
6 and subsidence.
- 7 (VII.13) OAR 345-027-0020(13): The certificate holder shall notify the Department, the
8 State Building Codes Division and the Department of Geology and Mineral
9 Industries promptly if site investigations or trenching reveal that conditions in the
10 foundation rocks differ significantly from those described in the application for a
11 site certificate. After the Department receives the notice, the Council may require
12 the certificate holder to consult with the Department of Geology and Mineral
13 Industries and the Building Codes Division and to propose mitigation actions.
- 14 (VII.14) OAR 345-027-0020(14): The certificate holder shall notify the Department, the
15 State Building Codes Division and the Department of Geology and Mineral
16 Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes
17 are found at or in the vicinity of the site.
- 18 (VII.15) OAR 345-027-0020(15): Before any transfer of ownership of the facility or
19 ownership of the site certificate holder, the certificate holder shall inform the
20 Department of the proposed new owners. The requirements of OAR
21 345-027-0100 apply to any transfer of ownership that requires a transfer of the
22 site certificate.
- 23 (VII.16) OAR 345-027-0020(16): If the Council finds that the certificate holder has
24 permanently ceased construction or operation of the facility without retiring the
25 facility according to a final retirement plan approved by the Council, as described
26 in OAR 345-027-0110, the Council shall notify the certificate holder and request
27 that the certificate holder submit a proposed final retirement plan to the Office
28 within a reasonable time not to exceed 90 days. If the certificate holder does not
29 submit a proposed final retirement plan by the specified date, the Council may
30 direct the Department to prepare a proposed a final retirement plan for the
31 Council’s approval. Upon the Council’s approval of the final retirement plan, the
32 Council may draw on the bond or letter of credit described in OAR
33 345-027-0020(8) to restore the site to a useful, non-hazardous condition
34 according to the final retirement plan, in addition to any penalties the Council
35 may impose under OAR Chapter 345, Division 29. If the amount of the bond or
36 letter of credit is insufficient to pay the actual cost of retirement, the certificate
37 holder shall pay any additional cost necessary to restore the site to a useful, non-
38 hazardous condition. After completion of site restoration, the Council shall issue
39 an order to terminate the site certificate if the Council finds that the facility has
40 been retired according to the approved final retirement plan.
- 41 (VII.17) OAR 345-027-0023(4): If the facility includes any transmission line under
42 Council jurisdiction:

- 1 (a) The certificate holder shall design, construct and operate the transmission
2 line in accordance with the requirements of the National Electrical Safety
3 Code 2007 edition; and
- 4 (b) The certificate holder shall develop and implement a program that
5 provides reasonable assurance that all fences, gates, cattle guards, trailers,
6 or other objects or structures of a permanent nature that could become
7 inadvertently charged with electricity are grounded or bonded throughout
8 the life of the line.

9 (VII.18) OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a
10 transmission line or has, as a related or supporting facility, a pipeline or
11 transmission line, the Council shall specify an approved corridor in the site
12 certificate and shall allow the certificate holder to construct the pipeline or
13 transmission line anywhere within the corridor, subject to the conditions of the
14 site certificate. If the applicant has analyzed more than one corridor in its
15 application for a site certificate, the Council may, subject to the Council's
16 standards, approve more than one corridor.

17 (VII.19) OAR 345-027-0028: The following general monitoring conditions apply:

- 18 (a) The certificate holder shall consult with affected state agencies, local
19 governments and tribes and shall develop specific monitoring programs
20 for impacts to resources protected by the standards of divisions 22 and 24
21 of OAR Chapter 345 and resources addressed by applicable statutes,
22 administrative rules and local ordinances. The certificate holder must
23 submit the monitoring programs to the Department of Energy and receive
24 Department approval before beginning construction or, as appropriate,
25 operation of the facility.
- 26 (b) The certificate holder shall implement the approved monitoring programs
27 described in OAR 345-027-0028(1) and monitoring programs required by
28 permitting agencies and local governments.
- 29 (c) For each monitoring program described in OAR 345-027-0028(1) and (2),
30 the certificate holder shall have quality assurance measures approved by
31 the Department before beginning construction or, as appropriate, before
32 beginning commercial operation.
- 33 (d) If the certificate holder becomes aware of a significant environmental
34 change or impact attributable to the facility, the certificate holder shall, as
35 soon as possible, submit a written report to the Department describing the
36 impact on the facility and any affected site certificate conditions.

37 (VII.20) OAR 345-026-0048: Following receipt of the site certificate or an amended site
38 certificate, the certificate holder shall implement a plan that verifies compliance
39 with all site certificate terms and conditions and applicable statutes and rules. As
40 a part of the compliance plan, to verify compliance with the requirement to begin
41 construction by the date specified in the site certificate, the certificate holder shall
42 report promptly to the Department of Energy when construction begins.

1 Construction is defined in OAR 345-001-0010. In reporting the beginning of
2 construction, the certificate holder shall describe all work on the site performed
3 before beginning construction, including work performed before the Council
4 issued the site certificate, and shall state the cost of that work. For the purpose of
5 this exhibit, “work on the site” means any work within a site or corridor, other
6 than surveying, exploration or other activities to define or characterize the site or
7 corridor. The certificate holder shall document the compliance plan and maintain
8 it for inspection by the Department or the Council.

9 (VII.21) OAR 345-026-0080: The certificate holder shall report according to the
10 following requirements:

- 11 (a) General reporting obligation for energy facilities under construction or
12 operating:
 - 13 (i) Within six months after beginning construction, and every six
14 months thereafter during construction of the energy facility and
15 related or supporting facilities, the certificate holder shall submit a
16 semiannual construction progress report to the Department of
17 Energy. In each construction progress report, the certificate holder
18 shall describe any significant changes to major milestones for
19 construction. The certificate holder shall include such information
20 related to construction as specified in the site certificate. When the
21 reporting date coincides, the certificate holder may include the
22 construction progress report within the annual report described in
23 OAR 345-026-0080.
 - 24 (ii) By April 30 of each year after beginning construction, the
25 certificate holder shall submit an annual report to the Department
26 addressing the subjects listed in OAR 345-026-0080. The Council
27 Secretary and the certificate holder may, by mutual agreement,
28 change the reporting date.
 - 29 (iii) To the extent that information required by OAR 345-026-0080 is
30 contained in reports the certificate holder submits to other state,
31 federal or local agencies, the certificate holder may submit
32 excerpts from such other reports to satisfy this rule. The Council
33 reserves the right to request full copies of such excerpted reports.
- 34 (b) In the annual report, the certificate holder shall include the following
35 information for the calendar year preceding the date of the report:
 - 36 (i) Facility Status: An overview of site conditions, the status of
37 facilities under construction, and a summary of the operating
38 experience of facilities that are in operation. In this section of the
39 annual report, the certificate holder shall describe any unusual
40 events, such as earthquakes, extraordinary windstorms, major
41 accidents or the like that occurred during the year and that had a
42 significant adverse impact on the facility.

- 1 (ii) Reliability and Efficiency of Power Production: For electric power
2 plants, the plant availability and capacity factors for the reporting
3 year. The certificate holder shall describe any equipment failures
4 or plant breakdowns that had a significant impact on those factors
5 and shall describe any actions taken to prevent the recurrence of
6 such problems.
- 7 (iii) Fuel Use: For thermal power plants:
- 8 (A) The efficiency with which the power plant converts fuel
9 into electric energy. If the fuel chargeable to power heat
10 rate was evaluated when the facility was sited, the
11 certificate holder shall calculate efficiency using the same
12 formula and assumptions, but using actual data; and
- 13 (B) The facility's annual hours of operation by fuel type and,
14 every five years after beginning operation, a summary of
15 the annual hours of operation by fuel type as described in
16 OAR 345-024-0590(5).
- 17 (iv) Status of Surety Information: Documentation demonstrating that
18 bonds or letters of credit as described in the site certificate are in
19 full force and effect and will remain in full force and effect for the
20 term of the next reporting period.
- 21 (v) Monitoring Report: A list and description of all significant
22 monitoring and mitigation activities performed during the previous
23 year in accordance with site certificate terms and conditions, a
24 summary of the results of those activities, and a discussion of any
25 significant changes to any monitoring or mitigation program,
26 including the reason for any such changes.
- 27 (vi) Compliance Report: A description of all instances of
28 noncompliance with a site certificate condition. For ease of
29 review, the certificate holder shall, in this section of the report, use
30 numbered subparagraphs corresponding to the applicable sections
31 of the site certificate.
- 32 (vii) Facility Modification Report: A summary of changes to the
33 facility that the certificate holder has determined do not require a
34 site certificate amendment in accordance with OAR 345-027-0050.
- 35 (viii) Nongenerating Facility Carbon Dioxide Emissions: For
36 nongenerating facilities that emit carbon dioxide, a report of the
37 annual fuel use by fuel type and annual hours of operation of the
38 carbon dioxide emitting equipment as described in OAR
39 345-024-0630(4).
- 40 (VII.22) OAR 345-026-0105: The certificate holder and the Department of Energy shall
41 exchange copies of all correspondence or summaries of correspondence related to
42 compliance with statutes, rules and local ordinances on which the Council
43 determined compliance, except for material withheld from public disclosure under

1 state or federal law or under Council rules. The certificate holder may submit
2 abstracts of reports in place of full reports; however, the certificate holder shall
3 provide full copies of abstracted reports and any summarized correspondence at
4 the request of the Department.

5 (VII.23) OAR 345-026-0170(1): The certificate holder shall notify the Department of
6 Energy within 72 hours of any occurrence involving the facility if:

7 (a) There is an attempt by anyone to interfere with its safe operation;

8 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a
9 human-caused event such as a fire or explosion affects or threatens to
10 affect the public health and safety or the environment; or

11 (c) There is any fatal injury at the facility.

12 VIII. SUCCESSORS AND ASSIGNS

13 To transfer this site certificate or any portion thereof or to assign or dispose of it in any
14 other manner, directly or indirectly, the certificate holder shall comply with OAR 345-027-0100.

15 IX. SEVERABILITY AND CONSTRUCTION

16 If any provision of this agreement and certificate is declared by a court to be illegal or in
17 conflict with any law, the validity of the remaining terms and conditions shall not be affected,
18 and the rights and obligations of the parties shall be construed and enforced as if the agreement
19 and certificate did not contain the particular provision held to be invalid.

20 X. GOVERNING LAW AND FORUM

21 This site certificate shall be governed by the laws of the State of Oregon. Any litigation
22 or arbitration arising out of this agreement shall be conducted in an appropriate forum in Oregon.

23 XI. EXECUTION

24 This site certificate may be executed in counterparts and will become effective upon
25 signature by the Chair of the Council and the authorized representative of the certificate holder.

26 **IN WITNESS WHEREOF**, this site certificate has been executed by the State of
27 Oregon, acting by and through its Energy Facility Siting Council, and by Golden Hills Wind
28 Farm LLC.

29 ENERGY FACILITY SITING COUNCIL

GOLDEN HILLS WIND FARM LLC

30
31
32 By: _____
33 Barry Beyeler, Chair
34 Oregon Energy Facility Siting Council

By: _____
Print: _____

35
36 Date: _____

Date: _____

Attachment 5
Habitat Categories and Classifications
with Acreages of Impact

Attachment 5. Habitat Categories and Classifications within Proposed Site Boundary with Acreages of Impact

Habitat Category	Habitat Classification	Impacts	
		Temporary Facilities (acres disturbed)	Permanent Facilities (acres disturbed)
1	Conservation Reserve Enhancement Program (CREP)	0.0	0.0
1	Grassland (GR)	0.0	0.0
1	Shrub-steppe (SS)	0.0	0.0
1	Upland Trees (UT)	0.0	0.0
1	Upland Trees Exotic Shrubs (UT/ES)	0.0	0.0
Category 1 Total		0.0	0.0
2	CREP	2.0	0.0
2	Perennial Stream (PS)	0.0	0.0
2	Riparian Trees (RT)	0.0	0.0
2	Shrub-steppe (SS)	0.9	0.0
2	UT	0.0	0.0
2	Pond (WP)	0.0	0.0
Category 2 Total		2.9	0.0
3	Conservation Reserve Program (CRP)	17.2	1.3
3	GR	39.8	4.2
3	Grassland Cliff (GR/CL)	0.0	0.0
3	(Intermittent Stream) IS	0.0	0.0
3	RT	0.0	0.0
3	SS	0.0	0.0
3	UT	0.0	0.0
3	UT/ES	0.0	0.0
Category 3 Total		57.0	5.5
4	GR	6.5	0.1
Category 4 Total		6.5	0.1
Category 5 Total		(None Identified)	
6	Agricultural (AG)	942.7	126.5
6	Developed (DE)	2.2	0.0
6	Road	57.3	0.2
Category 6 Total		1002.2	126.7
TOTAL		1069	132

Attachment 6
Retirement Cost Estimate and
Financial Assurance Letter

COST ESTIMATE FOR FACILITY SITE RESTORATION

(Unit Costs in 2nd Quarter 2010 Dollars)

Adjustment Factor: 0.982178

Current Quarter: **4Q 2008**

GDP Index 2nd Quarter 2010: **101**

<http://www.oregon.gov/DAS/OEA/economic.shtml>

GDP Index Current Quarter: **99.2**

Use GDP deflator.

Cost Estimate Component	Quantity	Unit Cost	Extension
Turbines			
- Disconnect electrical, ready for disassembly (per turbine)	125	\$252	\$31,500
- Remove turbine blades, hubs and nacelles (per turbine)	125	\$5,900	\$737,500
- Remove turbine towers (per ton of steel)	42,000	\$82	\$3,444,000
- Remove turbine foundations (per cubic yard)	4,713	\$52	\$245,050
- Remove pad transformer and foundation (per turbine)	125	\$2,614	\$326,750
- Restore turbine site including spur road (per turbine)	125	\$2,187	\$273,375
Met Towers			
- Dismantle and dispose of met towers (per tower)	6	\$11,656	\$69,936
O&M Facilities			
- Dismantle and dispose of O&M facilities (per unit)	1	\$97,175	\$97,175
Substations			
- Dismantle and dispose of substations (per unit)	1	\$187,019	\$187,019
Transmission Lines			
- Remove aboveground single-circuit collector (per mile)	2.76	\$3,270	\$9,025
- Remove aboveground double-circuit collector (per mile)	0	\$4,241	\$0
- Remove aboveground 230-kV transmission line (per mile)	4.39	\$30,582	\$134,255
- Junction boxes - Remove electrical to 4' below grade (per unit)	22	\$51	\$1,122
Access Roads			
- Road removal, grading and seeding (per mile)	41	\$29,426	\$1,206,466
Restore Additional Areas Disturbed by Facility Removal			
- Grading and seeding around access roads, met towers, O&M facilities and turbine turnouts (per acre)	249	\$8,706	\$2,167,794
- Seeding around collector line structures, transmission lines, crane paths and temporary laydown areas (per acre)	805	\$3,398	\$2,735,390
General Costs			
- Permits, mobilization, engineering, overhead			\$451,365
Subtotal			\$12,117,722
Subtotal Adjusted to Current Dollars	4Q 2008		\$11,901,763
Performance Bond @ 1%			\$119,018
Gross Cost (Adjusted)			\$12,020,780
Administration and Project Management @ 10%			\$1,202,078
Future Developments Contingency @ 10%			\$1,202,078
Total Site Restoration Cost (current dollars)			\$14,424,936
Total Site Restoration Cost (rounded to nearest \$1,000)			\$14,425,000

March 7, 2016

Maxwell Woods
Oregon Department of Energy
625 Marion Street NE
Salem, OR 97301-3737

Re: Golden Hills Wind Project

Dear Mr. Woods,

We handle the surety bonds and commercial insurance for Orion Renewable Energy Group LLC, a parent company of Golden Hills Wind Farm LLC, and have done so for the past several years.

We have reviewed Golden Hills Wind Farm LLC's proposal for the referenced project and are confident that they will be able to secure the surety bonds needed for this project. They are submitting this letter as evidence that they are capable of providing performance and payment bonds up to \$14,424,936 on the referenced project.

Final approval prior to issuance would require review of the contract documents, bond forms and financial review of our client at the time that such bonds are required. Should you decide to request bonds from Golden Hills Wind Farm LLC, we believe their surety partner will provide favorable consideration.

It is understood of course, that any arrangement for performance and payment bonds is a matter between this agency, Golden Hills Wind Farm LLC and their surety company. We assume no liability to third parties or to you, if for any reason we do not execute said bonds.

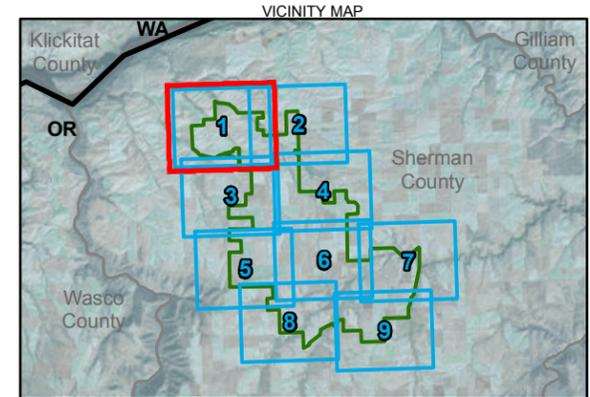
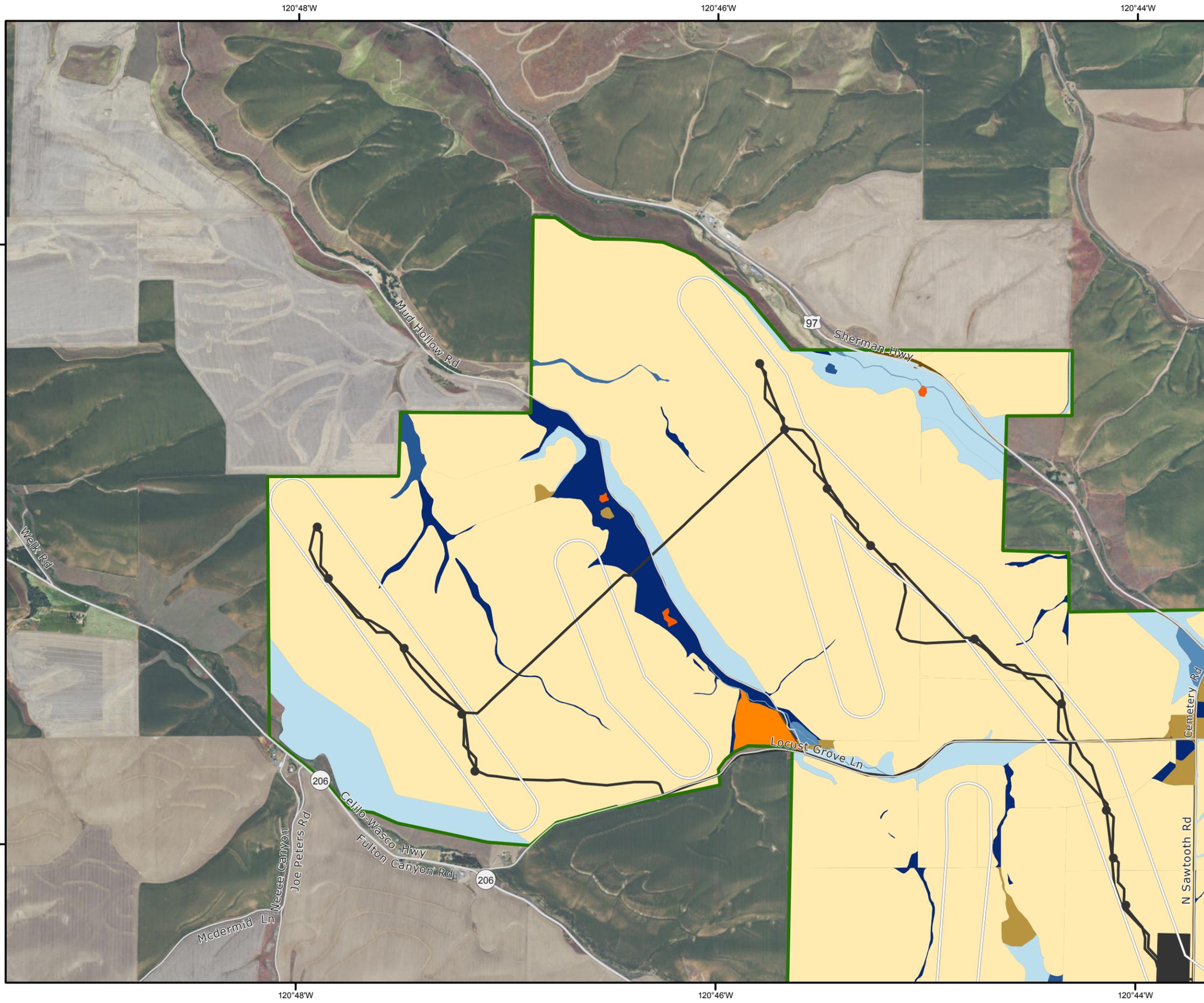
We are proud to recommend Golden Hills Wind Farm LLC for this project. If you have any further questions, please do not hesitate to contact us.

