



**LotusWorks – Summit Ridge I, LLC**

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February 11, 2016

Mr. Todd Cornett  
Assistant Director, Siting Division  
Oregon Department of Energy  
625 Marion Street NE  
Salem, OR 97301

Subject: LotusWorks-Summit Ridge I, LLC Ownership Transfer and Amendment Request

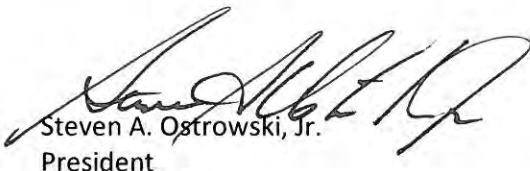
Reference: LotusWorks-Summit Ridge I Wind Farm Site Certificate dated August 19, 2011, Amendment #1, dated August 7, 2015

Dear Mr. Cornett,

This letter serves to notify the Oregon Department of Energy of our request to make changes to our existing Site Certificate. In accordance with OAR 345-027-0100 we are requesting the Siting Council approve to transfer of ownership of the existing site certificate. We are also, in accordance with **OAR 345-027-0030**, requesting to extend the Site Certificate for Summit Ridge for an additional two years. We are also requesting to add an additional turbine option to those currently available to the project.

Please contact me should you have any questions regarding this request and/or the information contained within.

Sincerely,



Steven A. Ostrowski, Jr.  
President

Cc: File

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## **Request for Amendment No 2 to the Site Certificate for the Summit Ridge Wind Project**

Prepared for  
**Oregon Energy Facility Siting Council**  
February 2016

Prepared and Submitted by  
**LotusWorks-Summit Ridge I, LLC**  
**Summit Ridge Wind Holdings, LLC**





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## **Section I – Introduction**

Summit Ridge Wind Farm is a permitted wind-energy generation facility in Wasco County, Oregon with an electrical capacity of up to 194.4 MWs (MW). On August 19, 2011, the Oregon Energy Facility Siting Council issued a Site Certificate approving the facility. The facility as originally permitted would have consisted of up to 87 wind turbines as well as various related and supporting facilities, all located within permitted survey corridors of approximately 25,000 acres of privately owned, Exclusive Farm Use land located approximately 17 miles southeast of The Dalles and eight miles east of Dufur, Oregon. LotusWorks-Summit Ridge I, LLC is the Certificate Holder.

On August 07, 2015, the Oregon Energy Facility Siting Council issued Amendment #1 to the Site Certificate reducing the output of the project to 194.4 MWs and 72 turbines. Turbine sizing was expanded to include 91 meter hub heights and 122 meter rotor diameters. All turbines as well as various related and supporting facilities, remained located within approximately 11,000 acres of permitted survey corridors located on approximately 25,000 acres of privately owned, Exclusive Farm Use land located approximately 17 miles southeast of The Dalles and eight miles east of Dufur, Oregon. LotusWorks-Summit Ridge I, LLC is the current Certificate Holder.

### **1.1 Proposed Changes**

LotusWorks-Summit Ridge I, LLC (LWSR1) is seeking approval from the Siting Council to transfer the existing Site Certificate from LotusWorks-Summit Ridge I, LLC to Summit Ridge Wind Holdings, LLC. We are requesting to amend the Site Certificate to extend the construction start and finish deadlines two years.

In addition LWSR1 seeks to take advantage of the technical advances made in turbine technology over the last year and add an additional turbine option for potential use on the site. This additional turbine option would have larger generators and reduced hub height from what is currently approved. These turbines do have a greater rotor diameter but the overall height of the turbines is less than what is currently approved. The total MWs generated at the site will remain at 194.4. The maximum number of turbines to be used for the project would remain at 72 for the currently approved turbine options. However in the event the requested turbine addition is used, the site capacity would reduce to a maximum of 192 MWS and the number of turbines would reduce to 64.





## **1.2 Transfer of Site Certificate**

LotusWorks-Summit Ridge I, LLC will remain the Facility owner and operator. Through a multiple step transaction, Summit Ridge Wind Holdings, LLC has acquired and holds all outstanding membership interests in LotusWorks - Summit Ridge I, LLC (to be renamed as Summit Ridge Wind, LLC). This change in ownership structure requires LotusWorks Summit Ridge I, LLC to file a request to transfer the First Amended Site Certificate under OAR 345-027-0100. This request will also confirm that Summit Ridge Wind Holdings, LLC, as the Certificate Holder's new parent company, complies with the applicable EFSC standards, as set forth in OAR 345-027-0100(8).

## **1.3 Request for Extension**

We are requesting an extension to the Summit Ridge permit as a precaution. We fully intend to begin construction on Summit Ridge prior to August 19, 2016 as required by Amendment #1. However there are three items that could prevent us from meeting the mandated August 19<sup>th</sup> start of construction date. These are:

1. Finalization of all legal documents required to complete the transfer of the site certificate from LotusWorks-Summit Ridge I, LLC to Summit Ridge Wind Holdings, LLC. We don't believe this is likely but it is a possibility.
2. The approval of an additional turbine option being requested in this Amendment. Our past experience indicates it is likely that the review for this change will be an impact to our ability to meet the required construction start date.
3. Potential new findings from our second vegetation and raptor nest survey this spring. Again we believe it is unlikely this is a significant impact, but it is a possibility.

Finalization of the transfer of the site certificate cannot occur until approval by the Siting Council. Depending upon the actual date of approval there may be inadequate time to finalize all legal documents associated with the transfer to allow on-site construction to begin prior to August 19<sup>th</sup>.

The same may be the case in the likely event we choose to move forward with the new turbine alternative being proposed in this Request for Amendment. We will not be able to finalize our design and subsequently all the necessary EFSC mandated pre-construction requirements until we have confirmation Siting Council's approval of the turbine selection. We believe a realistic concern exists that there will be inadequate time to submit the necessary documentation and complete the review process in adequate time to support the mandated August 19<sup>th</sup> date. Rather than invoking the "good cause" argument at a later date, we are choosing to take a proactive approach now.

Amendment #1 of the Summit Ridge Site Certificate added the requirement for two additional raptor nest and vegetation surveys. The first was performed last May and did not produce findings that significantly impact the project. Given that Summit Ridge is located predominantly on agricultural land



we are not anticipating any significant change in this year's study. However, the possibility exists. Therefore as a precaution against the possibility of findings that could somehow alter the design of the project and thereby delay the start of construction, requesting an extension of the start of construction date is the prudent course of action.

#### **1.4 Additional Turbine Option**

We continuously investigate ways to enhance the performance of the project while at the same time seeking to minimize its impact. As a result of our investigations we are requesting an addition to our list of available turbine options. The additional turbine is a 3 MW machine that has an 84 meter hub height and a rotor diameter of 132 meters. The only technical change to existing permit necessary for this addition will be changing minimum ground clearance from the current 23 meters to 18 meters, well above the existing requirement that the blade is at least 20 feet above the tallest existing or foreseeable obstruction to blade movement.

The added benefits of this turbine option, should we select it, is that it would reduce the overall height of the project's turbines by 2 meters while reducing the number of turbines from the current approved seventy-two (72) to a maximum of sixty-four (64).





## **Section 2 – Transfer of Site Certificate Pursuant to 345-027-0100**

### **OAR 345-027-0100 Transfer of a Site Certificate**

*(1) For the purpose of this rule:*

*(a) A transfer of ownership requires a transfer of the site certificate when the person who will have the legal right to possession and control of the site or the facility does not have authority under the site certificate to construct, operate or retire the facility;*

**Response:** Pursuant to OAR 345-027-0100(4), Summit Wind Holdings, LLC is submitting the request for EFSC's approval of the ownership transfer of the Certificate Holder from LotusWorks to Summit Ridge Wind Holdings, LLC. While the First Amended Site Certificate for the Facility will still be held by the Certificate Holder, the new parent company is now Summit Ridge Wind Holdings, LLC. The articles of incorporation for Summit Ridge Wind Holdings, LLC are provided in Attachment 1.

*(b) "Transferee" means the person who will become the new applicant and site certificate holder.*

**Response:** See response to (2) below.

*(2) When a certificate holder has knowledge that any transfer of ownership of the facility that requires a transfer of the site certificate is or may be pending, the certificate holder shall notify the Department of Energy. In the notice, the certificate holder shall include, if known, the name, mailing address and telephone number of the transferee and the date of the transfer of ownership. If possible, the certificate holder shall notify the Department at least 60 days before the date of the transfer of ownership.*

**Response:** LotusWorks filed a notice of intent to transfer the First Amended Site Certificate on February 1, 2016. This requirement has been met.

### **Certificate Holder's name and address are:**

LotusWorks-Summit Ridge I, LLC  
9611 NE 117<sup>th</sup> Ave, Suite 2840  
Vancouver, WA 98662

### **Contact Person, Address and Phone Number:**

Steven A. Ostrowski, Jr., Manager  
LotusWorks-Summit Ridge I, LLC  
9611 NE 117<sup>th</sup> Ave, Suite 2840





Vancouver, WA 98662  
(360)737-9692  
[sostrowski@energysi.com](mailto:sostrowski@energysi.com)

*(3) The transferee is not allowed to construct or operate the facility until an amended site certificate as described in section (10) or a temporary amended site certificate as described in section (11) becomes effective.*

**Response:** The Facility has not yet been constructed. Construction will not begin until a transfer of the First Amended Site Certificate has been approved

*(4) To request a transfer of the site certificate, the transferee shall submit a written request to the Department that includes the information described in OAR 345-021-0010(1)(a), (d), (f) and (m), a certification that the transferee agrees to abide by all terms and conditions of the site certificate currently in effect and, if known, the date of the transfer of ownership. If applicable, the transferee shall include in the request the information described in OAR 345-021-0010(1)(y)(O)(iv).*

**Response:** Attachment 2 of this Transfer and Amendment Request includes information required under Exhibits, A, D and M describing Summit Ridge Wind Holdings' organizational expertise and retirement/financial assurance. Summit Ridge Wind Holdings has certified that it agrees to abide by all the terms and conditions that will result from this request.

*(5) The Department may require the transferee to submit a written statement from the current certificate holder, or a certified copy of an order or judgment of a court of competent jurisdiction, verifying the transferee's right, subject to the provisions of ORS Chapter 469 and the rules of this chapter, to possession of the site or the facility.*

**Response:** Please accept this request as a written statement from LotusWorks and Summit Ridge Wind Holdings, LLC verifying that Summit Ridge Wind Holdings, LLC has the legal right to possess the Facility

*(6) Within 15 days after receiving a request to transfer a site certificate, the Department shall send a notice of the request by mail or email to the reviewing agencies as defined in OAR 345-001-0010, to all persons on the Council's general mailing list as defined in OAR 345-011-0020, to any special list established for the facility and to the updated property owner list submitted by the transferee under subsection (4). In the notice, the Department shall describe the transfer request, specify a date by which comments are due and state that the date of the Council's informational hearing will be announced on the Department's website.*

*(7) Before acting on the transfer request, the Council shall hold an informational hearing. The Council shall hold the informational hearing during a Council meeting and shall provide notice of the hearing on its meeting agenda, which will be sent by mail or email to the Council's general mailing list in advance of the meeting. The informational hearing is not a contested case hearing.*



*(8) At the conclusion of the informational hearing or at a later meeting, the Council may issue an order approving the transfer request if the Council finds that:*

*(a) The transferee complies with the standards described in OAR 345-022-0010, 345-022-0050 and, if applicable, 345-024-0710(1); and*

*(b) The transferee is or will be lawfully entitled to possession or control of the site or the facility described in the site certificate.*

**Response:** Attachment 1 of this Transfer and Amendment Request includes Exhibits A, D and M to demonstrate Summit Ridge Wind Holdings' compliance with the standards in OAR-345-022-0010 (Organizational Expertise) and OAR 345-022-0050(Retirement and Financial Assurance). Summit Ridge Wind Holdings, LLC has the legal right to possess this facility.