Best Regards,



Karl Choltus
SVP - Surety Practice Leader

Attachment 7
Habitat Classifications within Proposed
Site Boundary



- Habitat Classifications**
- 2, SS
 - 2, UT
 - 3, CRP
 - 3, GR
 - 3, IS
 - 3, RT
 - 3, SS
 - 3, UT
 - 4, GR
 - 6, AG
 - 6, DE
 - 6, Road
 - Facility Site Boundary
 - Approved Micrositing Corridor
 - Project Features: Facilities, Roads, Power Lines, Laydown Areas
 - Interstate or Highway
 - Public Road (Paved)
 - County Boundary

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

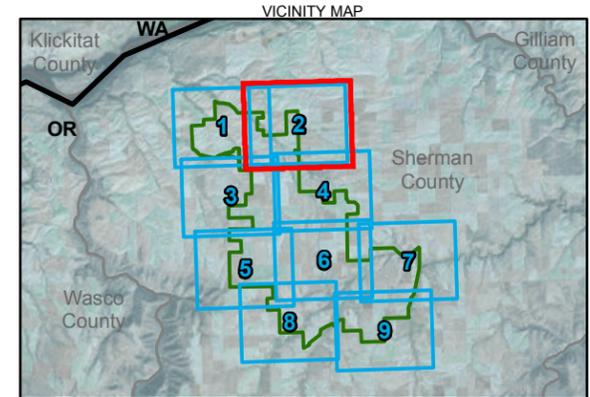
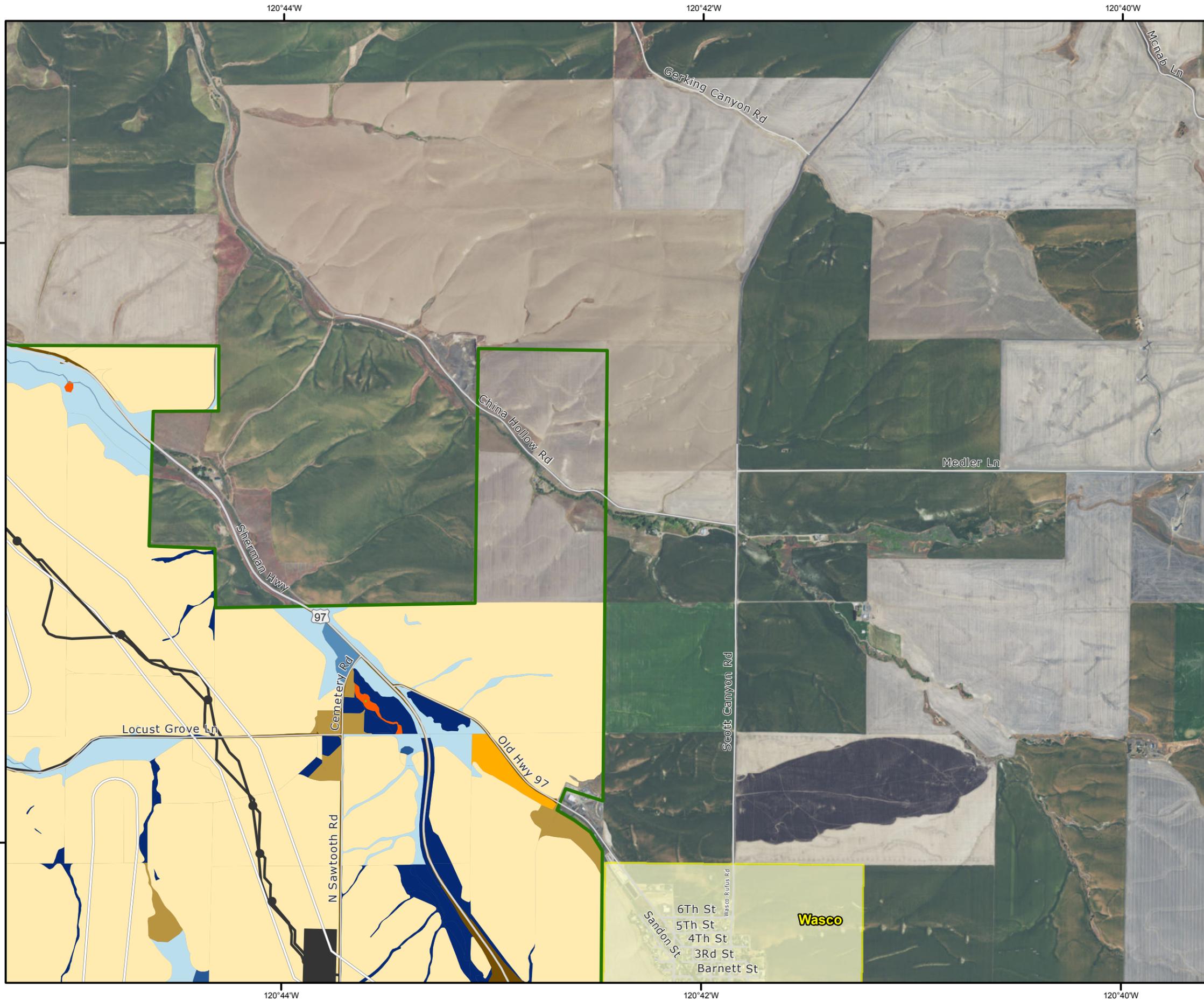
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

0 0.25 0.5 1
 Miles

1 inch equals 0.38 miles

Attachment 7 (REVISED) - Page 1 of 9
Habitat Classifications Within
Proposed Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3

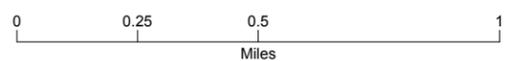




Habitat Classifications

- 1, UT
- 2, RT
- 2, UT
- 3, GR
- 3, IS
- 3, RT
- 3, UT
- 6, AG
- 6, DE
- 6, Road
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- Public Road (Paved)
- City Boundary
- County Boundary

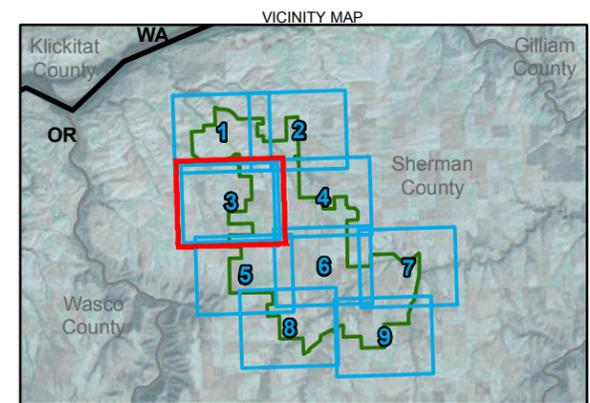
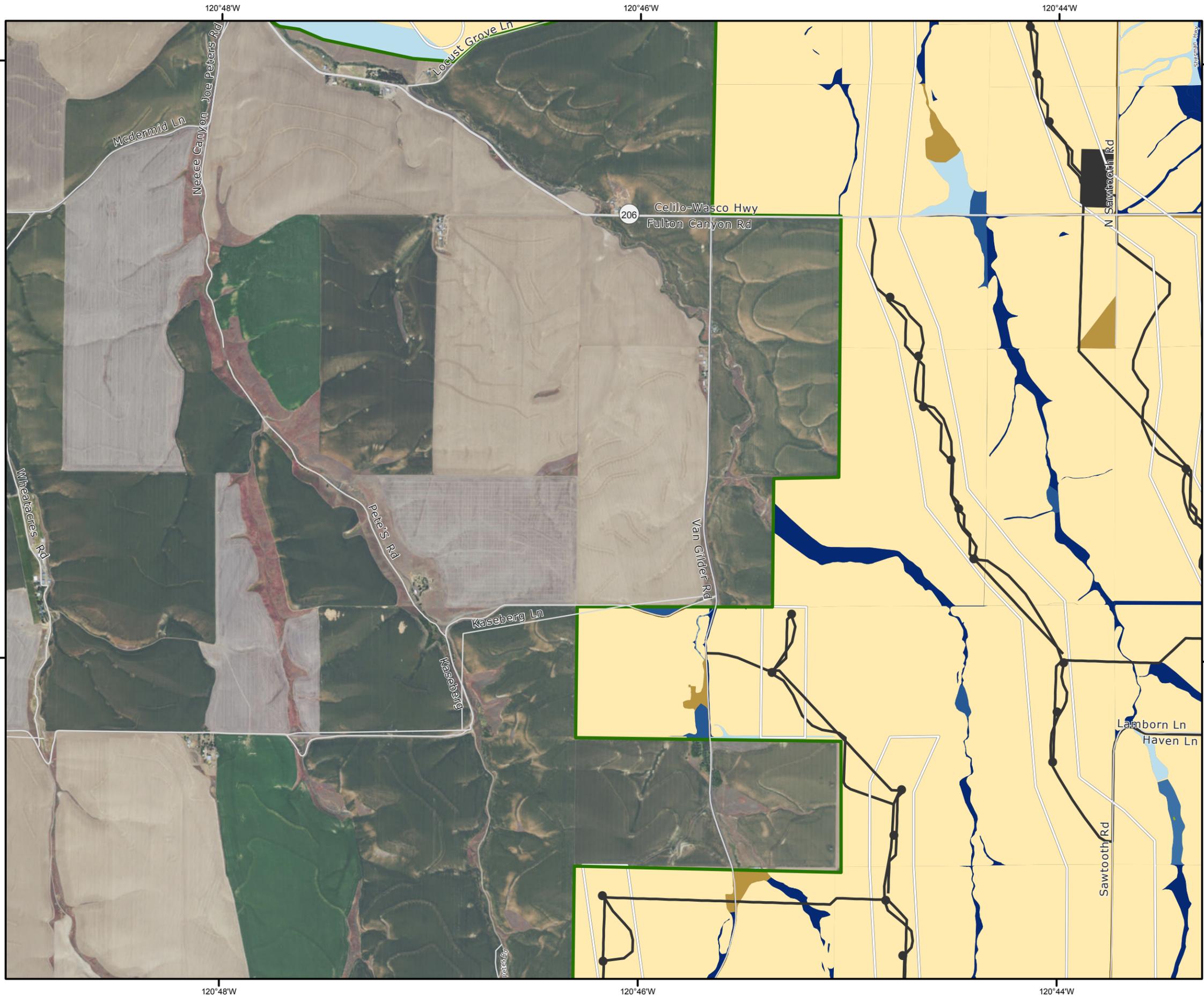
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Attachment 7 (REVISED) - Page 2 of 9
Habitat Classifications Within Proposed Site Boundary
 Supplement to Golden Hills Wind Project Request for Amendment No. 3





- Habitat Classifications**
- 1, UT
 - 3, GR
 - 3, IS
 - 3, SS
 - 3, UT
 - 4, GR
 - 6, AG
 - 6, DE
 - 6, Road
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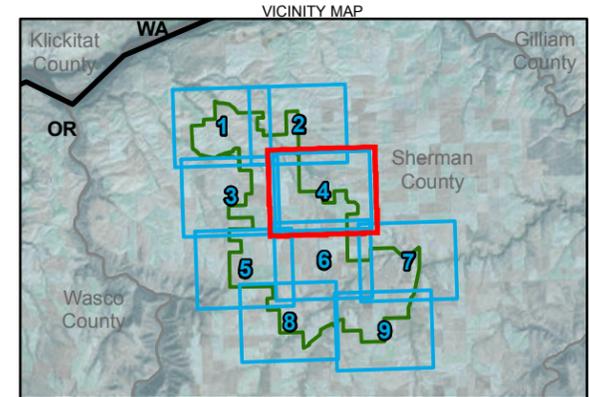
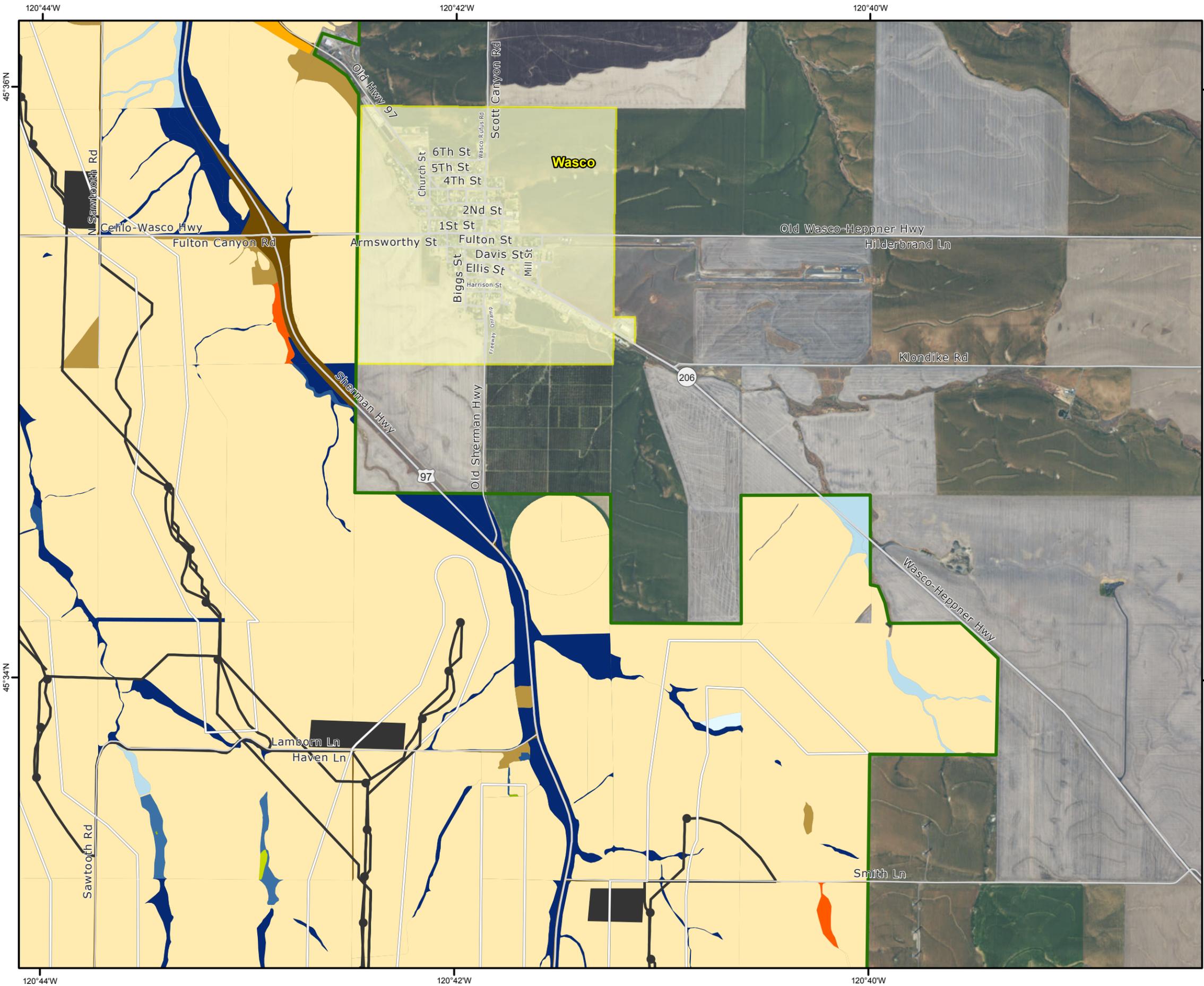
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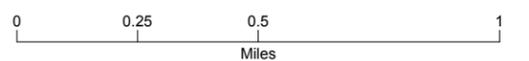




Habitat Classifications

- 1, UT
- 1, UT/ES
- 2, RT
- 2, UT
- 3, CRP
- 3, GR
- 3, SS
- 3, UT
- 4, GR
- 6, AG
- 6, DE
- 6, Road
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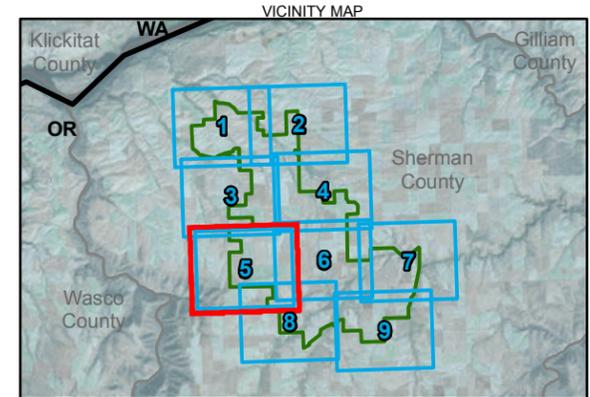
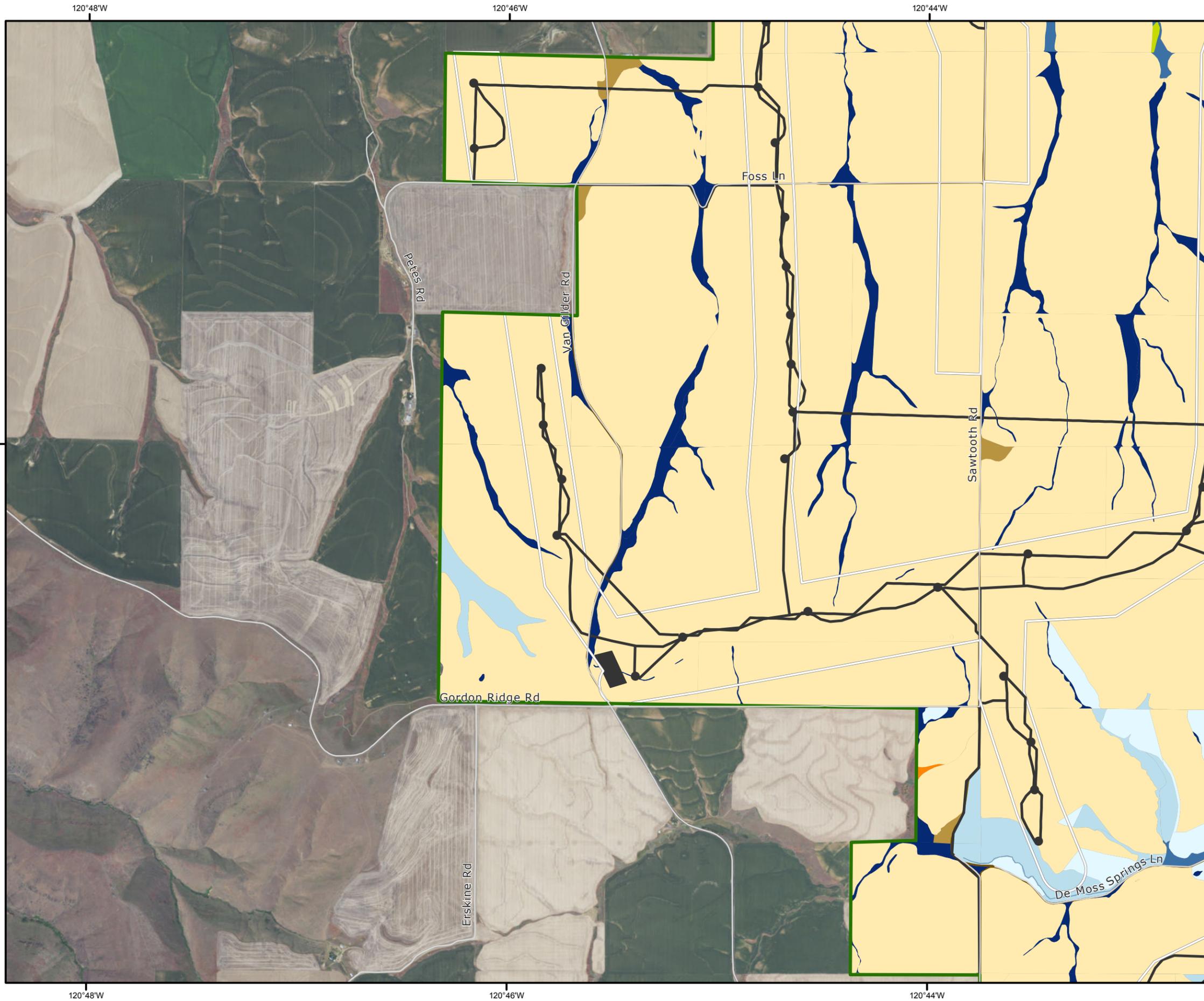
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Attachment 7 (REVISED) - Page 4 of 9
Habitat Classifications Within
Proposed Site Boundary
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Habitat Classifications

- 1, UT/ES
- 2, SS
- 3, CRP
- 3, GR
- 3, IS
- 3, SS
- 3, UT
- 4, GR
- 6, AG
- 6, DE
- 6, Road
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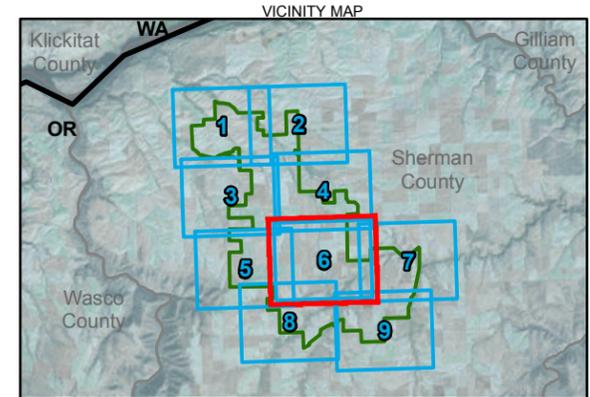
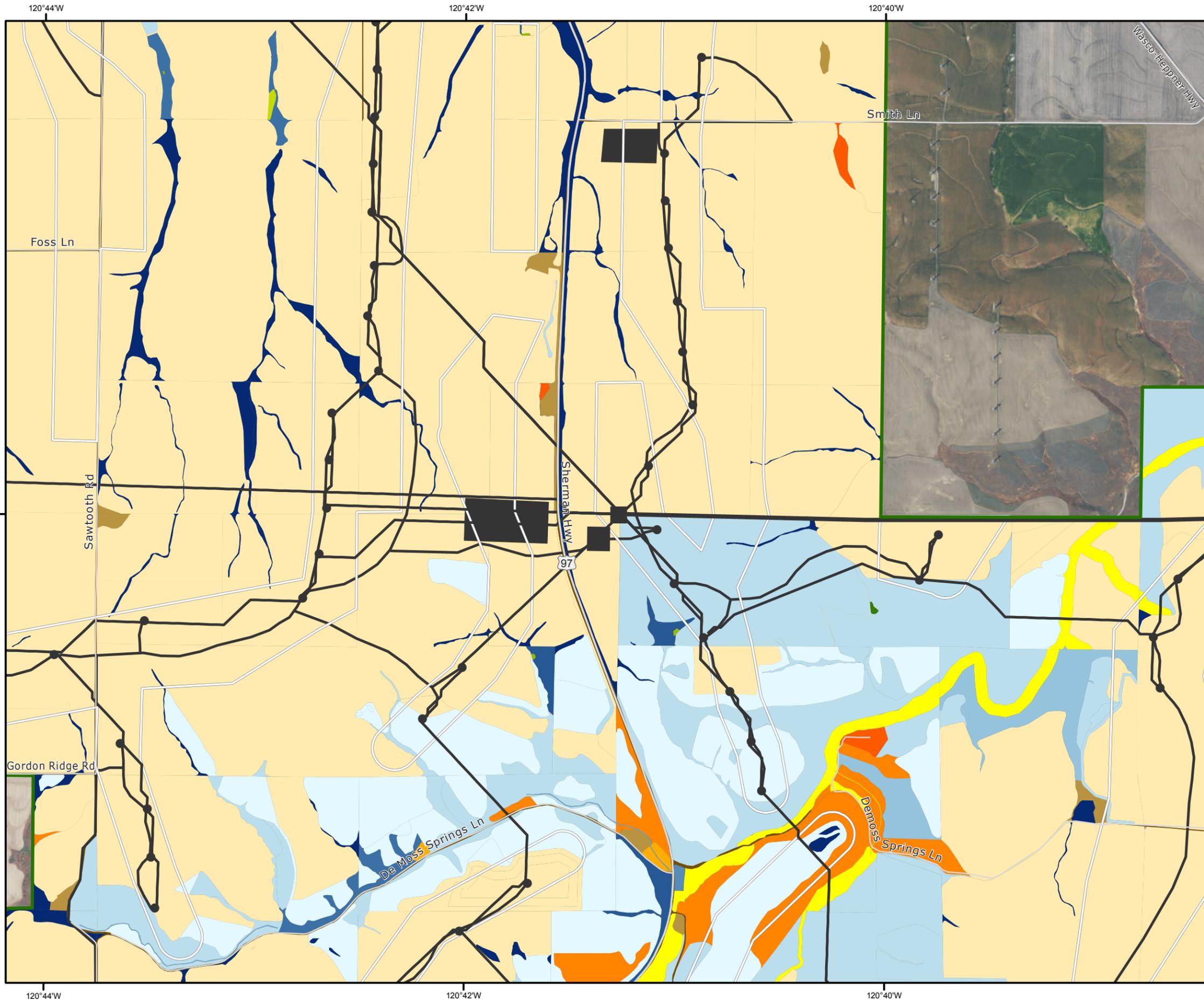
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Habitat Classifications

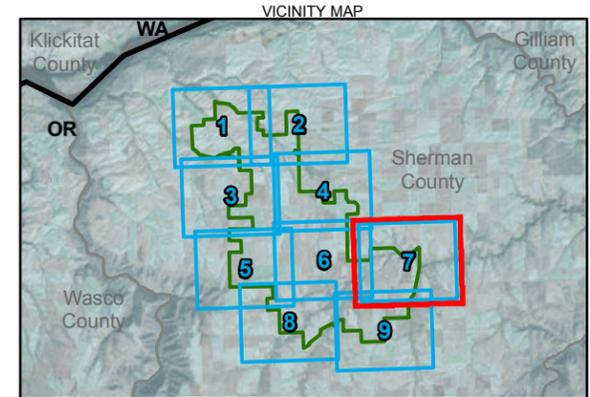
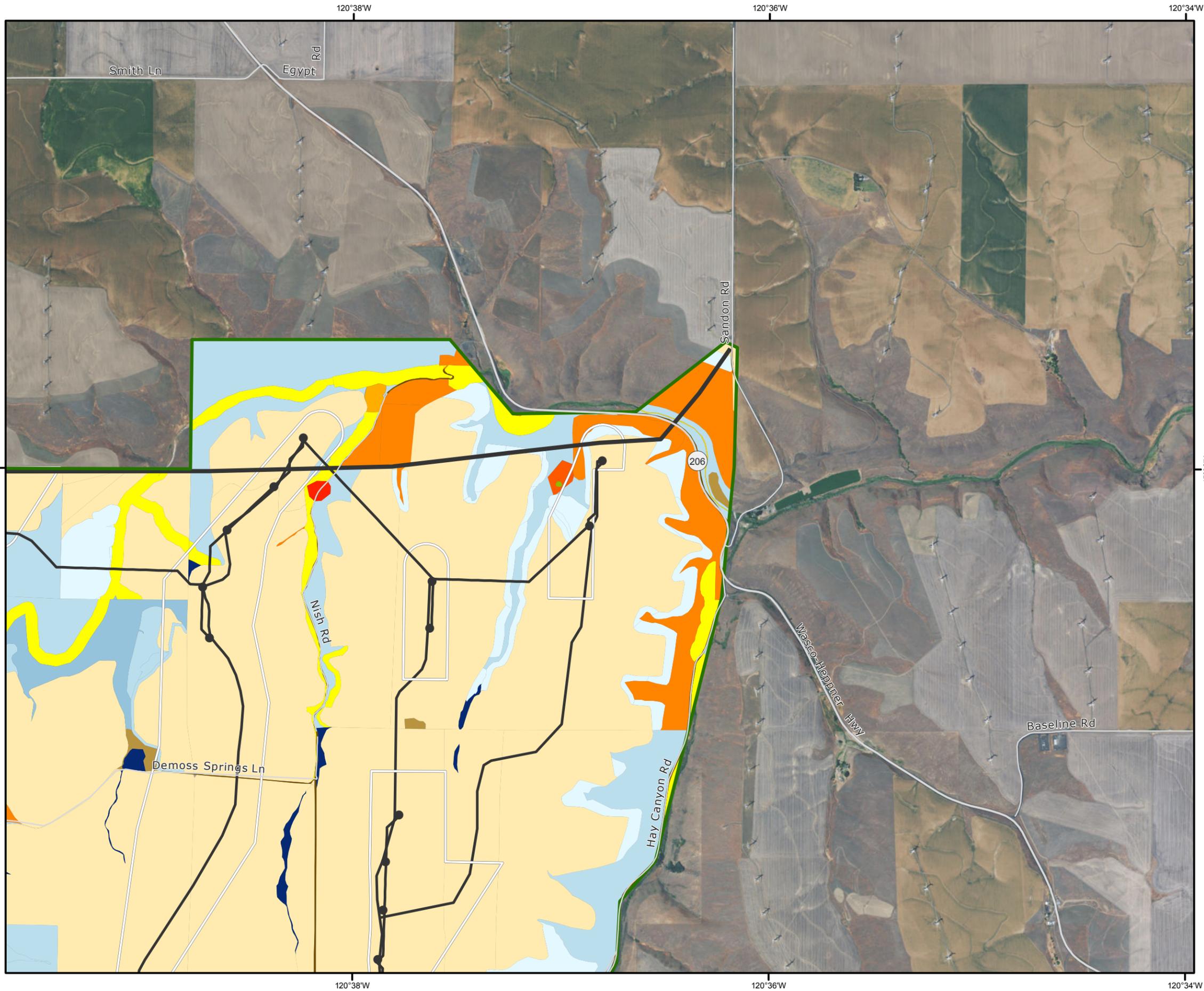
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- 1, UT
- 1, UT/ES
- 2, CREP
- 2, PS
- 2, RT
- 2, SS
- 2, UT
- 3, CRP
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- 3, GR/CL
- 3, IS
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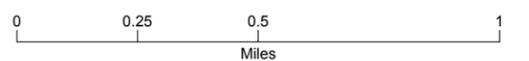




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- 2, CREP
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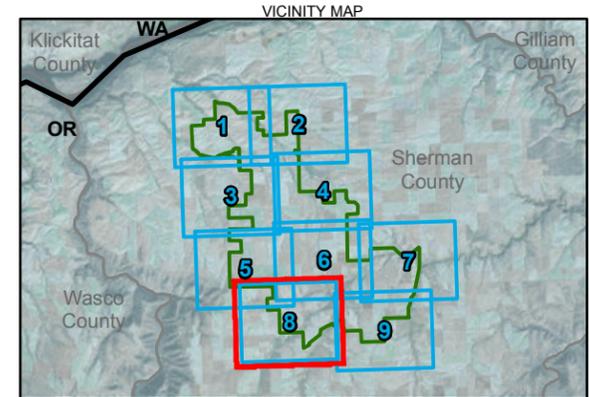
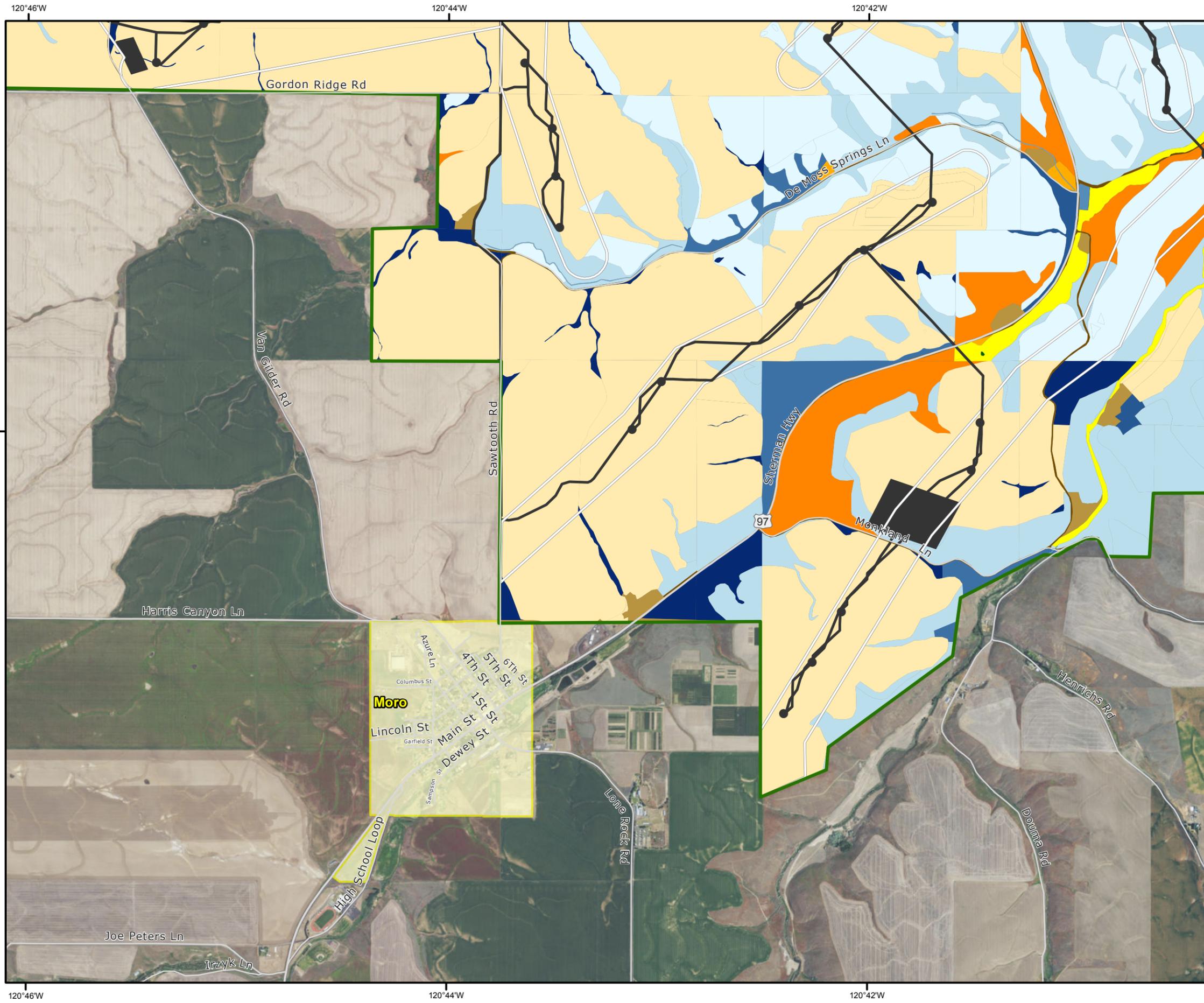
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Habitat Classifications Within
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Habitat Classifications

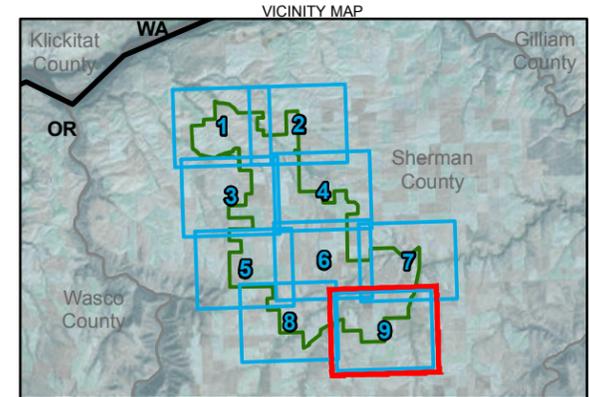
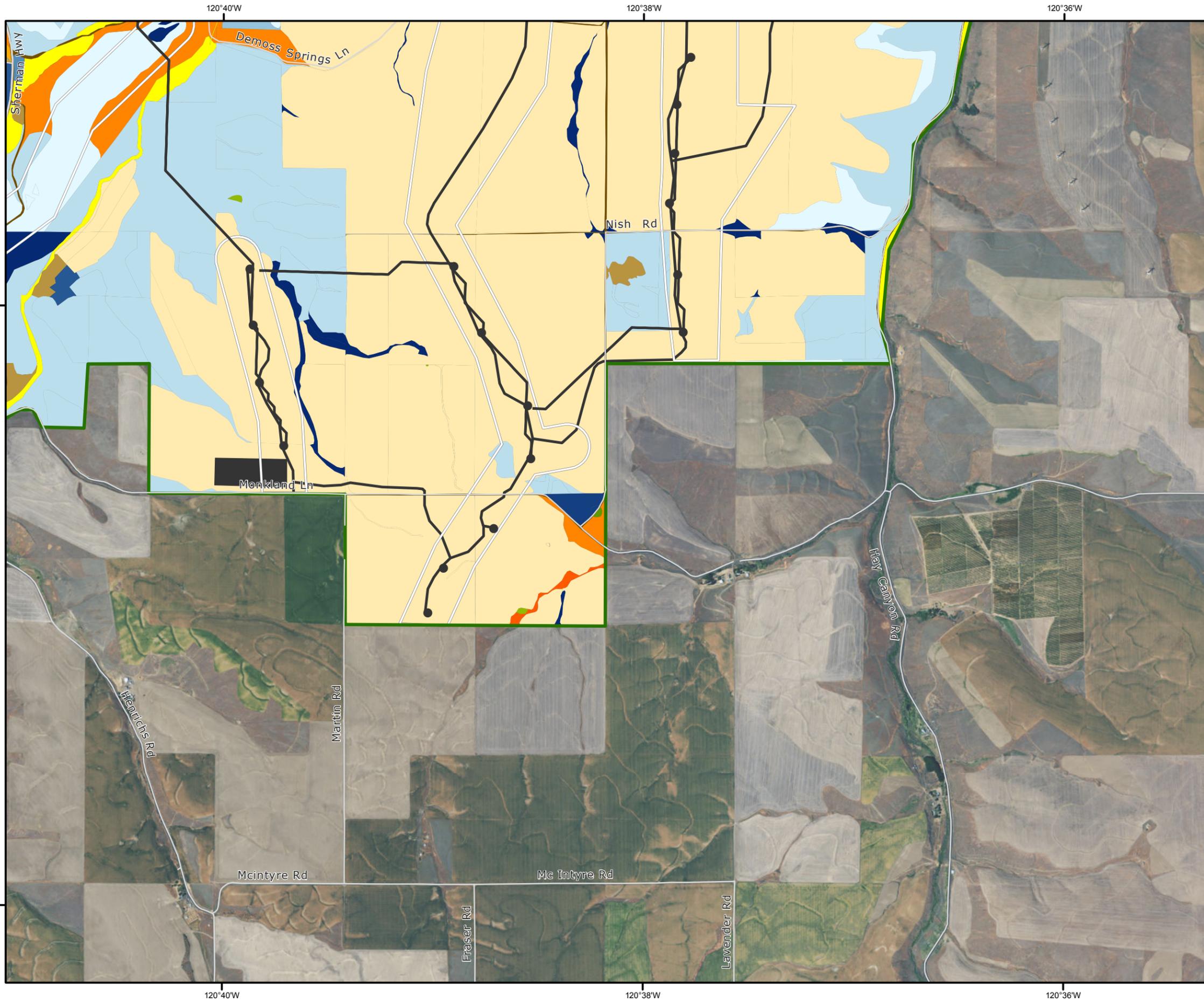
- 1, CREP
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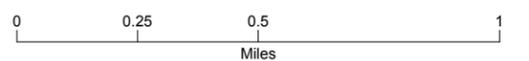




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 FIPS 3601 Feet Intl
 Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI



1 inch equals 0.38 miles



Attachment 8
Report Documenting March 2016
Biological Resources Survey Results

SURVEY REPORT

Biological Resources Investigation for the Golden Hills Wind Project, Sherman County, Oregon

Prepared for

Golden Hills Wind Farm LLC

March 2016



CH2M HILL Engineers, Inc.
2020 SW 4th Avenue
Suite 300
Portland, OR 97201

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Figures (located in Appendix A)

- 1 Facility Site Layout
- 2 Transmission Line Extension Survey Area
- 3 Substation Expansion Survey Area

Acronyms and Abbreviations

ODA	Oregon Department of Agriculture
ODFW	Oregon Department of Fish and Wildlife
ORBIC	Oregon Biodiversity Information Center
project	Golden Hills Wind Project
USFWS	U.S. Fish and Wildlife Service

1.0 Introduction

This report presents the results of a biological resources investigation conducted on March 4, 2016, by CH2M HILL Engineers, Inc., for the Golden Hills Wind Project (project), a permitted wind energy generation facility of up to 400 megawatts proposed for development in Sherman County, Oregon. Golden Hills Wind Farm LLC proposes to construct and operate the project. The project will be located on privately owned, exclusive farm use land both east and west of Highway 97, between the cities of Wasco and Moro (Figure 1, Appendix A).

The proposed project will install up to 125 turbines sited within 900-foot micro-siting corridors. Related and supporting facilities will include a substation, an underground power-collection system, approximately 5 miles of 230-kilovolt transmission line to connect to an existing 230-kV transmission line, an operations and maintenance building, access roads, and meteorological towers. Previous biological resources investigations were conducted and the Energy Facility Siting Council found that the project complies with Oregon Administrative Rule (OAR) 345-022-0060, Fish and Wildlife Habitat Standard,¹ and with OAR 345-022-0070, Threatened and Endangered Species Standard.² The biological resources investigation documented in this report focused on ground-disturbing activities associated with expanding the previously permitted substation from 2 to 5 acres and extending the previously permitted 230-kV transmission line by approximately 700 feet.

2.0 Project Description

The project is located in Sherman County, Oregon. The proposed substation expansion is located in Township 1 North, Range 17 East, Sections 27, 28, 33, and 34, approximately 4 miles south of Wasco, Oregon. The substation survey area encompasses 20 acres to provide future flexibility in construction and design. The proposed transmission line extension is located in Township 1 North, Range 18 East, Sections 7 and 8, in the community of Klondike, Oregon, approximately 4.5 miles east of Wasco, Oregon (Figure 1). This element of the project includes connecting an existing transmission power pole on the west side of the Schoolhouse substation (Power Pole A) to the Bonneville Power Administration transmission tower (Power Pole B) approximately 700 feet to the north. The transmission line survey area is 400 feet each side of centerline and encompasses 12.5 acres.

3.0 Survey

The biological resource survey was conducted in compliance with the local, state, and federal requirements identified in Section 3.1, following the methodology described in Section 3.2.

3.1 Regulatory Requirements

The Federal Endangered Species Act (16 United States Code Sections 1531-1544) and the Oregon Endangered Species Act (Oregon Revised Statute 496.171 through 192) prohibits taking (meaning to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of species protected under the Acts. The Oregon Department of Fish and Wildlife's (ODFW's) Habitat Mitigation Policy (Oregon Administrative Rule 635-415-000 through 0025T) applies when ODFW is implementing its own development actions and when developing recommendations to

¹ Final Order on Amendment No. 2, p. 36 (January 30, 2015).

² Final Order on Amendment No. 2, p. 38 (January 30, 2015).

other state, federal, or local agencies regarding development action for which mitigation for impacts to fish and wildlife habitat is authorized or required by federal, state, or local environmental laws or land use regulations.

3.2 Methodology

3.2.1 Desktop Survey

Resources consulted for the preliminary desktop survey of biological resources in the substation expansion and transmission line extension areas included aerial imagery, the U.S. Fish and Wildlife Service (USFWS), the Oregon Department of Agriculture (ODA), ODFW, the project site certificate, and associated amendments containing biological resource data.

Information pertaining to federally listed species was obtained from the USFWS Information, Planning, and Conservation System. Information pertaining to wetlands and other waters was obtained from the USFWS National Wetland Inventory online mapper (USFWS, 2016).

Oregon state-listed species are managed by two separate agencies. ODA manages plants, and ODFW manages wildlife. Information pertaining to state-listed plants in Sherman County was obtained from ODA's Plant Conservation Program Web site (ODA, 2016). Information pertaining to Sherman County species listed by ODFW was obtained from the Oregon Biodiversity Information Center (ORBIC, 2013).