*(9) Except as described in section (12), the Council shall not otherwise change the terms and conditions of the site certificate in an order approving the transfer request.*

*(10) Upon issuing the order described in section (8), the Council shall issue an amended site certificate that names the transferee as the new certificate holder. The amended site certificate is effective upon execution by the Council chair and the transferee. The Council shall issue the amended site certificate in duplicate counterpart originals and each counterpart, upon signing, will have the same effect.*

**Response:** LotusWorks-Summit Ridge I, LLC and Summit Ridge Wind Holdings, LLC seek EFSC approval of the requested changes effective immediately upon approval of this Transfer and Amendment Request.

*(11) If the Council chair determines that special circumstances justify emergency action, the Council chair may, upon a written request from the transferee that includes a showing that the transferee can meet the requirements of section (8), issue a temporary amended site certificate that names the transferee as the new certificate holder. The temporary amended site certificate is effective upon execution by the Council chair and the transferee. The temporary amended site certificate expires when an amended site certificate as described in section (10) becomes effective or as the Council otherwise orders.*

**Response:** The parties are not requesting a temporary amended site certificate

*(12) The Council may act concurrently on a request to transfer a site certificate and any other amendment request subject to the procedures described in this rule for the transfer request and:*

*(a) The procedures described in OAR 345-027-0030 for an amendment to extend construction beginning and completion deadlines.*

*(b) The procedures described in OAR 345-027-0090 for an amendment to apply subsequent laws or rules.*





*(c) The procedures described in OAR 345-027-0060 and 345-027-0070 for any amendment request not described in (a) or (b).*

**Response:** This request seeks both a transfer of ownership of the site certificate and an extension of the construction start and completion deadlines. EFSC is authorized to consider these proposed changes concurrently in a single request.



### **Section 3 – Information Required Pursuant to OAR 345-027-0060 and OAR 345-027-0070(10) for Site Certificate Amendments**

The following serves as the basis for our request to extend the construction time frame and make quantity and technical changes relative to the number and physical characteristics of wind turbines to be considered for use on site. In accordance with OAR 345-027-0060 we present our request as follows:

#### **3.1 Information Required Pursuant to OAR 345-027-0060**

**OAR 345-027-0060 (1)(a)** *The name and mailing address of the certificate holder and the name, mailing address, email address and phone number of the individual responsible for submitting the request.*

**Response:** Contact Information

- The name and mailing address of the certificate holder:

LotusWorks-Summit Ridge I, LLC  
9611 NE 117<sup>th</sup> Ave  
Suite 2840  
Vancouver, WA 98662

- The name, mailing address, email address and phone number of the individual submitting the request:

Steven A. Ostrowski, Jr.  
Manager  
LotusWorks-Summit Ridge I, LLC  
9611 NE 117<sup>th</sup> Ave  
Suite 2840  
Vancouver, WA 98662  
P 360.737.9692  
[sostrowski@energysi.com](mailto:sostrowski@energysi.com)

**OAR 345-027-0060 (1)(b)** *A description of the facility including its location and other information relevant to the proposed change.*

**Response:** Description of Proposed facility including its location and other information relevant to the proposed change:

LotusWorks-Summit Ridge I, LLC current Site Certificate including Amendment #1 allows it to develop, construct and operate a wind generation facility in Wasco County, Oregon with a generation capacity of



approximately 194 MW. The facility will be located on private land, approximately 17 miles southeast of The Dalles, Oregon. As currently permitted the facility consists of:

- 72 turbines with a maximum facility output of 194.4 MWs. Each turbine will be limited to a hub height no greater than 91 meters, a blade tip height no greater than 152 meters or a blade tip clearance not less than 23 meters above the ground.
- Substation with an approximately seven mile transmission line interconnecting to a new Bonneville Power Authority (BPA) on the Big Eddy – Maupin 230kV transmission line
- Operations and Maintenance (O&M) facility of approximately 10,000 square feet
- The project site boundary encompasses approximately 25,000 acres on privately owned land subject to long term wind leases with the landowners
- The Site Certificate was issued August 19, 2011 with Amendment #1 issued August 7, 2015 and has a current requirement to start construction by August 19, 2016 and complete construction activity by August 19, 2019

LotusWorks-Summit Ridge I, LLC is requesting that the Siting Council approve the following changes to the existing site certificate:

- An two year extension of The Site Certificate was issued August 19, 2011 with a resulting requirement to start construction by August 19, 2016 and complete construction activity by August 19, 2019
- The addition of a 3.0 MW turbine option that, if selected to be implemented, would reduce the total MW's of the facility to 192MWs. This turbine selection would also reduce the total number of turbines to 64 with each turbine having:
  - 84 meter hub height
  - 132 meter rotor diameter
  - 17 meter ground clearance
  - 151 meter overall height

**OAR 345-027-0060 (1)(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:** 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)

The following changes are proposed for the Summit Ridge wind farm:

- The site certificate is extended for another two years thereby establishing a new construction start date of August 19, 2018.
- Likewise the completion date for construction is extended an additional two years so that construction must be complete within three years from the proposed new construction start date, August 19, 2021
- The siting corridor acreage of the project would remain at approximately 11,000 acres
- That an additional turbine option be approved that would meet the following parameters.





- ✓ The total number of turbines at the facility must not exceed 64 turbines
- ✓ The combined peak generating capacity of the facility would not exceed 192 megawatts and that the peak generating capacity of any individual turbine would not exceed 3 megawatts
- ✓ The turbine hub height for this option would not exceed 84 meters and the maximum blade tip height would not exceed 150 meters
- ✓ The minimum blade tip clearance would be 18 meters above ground

Based on our analysis It is our opinion that these proposed changes necessitates a request to amend the site certificate in accordance with OAR 345-027-0050(1)Paragraph 1, item (c).

**OAR 345-027-0060 (1)(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:** The specific language of the site certificate, including affected conditions that we propose to change, add or delete by this amendment are as follows:

For the ease of determining the change we will present each proposed change both in the current Site Certificate language followed immediately by our proposed change with changes shown in bold print.

- Page 3, Paragraph 2.9 – Site Certification

**Current language:** The certificate holder shall request an amendment of the site certificate to increase the combined generating capacity of the facility beyond 194.4 megawatts. To increase the number of wind turbines to more than 72 wind turbines or to install wind turbines with a hub height greater than 91 meters, a blade tip height greater than 152 meters or a blade tip clearance less than 23 meters above the ground.

**Proposed language:** The certificate holder shall request an amendment of the site certificate to increase the combined generating capacity of the facility beyond 194.4 megawatts. To increase the number of wind turbines to more than 72 wind turbines or to install wind turbines with a hub height greater than 91 meters, a blade tip height greater than 152 meters or a blade tip clearance less than **18** meters above the ground.

- Page 4, Paragraph 3.0 – The Energy Facility

**Current language:** Summit Ridge I has a combined peak generating capacity of 194.4 megawatts (MW). The facility consists of up to 72 wind turbine generators.



Turbines will be mounted on tubular steel towers approximately 91 meters (299 feet) tall at the turbine hub, with a maximum blade tip height no greater than 152 meters (499 feet) and a minimum blade tip clearance of no less than 23 meters (75 feet) above the ground.

**Proposed language:** Summit Ridge I has a combined peak generating capacity of 194.4 megawatts (MW). The facility consists of up to 72 wind turbine generators.

Turbines will be mounted on tubular steel towers approximately 91 meters (299 feet) tall at the turbine hub, with a maximum blade tip height no greater than 152 meters (499 feet) and a minimum blade tip clearance of no less than **18 meters (59 feet)** above the ground.

- Page 8, Paragraph 5.5 – Pre-Construction Requirements

**Current language:** Before beginning construction, the certificate holder shall provide to the Department a description of the turbine types selected for the facility demonstrating compliance with this condition. The certificate holder may select turbines of any type, subject to the following restrictions and compliance with all other site certificate conditions:

- The total number of turbines at the facility must not exceed 72 turbines.
- The combined peak generating capacity of the facility must not exceed 194.4 megawatts
- The turbine hub height must not exceed 91 meters and the maximum blade height must not exceed 152 meters above grade.
- The minimum blade tip clearance must be 23 meters above the ground.

**Proposed language:** Before beginning construction, the certificate holder shall provide to the Department a description of the turbine types selected for the facility demonstrating compliance with this condition. The certificate holder may select turbines of any type, subject to the following restrictions and compliance with all other site certificate conditions:

- The total number of turbines at the facility must not exceed 72 turbines.
- The combined peak generating capacity of the facility must not exceed 194.4 megawatts.
- The turbine hub height must not exceed 91 meters and the maximum blade height must not exceed 152 meters above grade.
- The minimum blade tip clearance must be **18 meters** above the ground.

**Reason for Change:** Since our original request was submitted and approved by the Council there have been significant technical advancements in turbine design, especially turbines designed to service lower speed wind sites such as Summit Ridge. These advancements include more MWs/turbine, higher hub heights and larger diameter rotors. As a result we are requesting a broader range of turbine parameters so that we can maximize the number of turbine selections available for consideration. The





wind market is highly competitive and we will need every economic advantage available to us to secure the long term success of the project.

In our determination of potential impacts from a change in turbine size we focused on the effects larger turbines might have on the protection of natural resources, visibility and noise control. Attachments 2 & 3 are reports generated by third parties hired by us to address the protection of natural resources and visibility. It can be seen from both reports that the impact to both natural resources and visibility is minimal if not non-existent.

Not addressed by a third party study is what impact our final turbine selection would have on noise production. Noise is turbine specific and until a final turbine selection is made, we are unable to offer an exact response. We do offer the following as our commitment to compliance of all noise requirements:

- We are committed to adhering to every aspect of the requirements to minimize turbine noise as identified in Paragraph 12.2 of our existing Site Certificate including submitting our final turbine selection and design to the State prior to beginning construction. We will submit our selection to the Department of Energy prior to placing the turbine order. Included with our submittal will be a noise analysis performed in a manner consistent with OAR 340-035-0035(1)(b)B)(iii)(IV) and (VI).
- We have received noise waivers from all of our landowners.

**345-027-0060 (1)(e)** *A list of the Council standards relevant to the proposed change*

**Response:** The list of EFSC standards relevant to the proposed change in Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). The applicable standards are listed in Section 5. Summit Ridge is an electric generating facility using wind fueled turbine technology. As a result, certain provisions of Division 24 (e.g., standards applicable to gas plants, gas storage, non-generating facilities, etc.) are not discussed

**345-027-0060(1)(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:** Section 4 of this document contains an analysis of whether the facility, with the proposed changes, would comply with the requirement of ORS Chapter 469, applicable EFSC rules, and applicable state and local laws, rules and ordinances if the Siting Council amends the existing site certificate as requested.