3.2.2 Field Survey

Biological resource surveys were conducted on March 4, 2016, by a qualified biologist. Vegetation surveys were conducted to identify plant communities, noxious weeds, and rare plant habitat by walking line transects spaced approximately 100 feet apart. Habitat categorization surveys were conducted concurrently with vegetation surveys. General wildlife observations were also recorded to document wildlife species. The incidental wildlife observations were conducted concurrently with the habitat and vegetation surveys. Photographs were taken at each site (Appendix B). The photographs were used to document vegetation types after the field survey was completed. The survey areas also were assessed for threatened and endangered species potential habitat.

4.0 Results

This section summarizes the desktop and field survey results.

4.1 Desktop Survey

The USFWS (2015), ODA (2016), and ORBIC (2013) literature reviews did not identify any endangered, threatened, proposed, or candidate species listed at the state or federal level. The literature reviews also did not identify critical habitats for the survey areas that were not previously identified in the site certificate and associated amendments.

4.2 Field Survey

The only vegetation type identified during the March 4, 2016, site visit was agricultural land consisting of actively farmed wheat fields. Onsite investigation of the survey areas found no suitable habitat for endangered, threatened, proposed, or candidate species listed at the state or federal level.

The substation expansion area and extended 700-foot-long, 230-kV transmission line corridor are dominated by recently tilled and planted wheat fields and some scattered Russian thistle (*Salsola kali*) (Figures 2 and 3, Appendix A). No trees or shrubs were identified in the survey areas or immediate vicinity.

No wetlands or other waters were identified in the survey areas. Existing facilities identified within and adjacent to both survey areas include graveled roads, transmission lines, and a substation.

Two ravens and an unidentified raptor were observed flying approximately 0.5 mile northeast of the existing Klondike substation. Passerines, including horned larks (*Eremophila alpestris*), were also observed at both survey areas. Multiple instances of deer sign (tracks and scat) and a few small mammal burrows were observed during biological resource surveys.

4.3 Discussion

Based on pre-field review of publicly and privately available resources, as well as surveys conducted in the expanded substation and extended transmission line areas on March 4, 2016, the risk of impacting sensitive biological resources is very low because no suitable habitat that could support sensitive species was observed in the survey areas or immediate vicinity. Additionally, no sensitive plant or animal species were observed during the surveys. Raptor nesting habitat available in the survey areas was limited to transmission line towers and is neither unique nor high quality. Deer signs (scat and tracks) confirmed that the area is used by deer. Riparian habitat, important for wildlife, was absent.

Actively farmed wheat fields provide habitat for deer and small mammals and thus foraging habitat for raptors. Sign of small rodents (burrows) was observed during the surveys. The level of hunting use by raptors is not known. No raptors were observed hunting or roosting in the survey areas or vicinity.

No habitat for threatened or endangered species was identified in the survey areas.

5.0 References

Oregon Biodiversity Information Center (ORBIC). 2013. *Rare, Threatened and Endangered Species of Oregon*. Institute for Natural Resources, Portland State University, Portland, Oregon. 111 pp.

Oregon Department of Agriculture (ODA) Plant Conservation Program. 2016. *Oregon Listed Plants by County*. <http://www.oregon.gov/ODA/programs/PlantConservation/Pages/ListedPlants.aspx>. Accessed March 1, 2016.

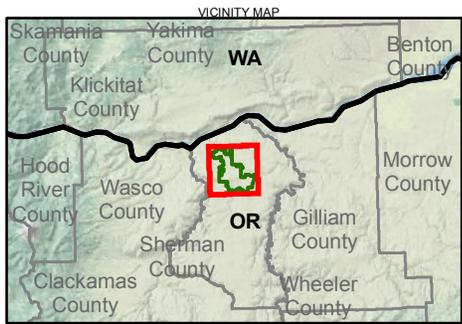
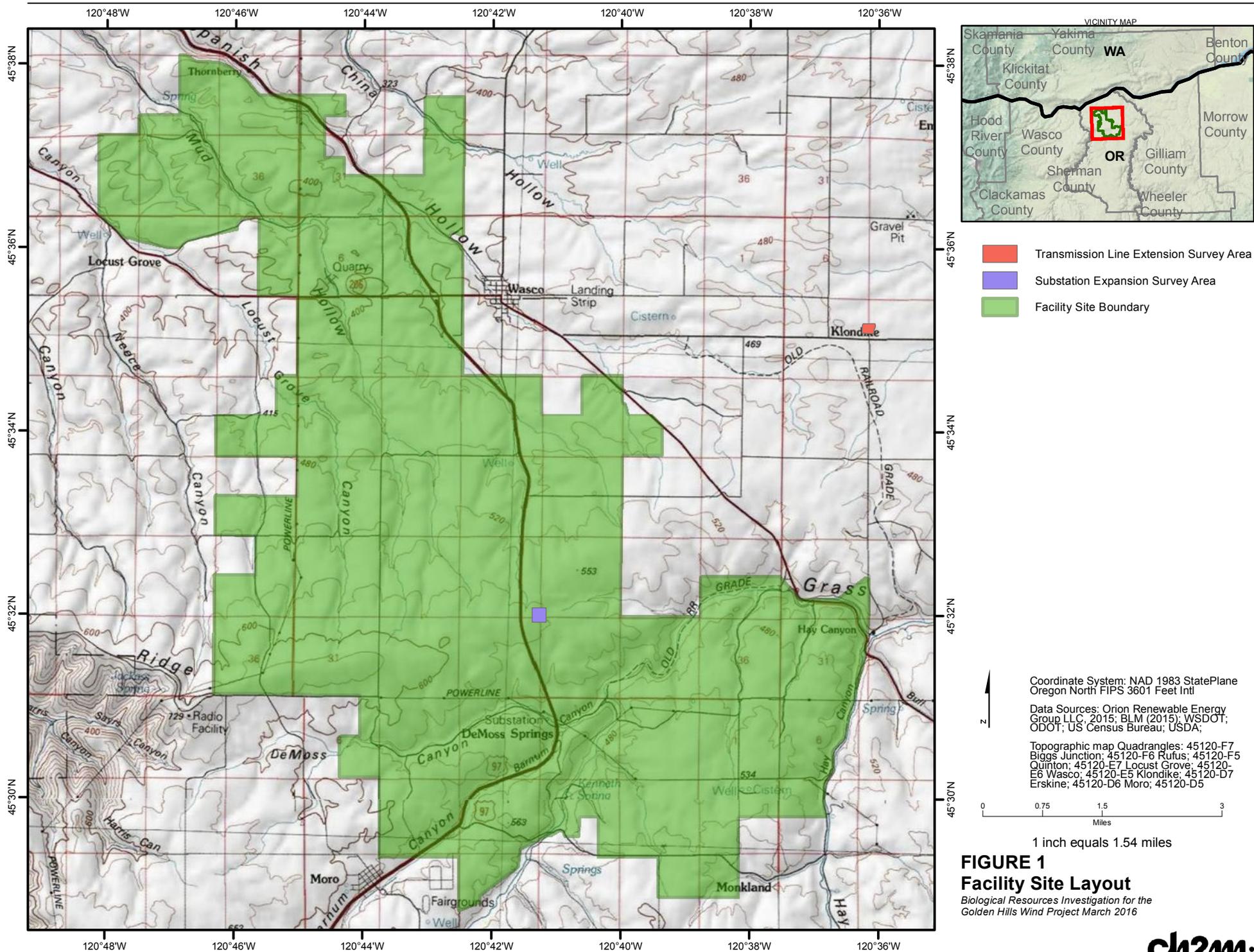
Oregon Department of Energy, Energy Facility Siting Council. 2015. *Final Order on Amendment No. 2 for the Golden Hills Wind Project* (issued January 30, 2015) and *Second Amended Site Certificate* (fully executed on February 11, 2015).

U.S. Fish and Wildlife Service (USFWS). 2015. *Information, Planning, and Conservation System*. <http://ecos.fws.gov/ipac/gettingStarted/map>. Accessed December 1, 2015.

U.S. Fish and Wildlife Service (USFWS). 2016. *National Wetland Inventory Online Mapper*. <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed March 1, 2016.

Appendix A

Figures



- Transmission Line Extension Survey Area
- Substation Expansion Survey Area
- Facility Site Boundary

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA;

Topographic map Quadrangles: 45120-F7 Biggs Junction; 45120-F6 Rufus; 45120-F5 Quinton; 45120-E7 Locust Grove; 45120-E6 Wasco; 45120-E5 Klondike; 45120-D7 Erskine; 45120-D6 Moro; 45120-D5

0 0.75 1.5 3
Miles

1 inch equals 1.54 miles

FIGURE 1
Facility Site Layout
Biological Resources Investigation for the Golden Hills Wind Project March 2016

120°36'W



45°35'N

45°35'N

120°36'W



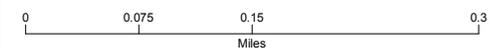
 Transmission Line Extension Survey Area



Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl

Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA;

Topographic map Quadrangles: 45120-E6 Wasco; 45120-E5 Klondike.

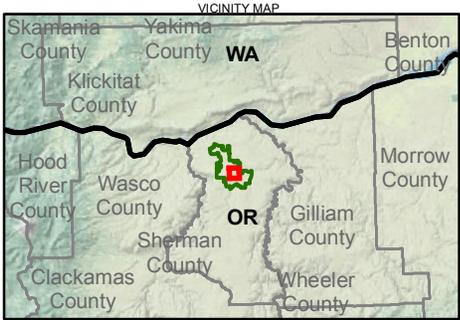


1 inch equals 0.13 miles

FIGURE 2
Transmission Line Extension Survey Area

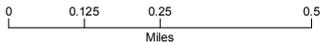
Biological Resources Investigation for the Golden Hills Wind Project March 2016





- Substation Expansion Survey Area
- Facility Site Boundary

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
 Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA;
 Topographic map Quadrangles: 45120-E6 Wasco.



1 inch equals 0.32 miles

FIGURE 3
Substation Expansion Survey Area
Biological Resources Investigation for the Golden Hills Wind Project March 2016

Appendix B Photographs

APPENDIX B

Photographs



Photo 1: Substation expansion area, looking south toward characteristic habitat. Deer sign in the foreground.



Photo 2: Transmission line extension area, looking northeast toward existing transmission line and Klondike substation.

Attachment 9
Report Documenting March 2016
Cultural Resources Survey Results
[Restricted Distribution—Provided Under Separate Cover]

ESTERSON Sarah * ODOE

Subject: FW: Golden Hills RFA 3; Request to Withdraw Proposed Order
Attachments: GH_RFA_3_Second_Supplement_10-27-2016.pdf

From: Carrie.Konkol@ch2m.com [<mailto:Carrie.Konkol@ch2m.com>]

Sent: Friday, October 28, 2016 1:43 PM

To: WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>; FRANCE Renee M <Renee.M.FRANCE@state.or.us>; CORNETT Todd * ODOE <Todd.Cornett@oregon.gov>

Cc: rmcgraw@orionrenewables.com; jeisen@orionrenewables.com; rbuckley@orionrenewables.com; elaine.albrich@stoel.com; tim.mcmahan@stoel.com

Subject: RE: Golden Hills RFA 3; Request to Withdraw Proposed Order

Hello Max,

Attached is the Second Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project.

Please let us know if you would like us to mail you a hard copy of this document.

Thank you,
Carrie

Carrie Konkol

Environment and Nuclear Market

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CH2M

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From: McMahan, Tim [<mailto:tim.mcmahan@stoel.com>]

Sent: Sunday, October 23, 2016 8:40 PM

To: WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>; FRANCE Renee M <Renee.M.FRANCE@state.or.us>; CORNETT Todd * ODOE <Todd.Cornett@oregon.gov>

Cc: Ryan McGraw <rmcgraw@orionrenewables.com>; Konkol, Carrie/PDX <Carrie.Konkol@ch2m.com>; Jim Eisen (jeisen@orionrenewables.com) <jeisen@orionrenewables.com>; Reid Buckley <rbuckley@orionrenewables.com>; Albrich, Elaine <elaine.albrich@stoel.com>; McMahan, Tim <tim.mcmahan@stoel.com>

Subject: RE: Golden Hills RFA 3; Request to Withdraw Proposed Order [EXTERNAL]

Hello Max: This is in response to your correspondence below. In response to Golden Hills Request for Amendment No. 3, we received a comment letter and request for contested case that appears to raise the issue of whether Orion Renewable Energy ("Golden Hills") should have evaluated transmission line infrastructure (gen-tie line) under the provisions of ORS 215.274. In the original site certificate application (and previous two amendments), Golden Hills requested and received EFSC approval to construct and operate two transmission lines to connect the Facility to the Bonneville Power Administration (BPA) grid, and two substations associated with each transmission line. One of these transmission lines was to be a 500-kV transmission line and a substation to connect the Facility to an existing BPA substation north of the site boundary. The transmission lines were approved in accordance with the criteria in ORS 215.275.

The current amendment request eliminates the need for the 500-kV transmission line and associated substation. The previously approved 230-kV transmission line would, instead, be extended to a more central location in the site boundary, and connect with a single substation serving the entire Facility. EFSC previously approved the approximately 11 miles of 500-kV transmission line to the John Day substation, and 0.7 mile of 230-kV transmission line to the Klondike substation, for a total of approximately 11.7 miles of to- be- constructed transmission line route. As modified, the Certificate Holder proposes approximately 5 miles of to-be-constructed 230-kV line and approximately 3 miles of to-be-constructed transmission line on the already fully constructed Hay Canyon transmission line for 8 total miles of transmission line. The proposed modification reduces the amount of new transmission line infrastructure by more than half of that which is previously approved by EFSC. Regardless, it is Golden Hill's belief that a conservative approach would be to evaluate the transmission infrastructure for compliance with ORS 215.274, as an "associated" transmission line.

We request that ODOE withdraw its Proposed Order for Golden Hills to submit a supplement to the RFA, in order to address compliance with ORS 214.274. Please advise us immediately if you need any further clarifications. We intend to submit the supplement this week. Thank you. TLM

Timothy L. McMahan | Partner

STOEL RIVES LLP | 760 SW Ninth Avenue, Suite 3000 | Portland, OR 97205

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From: WOODS Maxwell * ODOE [<mailto:Maxwell.Woods@oregon.gov>]

Sent: Friday, October 21, 2016 3:30 PM

To: McMahan, Tim; FRANCE Renee M; CORNETT Todd * ODOE

Cc: Ryan McGraw; Carrie Konkol (Carrie.Konkol@ch2m.com); Jim Eisen (jeisen@orionrenewables.com); Reid Buckley; Albrich, Elaine

Subject: RE: Golden Hills RFA 3; Request to Withdraw Proposed Order

Hello Tim,

Thank you for your email. Before ODOE makes a decision, please provide additional specificity regarding the issue that Orion will be evaluating and addressing in the supplement.

Regards,

Max

Maxwell Woods

Senior Policy Advisor

Oregon Department of Energy

625 Marion Street NE

Salem, OR 97301

P: Direct: (503) 378-5050

C: (503) 551-8209

Oregon.gov/energy

Please note my email has changed to maxwell.woods@oregon.gov



From: McMahan, Tim [<mailto:tim.mcmahan@stoel.com>]

Sent: Thursday, October 20, 2016 7:02 AM

To: FRANCE Renee M <Renee.M.FRANCE@state.or.us>; CORNETT Todd * ODOE <Todd.Cornett@oregon.gov>; WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>

Cc: Ryan McGraw <rmcgraw@orionrenewables.com>; Carrie Konkol (Carrie.Konkol@ch2m.com) <Carrie.Konkol@ch2m.com>; Jim Eisen (jeisen@orionrenewables.com) <jeisen@orionrenewables.com>; Reid Buckley <rbuckley@orionrenewables.com>; McMahan, Tim <tim.mcmahan@stoel.com>; Albrich, Elaine <elaine.albrich@stoel.com>

Subject: Golden Hills RFA 3; Request to Withdraw Proposed Order

Good morning: On behalf of Orion Renewable Energy, I am asking ODOE to withdraw its Proposed Order at this time. Orion intends to file an additional supplement to RFA 3 to address an issue that we believe should be better evaluated in the RFA.

Thank you for your attention to this matter. TLM

Timothy L. McMahan | Partner

STOEL RIVES LLP | 760 SW Ninth Avenue, Suite 3000 | Portland, OR 97205

Direct: (503) 294-9517 | Mobile: (503) 504-8693 | Fax: (503) 220-2480

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Second Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Prepared for

Oregon Energy Facility Siting Council

October 2016

Submitted by

Golden Hills Wind Farm LLC

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Transmission Line Siting Figure	

Second Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Introduction and Purpose

On December 17, 2015, Golden Hills Wind Farm LLC (Golden Hills or Certificate Holder), a subsidiary of Orion Renewable Energy Group LLC, filed *Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project* (amendment request) with the Oregon Department of Energy¹. The amendment request presented proposed modifications to the approved Golden Hills Wind Project (Facility or project). This second supplement provides additional detail to support a determination of completeness for the amendment request.

The Energy Facility Siting Council (EFSC) has previously found the Facility, including the associated transmission lines proposed as part of the Facility, to be compatible with siting in the F-1 exclusive farm use (EFU) zone. The changes proposed in the amendment request would not affect the previous findings. As described below, the Facility except the substation and transmission line is a “commercial utility facility” and as such is a conditionally permitted use in the F-1 zone. The Certificate Holder demonstrated in the original application that under Oregon Revised Statute (ORS) 215.275, the substation and transmission line are utility facilities necessary for public service and must be sited on EFU land in order to provide service.

Under new legislation (House Bill 2704, 2013 Session), the related or associated transmission line, because it connects the commercial energy generating source to its interconnection point with the Northwest Power Grid, meets the definition of an “associated transmission line necessary for public service” rather than a “utility facility necessary for public service.” The transmission line is therefore subject to the provisions of ORS 215.274, *Associated transmission lines necessary for public service*.

Summary of Additional Analysis (ORS 215.274)

In the original site certificate application (and previous two amendments), Golden Hills requested and received EFSC approval to build and construct two transmission lines to connect the Facility to the Bonneville Power Administration (BPA) grid, and two substations associated with each transmission line. One of these transmission lines was to be a 500-kilovolt (kV) transmission line and a substation to connect the Facility to an existing BPA substation north of the site boundary. The current amendment request eliminates the need for the 500-kV transmission line and associated substation. The previously approved 230-kV transmission line would, instead, be extended to a more central location in the site boundary, and connect with a single substation serving the entire Facility.

EFSC previously approved the approximately 11 miles of 500-kV transmission line to the John Day substation, and 0.7 mile of 230-kV transmission line to the Klondike substation, for a total of approximately 11.7 miles of to-be-constructed transmission line route. As modified, the Certificate Holder proposes approximately 5 miles of to-be-constructed 230-kV line and approximately 3 miles of

¹ The project consists of a permitted wind energy generation facility in Sherman County, Oregon, with electrical generating capacity of up to 400 megawatts (MW). On May 15, 2009, the Energy Facility Siting Council (EFSC) issued a site certificate for construction and operation of the project. In 2012 and 2015, respectively, EFSC approved amendments to the site certificate to extend the construction start and completion deadlines.

transmission line on the already fully constructed Hay Canyon transmission line for 8 total miles of transmission line. The proposed modification reduces the amount of new transmission line infrastructure by more than half of that which is previously approved by EFSC.

Additional Analysis

This section presents an analysis of ORS 215.274, *Associated Transmission Lines Necessary for Public Service*, demonstrating that the transmission components of the Facility meet the applicable statutory criteria. The attached figure titled Transmission Line Siting shows how the Facility 230-kV transmission line was sited section by section to (1) minimize EFU impacts by following tax lot lines; (2) minimize transmission line corridor extents by connecting to the existing Hay Canyon transmission corridor via a direct route that considers topographic constraints; (3) co-locate with the Hay Canyon transmission line adjacent to Sanborn Road; and (4) parallel an existing adjacent transmission line utility corridor north of the Klondike substation.

(1) As used in this section, associated transmission line has the meaning given that term in ORS 469.300 (Definitions).

ORS 469.300 (3). *Associated transmission lines means new transmission lines constructed to connect an energy facility to the first point of junction of such transmission line or lines with either a power distribution system or an interconnected primary transmission system or both or to the Northwest Power Grid.*

Finding: The Facility 230-kV transmission line meets the definition of an associated transmission line in ORS 469.300 (3) because it will connect the energy generated from the Facility to the Northwest Power Grid located at the BPA interconnection point just north of the Klondike Schoolhouse, for a transmission line route that is 8 miles in length.

(2) An associated transmission line is necessary for public service if an applicant for approval under ORS 215.213 (uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (1)(c)(B) or 215.283 (uses permitted in exclusive farm use zones in nonmarginal lands counties) (1)(c)(B) demonstrates to the governing body of a county or its designee that the associated transmission line meets:

- (a) At least one of the requirements listed in subsection (3) of this section; or*
- (b) The requirements described in subsection (4) of this section*

Finding: The entire route of the Facility 230-kV transmission line does not meet any of the requirements of subsection (3). However, it does meet the requirements of subsection (4) as outlined in that section below.

(3) The governing body of a county or its designee shall approve an application under this section if an applicant demonstrates that the entire route of the associated transmission line meets at least one of the following requirements:

- (a) The associated transmission line is not located on high-value farmland, as defined in ORS 195.300 (Definitions for ORS 195.300 to 195.336), or on arable land;*

Finding: Most of the Facility 230-kV transmission line route is located on high-value and arable land. Therefore, it does not meet this requirement.

- (b) The associated transmission line is co-located with an existing transmission line;*

Finding: The Facility 230-kV transmission line will be co-located with the Hay Canyon transmission line for only 3 miles of its 8-mile route, not the entire route. Therefore, it does not meet this requirement.

(c) The associated transmission line parallels an existing transmission line corridor with the minimum separation necessary for safety; or

Finding: The Facility 230-kV transmission line only parallels a short section of existing transmission line corridor near the interconnection point with the BPA grid just north of the Klondike substation, not the entire route. Therefore, it does not meet this requirement.

(d) The associated transmission line is located within an existing right-of-way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground.