**345-027-0060(1)(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 Summit Ridge site boundary is included as Attachment 4. The list includes all known property owners within 500 feet of the project boundary as required by OAR 345-021-0010(1)(f)(C) as required for a site located within a farm or forest zone. These names are current as of one week prior to the submittal of this request.

**345-027-0060(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:** Other than the information presented in this Extension and Amendment Request, the information contained in the Application for Site Certificate for the Summit Ridge Wind Farm project and the information forming the basis for the Final Order approving the Site Certificate are incorporated by reference.

**345-027-0060(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:** LotusWorks-Summit Ridge I, LLC did not submit a draft of this document to the Oregon Department of Energy for review prior to submitting this formal request. However ODOE was consulted numerous times in the preparation of this document.

**345-027-0060(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:** LotusWorks-Summit Ridge I, LLC submits an original and two printed copies and one non-copy-protected electronic format of this Transfer and Extension Request and will provide additional copies as requested by the Department of Energy.





### 3.2 Information Required Pursuant to OAR 345-027-0070(10)

#### OAR 345-027-0070 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:** This amendment request does not seek to change the site boundary as described in Amendment #1.

- (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 has previously granted an extension of the deadline for beginning or completing construction on August 07, 2015. As previously identified this request to extend the schedule is a precaution in the event we are unable to achieve compliance with the specific pre-construction requirements mandated by the site certificate

*(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:** The only change of significance is the request to lower blade tip ground clearance from 23 to 18 meters. In our review we do not believe this affects a previous Council finding. Given that allowing this additional option could also mean fewer overall turbines for the project.

*(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 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:** The amount of the bond or letter of credit was evaluated in the Final Application for Site Certificate. There is no change in the maximum generating capacity from what was authorized in Amendment #1. Therefore, no change in the bond amount is required at this time. This position will be re-evaluated upon the selection of the turbine for the project and the completion of the final design.



#### **Section 4 – Information Required Pursuant to OAR 345-027-0030 for Extension of Construction Start and Completion Dates**

The following serves to support our request to extend the construction start and completion dates for the Summit Ridge Wind project.

**OAR 345-027-0030(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 request for extension is being submitted at least six months prior to the date of the construction start deadline. We are requesting the two year extension to the Summit Ridge permit as a precaution. We fully intend to begin construction on Summit Ridge prior to August 19, 2016 as required by Amendment #1. However there are three items that could prevent us from meeting the mandated August 19<sup>th</sup> start of construction date. These are:

1. Finalization of all legal documents required to complete the transfer of the site certificate from LotusWorks-Summit Ridge I, LLC to Summit Ridge Wind Holdings, LLC.
2. The approval of an additional turbine option being requested in this Amendment.
3. Potential for new findings from our second vegetation and raptor nest survey this spring

Finalization of the transfer of the site certificate cannot occur until approval by the Siting Council. Depending upon the actual date of approval there may be inadequate time to finalize all legal documents associated with the transfer to allow on-site construction to begin prior to August 19<sup>th</sup>.

The same may be the case in the likely event we choose to move forward with the new turbine alternative being proposed in this Request for Amendment. We will not be able to finalize our design and subsequently all the necessary EFSC mandated pre-construction requirements until we have confirmation Siting Council's approval of the turbine selection. We believe a realistic concern exists that there will be inadequate time to submit the necessary documentation and complete the ODOE review process in adequate time to support the mandated August 19<sup>th</sup> start of construction requirements. Rather than invoking the "good cause" argument at a later date, we are choosing to take a proactive approach now.

Amendment #1 of the Summit Ridge Site Certificate added the requirement for two additional raptor nest and vegetation surveys. The first was performed last May and did not produce findings that significantly impact the project. Given that Summit Ridge is located predominantly on agricultural land we are not anticipating any significant change in this year's study. However, the possibility exists.





Therefore as a precaution against the possibility of findings that could somehow alter the design of the project and thereby delay the start of construction, requesting an extension of the start of construction date is the prudent course of action.

**OAR 345-027-0030(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 request is timely under OAR 345-027-0030(1) and the applicable deadlines for the construction deadlines in the Site Certificate are suspended until EFSC acts on this Extension and Amendment request.

**OAR 345-027-0030(3)** The Council shall review the request for amendment as described in OAR 345-027-0070.

Response: LotusWorks Summit Ridge I, LLC believes the net effect of the changes being proposed is minor. As such we request that the Siting Council not require an extended review as described under OAR 345-027-0070(2)

**OAR 345-027-0030(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: LotusWorks requests a two-year extension of the construction deadlines, specifically August 19, 2018 for starting construction and August 19, 2021 for completing construction.



## **Section 5 – Information Required Pursuant to OAR 345-027-0060(1)(e) and (f) for Compliance with Applicable Council Standards, Laws and Council Rules**

### **5.1 OAR 345-022**

This Section provides our detail response to OAR-345-027-0060(1)(e) and (f)

**345-027-0060 (1)(e)** *A list of the Council standards relevant to the proposed change*

**Response:** The list of EFSC standards relevant to the proposed change in Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). The applicable standards are listed below. Summit Ridge is an electric generating facility using wind fueled turbine technology. As a result, certain provisions of Division 24 (e.g., standards applicable to gas plants, gas storage, non-generating facilities, etc.) are not discussed

The specific council standards relevant to the proposed change include:

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

### **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:** In approving the Site Certificate for Summit Ridge, EFSC previously found that the Facility complies with the requirements of its standards. The changes that we are proposing are positive in nature and only serve to increase the suitability of the project for its intended application and purpose. EFSC may rely on its previous findings and determine that Summit Ridge, as amended, satisfies OAR 345-022-000(1)

#### **345-22-10 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, the applicant has an ISO 9000 or ISO 1400 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 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*





**Response:**

**A. Certificate Holder's Expertise**

EFSC previously found that Summit Ridge complied with the General Standards of Review. Steven Ostrowski was president of LotusWorks-Summit Ridge I, LLC. Mr. Ostrowski is the sole owner and manager of Summit Ridge Wind Holdings, LLC, the parent company of Summit Ridge Wind, LLC. Mr. Ostrowski brings 40 years of construction and engineering experience to the project. He has participated, managed and consulted in the engineering and construction of more than 5000 MW's of energy generating facilities over the course of his career. While serving as president of LotusWorks Construction Management division, he oversaw the construction of 1000 MW's of wind facilities in the Pacific Northwest including the effort to secure Summit Ridge's original site certificate and Amendment #1. Similar to the approach put for the by LotusWorks, Mr. Ostrowski intends to bring together a consortium of highly capable and experienced local and nationally recognized engineering and construction firms to design, build and operate the Summit Ridge facility in accordance with all of the Council requirements.

Included as an attachment to this request is a letter from Hefferman Insurance Brokers expressing their willingness to enter into a bond agreement with Summit Ridge Wind Holdings, LLC to meet the required financial security instrument requirements mandated by the Siting Council.

Therefore EFSC should find Summit Ridge Wind Holdings, LLC is capable and has the necessary expertise to build and operate this facility.

**B, Third Party Permits**

EFSC previously found that third parties either have the necessary permits or have a reasonable likelihood of obtaining the necessary permits. This proposed amendment does not affect the previous finding.

**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 the Maximum Considered Earthquake Ground Motion as shown 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:** EFSC previously found that Summit Ridge complied with the Structural Standard. No changes have been made that would warrant reconsideration of the prior finding. Therefore EFSC should find Summit Ridge in compliance with the Structural Standard.

*(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 to Summit Ridge

#### **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 Summit Ridge complied with the Soil Protection Standard. These requirements were previously reviewed with Wasco County. No changes have been made that would warrant additional review or reconsideration of the prior finding. Therefore EFSC should find Summit Ridge in compliance with the Soil Protection Standard.

#### **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:*





*(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 found that Summit Ridge complied with the Land Use Standard. These requirements were previously reviewed with Wasco County. No changes have been made that would warrant additional review or reconsideration of the prior finding. Therefore EFSC should find Lotus Summit Ridge in compliance with the Land Use Standard.

**345-022-0040 Protected Areas**

*(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside*



*the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007:*

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

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

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

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

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

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

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

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

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

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

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

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





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

*Coastal Oregon Marine Experiment Station, Astoria  
Mid-Columbia Agriculture Research and Extension Center, Hood River  
Agriculture Research and Extension Center, Hermiston  
Columbia Basin Agriculture Research Center, Pendleton  
Columbia Basin Agriculture Research Center, Moro  
North Willamette Research and Extension Center, Aurora  
East Oregon Agriculture Research Center, Union  
Malheur Experiment Station, Ontario  
Eastern Oregon Agriculture Research Center, Burns  
Eastern Oregon Agriculture Research Center, Squaw Butte  
Central Oregon Experiment Station, Madras  
Central Oregon Experiment Station, Powell Butte  
Central Oregon Experiment Station, Redmond  
Central Station, Corvallis  
Coastal Oregon Marine Experiment Station, Newport*

*(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 Summit Ridge complied with the Protected Area Standard. These requirements were previously reviewed with Wasco County. To provide the Council additional clarification on the matter we have included a third party independent review performed by David Evans and Associates(Attachment 2). We believe this independent review confirms that LotusWorks-Summit Ridge I, LLC meets the intent of the standard and EFSC should find Summit Ridge in compliance with the Protected Area Standard.

**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:** Attachment #1 to this request demonstrates that Summit Ridge retains the ability to restore the project and 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. Therefore EFSC should find Summit Ridge in compliance with the Retirement and Financial Use Standard.

**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.*

**Response:** EFSC previously found that Summit Ridge complied with the Fish and Wildlife Habitat Standard. No changes have been made that would warrant reconsideration of the prior finding. We are requesting an option that would reduce the number of turbines. These changes according to Northwest Wildlife Consultants, Inc. (Attachment 3) "decrease in the overall number of turbines (that this increase in rotor diameter allows) is expected to yield a decrease both in overall collision potential and in habitat loss and associated impacts to wildlife, such as habitat fragmentation, displacement, etc. It is for these reasons we believe EFSC should find Summit Ridge in compliance with the Fish and Wildlife Habitat Standard.

**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 found that Summit Ridge complied with the Threatened and Endangered Species. No changes have been made that would warrant reconsideration of the prior finding. The requested option serves to reduce number of turbines. According to our independent third party environmental consultant Northwest Wildlife Consultants, Inc. (Attachment 3):

The present proposed turbine change is expected to entail a further decrease in risk to golden eagles.

The proposed change to a smaller number of turbines—albeit with larger rotor diameters—is expected to result in a net benefit to wildlife and their habitats. It is anticipated that this change will result in fewer birds and bats colliding with turbines at this project. In addition, it will result in less temporary habitat disturbance and permanent habitat loss.

It is for these reasons we believe EFSC should find Summit Ridge in compliance with the Threatened and Endangered Species Standard.

#### **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.*

**Response:** EFSC previously found that Summit Ridge complied with the Scenic Resources Standard. These requirements were previously reviewed with Wasco County. To provide the Council additional clarification on the matter we have included a third party independent review performed by David Evans and Associates (Attachment 2). We believe this independent review confirms that LotusWorks-Summit Ridge I, LLC meets the intent of the standard and EFSC should find Summit Ridge in compliance with the Scenic Resources Standard.