Finding: The Facility 230-kV transmission line route consists of sections that are new transmission line corridor, sections that are co-located, and sections that are located parallel and adjacent to an existing transmission line right-of-way (see attached figure). The Facility 230-kV transmission line route does not include sections of new transmission line infrastructure within an existing linear right-of-way. Where the Facility 230-kV transmission line route is co-located, it is adjacent to but outside of the linear right-of-way of Sanborn Road to allow for future road widening. Therefore, the Facility 230-kV transmission line route does not meet this requirement.

(4)(a) Except as provided in subsection (3) of this section, the governing body of a county or its designee shall approve an application under this section if, after an evaluation of reasonable alternatives, the applicant demonstrates that the entire route of the associated transmission line meets, subject to paragraphs (b) and (c) of this subsection, two or more of the following factors:

(A) Technical and engineering feasibility;

Finding: It is not feasible or technically possible to interconnect with the electrical grid system without transmission lines that transmit power from the wind farm, which is located on EFU land, and interconnect to the BPA transmission system (also on EFU land) for the purpose of distributing power via the electrical grid system. The Certificate Holder, after further technical and engineering study, eliminated the previously approved 11-mile 500-kV transmission line from the project design, thereby reducing the need for a new transmission line corridor by more than half. However, the proposed 8-mile route (3 miles of which are co-located) is necessary to deliver the power generated from the wind farm to the electrical grid system. Therefore, the Facility 230-kV transmission line meets this criterion.

(B) The associated transmission line is locationally dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300 (Definitions for ORS 195.300 to 195.336), or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

Finding: The Facility 230-kV transmission line is locationally dependent because it must be near the wind farm, which is sited on EFU land and from which the power would be generated. It also must be located near the point of interconnection with the BPA system near the Klondike substation, also on EFU land, so that the power can be conveyed to the electrical grid system. There are no urban or resource lands available to locate the transmission line where it could serve its purpose of conveying energy from the wind farm (on EFU land) to the electrical grid system. In addition, the Facility 230-kV line was sited so that it could have a reasonably direct route to the BPA grid system interconnection point near the Klondike substation while also co-locating with the existing Hay Canyon transmission line thereby minimizing impacts.

(C) Lack of an available existing right-of-way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground;

Finding: The project utilized existing right-of-way to the maximum extent practicable by co-locating on the existing Hay Canyon transmission line. Because the Facility is in an EFU-zoned area with large lots resulting from topographical constraints, the area near the Facility substation lacks well-defined linear infrastructure such as roads that would provide a reasonably direct route for the Facility 230-kV

transmission line to connect with the electrical grid system without substantially lengthening the route. Therefore, a section of new transmission line corridor is necessary to connect to the existing Hay Canyon transmission line.

(D) Public health and safety; or

Finding: The Certificate Holder is minimizing health and safety risks from exposure to magnetic fields or shock by limiting the length of transmission line for the project; reducing the new transmission line corridor from 11 to 5 miles; consolidating the area necessary for energy transmission use by co-locating a portion of the transmission line; and locating the transmission line away from populated areas.

(E) Other requirements of state or federal agencies

Finding: As documented through the site certificate process and subsequent amendment processes, the project complies with other requirements of state and federal agencies.

(4)(b) The applicant shall present findings to the governing body of the county or its designee on how the applicant will mitigate and minimize the impacts, if any, of the associated transmission line on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

Finding: The Certificate Holder has designed the 230-kV transmission feeder line to minimize, to the greatest degree practicable, impacts to EFU land. Construction of the 230-kV transmission line will not substantially add to the agricultural land impacts caused by the project wind turbines and access roads, which will occupy a much larger area of EFU land. The 230-kV transmission line pole structures will permanently impact less than an acre of land, thereby removing very little land from agricultural production. In addition, the transmission line is sited as to minimize dividing lots or disturbing agricultural practices. The amount of new transmission line corridor has been minimized to the greatest extent practicable by minimizing the amount of new transmission line corridor needed and co-locating transmission on existing transmission line infrastructure. Landowners and farm operators will be compensated for the loss of land for agricultural production. In addition, when construction is completed, lands temporarily affected by construction would be restored to their original condition. Therefore, because the 230-kV transmission line permanent impacts are minimal, especially considering the amount of EFU zoned land in Sherman County, and the transmission line has been sited in consideration of farming practices, it will not force a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

(4)(c) The governing body of a county or its designee may consider costs associated with any of the factors listed in paragraph (a) of this subsection, but consideration of cost may not be the only consideration in determining whether the associated transmission line is necessary for public service. [2013 c.242 §2]

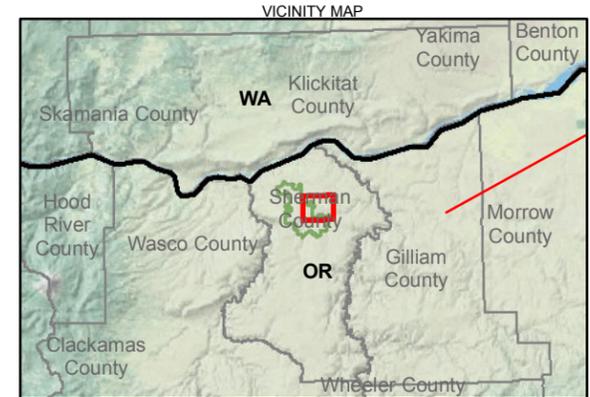
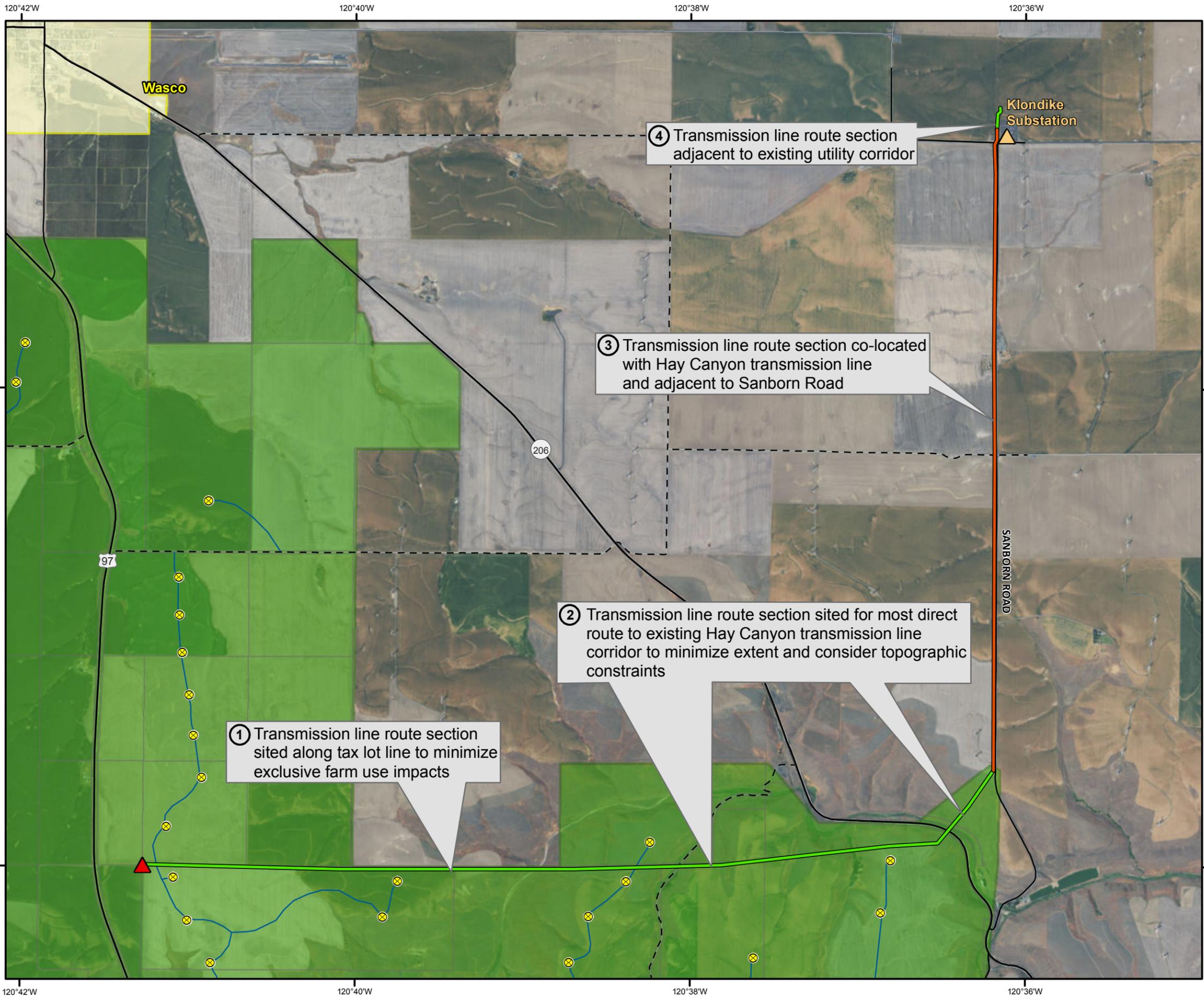
Finding: Land costs were not a significant consideration in determining the location of the transmission line segment. The majority of land in Sherman County is zoned EFU and no alternative location exists, regardless of cost, to locate the Facility 230-kV transmission line on non-EFU land. The location was dependent on providing a connection for the energy generated by the wind facility to the electrical energy grid interconnection point north of the Klondike substation while minimizing impacts to EFU lands by using existing utility rights-of-way.

Conclusion

The Facility 230-kV transmission line must be on EFU land in order to connect the wind farm with the electrical grid system, both of which are on and surrounded by EFU-zoned land. The Facility 230-kV transmission line was designed and sited to minimize impacts to EFU land. The Certificate Holder has greatly reduced the length of transmission line on EFU-zoned land by eliminating the 500-kV

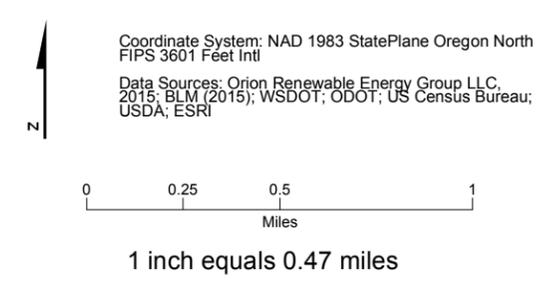
transmission line previously approved. In addition, the Certificate Holder is co-locating a portion of the Facility 230-kV transmission line on existing transmission line infrastructure and right-of-way. Consequently, based on the analysis set forth above, the associated transmission line meets the standards required by ORS 215.274.

Attachment
Transmission Line Siting Figure



- Facility Site Boundary
- Wind Turbine
- Land Parcel Boundary
- Proposed Substation
- Existing Substation
- Proposed 230-kV Transmission Line
- Existing Hay Canyon 230-kV Transmission Line
- Access Road
- Public Road (Paved)
- Public Road (Gravel)
- City Boundary
- County Boundary

Note: Numbered callouts coincide with "Additional Analysis" discussion in Second Supplement text.



Transmission Line Siting Figure
 Second Supplement to Golden Hills Wind
 Project Request for Amendment No. 3

Third Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Prepared for

Oregon Energy Facility Siting Council

November 2016

Submitted by

Golden Hills Wind Farm LLC

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2	Aerial Reconnaissance
3	Natural Resources Conservation Service Irrigated Soil Capability Class
4	Transmission Line Siting
5	Observed Farm Practices

Third Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project

Introduction and Purpose

On December 17, 2015, Golden Hills Wind Farm LLC (Golden Hills or Certificate Holder), a subsidiary of Orion Renewable Energy Group LLC, filed *Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project* (amendment request) with the Oregon Department of Energy¹. The amendment request presented proposed modifications to the approved Golden Hills Wind Project (Facility or project). This third supplement provides information requested from the Department on November 10, 2016.

The Energy Facility Siting Council (EFSC) has previously found the Facility, including the associated transmission lines proposed as part of the Facility, to be compatible with siting in the F-1 exclusive farm use (EFU) zone. The changes proposed in the amendment request would not affect the previous findings. As described below, the Facility except the substation and transmission line is a “commercial utility facility” and as such is a conditionally permitted use in the F-1 zone. The Certificate Holder demonstrated in the original application that under Oregon Revised Statute (ORS) 215.275, the substation and transmission line are utility facilities necessary for public service and must be sited on EFU land in order to provide service.

Under new legislation (House Bill 2704, 2013 Session), associated transmission lines are considered “associated transmission line necessary for public service” rather than a “utility facility necessary for public service.” The Facility’s proposed transmission line is an associated transmission line and therefore is subject to the provisions of ORS 215.274, *Associated transmission lines necessary for public service*.

Summary of Additional Analysis (ORS 215.274)

In the original site certificate application (and previous two amendments), Golden Hills requested and received EFSC approval to build and construct two transmission lines to connect the Facility to the Bonneville Power Administration (BPA) grid, and two substations associated with each transmission line. One of these transmission lines was to be a 500-kilovolt (kV) transmission line and a substation to connect the Facility to an existing BPA substation north of the site boundary. The current amendment request eliminates the need for the 500-kV transmission line and associated substation. The previously approved 230-kV transmission line would, instead, be extended to a more central location in the site boundary, and connect with a single substation serving the entire Facility.

EFSC previously approved the approximately 11 miles of 500-kV transmission line to the John Day substation, and 0.7 mile of 230-kV transmission line to the Klondike substation, for a total of approximately 11.7 miles of to-be-constructed transmission line route. As modified, the Certificate Holder proposes constructing approximately 5 miles of new 230-kV line and using approximately 3 miles

¹ The project consists of a permitted wind energy generation facility in Sherman County, Oregon, with electrical generating capacity of up to 400 megawatts (MW). On May 15, 2009, the Energy Facility Siting Council (EFSC) issued a site certificate for construction and operation of the project. In 2012 and 2015, respectively, EFSC approved amendments to the site certificate to extend the construction start and completion deadlines.

of existing 230-kV line on the already fully constructed Hay Canyon transmission line, for 8 total miles of associated transmission line. The proposed modification reduces the amount of new transmission line infrastructure by more than half of that which is previously approved by EFSC.

Additional Analysis

This section supplements and supersedes, in part, the ORS 215.274 analysis contained in the *Second Supplement to Request for Amendment No. 3 to the Site Certificate for the Golden Hills Wind Project*, dated October 2016. This supplement is provided in response to the Department's request for additional information. The Facility's associated transmission line cannot satisfy ORS 215.274(3) and therefore must meet ORS 215.274(4).

(4)(a) Except as provided in subsection (3) of this section, the governing body of a county or its designee shall approve an application under this section if, after an evaluation of reasonable alternatives, the applicant demonstrates that the entire route of the associated transmission line meets, subject to paragraphs (b) and (c) of this subsection, two or more of the following factors:

Finding: The Certificate Holder demonstrates that the Facility, specifically the associated transmission line, satisfies ORS 215.274(4) by meeting the factors in subpart (4)(a)(A)-(C). ORS 215.274(4) requires the Certificate Holder to consider reasonable alternatives when evaluating the proposed associated transmission line against the factors in subpart (4)(a)(A)-(C). As shown below, the agricultural land within the site boundary and the larger surrounding area, including the distance between the site boundary and the BPA Klondike substation, is predominately high-value farmland or arable lands.

Attachment 1 shows the Natural Resource Conservation Service (NRCS) nonirrigated soil capability classes for the land within the site boundary and the surrounding area. Using the NRCS nonirrigated soil capability classes for this analysis is proper because, as documented in Exhibit K, the area is not irrigated, and as documented more recently in Attachment 2 (aerial reconnaissance photographs of site boundary and surrounding area), the majority of the land within the site boundary and surrounding areas is actively cultivated for dryland wheat production. Nonetheless, for completeness of the record, Attachment 3 contains the NRCS irrigated soil capability classes for land within the site boundary and the surrounding area. Whether the land is irrigated or not irrigated is irrelevant for purposes of this analysis. Under either scenario, the analysis remains and supports the Certificate Holder's conclusion that the associated transmission line satisfies two or more of the factors in ORS 215.274(4)(a).

The land within the site boundary and surrounding areas is composed predominately of NRCS Class II and III soils, with some Class IV and VII soils. As shown on the aerial photographs in Attachment 2, the areas comprising Class II and III soils are in dryland wheat production and the areas comprising Class IV and VII soils are limited to ravines and steeper slopes. Accordingly, the site boundary and surrounding area is composed predominately of high-value farmland and arable land, with areas of limited nonarable land on steep slopes. See ORS 195.300(10); OAR 660-033-0130(38)(a)-(d).

(A) Technical and engineering feasibility;

Finding: It is not feasible or technically possible to interconnect the Facility with the BPA Klondike substation without an associated transmission line. Any alternative requires that the Facility be interconnected via an associated transmission line to the BPA Klondike substation for the purpose of distributing power via the electrical grid system. The Certificate Holder, after further technical and engineering study, eliminated the previously approved 11-mile 500-kV transmission line from the project design, thereby reducing the need for a new transmission line corridor by more than half. The proposed 8-mile route includes approximately 5 miles of new transmission line and 3 miles of the existing 230-kV Hay Canyon line (Attachment 4). An alternative route would make it not feasible for the Certificate Holder to use the existing Hay Canyon line, which, as proposed, significantly reduces the amount of impact associated with the Facility's interconnection with the regional grid. An alternative

that does not favor co-locating transmission lines routes when feasible is not a reasonable alternative. The new portions of the associated transmission line are located on flat portions of the site, spanning gullies, ravines and steep slopes. These areas are avoided to construct the straightest route, with the shortest line, with the least impacts. Although these areas may have lower quality soil (as discussed below), siting the proposed line in these areas simply to avoid high-value farmland and arable land increases the technical difficulty of constructing the line. Therefore, it is appropriate to find that the associated transmission line, as proposed, is a reasonable technical and engineering feasible solution for interconnecting the Facility to the regional grid.

(B) The associated transmission line is locationally dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300 (Definitions for ORS 195.300 to 195.336), or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

Finding: As discussed above, the site boundary and surrounding area are composed predominately of high-value farmland and arable lands. Specifically, the land within the site boundary and surrounding area is composed predominately of NRCS nonirrigated Class II and III soils, with some Class IV and VII soils. As shown on the aerial photographs in Attachment 2, the areas consisting of Class II and III soils are primarily cultivated and the areas composed of Class IV and VII soils are limited to ravines and steeper slopes.

No matter the route from the Facility to the BPA Klondike substation, an associated transmission line must cross high-value farmland or arable land to serve its purpose of conveying energy from the wind farm to the electrical grid system. In fact, the BPA Klondike substation itself is located on land identified as high-value or arable.

The proposed associated transmission line is sited so that it has a reasonably direct route to the BPA interconnection point near the Klondike substation while also utilizing the existing Hay Canyon transmission. The new portion of the line runs from the Facility's centrally-located substation in the shortest route to the interconnection point with the Hay Canyon line and from there, it runs directly to the BPA substation, again utilizing the most direct route. Given that any route would impact high-value and arable land, and the fact that the proposed line offers the most direct route and utilizes existing infrastructure, there is no reasonable alternative to consider under this factor. There is sufficient evidence to support a finding that the proposed line meets this factor.

(C) Lack of an available existing right-of-way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground;

Finding: The project used existing right-of-way to the maximum extent practicable by interconnecting with the existing Hay Canyon transmission line. Because the Facility is in an area with high-value farmland and arable land containing large lots with intermittent steep ravines, the area near the Facility substation lacks well-defined linear right-of-way such as roads that would provide a reasonably direct route for the Facility 230-kV transmission line to connect with the electrical grid system. There is no available existing right-of-way like a road or railroad that the Certificate Holder could use as an alternative route that would offer a reasonable alternative. Trying to route the associated transmission line along existing road right-of-ways would significantly increase the length of the line, require acquisition of numerous new land rights, increase construction costs, and potentially interfere with existing utility infrastructure already located within the right-of-way. Such factors make such an alternative not reasonable. For these reasons, the project meets this factor.

(D) Public health and safety; or

Finding: The Certificate Holder is minimizing health and safety risks from exposure to magnetic fields or shock by limiting the length of transmission line for the project; reducing the new transmission line

corridor from 11 to 5 miles; consolidating the area necessary for energy transmission use by co-locating a portion of the transmission line; and locating the transmission line away from populated areas.

(E) Other requirements of state or federal agencies

Finding: As documented through the site certificate process and subsequent amendment processes, the project complies with other requirements of state and federal agencies.

(4)(b) The applicant shall present findings to the governing body of the county or its designee on how the applicant will mitigate and minimize the impacts, if any, of the associated transmission line on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

Finding: The Certificate Holder has designed the 230-kV transmission feeder line to minimize, to the greatest degree practicable, impacts to accepted farming practices within the site boundary and on surrounding lands. The 2007 Farmland Technical Memo included in ASC Exhibit K identified dryland wheat farming as the primary farming practice within the site boundary. The latest census of agriculture conducted by the U.S. Department of Agriculture in 2012 (the census is conducted every 5 years) shows that wheat is, by far, still the top crop for Sherman County, and in fact has grown by 12 percent since 2007. In 2007, 115,237 acres of wheat were farmed and in 2012, 128,582 acres of wheat were farmed.

Field surveys conducted by the Certificate Holder as part of the biological resources investigation documented in Attachment 8 to the First Supplement (March 2016), noted the following: "The only vegetation type identified during the March 4, 2016, site visit was agricultural land consisting of actively farmed wheat fields." In addition, recent aerial photographs (Attachment 2) from site reconnaissance conducted by the Certificate Holder shows that farm field configurations and areas cultivated generally have stayed the same within the site boundary since 2007, confirming the Certificate Holder's position that accepted farm practices have stayed the same within the site boundary. The Certificate Holder also includes a statement addressing observed farm practices within the site boundary and surrounding area. See Attachment 5.