**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.*

*(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:** EFSC previously found that Summit Ridge complied with the Cultural and Archaeological Resources Standard. No changes have been made that would warrant reconsideration of the prior finding. The proposed changes have been reviewed with Wasco County and found acceptable prior to submittal to the Council. Therefore EFSC should find Summit Ridge in compliance with the Cultural and Archaeological Resources Standard.

**345-022-0100 Recreation**

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

*(a) Any special designation or management of the location;*

*(b) The degree of demand;*

*(c) Outstanding or unusual qualities;*

*(d) Availability or rareness;*





*(e) Irreplaceability or irretrievability of the opportunity.*

**Response:** EFSC previously found that Summit Ridge complied with the Recreation Standard. These requirements were previously reviewed with Wasco County. To provide the Council additional clarification on the matter we have included a third party independent review performed by David Evans and Associates (Attachment 2). We believe this independent review confirms that LotusWorks-Summit Ridge I, LLC meets the intent of the standard and EFSC should find Summit Ridge in compliance with the Recreation Standard.

**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.*

*(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:** EFSC previously found that Summit Ridge complied with the Standard. No changes have been made that would warrant reconsideration of the prior finding. The proposed changes have been reviewed with Wasco County and found acceptable prior to submittal to the Council. Therefore EFSC should find Summit Ridge in compliance with the Public Services Standard.

**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:** EFSC previously found that Summit Ridge complied with the Waste Minimization Standard. No changes have been made that would warrant reconsideration of the prior finding. The proposed changes have been reviewed with Wasco County and found acceptable prior to submittal to the Council. Therefore EFSC should find Summit Ridge in compliance with the Waste Minimization Standard.

## **5.2 OAR 345-024**

This Section provides our detail response to following OAR 345-024 standards

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

### **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 Summit Ridge complied with the Public Health and safety Standards for Wind Energy Facilities. No changes have been made that would warrant reconsideration of the prior finding. Therefore EFSC should find Summit Ridge in compliance with the Public Health and Safety Stands for Wind energy Facilities.

### **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.*

*(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 Summit Ridge complied with the Cumulative Effects Standard for Wind Energy Facilities. No changes have been made that would warrant reconsideration of the prior finding. Therefore EFSC should find Summit Ridge in compliance with the Cumulative Effects Standard for Wind Energy Facilities.

#### **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 Summit Ridge complied with the Siting Standards for Transmission Lines. No changes have been made that would warrant reconsideration of the prior finding. Therefore EFSC should find Summit Ridge in compliance with the Siting Standard for Transmission Lines.

**345-027-0060(1)(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:** As described in the aforementioned responses, Summit Ridge Wind Holdings, LLC has analyzed and demonstrated that Summit Ridge as amended, would comply with all applicable requirements outlined in OAR 345-027-0060(1)(f).





## **Section 6 - Review of Chapter 19 of the Wasco County Oregon Standards for Commercial Energy Facilities & Related Uses**

### Wasco County Land Use Development Ordinance

### Chapter 19 – Standards for Non-Commercial Energy Facilities, Commercial Energy Facilities & Related Uses

#### SECTION 19.030 Commercial Power Generating Facilities Review Processes & Approval Standards

- A. Review Processes - Commercial Power Generating Facilities & Related Uses (energy facilities) shall be reviewed pursuant to the following. Where standards are less restrictive than comparative standards in other sections, the more restrictive shall govern.

1. Review Authority:

- a. Planning Commission Review – Notwithstanding applications reviewed by EFSC and unless otherwise specified all energy facilities reviewed pursuant to this section shall be initially heard and decided upon by the Planning Commission in a public hearing.

b. Planning Department Review:

- (1) Small Scale Commercial Power Generating Facilities - A commercial power generating facility shall be considered small scale if it falls within either the tower or solar matrix listed in Section 19.020, Non-Commercial Power Generating Facilities and shall be reviewed by the planning department pursuant to the standards of Section 19.020 and not this section.

For non-resource zones, solar arrays shall be limited to ¼ acre and towers to no more than 150' in height and no more than 4 towers per property. For resource zones solar arrays shall be limited to ½ acre and towers to under 200' in height and no more than 4 towers per property shall be reviewed by the planning department. Beyond these limits the energy facility will not be considered small scale and will only be allowed pursuant to the standards in this section.

- (2) Community Projects - Renewable projects of 10MW or less which include a partnership between a local land owner and a community (public) organization such as Wasco County, Mid-Columbia Council of Governments, a city, or a school district, shall be reviewed by the planning department.
- (3) Post EFSC Review - Pursuant to ORS 469.401, after issuance of a site certificate by EFSC pursuant to subsection c. below, and subject to receiving the proper fees, Wasco County



will issue in an expedited manner any permits, licenses and certificates addressed in the site certificate subject only to conditions set forth in the site certificate but without hearings or other proceeding (i.e., Type I review).

(4) Hydroelectric Energy Facilities - See subsection d. below.

c. EFSC Review:

- (1) EFSC has regulatory authority over all energy facilities designated by ORS 469.300. However, pursuant to ORS 469.480 EFSC shall designate the BOC as a Special Advisory Group. As such and at their discretion the BOC may participate in the siting process pursuant to the role established in ORS 469 and OAR 345, which includes recommending substantive criteria applicable to the proposed energy facility.
- (2) Pursuant to ORS 469.320(8), notwithstanding the threshold limits in ORS 469.300, an applicant can elect to have EFSC review an energy facility that may otherwise be subject to Wasco County's jurisdiction.
- (3) If for any reason the BOC desires, they may defer regulatory authority of energy facility to EFSC notwithstanding it is less than the threshold designated by ORS 469.300.

d. OWRD Review - Hydroelectric Energy Facilities:

- (1) Not located within an Area of Special Flood Hazard - Hydroelectric energy facilities not located within an Area of Special Flood Hazard are not required to meet property development standards within the zone they are being located. If located in a non-resource zone they are allowed without any review by the planning department as long as they are being reviewed by OWRD or FERC. If located in a resource zone they are required to be reviewed as a "utility facilities necessary for a public use".
- (2) Located within an Area of Special Flood Hazard - In addition to (d)(1) above, hydroelectric energy facilities located within an Area of Special Flood Hazard are subject to Section 3.740, Flood Hazard Overlay by the planning department even if they are being reviewed by the OWRD or FERC.

e. FERC Review - FERC has regulatory authority over all energy or related projects of a size, scale or interest to the federal government pursuant to Title 18, Conservation of Power and Water Resources, of the Code of Federal Regulations.





2. County Decision Options - As part of the application materials the applicant shall indicate if they are requesting tentative or final approval. For facilities sited through EFSC, this section does not apply.

- a. Tentative Approval - A tentative approval may be issued when the applicant has submitted most of the required application materials but defers completion of one or more required discretionary elements such as the wildlife plan and all of its required baseline studies. Any deferred discretionary elements will be the only elements reviewed and decided upon during the final approval process.

A tentative approval shall specify a time limit or expiration date within which all deferred discretionary review elements or plans shall be reviewed for final approval. Pursuant to Section 2.125, Time Limits for Permits and Extensions of Time, the combined time for both the tentative and final approval shall be limited to 2 years with the opportunity for a onetime 2 year extension. This time frame shall start on the date of the tentative approval.

- b. Final Approval - Final approval occurs when the applicant has submitted all of the required application materials, Wasco County has issued a decision which includes conditions of approval that can be submitted for staff review and verification, and the appeal period has concluded.

2. Modifications - An amendment to the conditional use permit shall be required if the proposed facility changes would:

- a. Require an expansion of the established facility boundaries where the original facility was sited or constructed;
- b. Increase the number of towers; or
- c. Increase generator output by more than 25 percent relative to the generation capacity authorized by the initial permit due to the repowering or upgrading of power generation capacity.

**Response:** Summit Ridge is a commercial wind energy plant that exceeds the threshold limits in ORS 469.300 thus necessitating an EFSC review. This request does not seek to increase the number of turbines or increase generator capacity by more than 25%.

**B. Non-Resource Zone Standards:**

1. Small Scale Commercial Power Generating Facilities - Pursuant to Subsection A(1)(b)(1) above, commercial power generating facilities that are considered small scale will be allowed in non-resource zones subject to the standards of Section 19.020.
2. **Large Scale Commercial Power Generating Facilities** - Except for related or supporting



facilities, large scale commercial power generating facilities shall not be allowed in nonresource zones.

3. Related or Supporting Facilities (Reasonable Alternatives Analysis) - Related or supporting facilities to a commercial power generating facility may be allowed in nonresource zones subject to Conditional Use Review upon a showing that such related or supporting facilities are necessary for siting the commercial power generating facility. To the extent practicable, any related or supporting facilities must be consistent in size, scale, and impact as other existing or allowed uses in the non-resource zone. Related or Supporting Facilities shall be reviewed as part of the Commercial Power Generating Facility and not subject to a separate Conditional Use Review. To demonstrate the related or supporting facilities are necessary within the meaning of this section, an applicant must show that reasonable alternatives have been considered and that the related or supporting facilities must be sited in a non-resource zone after considering the following factors:

- a. Technical and engineering feasibility of siting the energy facility as a whole;
- b. Availability of existing rights-of-ways and public roads and proximity to transmission lines and interconnections;
- c. Environmental impacts associated with avoiding non-resource zoned land; and
- d. Protection of farm and forest resources.

**Response:** Neither Summit Ridge's wind turbines nor its supporting facilities are located in a non-resource zone.

C. General Standards - The following standards apply to energy facilities as outlined in Section A above, in addition to meeting the Conditional Use Standards listed in Chapter 5:

- 1. Air Safety - All structures that are more than 200 feet above grade or, exceed airport imaginary surfaces as defined in OAR Chapter 738, Division 70, shall comply with the air hazard rules of the Oregon Department of Aviation and/or Federal Aviation Administration. The applicant shall notify the Oregon Department of Aviation and the Federal Aviation Administration of the proposed facility and shall promptly notify the planning department of the responses from the Oregon Department of Aviation and/or Federal Aviation Administration.

Aerial Sprayers and operators who have requested to be notified will receive all notifications associated with the energy facility as required by Chapter 2, Development





Approval Procedures.

**Response:** Summit Ridge has promptly notified the Oregon Department of Aviation and/or Federal Aviation Administration of the proposed facility and will promptly notify the planning department of the responses from the Oregon Department of Aviation and/or Federal Aviation Administration in accordance with paragraph 5.4 of the existing Site Certificate.

Aerial Sprayers and operators who request to be notified will receive all notifications associated with the energy facility as required by Chapter 2, Development Approval Procedures.

2. Interference with Communications - The energy facility shall be designed, constructed and operated so as to avoid any material signal interference with communication systems such as, but not limited to, radio, telephone, television, satellite, microwave or emergency communication systems. Should any material interference occur, the permit holder must develop and implement a mitigation plan in consultation with the planning department.

**Response:** Summit Ridge will be designed, constructed and operated so as to avoid any material signal interference with Communication systems such as, but not limited to radio, telephone, satellite, microwave or emergency communication systems. Should any material interference occur, LWSR will develop and implement a mitigation plan in consultation with all appropriate authorities.

3. Noise - The energy facility shall comply with the noise regulations in OAR Chapter 340, Division 35. The applicant may be required to submit a qualified expert's analysis and written report.

**Response:** Summit Ridge will comply with the noise regulations in OAR Chapter 340 and with Section 12.0 of the existing Site Certificate.

4. Visual Impact

- a. Scenic Resources – To issue a conditional use permit for an energy facility, the county 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 or values identified as significant or important in the Wasco County Comprehensive Plan.
- b. Protected Areas - Except as provided in subsections (b) and (c) below, an energy facility shall not be located in the areas listed below:
  - (1) National recreation and scenic areas, including but not limited to the Columbia River Gorge National Scenic Area;



- (2) 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;
- (3) State parks and waysides as listed by the Oregon Department of Parks and Recreation;
- (4) State wildlife areas and management areas identified in OAR chapter 635, division 8.
- (5) National and state fish hatcheries or national and state wildlife refuges;
- (6) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;
- (7) 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; and
  - a. Exceptions to Protected Areas - Except where the following uses are regulated by federal, state or local laws, including but not limited to the Columbia River Gorge National Scenic Area Act and implement land use ordinances, the following may be approve in a protected area identified in subsection (b) above if other alternative routes or sites have been studied and been determined to have greater impacts
    - An electrical transmission line;
    - A natural gas pipeline; or
    - An energy facility located outside a protected area that includes an electrical transmission line or natural gas or water pipeline as a related or supporting facility located within a protected area.
  - b. Transmission Line & Pipeline Exception - The provisions of subsection (b) above do not apply to electrical transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line or one natural gas pipeline.
  - c. Additional Visual Mitigation Impacts for all Facilities - The design, construction and operation of the energy facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified in subsection (b) above. Methods to mitigate adverse visual impacts could include but are not limited to:





- (1) Building the energy facility near the edge of contiguous timber areas or using the natural topography to obscure the energy facility;
- (2) Using materials and colors that blend with the background unless otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation; and
- (3) Retaining or planting vegetation to obscure views of the energy facility.

**Response:** Summit Ridge hired David Evans and Associates (DEA) to perform additional visual analysis of revised turbine option layout using worst case scenarios for both the number and sizing of the turbines (Attachment 2). DEA concluded that the requested changes proposed in Amendment 2 do not have significantly adverse to scenic resources or values identified as significant or important in the Wasco County Comprehensive Plan.

Summit Ridge is not built on protected areas or in scenic waterways

5. Natural Resource/Wildlife Protection - Taking into account mitigation, siting, design, construction and operation the energy facility will not cause significant adverse impact to important or significant natural resources identified in the Wasco County Comprehensive Plan, Wasco County Land Use and Development Ordinance or by any jurisdictional wildlife agency resource management plan adopted and in effect on the date the application is submitted. As appropriate, the permit holder agrees to implement monitoring and mitigation actions that Wasco County determines appropriate after consultation with the Oregon Department of Fish and Wildlife, or other jurisdictional wildlife or natural resource agency. Measures to reduce significant impacts may include, but are not limited to the following:
  - a. Providing information pertaining to the energy facility's potential impacts and measures to avoid impacts on:
    - (1) Wildlife (all potential species of reasonable concern);
    - (2) Wildlife Habitat;
    - (3) Endangered Plants; and
    - (4) Wetlands & Other Water Resources.
  - b. Conducting biologically appropriate baseline surveys in the areas affected by the proposed energy facility to determine natural resources present and patterns of habitat use.
  - c. Selecting locations to reduce the likelihood of significant adverse impacts on natural

resources based on expert analysis of baseline data.

- d. Utilizing turbine towers that are smooth steel structures that lack features that would allow avian perching. Where horizontal surfaces cannot be avoided, anti-perching devices shall be installed where it is determined necessary to reduce bird mortality.
- e. Designing and installing all aboveground transmission line support structures following the current suggested practices for avian protection on power lines published by the Avian Power Line Interaction Committee.
- f. Utilizing towers and transmission line support structures designed so the foundation area and supports avoid the creation of artificial habitat or shelter for raptor prey.
- g. Controlling weeds to avoid the creation of artificial habitat suitable for raptor prey such as spreading gravel on turbine pad.
- h. Avoiding construction activities near raptor nesting locations during sensitive breeding periods and using appropriate no construction buffers around known nest sites.
- i. Locating transmission lines or associated transmission lines with the energy facility to minimize potential impacts (e.g., 50 feet from the edge of the nearest wetland or water body except where the line is required to cross the wetland or water body; or separating transmission lines or associated transmission lines with the energy facility from the nearest wetland or water body by topography or substantial vegetation to the extent practical, except where the line is required to cross the wetland or water body).
- j. Locating transmission towers or associated transmission towers outside of Class I or II streams unless:
  - (1) Adjoining towers and conductors cannot safely and economically support the line(s) that span the stream without an in-stream tower; and
  - (2) The lines cannot be safely and economically placed under the water or streambed.
  - (3) Developing a plan for post-construction monitoring of the facility site using appropriate survey protocols to measure the impact of the project on identified natural resources in the area.





**Response:** Compliance with Sections 9 (Protection of Soil) and Section 10 (Protection of Natural Resources) of the existing site certificate will satisfy the requirements of paragraph 5. Summit Ridge is not proposing any changes to either Section 9 or Section 10 of the existing Site Certificate.

6. **Protection of Historical and Cultural Resources** - The applicant shall complete a cultural resources survey of areas where there will be temporary or permanent disturbance. During construction, cultural resources included in the Wasco County Comprehensive Plan shall be flagged and avoided in areas of potential temporary or permanent disturbance, and construction activities monitored to ensure all cultural resources in such areas are avoided, unless appropriate permits are obtained from the Oregon State Historic Preservation Office. Prior to construction an Inadvertent Discovery Plan (IDP) shall be developed that must outline the procedures to be followed in the case previously undiscovered archeological, historical or cultural artifacts are encountered during construction or operation of the energy facility, in compliance with ORS 358.905-358.955 and any other applicable local, state and federal law.

**Response:** Compliance with Section 11 (Protection of Historic, Cultural and Archaeological Resources) of the existing Site Certificate will satisfy the requirements of paragraph 6. Summit Ridge is not proposing any changes to Section 11 of the existing Site Certificate.

7. **Fire Protection & Emergency Response** - A fire protection and emergency response plan shall be developed and implemented in consultation with the applicable fire district or department and/or land management agency to minimize the risk of fire and respond appropriately to any fire or emergency that occurs onsite for all phases of the life of the facility. In developing the plan the applicant shall take into account, among other things, the terrain, dry nature of the region, address risks on a seasonal basis, and identify the locations of fire extinguishers, nearby hospitals, telephone numbers for emergency responders, and first aid techniques.

**Response:** Compliance with Section 8 (On-Site Safety and Security) of the existing Site Certificate will satisfy the requirements of paragraph 7. Summit Ridge is not proposing any changes to Section 8 of the existing Site Certificate.

8. **Public Safety** - A public safety plan shall be developed and implemented to exclude members of the public from hazardous areas within the Energy Facility Project Area.

**Response:** Compliance with Section 8 (On-Site Safety and Security) of the existing Site Certificate will satisfy the requirements of paragraph 8. Summit Ridge is not proposing any changes to Section 8 of the existing Site Certificate.

9. **Transportation Plan** - A transportation plan shall be developed and implemented in consultation with the Wasco County Road Department and/or the Oregon Department of



Transportation (ODOT). The plan shall be consistent with any applicable requirements from the Wasco County Transportation System Plan and shall also provide or address:

- a. The size, number, and location of vehicle access points off of public roads.
- b. Use of existing roads to the extent practical to minimize new access roads.
- c. Restoring the natural grade and re-vegetating all temporary road cuts, used during construction of the energy facility. The applicant shall specify the type and amount of native seed or plants used to re-vegetate the disturbed areas and a timeline to complete this work.
- d. A Road Impact Assessment/Geotechnical Report for roads to be used by the project. Said report should include an analysis of project-related traffic routes to be used during phases of construction, project operation and decommissioning. The report and any subsequent amendments shall be used as a discipline study and shall be incorporated into the Road Use Agreement between the Applicant and the County.

**Response:** The existing Site Certificate (paragraphs 5.9, 6.17, 6.18, 6.19, 6.20, 8.8, 9.2) serves to address the requirements of paragraph C-9. Summit Ridge is not proposing to change these Site Certificate paragraphs.

10. Road Use Agreement - Where applicable, the Wasco County Road Department shall require the applicant to enter into a Road Use Agreement with the County to ensure that project construction traffic is mitigated and any damage to county roads that is caused by the construction of the energy facility or its related or supporting facilities is repaired by the applicant, and such county roads are restored to pre-construction conditions or better (this includes a weed plan and providing for re-vegetation).
  - General design standards for roads shall, in general, conform to policies set forth in Chapter 21.
  - As part of the Road Use Agreement the applicant shall also obtain a utility permit for all project utility installation and approach permits for road approach access to county roads.

**Response:** The existing Site Certificate (paragraphs 5.9, 6.17, 6.18, 6.19, 6.20, 8.8, 9.2) serves to address the requirements of paragraph C-10. Summit Ridge is not proposing to change these Site Certificate paragraphs.

11. Onsite Access Roads and Staging Areas - The impact of onsite access roads and staging areas within the Energy Facility Project Area shall be limited by:





- a. Constructing and maintaining onsite access roads for all-weather use to assure adequate, safe and efficient emergency vehicle and maintenance vehicle access to the site;
- b. Using existing onsite access roads to the extent practical and avoiding construction of new on-site access roads as much as possible; and
- c. Restoring the natural grade and re-vegetating all temporary access roads, road cuts, equipment staging areas and field office sites used during construction of the energy facility. The applicant shall specify the type and amount of native seed or plants used to re-vegetate the disturbed areas and a timeline to complete this work.

**Response:** The existing Site Certificate (paragraphs 5.9, 6.17, 6.18, 6.19, 6.20, 8.8, 9.2) serves to address the requirements of paragraph C-11. Summit Ridge is not proposing to change these Site Certificate paragraphs.

12. Dust Control - All approved non-paved temporary or permanent roads and staging areas within the Energy Facility Project Area shall be constructed and maintained to minimize dust, which may be addressed through the Road Use Agreement. If roads and staging areas are not constructed with material that would prevent dust, the permit holder must regularly water roads and staging areas as necessary or apply an approved dust suppression agent such as Earthbind 100 to minimize dust and wind erosion.

**Response:** The existing Site Certificate (paragraphs 5.9, 6.17, 6.18, 6.19, 6.20, 8.8, 9.2) addresses the requirements of paragraph C-12. Summit Ridge is not proposing to change these Site Certificate paragraphs.

13. Erosion and Sediment Control - All ground disturbing activities shall be conducted in compliance with a National Pollutant Discharge Elimination System (NPDES) permit as may be required by Oregon Department of Environmental Quality. Where applicable, an NPDES permit must be obtained. The plan must include best management practices for erosion control during construction and operation and permanent drainage and erosion control measures to prevent damage to local roads or adjacent areas and to minimize sediment run-off into waterways.

**Response:** The existing Site Certificate Section 9 addresses the requirements of paragraph C-13. Summit Ridge is not proposing to change Section 9.

14. Weed Control - A weed plan shall be developed in consultation with the Wasco County Weed Department and implemented during construction and operation of the energy facility.