While farm practices within the site boundary have generally stayed the same since 2007, in the surrounding area to the east of the site boundary, wind turbine strings have been constructed and are in operation on high-value farmland and arable lands. Otherwise, accepted farm practices on surrounding lands remain the same as 2007, primarily dryland wheat farming. Aerial imagery indicates that crop patterns and field layout are slightly modified in some areas to account for the wind farm infrastructure, but overall, it appears cultivation practices are largely the same on lots with wind farm facilities compared to those without them.

The amount of new transmission line corridor and therefore impacts to farming practices have been minimized to the greatest extent practicable by minimizing the amount of new transmission line corridor needed and interconnecting to existing transmission line infrastructure. Construction of the 230-kV transmission line pole structures will permanently impact less than an acre of land, thereby in itself removing very little land from agricultural production.

In addition, the transmission line is sited to minimize disturbing typical field cultivation practices by being sited on the edge of fields and minimizing the dividing of lots consistent with Condition (IV.D.10) of the Amendment 2 Site certificate. The accepted farming practices will continue within the site boundary and the surrounding land the associated transmission line crosses. Local farmers will still be able to maneuver their necessary machinery around the associated transmission line infrastructure. There may be minor changes to plowing and harvesting patterns, but none will seriously interfere with accepted farming practices within the site boundary or on adjacent farmland. The Certificate Holder will coordinate with farmers to ensure adequate and timely access to properties during critical periods in the farming cycle such as harvest.

As specified in Condition IV.E.4 of the site certificate for Amendment 2, during construction and operation of the facility, the Certificate Holder shall implement a plan, developed in consultation with the Sherman County Weed Control Manager, to control the introduction and spread of noxious weeds.

When construction is completed, lands temporarily affected by construction would be restored to their original condition. Therefore, because the 230-kV transmission line permanent impacts are minimal, especially considering the amount of high-value and arable zoned land in Sherman County, and the transmission line has been sited in consideration of farming practices, it will not force a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

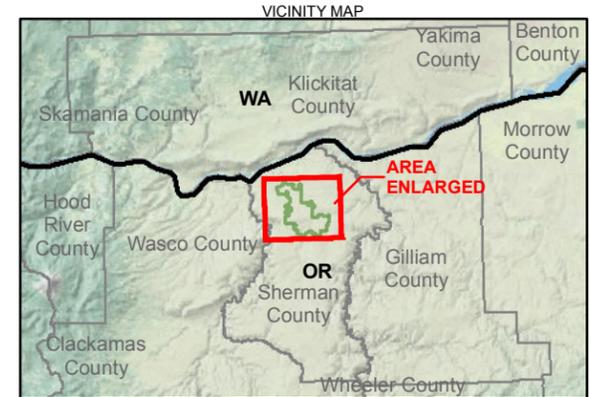
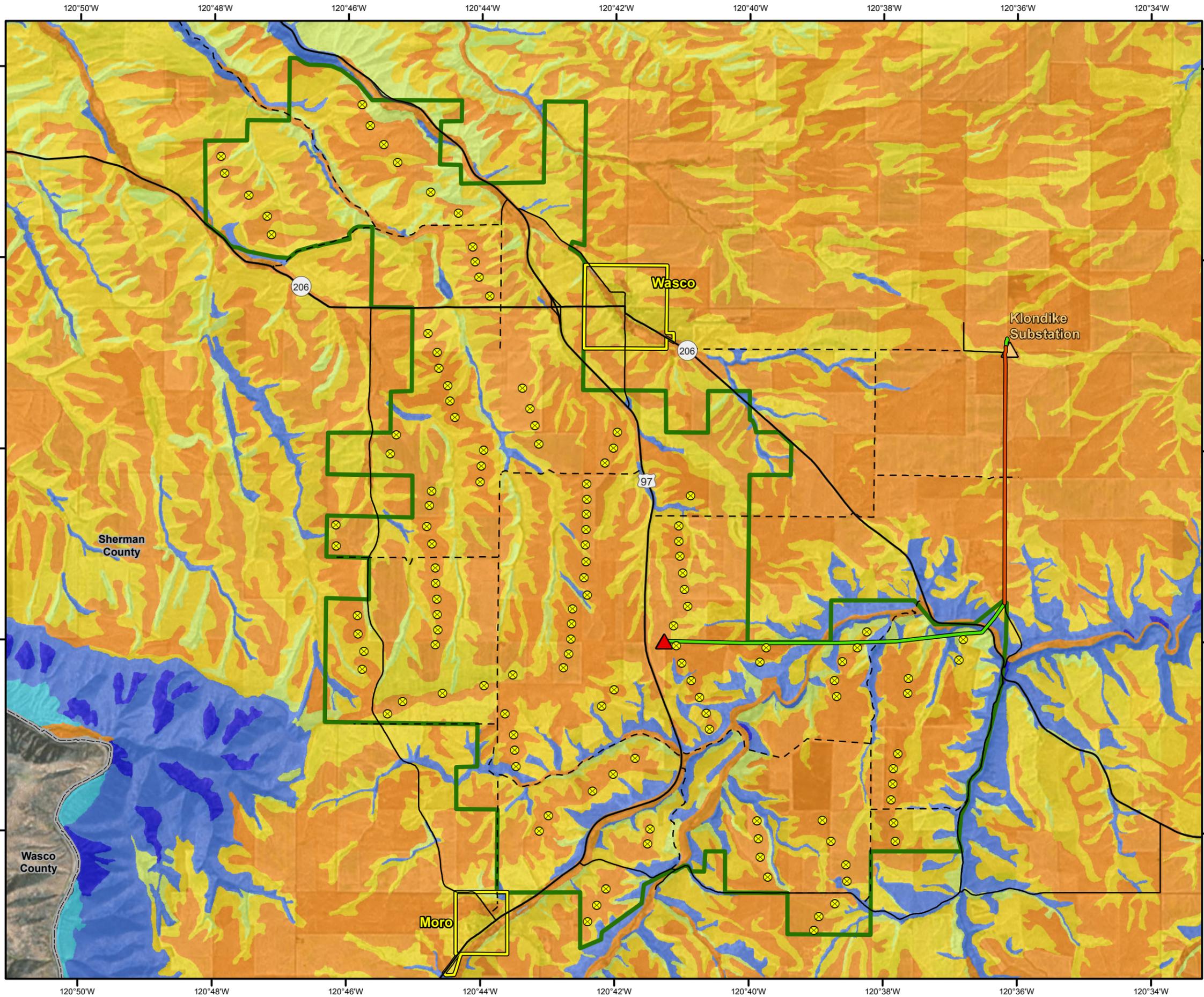
(4)(c) The governing body of a county or its designee may consider costs associated with any of the factors listed in paragraph (a) of this subsection, but consideration of cost may not be the only consideration in determining whether the associated transmission line is necessary for public service. [2013 c.242 §2]

Finding: Land costs were not a significant consideration in determining the location of the transmission line segment. The majority of land in Sherman County is zoned EFU and no alternative location exists, regardless of cost, to locate the Facility 230-kV transmission line on non-EFU land. The location was dependent on providing a connection for the energy generated by the wind facility to the electrical energy grid interconnection point north of the Klondike substation while minimizing impacts to EFU lands by using existing utility rights-of-way.

Conclusion

The Facility 230-kV transmission line must be sited on high-value and arable land in order to connect the wind farm with the electrical grid system, both of which are on and surrounded by high-value and arable land. The Certificate Holder has greatly reduced the length of transmission line on high-value and arable land by eliminating the 500-kV transmission line previously approved. In addition, the Certificate Holder is using existing transmission line infrastructure and right-of-way. Consequently, based on the analysis set forth above, the associated transmission line meets the factors required by ORS 215.274.

Attachment 1
Natural Resources Conservation
Service Nonirrigated Soil Capability
Class



- Facility Site Boundary
 - Wind Turbine
 - Proposed Substation
 - Existing Substation
 - Proposed 230-kV Transmission Line
 - Existing Hay Canyon 230-kV Transmission Line
 - Public Road (Paved)
 - Public Road (Gravel)
 - City Boundary
 - County Boundary
- Nonirrigated Soil Capability Class**
- Capability Class - II
 - Capability Class - III
 - Capability Class - IV
 - Capability Class - VI
 - Capability Class - VII
 - Capability Class - VIII
 - Not rated or not available

Coordinate System: NAD 1983 UTM Zone 10N
 Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

0 0.75 1.5 3
 Miles

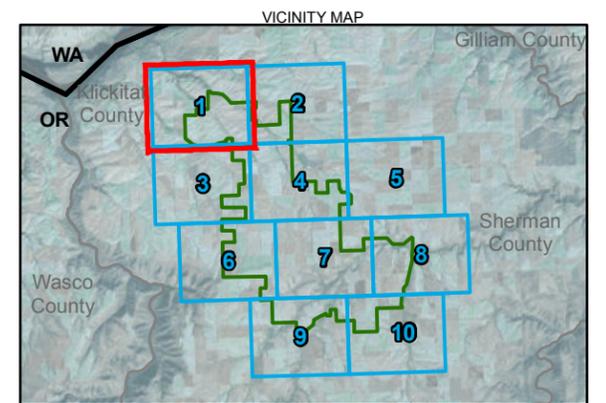
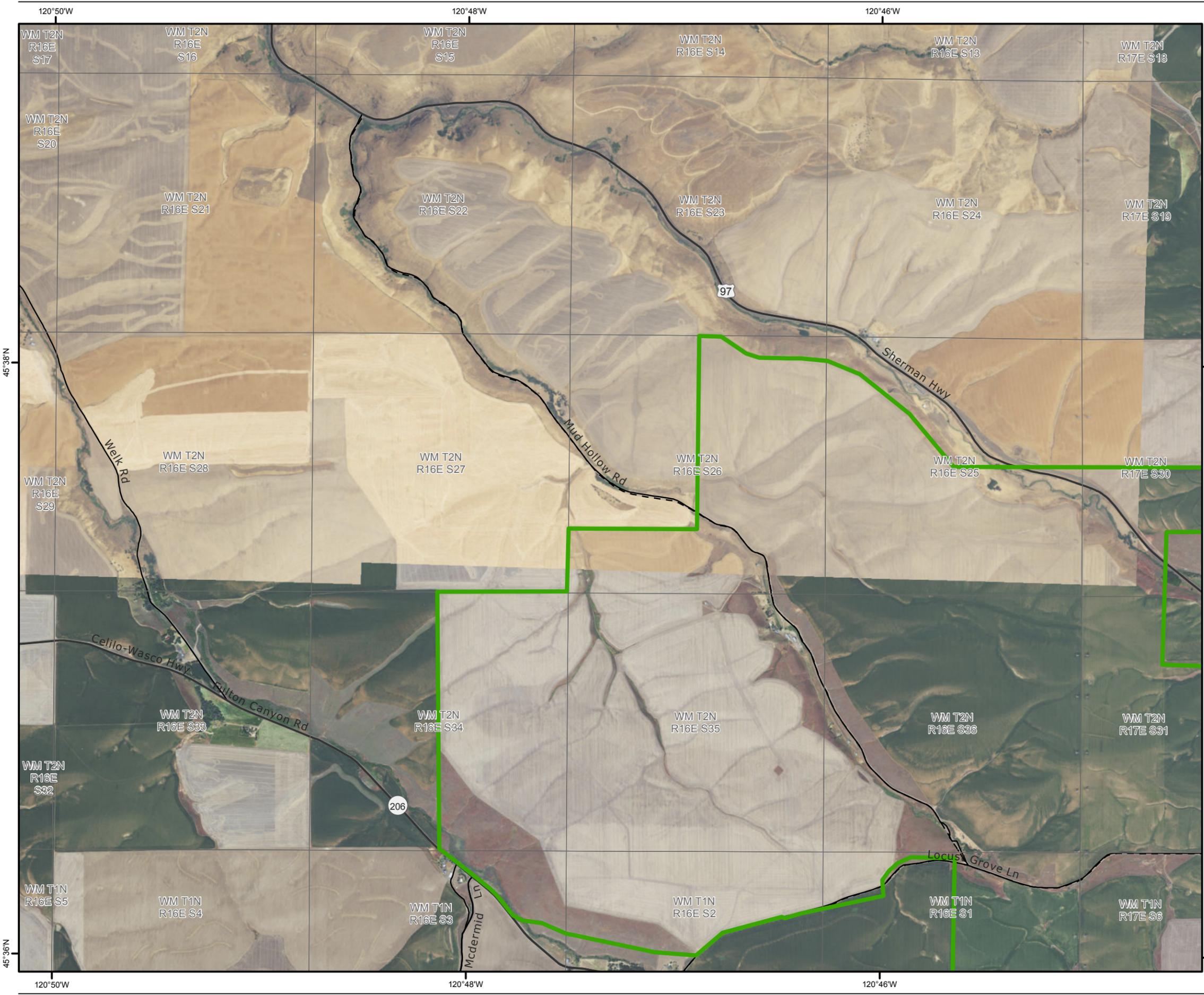
1 inch equals 1.18 miles

ATTACHMENT 1
Natural Resources Conservation
Service Nonirrigated Soil Capability Class
Third Supplement to Golden Hills Wind Project
Request for Amendment No. 3



Attachment 2

Aerial Reconnaissance



- Facility Site Boundary
- Interstate or Highway
- Public Road (Paved)
- Public Road (Gravel)
- County Boundary
- Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl
 Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI
 Imagery: USDA NAIP June, 2014

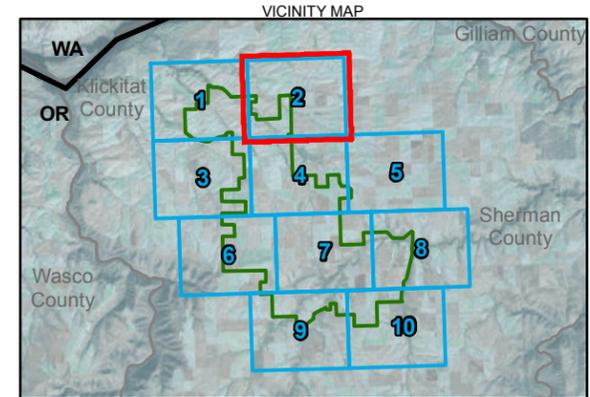
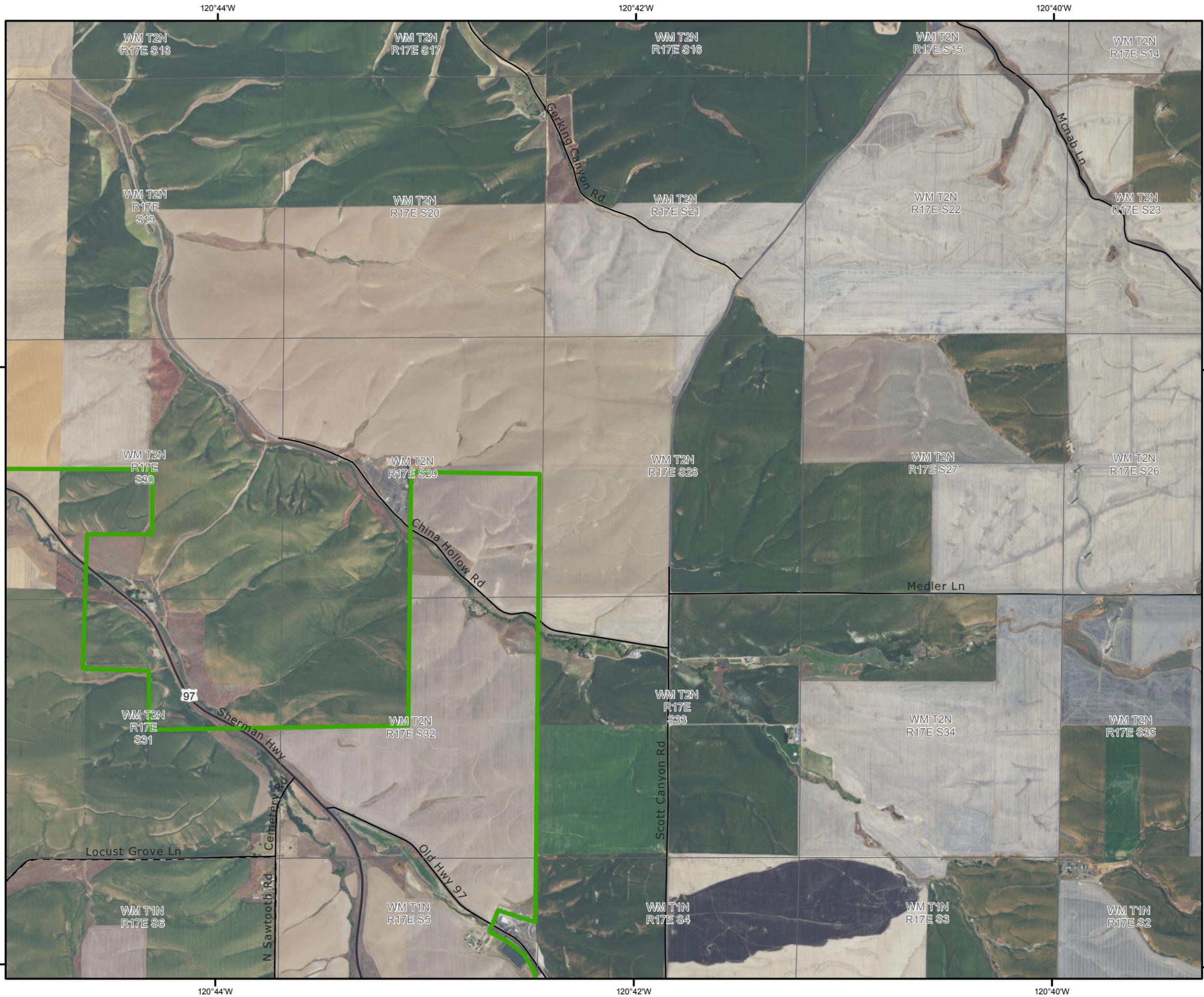
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1 inch equals 0.38 miles

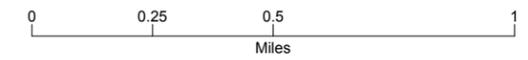
ATTACHMENT 2 - Page 1 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3





-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

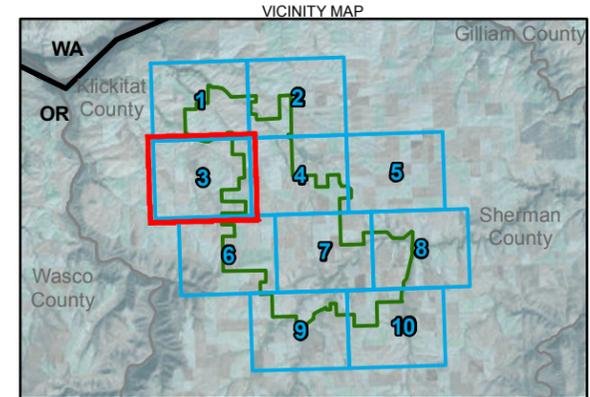
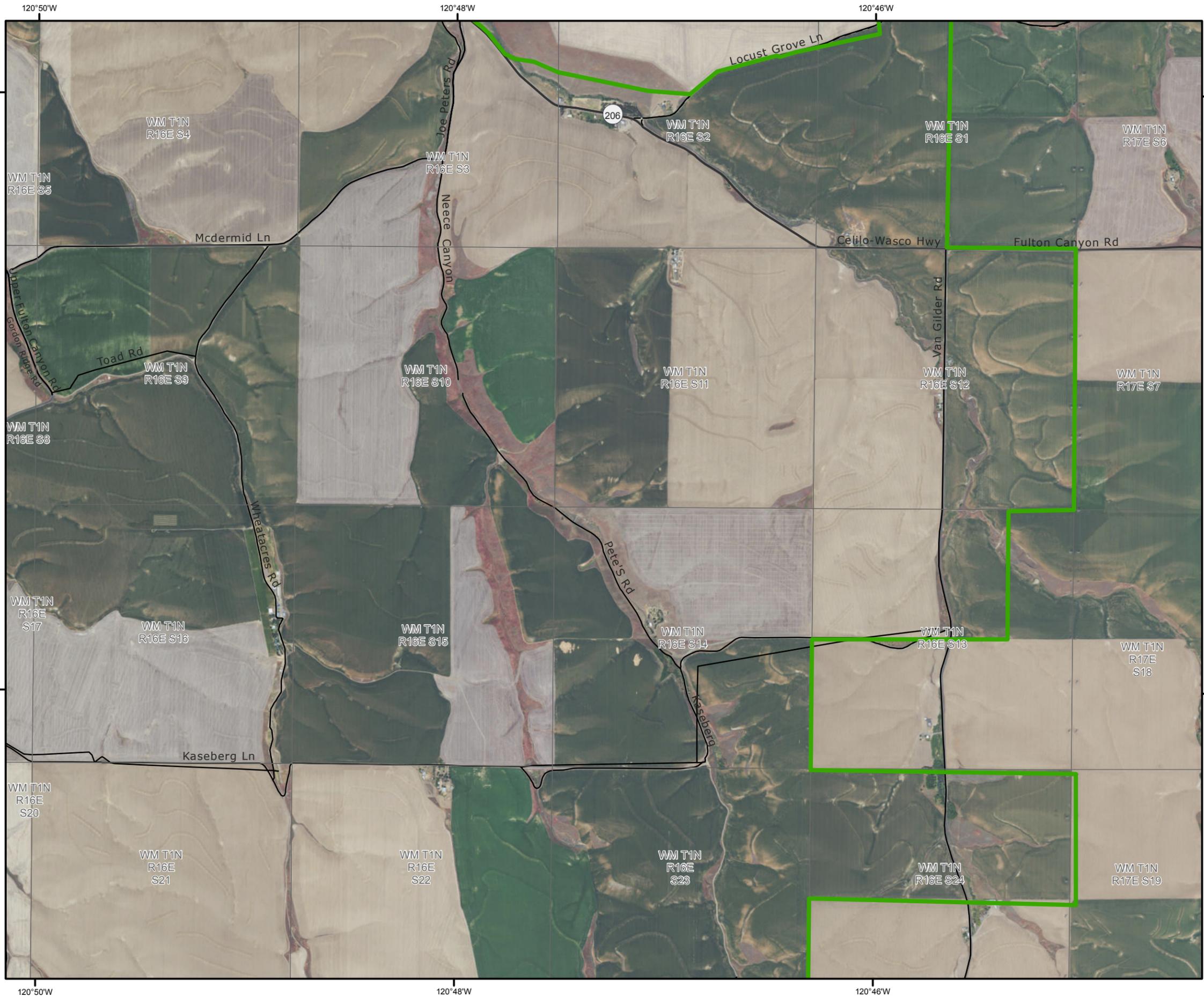
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 Imagery: USDA NAIP June, 2014