**Response:** The existing Site Certificate Section 9 addresses the requirements of paragraph C-14. Summit Ridge is not proposing changes to the Site Certificate that would affect this provision

15. Signs - Outdoor displays, signs or billboards within the energy facility project boundary shall not be erected, except:
- a. Signs required for public or employee safety or otherwise required by law; (e.g., OSHA or compliance with the Manual of Uniform Traffic Control Devices (MUTCD) administered through the County Road Department); and
  - b. No more than two signs relating to the name and operation of the energy facility of a size and type to identify the property for potential visitors to the site, but not to advertise the product. No signs for advertising of other products are permitted.

**Response:** The existing Site Certificate Section 6 paragraph 6.15 & 6.22 addresses the requirements of paragraph C- 15. Summit Ridge is not proposing to change these Site Certificate paragraphs.

16. Underground Systems - Where reasonably practicable, power collector and communication systems shall be installed underground, at a minimum depth of 3 feet. Shallower depths may be authorized where notification and safety measures are taken and wires are placed in schedule 40 conduit. The cable collector system shall be installed to prevent adverse impacts on agriculture operations and natural resources.

**Response:** The existing Site Certificate Section 6 paragraph 6.4 & Section 7 paragraph 7.9 addresses the requirements of paragraph C-16. Summit Ridge is not proposing to change these Site Certificate paragraphs.

17. Operation & Maintenance Buildings - Permanent maintenance/operations buildings shall be located in the same zone as the principal energy facility, except that such buildings may be constructed in a separate zone if:
- a. The building is designed and constructed generally consistent with the character of similar buildings used in the surrounding area; and
  - b. The building will be removed or converted to another approved use upon decommissioning of the energy facility consistent with the provisions of this ordinance.

**Response:** The existing Site Certificate Section 6, paragraphs 6.16 & 6.21 and Section 14 addresses the requirements of paragraph C-17. Summit Ridge is not proposing to change these Site Certificate paragraphs.





18. Coordination and Documentation - Prior to commencement of any construction, all other necessary permits shall be obtained, e.g. building permit, rural address, road approach, utility and other permits from the Wasco County Public Works Department, and/or from ODOT as well as any other applicable local, state or federal permits or approvals.

**Response:** The existing Site Certificate paragraph 4.6 addresses the requirements of paragraph C-18. Summit Ridge is not proposing to change this Site Certificate paragraph.

19. Termination and Decommissioning - For an energy facility sited through EFSC, compliance with EFSC's financial assurance and decommissioning standards shall be deemed to be in compliance with these requirements.
- a. The applicant shall prepare a decommissioning plan that describes the actions to restore the site to a useful, non-hazardous condition, including options for post dismantle or decommission land use, information on how impacts on fish, wildlife and the environment would be minimized during the dismantling or decommissioning process, and measures to protect the public against risk or danger resulting from post-decommissioning site conditions in compliance with the requirements of this section.
  - b. The applicant shall provide a detailed cost estimate, a comparison of that estimate with funds to be set aside, in the form of a financial assurance (bond, letter of credit, insurance policy other such form of guarantee acceptable to Wasco County), and a plan for assuring the availability of adequate funds for completion of dismantling or decommissioning. The cost estimate and financial assurance may take into account salvage value associated with the project, and can be requested for review and update by Wasco County at their discretion (e.g., every 5 years).
  - c. The following shall be required as conditions of the Wasco County approval:
    - (1) If operation of the energy facility ceases or begins construction of the project, but does not complete it, the permit holder shall restore the site according to a plan approved by Wasco County. A plan shall be submitted that ensures the site will be restored to a useful, non-hazardous condition without significant delay, including but not limited to the following:
      - (a) Removal of aboveground and underground equipment, structures and foundations to a depth of at least three feet below grade (four feet if cropland). Underground equipment, structures and foundations need not be removed if they are at least three feet below grade and do not constitute a hazard or interfere with agricultural use or other resource uses of the land.



Restoration of the surface grade and soil after removal of aboveground structures and equipment.

- (b) Removal of graveled areas and access roads and restoration of surface grade and soil.
  - (c) Re-vegetation of restored soil areas with native seed mixes, plant species suitable to the area, consistent with Wasco County's weed control plan.
  - (d) For any part of the energy facility on leased property, the plan may incorporate agreements with the landowner regarding leaving access roads, fences, gates or buildings in place or regarding restoration of agricultural crops or forest resource land. Said landowner will be responsible for maintaining said facilities for purposes permitted under applicable zoning.
  - (e) The underground power collector and communication lines need not be removed if at a depth of three feet or greater. These cables can be abandoned in place if they are deemed not a hazard or interfering with agricultural use or other consistent resource uses of the land.
  - (f) The plan must provide for the protection of public health and safety and for protection of the environment and natural resources during site restoration.
  - (e) The plan must include a schedule for completion of site restoration work.
- (2) Before beginning construction of the energy facility, the permit holder must submit in a form and amount satisfactory to Wasco County, assuring the availability of adequate irrevocably committed funds to restore the site to a useful, non-hazardous condition naming Wasco County as beneficiary or payee. The form may include posting a bond, issuing an irrevocable letter of credit, purchasing a paid up insurance policy or by other means acceptable by Wasco County and shall ensure continuity between owners.
- (3) The amount of the financial assurance (bond or other such form of guarantee) shall be annually adjusted for inflation using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast," or by any successor agency (the "Index"). The permit holder (including possible successor if sold or transferred) shall increase the amount of the financial assurance annually by the percentage increase in the Index and shall pro-rate the amount within the year to the date of retirement. If at any time the Index is no longer published, Wasco County shall select a comparable index for adjusting the





amount. The amount of the financial assurance shall be prorated within the year to the date of decommissioning.

- (4) Per the request of Wasco County, the permit holder (including possible successor if sold or transferred) shall describe the status of the financial assurance in a report (e.g., annual update report submitted to Wasco County).
- (5) The financial assurance shall not be subject to revocation or reduction before retirement of the energy facility site.

**Response:** The existing Site Certificate paragraphs 6.24 & 9.6 as well as Section 14 addresses the requirements of paragraph C-19. Summit Ridge is not proposing changes to these Site Certificate paragraphs or to Section 14.

- 20. Final Location - The actual latitude and longitude location or Oregon State Plane NAD83 HARN (international feet) coordinates of the energy facility and related or supporting facilities shall be provided to the County GIS Department once commercial electrical power production begins. Alternatively, this information could be provided in GIS layer consistent with the datum referenced above or any other datum deemed acceptable by the Wasco County GIS Department.

**Response:** The existing Site Certificate paragraph 4.3 addresses the requirements of paragraph C-20. Summit Ridge is not proposing to this Site Certificate paragraph.

- 21. Power Production Reporting - The County may require a report of nonproprietary power production for any time frame after the energy facility first begins production if permitted through the County. If requested, the permit holder shall have 180 days to produce said report.

**Response:** The existing Site Certificate paragraph 13.1(b) (ii) addresses the requirements of paragraph C-21. Summit Ridge is not proposing changes to this existing Site Certificate paragraph.

D. Specific Standards - The following standards apply to specific types of energy facilities as described, in addition to the General Standards in Section C above.

1. Wind Energy Facilities:

- a. Visual Impact - To the extent practical, the proposed wind energy facility has been designed to minimize visual impact upon open space and natural landscape by:

- (1) Using underground communication and power collector lines (transmission lines that connect each turbine to a substation);



**Response:** This requirement is addressed in Section 6.4 of the existing Site Certificate. Summit Ridge is not proposing changes to this Site Certificate paragraph.

- (2) Using turbine towers of uniform design, color and height;

**Response:** This requirement is addressed in Section 6.15 of the existing Site Certificate. In addition, this amendment requests a turbine option, that if selected would reduce the overall maximum number of turbines from 72 to 64. While the amendment requests approval to use turbines with a larger rotor diameter, hub height has been reduced such that the overall height of the requested additional turbine option is two meters less than what is currently approved. Our third party analysis of the new turbine option indicates a reduced visual impact from the currently approved 72 turbine- 91 meter hub height, 122 diameter meter rotor diameter layout.

- (3) Lighting - Lighting of towers shall be evaluated on a case by case basis and is only allowed if required by the Oregon Department of Aviation or Federal Aviation Administration. If lighting is required by Oregon Department of Aviation or Federal Aviation Administration the applicant shall minimize the amount of lighting to the extent feasible under the law, which may include consideration of radar triggered lighting.

**Response:** The existing Site Certificate paragraph 6.26 addresses the requirements of paragraph 3. In previous evaluations of radar based lighting, currently available systems were not found to be economically feasible or provide the level of safety deemed necessary for the application. We will re-evaluate currently available systems prior to finalizing our design and start of construction.

- (4) Using existing roads within the Energy Facility Project Area to provide access to the site, or if new roads within the Energy Facility Project Area are needed, minimizing the amount of land used for new roads and locating roads to reduce visual impact;

**Response:** Paragraphs "Access Roads" and "Temporary Roadway Modifications" located on page 5 of the existing Amendment #1 to the Site Certificate address this requirement. Summit Ridge is not seeking to change this Site Certificate paragraph.

- (5) Using existing substations, or if new substations are needed, minimizing the number of new substations; and

**Response:** As identified in the existing Site Certificate, a new BPA substation is required to connect the wind farm to the existing 230kV Big Eddy-Maupin transmission line. This substation is in addition to on-site collector substation also identified in the existing Site Certificate. Summit Ridge is not seeking to add additional substations.





- (6) Shadow Flicker – Upon the non-participating owner’s request, the applicant shall demonstrate that the wind turbines, taking into account mitigation measures, will have no significant adverse impact of shadow flicker on an existing dwelling of a non-participating landowner within ¼ mile (1,320 feet) from a turbine, measured from the centerline of the turbine to the centerline of the dwelling. Towers shall be allowed to create an adverse shadow flicker impact to an existing dwelling on a non-participating landowner’s property if written permission from the property owner and an adjustment is granted under Section 19.030(D)(1)(c). Said written permission shall be made part of the deed records of the non-participating landowner’s property.

**Response:** There are no non-participating owner residences within ¼ (1,320 feet) of a planned turbine location.

- b. Public Safety - The wind energy facility shall be designed, constructed, and operated to protect the public by measures that may include, but are not limited to, the following:
- (1) Installing the tower so at the closest point, the sweep of any exposed blade or other exposed moving component is at least 20 feet above the tallest existing or foreseeable obstruction to blade movement unless based on the proposed location and site specific circumstances, the tower will not represent a safety hazard; and
  - (2) Designing, constructing and operating the energy facility to exclude members of the public from close proximity to turbine blades and electrical equipment, including installing locks on turbine tower access doors; and
  - (3) Designing, constructing and operating the energy facility to protect against structural failure of the turbine tower or blades that could endanger members of the public’s safety, including having adequate safety devices and testing procedures designed to warn members of the public of impending failure and to minimize the consequences of such failure.

**Response:** The proposed amendment closest point of the exposed blade (18 meters above the ground) exceeds the above requirement. The remaining Public Safety requirements are addressed in paragraphs 6.8, 6.10, 6.11 and in Section 7 of the existing Site Certificate. Summit Ridge not seeking to change the aforementioned paragraphs or Section 7 of the existing Site Certificate

- b. Setbacks:



- (1) Project Boundaries - If the wind energy project encompasses more than one parcel neither the wind turbine setback to non-project boundaries nor the property line setbacks of the underlying zone in which the project is located are applicable to any internal property lines within the project area.
- (2) Non Project Boundaries - Wind turbines shall be set back from the property line of any abutting property not part of the project (non-project boundaries), the right-of-way of any dedicated road, and any above ground major utility facility line a minimum of 1.5 times the height of the wind turbine tower (i.e., full-height). Wind turbines shall be set back from any above ground minor utility facility line a minimum of 1.1 times the height of the wind turbine tower.
  - An applicant may request an adjustment to non-project boundaries using the Process described in 19.030(D)(1)(c)(3)(C) below.
  - Wind turbines shall meet the underlying zone setback requirement unless a variance is granted pursuant to either Chapter 6 or 7.

**Response:** Summit Ridge as proposed in Amendment #2 complies with these requirements.

(3) Resource Zone Dwellings

- a. Participating Landowners: Participating landowners are owners of legally placed resource dwellings on lands committed to the energy facility project by written contract. Participating landowners or applicant must provide evidence demonstrating that setbacks from dwellings will meet the DEQ noise standard and, prior to construction, provide evidence of any recorded noise easement obtained under OAR 345-035-0035.
- b. Non-Participating Landowners: For owners of legally placed resource dwellings who are not participating landowners in the energy facility project, wind turbine setbacks shall be 3,520 feet, measured from the centerline of the turbine to the edge of the dwelling, or the distance required to comply with the DEQ noise standard (OAR 345-035-0035), whichever is greater, unless a noise easement is obtained under OAR 340-035-0035.
- c. Adjustment Provision: Applicant may, as part of the wind energy permitting process, obtain an administrative adjustment to authorize a lesser setback from regulations addressing turbine setbacks from dwellings in resource zones. This may be authorized as part of the CUP pursuant to the Administrative Action process of Section 2.060(A) by the Director or designee and upon findings that demonstrate the following criteria are met:





- (1) The underlying landowner (or applicable road authority or utility as may be appropriate for non-project boundary setbacks) has consented, in writing, to an adjusted setback.
- (2) The proposed adjustment complies with DEQ noise standard.
- (3) The proposed adjustment will not force a significant change in accepted farm or forest practices on surrounding lands devoted to or available for farm or forest use.
- (4) The proposed adjustment will not unduly burden existing infrastructure (e.g., underground utilities or leach fields).
- (5) The proposed adjustment will not unduly impair safety in the area.
- (6) The proposed adjustment will minimize impacts to environmental resources (e.g., wetlands or identified EPDs).

**Response:** Summit Ridge as proposed in Amendment #2 complies with these requirements. Summit Ridge has also obtained noise waivers from all participating property owners.

- (4) Non-Resource Boundaries - Wind turbines shall be setback a minimum of 1 mile (5,280 feet) from all non-resource zoned property boundaries located outside of urban growth boundaries or urban reserves (as measured from the centerline of the turbine to the edge of the property boundary zoned for non-resource purposes, e.g., rural residential). Adjustment provisions do not apply to these non-resource zone property boundary setbacks.

**Response:** Summit Ridge as proposed in Amendment #2 complies with these requirements as it exceeds the one mile setback requirement from Non-Resource boundaries.

- (5) City Limits and Urban Areas – Wind turbines shall be setback 3/4 mile (3,960 feet) from the established city limit, urban growth boundary or urban reserve boundary of an incorporated city (whichever is the more restrictive applies) unless a lesser setback is granted through the adjustment process under this provision.

Adjustment Provision – Applicant may, as part of the wind energy permitting process, obtain an administrative adjustment to authorize a lesser setback from regulations addressing turbine setbacks from city limits, urban growth boundaries or urban reserves. This may be authorized as part of the CUP pursuant to the Administrative Action process of Section 2.060(A) by the Director or designee and upon findings that demonstrate the following criteria are met:

- (a) The incorporated city that would be affected has consented, in writing, to an adjusted setback.



- (b) The proposed adjustment complies with DEQ noise standard.
- (c) The proposed adjustment will not force a significant change in accepted farm or forest practices on surrounding lands devoted to or available for farm or forest use.
- (d) The proposed adjustment will not unduly burden existing infrastructure (e.g., underground utilities or leach fields).
- (e) The proposed adjustment will not unduly impair safety in the area.
- (f) The proposed adjustment will minimize impacts to environmental resources (e.g., wetlands or identified EPDs).

**Response:** Summit Ridge as proposed in Amendment #2 complies with these requirements as it exceeds the ¼ mile (3,960 feet) setback requirement from City Limits and Urban areas.

- (6) Downwind Properties - The establishment of a commercial wind energy facility consistent with the requirements of this ordinance shall not constitute wind access rights that are protected by this ordinance beyond the following setback requirement.

If a wind turbine 200' in height or taller has been previously placed on a downwind property that is not part of the project, the closest tower on the upwind property shall be set back a minimum of fifteen rotor diameters from the downwind tower location or any lesser distance agreed to by the downwind and upwind property owners or those authorized to act on their behalf.

**Response:** There are no downwind properties that will be impacted by Summit Ridge.

## 2. Solar Energy Facilities:

- a. Ground Leveling – The solar energy facility shall be designed and constructed to minimize ground leveling and to the extent reasonably practicable, limit ground leveling to those areas needed for effective solar energy collection.
- b. Misdirection of Solar Radiation - The solar energy facility shall be designed, constructed, and operated to prevent the misdirection of concentrated solar radiation onto nearby properties, public roadways or other areas accessible to the public, or mitigated accordingly.
- c. Glare - The solar energy facility shall be designed, constructed and operated such that any significant or prolonged glare is directed away from any nearby properties or public roadways, or mitigated accordingly.
- d. Cleaning Chemicals and Solvents - During operation of the solar energy facility, all





chemicals or solvents used to clean solar panels or heliostats shall be low in volatile organic compounds and to the extent reasonably practicable, the permit holder shall use recyclable or biodegradable products.

- e. Wildlife - Measures to reduce wildlife impact may include using suitable methods such as coloration or sound producing devices to discourage birds from entering areas of concentrated solar energy near solar-thermal mirrors or other devices that concentrate solar radiation.

**Response:** Section D- 2 is not applicable to Summit Ridge.

3. Cogeneration Facilities:

- a. The cogeneration facility would supply thermal energy to an existing or approved industrial or commercial use.
- b. Except as allowed in this section, an electric transmission line or natural gas or petroleum pipeline necessary for the cogeneration facility must be an upgrade to an existing transmission line or pipeline or must otherwise be constructed in an existing right-of-way or utility easement. If the proposed electric transmission line or natural gas or petroleum product pipeline necessary for the proposed cogeneration project is not an upgrade to an existing transmission line or pipeline, the transmission line or pipeline must comply with the standards in subsection 4 or 5 below.

**Response:** Section D-3 is not applicable to Summit Ridge.

4. Electrical Transmission Facilities:

- a. Use of Existing Routes/Co-Locating - The development uses available developed or approved road and utility rights-of-way, easements or transmission facilities that can accommodate the proposed facility. New routes are permitted if more adverse energy, environment, economic, and social consequences would result from using an existing route than development of other rights-of-way or easements.
- b. Adjacent to Existing Routes - To the extent practical, any part of the proposed transmission or distribution line outside an existing route would be adjacent to an existing public road or utility right-of way or easement.
- c. New Routes - If all or part of the proposed transmission line is outside an existing route or not adjacent to an existing route:

- (1) The proposed new route would serve an existing or proposed electric generation



project that is not adjacent to an existing right-of-way or easement, or

- (2) The proposed new route would result in less adverse energy, environmental, economic and social consequences than would result from using an existing route.

- d. Setbacks to dwellings - Unless sited within a public road right-of-way, new electrical transmission lines shall not be constructed closer than 500 feet to an existing dwelling without prior written approval of the owner. Said written approval shall be made part of the deed records to that property.

**Response:** Summit Ridge is proposing to use the same routing for transmission facilities as was approved in Amendment #1 of the original Site Certificate as there is no existing public road or utility right-of-way or easement that would be practical to access the desired BPA identified interconnection location. This routing would result in less adverse energy, environmental, economic and social consequences than would a result from using an existing route.

5. Natural Gas or Petroleum Product Pipelines:

- a. Use of Existing Routes - To the extent practical, the proposed pipeline would use developed or approved road and utility rights-of way or easements that can safely accommodate the proposed line.
- b. Adjacent to Existing Routes - To the extent practical, any part of the proposed pipeline outside an existing route would be adjacent to an existing public road or utility right-of-way or easement.
- c. New Routes - If all of part of the proposed pipeline is outside an existing route or not adjacent to an existing route:
  - (1) The proposed new route would serve an existing or proposed electric generation project that is not adjacent to an existing right-of-way or easement, or
  - (2) The proposed new route would result in less adverse energy, environmental, economic and social consequences than would result from using an existing route.
- d. Stream crossings: If the proposed pipeline would cross a stream or river that is important habitat for a state or federally-listed threatened or endangered species, the permit holder must use a crossing technique or method approved by the Oregon Department of Fish and Wildlife.





**Response:** This section not applicable to Summit Ridge.



# **ATTACHMENT 1**

## **EXHIBITS A, D and M**





**Attachment 1 - Exhibit A – Applicant Information**

**OAR 345-021-0010(1)(a)** Information about the applicant and participating persons, including:

(A) The name and address of the applicant including all co-owners of the proposed facility, the name, (A) mailing address, email address and telephone number of the contact person for the application, and if there is a contact person other than the applicant, the name, title, mailing address, email address and telephone number of that person.

LotusWorks-Summit Ridge I, LLC (name to be changed to Summit Ridge Wind, LLC)  
9611 NE 117<sup>th</sup> Ave  
Suite 2840  
Vancouver, WA 98662  
ATTN: Steven Ostrowski  
(360) 737-9692

(B) The contact name, mailing address, email address and telephone number of all participating persons, other than individuals, including but not limited to any parent corporation of the applicant, persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and, if known, other persons upon whom the applicant will rely in meeting any facility standard adopted by the Council.

Summit Ridge Wind Holdings, LLC  
9611 NE 117<sup>th</sup> Ave  
Suite 2840  
Vancouver, WA 98662  
ATTN: Steven Ostrowski  
(360) 737-9692

The applicant will not rely on any third-party permits or approvals to accomplish the project.

**OAR 345-021-0010(1)(a)(H)** If the applicant is a limited liability company, it shall give:

(i) The full name, official designation, mailing address, email address and telephone number of the officer responsible for submitting the application;

Summit Ridge Wind Holdings, LLC  
9611 NE 117<sup>th</sup> Ave  
Suite 2840  
Vancouver, WA 98662  
ATTN: Steven Ostrowski



(360) 737-9692

(ii) The date and place of its formation;

**Response:** State of Oregon, January 29, 2016

(iii) A copy of its articles of organization and its authorization for submitting the application; and

**Response:** Articles of Organization and authorization for submitting the application included as Attachment A-1

(iv) In the case of a limited liability company not registered in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.