1 inch equals 0.38 miles

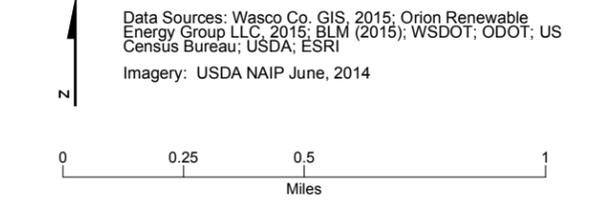
ATTACHMENT 2 - Page 2 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3





-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

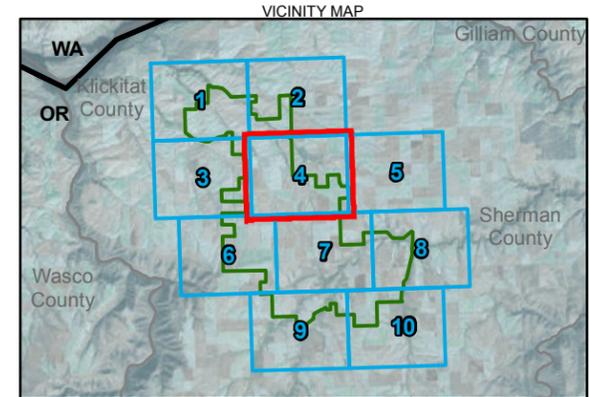
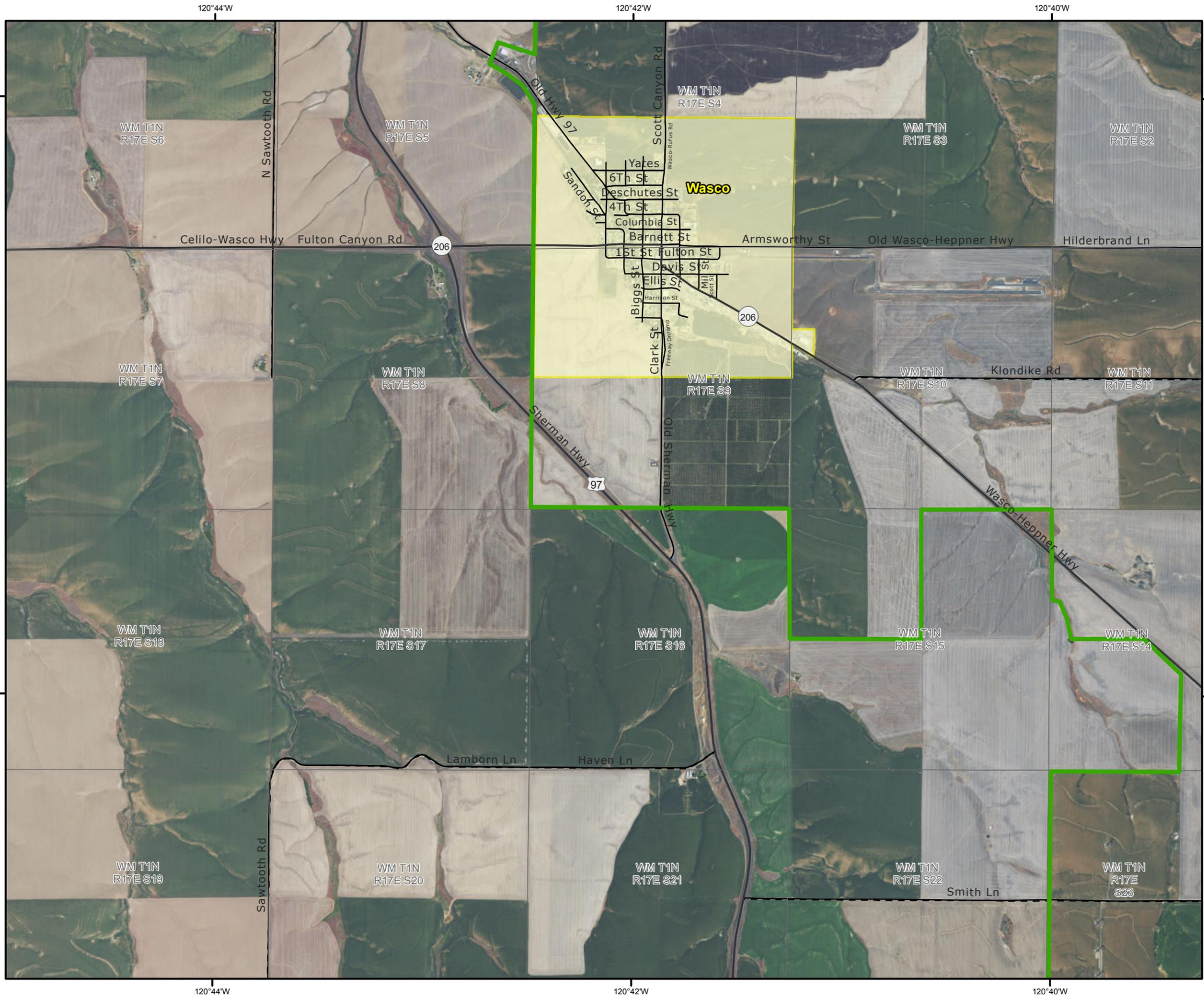
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1 inch equals 0.38 miles

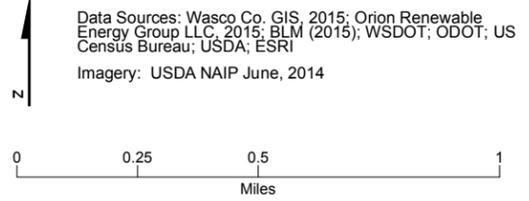
ATTACHMENT 2 - Page 3 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3





- Facility Site Boundary
- Interstate or Highway
- Public Road (Paved)
- Public Road (Gravel)
- City Boundary
- County Boundary
- Public Lands Survey Section

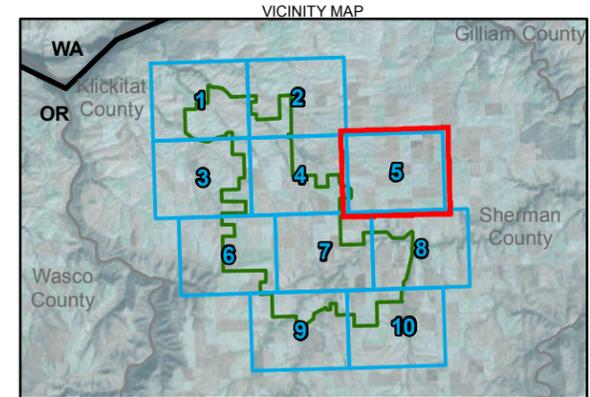
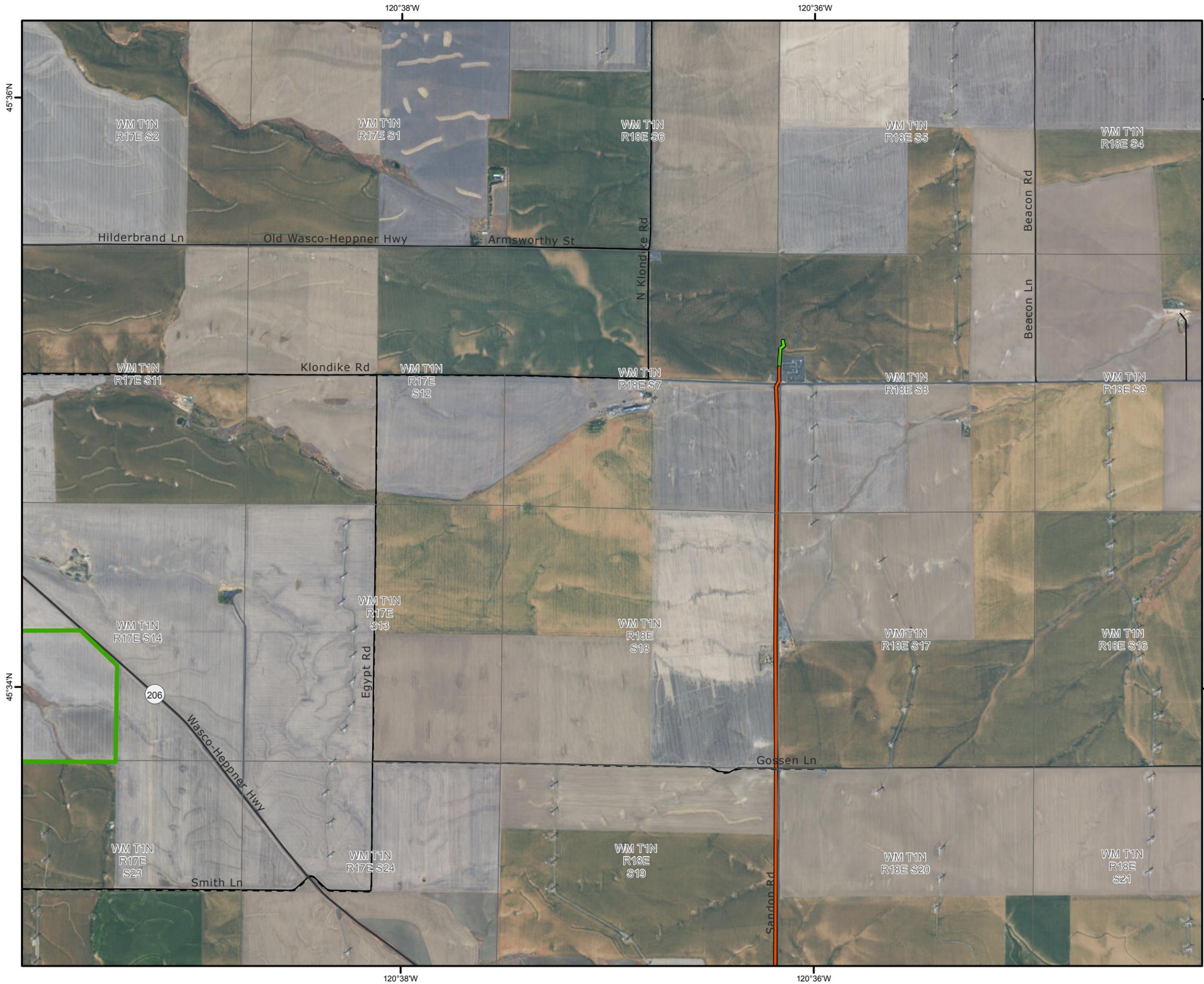
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 Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI
 Imagery: USDA NAIP June, 2014



1 inch equals 0.38 miles

ATTACHMENT 2 - Page 4 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3



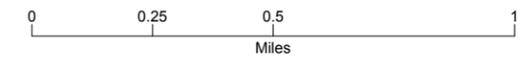


-  Facility Site Boundary
-  Existing Hay Canyon 230-kV Transmission Line
-  230 kV GenTie Northern Termination
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

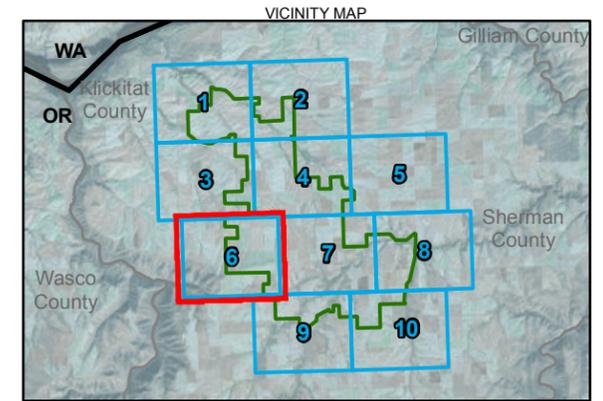
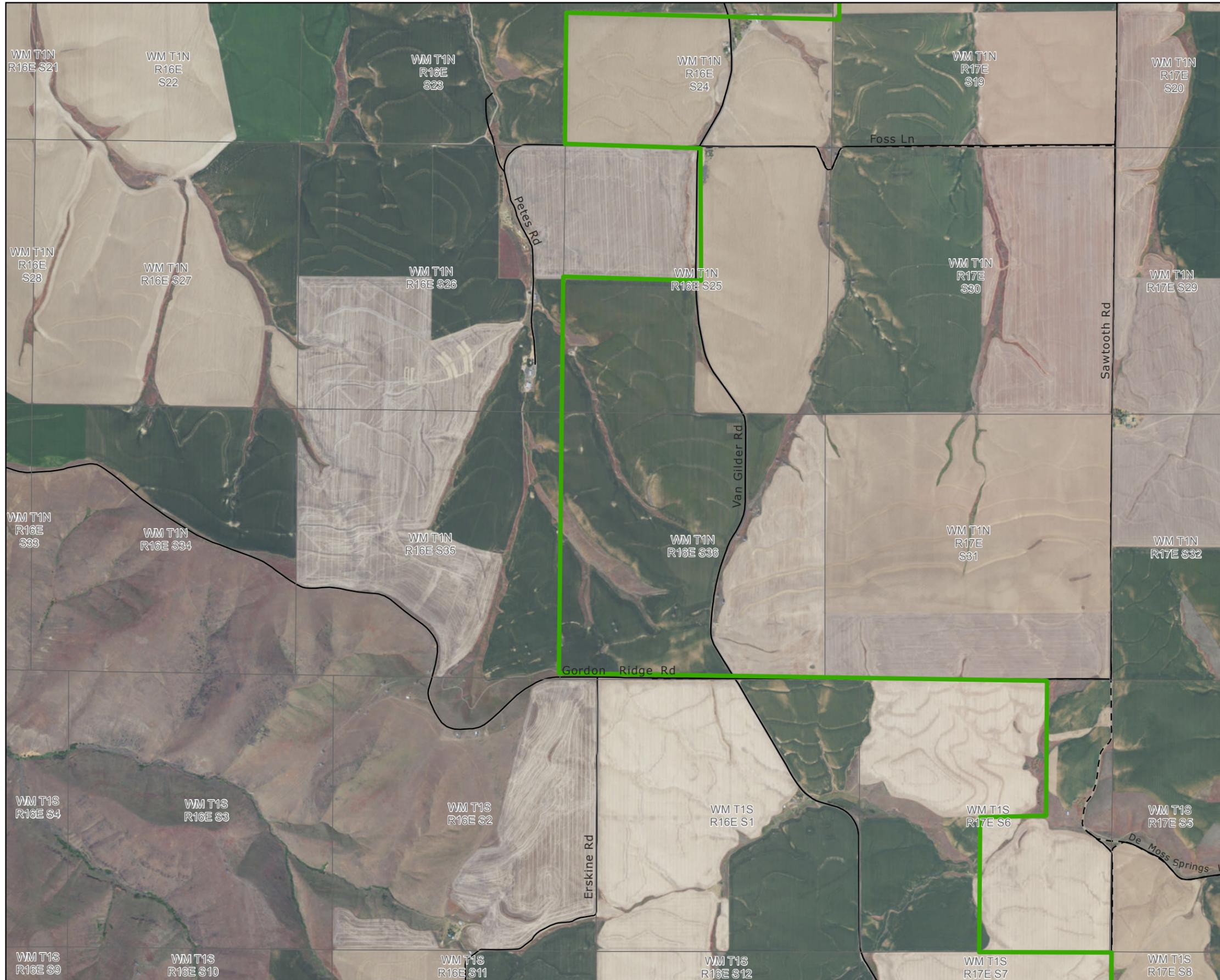
Imagery: USDA NAIP June, 2014



1 inch equals 0.38 miles

ATTACHMENT 2 - Page 5 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3





-  Facility Site Boundary
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

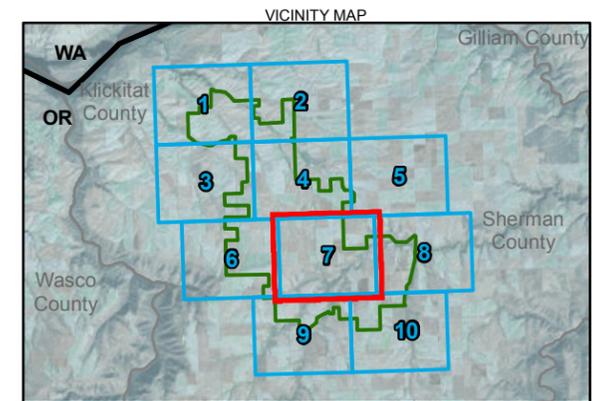
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

Imagery: USDA NAIP June, 2014

0 0.25 0.5 1
 Miles

1 inch equals 0.38 miles

ATTACHMENT 2 - Page 6 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
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-  Facility Site Boundary
-  Proposed 230-kV Transmission Line
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

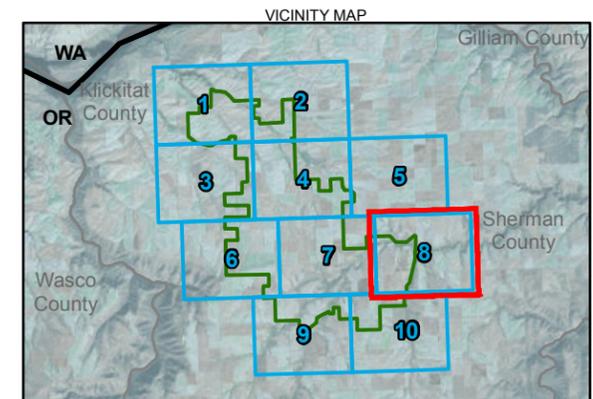
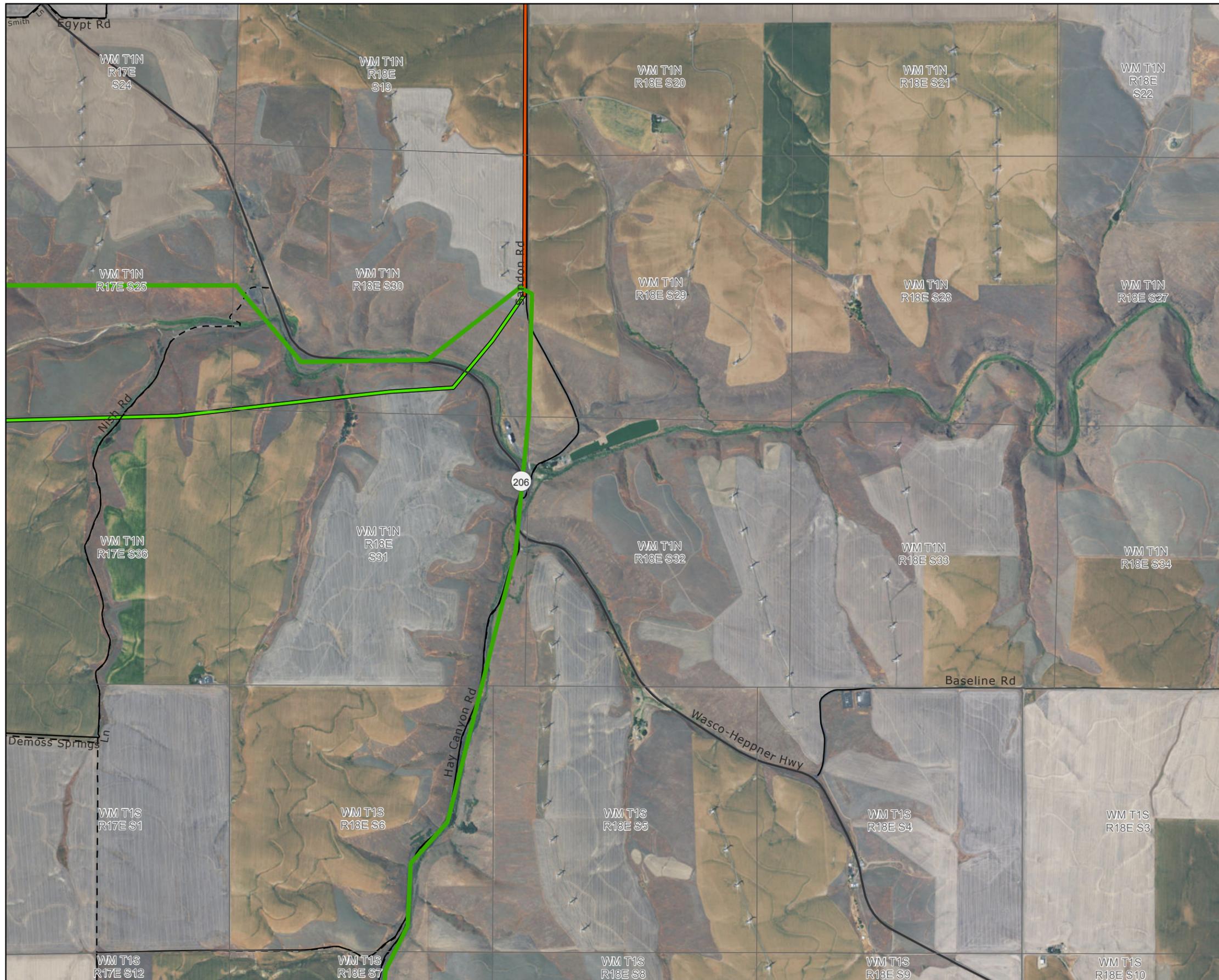
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

Imagery: USDA NAIP June, 2014

0 0.25 0.5 1
 Miles

1 inch equals 0.38 miles

ATTACHMENT 2 - Page 7 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3



-  Facility Site Boundary
-  Existing Hay Canyon 230-kV Transmission Line
-  Proposed 230-kV Transmission Line
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

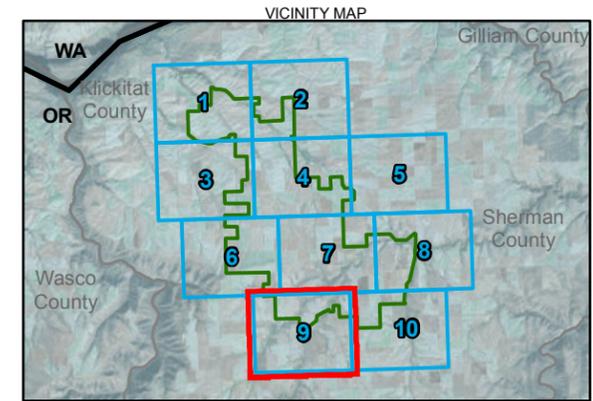
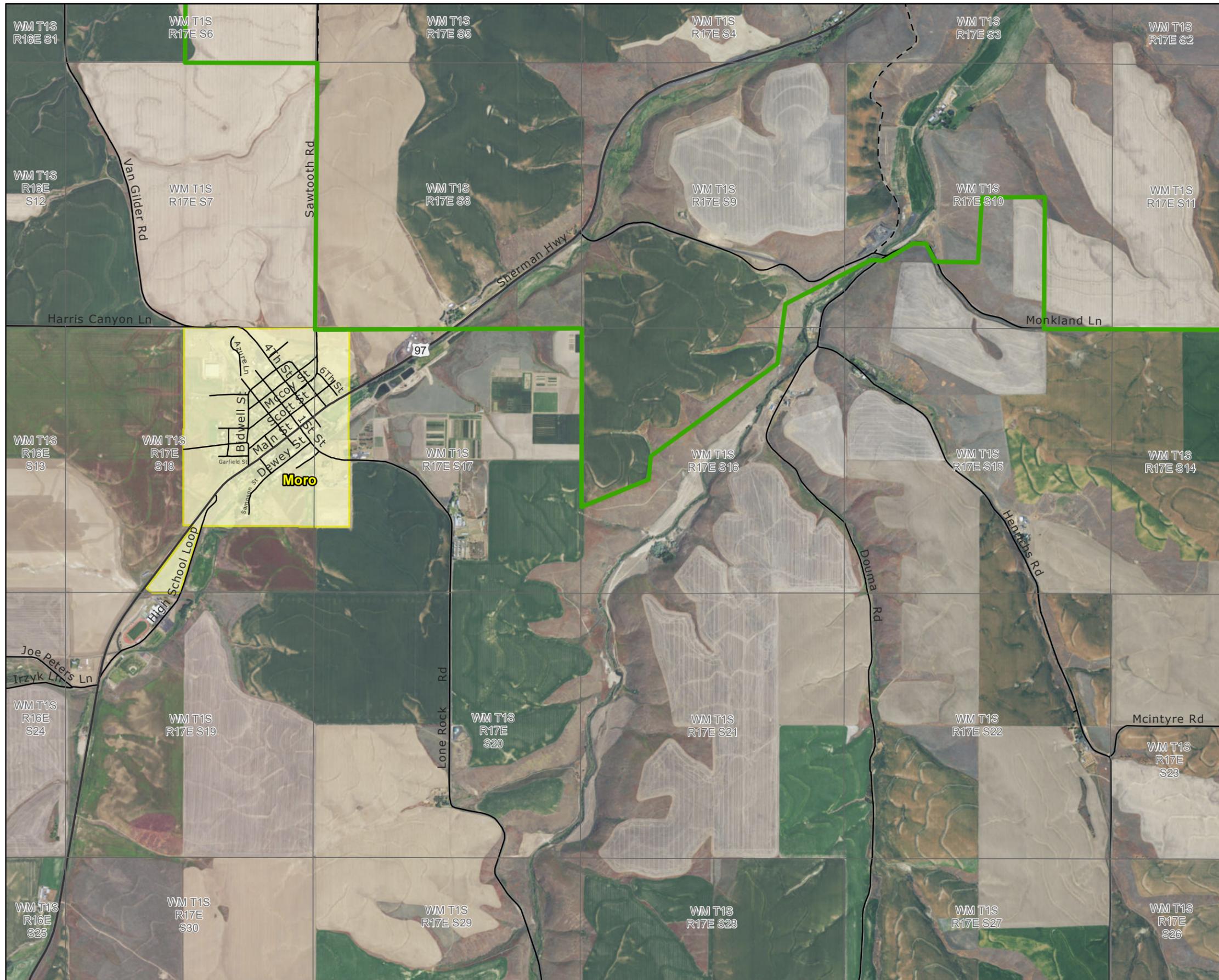
Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

Imagery: USDA NAIP June, 2014

0 0.25 0.5 1
 Miles

1 inch equals 0.38 miles

ATTACHMENT 2 - Page 8 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3



- Facility Site Boundary
- Interstate or Highway
- Public Road (Paved)
- Public Road (Gravel)
- City Boundary
- County Boundary
- Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

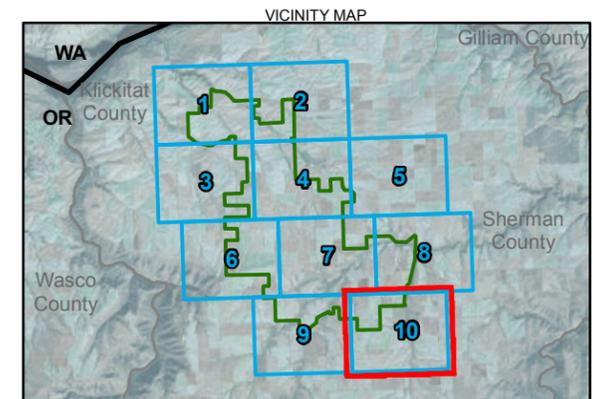
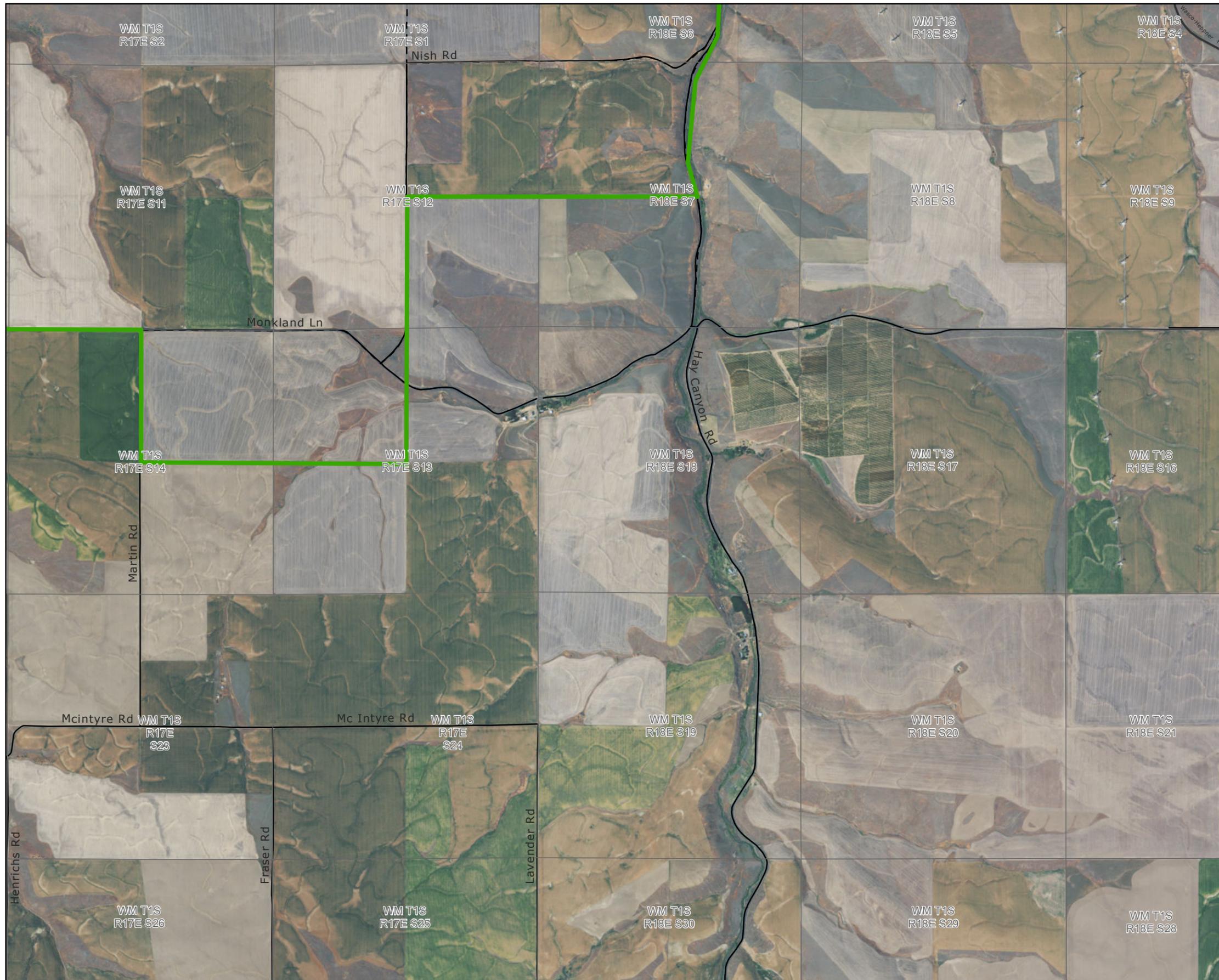
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Imagery: USDA NAIP June, 2014

0 0.25 0.5 1
 Miles

1 inch equals 0.38 miles

ATTACHMENT 2 - Page 9 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3



-  Facility Site Boundary
-  Interstate or Highway
-  Public Road (Paved)
-  Public Road (Gravel)
-  County Boundary
-  Public Lands Survey Section

Coordinate System: NAD 1983 StatePlane Oregon North
 FIPS 3601 Feet Intl

Data Sources: Wasco Co. GIS, 2015; Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

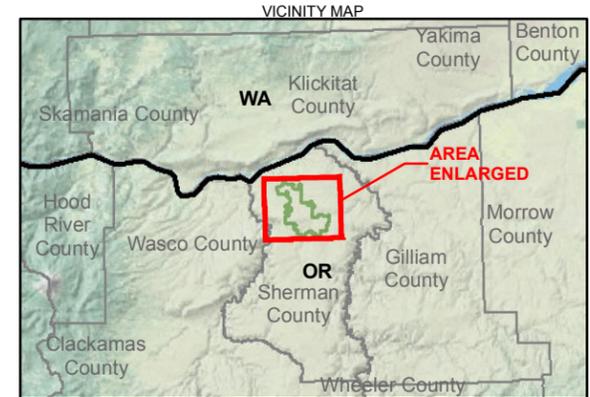
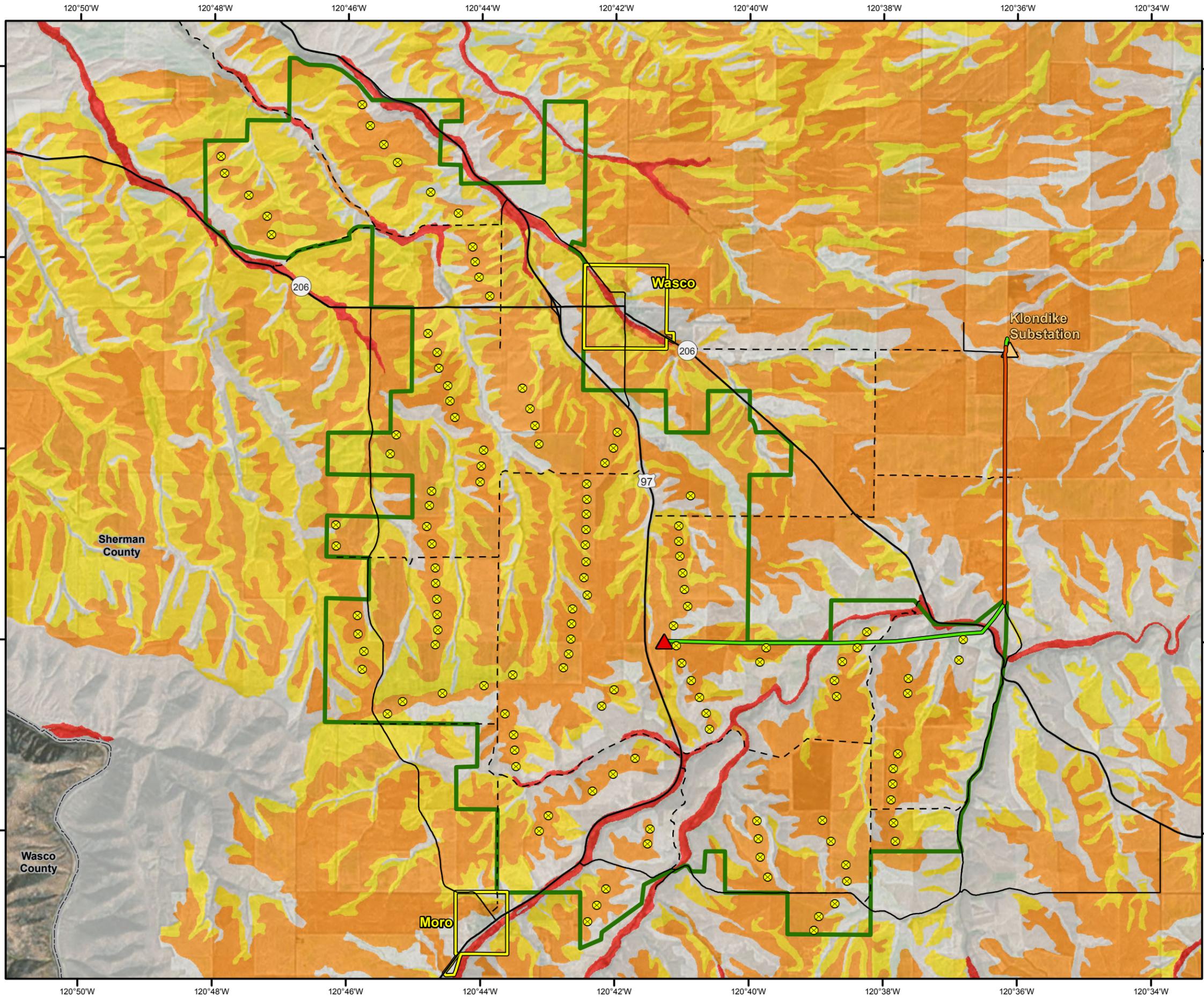
Imagery: USDA NAIP June, 2014

0 0.25 0.5 1
 Miles

1 inch equals 0.38 miles

ATTACHMENT 2 Page 10 of 10
Aerial Reconnaissance
 Third Supplement to Golden Hills Wind Project
 Request for Amendment No. 3

Attachment 3
Natural Resources Conservation
Service Irrigated Soil Capability Class



- Facility Site Boundary
 - Wind Turbine
 - Proposed Substation
 - Existing Substation
 - Proposed 230-kV Transmission Line
 - Existing Hay Canyon 230-kV Transmission Line
 - Public Road (Paved)
 - Public Road (Gravel)
 - City Boundary
 - County Boundary
- Irrigated Soil Capability Class**
- Capability Class - I
 - Capability Class - II
 - Capability Class - III
 - Not rated or not available

Coordinate System: NAD 1983 UTM Zone 10N
 Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

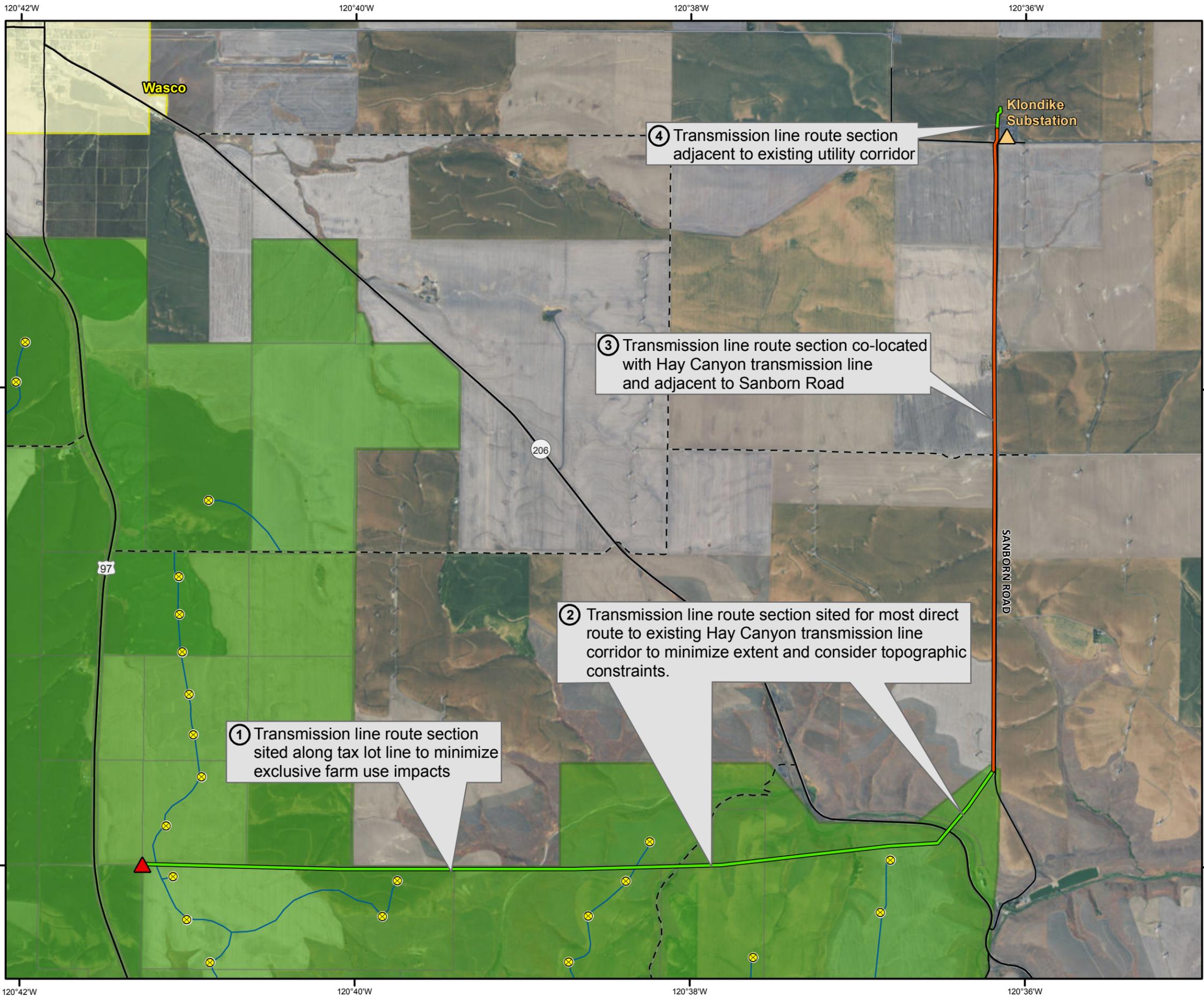
0 0.75 1.5 3
 Miles

1 inch equals 1.18 miles

ATTACHMENT 3
Natural Resources Conservation
Service Irrigated Soil Capability Class
Third Supplement to Golden Hills Wind Project
Request for Amendment No. 3



Attachment 4 Transmission Line Siting



- Facility Site Boundary
- Wind Turbine
- Land Parcel Boundary
- Proposed Substation
- Existing Substation
- Proposed 230-kV Transmission
- Existing Hay Canyon 230-kV Transmission Line
- Access Road
- Public Road (Paved)
- Public Road (Gravel)
- City Boundary
- County Boundary

Coordinate System: NAD 1983 UTM Zone 10N
 Data Sources: Orion Renewable Energy Group LLC, 2015; BLM (2015); WSDOT; ODOT; US Census Bureau; USDA; ESRI

N

0 0.25 0.5 1
Miles

1 inch equals 0.47 miles

ATTACHMENT 4
Transmission Line Siting
 Third Supplement to Golden Hills Wind
 Project Request for Amendment No. 3



Attachment 5

Observed Farm Practices

GOLDEN HILLS WIND FARM LLC

c/o Orion Renewable Energy Group LLC
155 Grand Avenue, Suite 706
Oakland, CA 94612
Phone: (510) 267-8921
Fax: (510) 267-8911

November 18, 2016

Todd Cornett
Siting Division Administrator
ODOE
625 Marion Street NE
Salem, OR 97301-3737

**Re: Response to ODOE Request for Additional Information,
Existing Land Uses in Golden Hills Site Boundary and Surrounding Area**

Dear Todd:

The Oregon Department of Energy (“ODOE”) has requested additional information concerning the current accepted farm practices within the Golden Hills site boundary and the surrounding area. I have visited the site and the surrounding area numerous times, including a site visit as recently as September 2016. This letter confirms my observations of the existing land use practices at the site and area surrounding the project location.

The accepted farm practices in this area are primarily dryland wheat farming with regular fallow intervals. Currently, the land within the site boundary is used primarily for dryland wheat farming of approximately 23,885 acres. The surrounding area, which was described in Exhibit K of the Application for Site Certificate as 0.5 mile from project facilities, is also predominately in dryland wheat production.

Thank you for your consideration and time on this project.

Very truly yours,



Ryan McGraw
Head of Asset Management