**Response:** Not Applicable





## **ATTACHMENT A1**

### **ARTICLES OF INCORPORATION**

- LOTUSWORKS-SUMMIT RIDGE I, LLC
- SUMMIT RIDGE WIND HOLDINGS, LLC
- WRITTEN CONSENT OF SOLE MEMBER LOTUSWORKS-SUMMIT RIDGE I, LLC

# State of Oregon

OFFICE OF THE SECRETARY OF STATE  
Corporation Division

**Certified Copy 641T578V1**

*I, JEANNE P. ATKINS, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:*

*That the attached*

Document File

*for*

*LOTUSWORKS - SUMMIT RIDGE I, LLC*

*is a true copy of the original document(s).*

*In Testimony Whereof, I have hereunto set  
my hand and affixed hereto the Seal of the  
State of Oregon.*



*Jeanne P. Atkins*

JEANNE P. ATKINS, SECRETARY OF STATE

2/2/2016





Phone: (503) 986-2200  
Fax: (503) 378-4381

Articles of Organization—Limited Liability Company

Secretary of State  
Corporation Division  
255 Capitol St. NE, Suite 151  
Salem, OR 97310-1327  
FilingInOregon.com

FILED

AUG 04 2008

REGISTRY NUMBER: 538378-95

For office use only

OREGON  
SECRETARY OF STATE

In accordance with Oregon Revised Statute 192.410-192.490, all information on this form is publicly available, including addresses. We must release this information to all parties upon request and it will be posted on our website.

For office use only

Please Type or Print Legibly in Black Ink. Attach Additional Sheet if Necessary.

1) NAME OF LIMITED LIABILITY COMPANY (Must contain the words "Limited Liability Company" or the abbreviations "LLC" or "L.L.C.")

LotusWorks - Summit Ridge I, LLC

2) DURATION (Please check one.)

☐ Latest date upon which the Limited Liability Company is to dissolve is \_\_\_\_\_

☒ Duration shall be perpetual.

3) NAME OF THE PERSON WHO WILL ACCEPT LEGAL SERVICE FOR THIS BUSINESS (INITIAL REGISTERED AGENT)

Ball Janik Service Company

4) REGISTERED AGENT'S PUBLICLY AVAILABLE ADDRESS (Must be an Oregon Street Address, which is identical to the registered agent's business office.)

101 SW Main Street, Suite 1100

Portland, OR 97204-3219

5) ADDRESS WHERE THE DIVISION MAY MAIL NOTICES

9611 NE 117th Avenue, Suite 2830

Vancouver, WA 98662

6) NAME AND ADDRESS OF EACH PERSON WHO IS FORMING THIS BUSINESS (ORGANIZER)

Jeffrey S. Perry

c/o BALL JANIK LLP

101 SW Main Street, Suite 1100

Portland, OR 97204-3219

7) IF THIS LIMITED LIABILITY COMPANY IS NOT MEMBER MANAGED, CHECK ONE BOX BELOW.

☐ This limited liability company is managed by a single manager.

☐ This limited liability company is managed by multiple manager(s).

8) IF RENDERING A LICENSED PROFESSIONAL SERVICE OR SERVICES, DESCRIBE THE SERVICE(S) BEING RENDERED.

N/A

9) OPTIONAL PROVISIONS (Attach a separate sheet if necessary.) ☒

(OPTIONAL) LIST MEMBERS AND/OR MANAGERS NAMES AND ADDRESSES

10) OWNERS (MEMBERS) (Names and Street address)

11) MANAGERS (MANAGERS) (Names and Street address)

12) EXECUTION/SIGNATURE OF THE PERSON WHO IS FORMING THIS BUSINESS (ORGANIZER) (The title for each signer must be "Organizer.")

By my signature, I declare as an authorized authority, that this filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment or both.

Signature

Printed Name

Title

Jeffrey S. Perry

Jeffrey S. Perry

Organizer

Organizer

Organizer

Organizer

FEES

Required Processing Fee \$50  
Confirmation Copy (Optional) \$5

Processing Fees are nonrefundable.

Please make check payable to "Corporation Division."

NOTE:

Fees may be paid with VISA or MasterCard. The card number and expiration date should be submitted on a separate sheet for your protection.

13) CONTACT NAME (To resolve questions with this filing.)

DAYTIME PHONE NUMBER (Include area code.)

Jane K. Gregory - Ball Janik LLP

(503) 228-2525

VOID IF ALTERED OR ERASED

VOID IF ALTERED OR ERASED

538378-95

Attachment A  
to  
Articles of Organization  
of  
LotusWorks - Summit Ridge I, LLC

Article 9      INDEMNIFICATION AND EXCULPATION OF LIABILITY

A.      The Company shall indemnify to the fullest extent permitted by law any person who is made or threatened to be made a party to, witness in, or otherwise involved in, any action, suit or proceeding, whether civil, criminal, administrative, investigative, or otherwise (including an action, suit or proceeding by or in the right of the Company) by reason of the fact that the person is or was a manager, director or officer of the Company or a fiduciary within the meaning of the Employee Retirement Income Security Act of 1974 with respect to any employee benefit plan of the Company, or serves or served at the request of the Company as a director, manager, officer, employee or agent or as a fiduciary of an employee benefit plan, of another limited liability company, corporation, partnership, joint venture, trust, or other enterprise. Any indemnification provided pursuant to this Article 9.A will not be exclusive of any rights to which the person indemnified may otherwise be entitled under any provision of these articles of organization, operating agreement, other agreement, statute, policy of insurance, vote of members, directors or managers, or otherwise.

For purposes of this Article 9.A, the term "to the fullest extent permitted by law" includes, without limitation, to the fullest extent permitted by any provision in the Oregon Limited Liability Company Act that authorizes a limited liability company to provide indemnification, by agreement, article, operating agreement or otherwise, in addition to the permissible indemnification specifically authorized and set forth in the Oregon Limited Liability Company Act.

B.      To the fullest extent permitted by law, no manager or director of the Company will be personally liable to the Company or its members for monetary damages for conduct as a manager or director. Without limiting the generality of the preceding, if the Oregon Revised Statutes are amended after this Article 9.B becomes effective to authorize action further eliminating or limiting the personal liability of members or managers of the Company, then the liability of the members or managers of the Company will be eliminated or limited to the fullest extent permitted by the Oregon Revised Statutes, as so amended. No amendment or repeal of this Article 9.B, nor the adoption of any provision of these Articles of Organization inconsistent with this Article 9.B, nor a change in the law, will adversely affect any right or protection that is based upon this Article 9.B and pertains to conduct that occurred prior to the time of such amendment, repeal, adoption or change. No change in the law will reduce or eliminate the rights and protections set forth in this Article 9.B unless the change in the law specifically requires such reduction or elimination.



# State of Oregon

OFFICE OF THE SECRETARY OF STATE  
Corporation Division

**Certified Copy 620L441P3**

*I, JEANNE P. ATKINS, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:*

*That the attached*

Document File

*for*

SUMMIT RIDGE WIND HOLDINGS, LLC

*is a true copy of the original document(s).*

*In Testimony Whereof, I have hereunto set  
my hand and affixed hereto the Seal of the  
State of Oregon.*



*Jeanne P. Atkins*

JEANNE P. ATKINS, SECRETARY OF STATE

2/2/2016

1183149-96

FILED

JAN 29 2016

OREGON  
SECRETARY OF STATE

ARTICLES OF ORGANIZATION  
OF  
SUMMIT RIDGE WIND HOLDINGS, LLC

The undersigned individual of the age of eighteen years or more, acting as organizer under the Oregon Limited Liability Company Act (the "Act"), adopts the following articles of organization:

I.

The name of the limited liability company is Summit Ridge Wind Holdings, LLC.

II.

The duration of the limited liability company is perpetual.

III.

The name of the initial registered agent is AW Services, Inc.

IV.

The address of the initial registered office of the limited liability company is c/o Ater Wynne LLP, 1331 NW Lovejoy Street, Suite 900, Portland, Oregon 97209. The Corporation Division may mail notices to the registered agent's address.

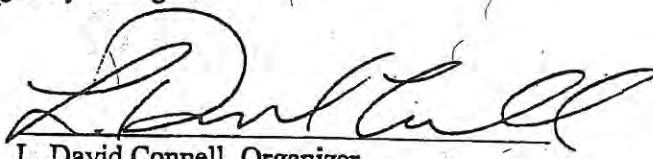
V.

The name and address of the organizer is L. David Connell, Ater Wynne LLP, 1331 NW Lovejoy Street, Suite 900, Portland, Oregon 97209.

VI.

The limited liability company will be managed by managers.

Dated: January 29, 2016.

  
L. David Connell, Organizer

Person to Contact about this Filing:  
Joy M. Aikin  
503-226-1191

SUMMIT RIDGE WIND HOLDINGS, LLC



118314996-16738260

NEWORG

2443992/1/JMA/107855-0002

VOID WITHOUT WATERMARK OR IF ALTERED OR ERASED

VOID IF ALTERED OR ERASED

VOID IF ALTERED OR ERASED



**WRITTEN CONSENT  
OF THE SOLE MEMBER  
OF  
LOTUSWORKS - SUMMIT RIDGE I, LLC**

The undersigned, constituting the sole member of LotusWorks – Summit Ridge I, LLC, an Oregon limited liability company (the “**Company**”), hereby takes the following action and adopts the following resolution without a meeting:


***Approval to Develop Project and File Application with Energy Facility Siting Council***

1. RESOLVED, that the sole member of the Company does hereby authorize and direct Steve Ostrowski, as President of the Company, to make all necessary filings with the Energy Facility Siting Council of the State of Oregon to amend the Site Certificate relating to the Summit Ridge Wind Farm proposed in Wasco County, Oregon (the “**Project**”), and to take any and all such further actions as he may deem necessary or appropriate to develop, finance and operate the Project.

DATED and EFFECTIVE as of this 2<sup>nd</sup> day of February, 2016.

***Member:***

Summit Ridge Wind Holdings, LLC

By:   
Steven A. Ostrowski, Jr., Manager



### **Attachment 1 - Exhibit D – Organization, Managerial and Technical Expertise**

**OAR 345-021-0010(1)(d)** Information about the organizational expertise of the applicant to construct and operate the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0010, including:

(A) The applicant's previous experience, if any, in constructing and operating similar facilities.

**Response:** Summit Ridge Wind Holdings, LLC as a new company has no prior direct experience as an entity building projects such as Summit Ridge. However the management team of Summit Ridge Wind Holdings has the combined experience of delivering more than 10,000 MWS of wind project combined experience. Steve Ostrowski, the member manager of Summit Ridge Wind Holdings was the President of LotusWorks-Summit Ridge I, LLC since the projects inception.

(B) The qualifications of the applicant's personnel who will be responsible for constructing and operating the facility, to the extent that the identities of such personnel are known when the application is submitted.

**Response: Steven Ostrowski** - Mr. Ostrowski brings nearly four decades of experience in heavy industry with the vast majority of that time focused in the energy industry. Over the course of his career Mr. Ostrowski has participated in the development and construction of over 10,000 MW's of energy projects across the US. The first 15 years of Mr. Ostrowski's career was spent in the nuclear industry where he served in various capacities including Project Manager for both the mechanical and Instrumentation and Controls installation contracts. The next ten years was spent primarily developing and constructing co-gen facilities, both as peaking and base load facilities and retrofitting control systems for utility sized coal fired power plants. Prior to Summit Ridge Wind Holdings, LLC, Mr. Ostrowski led the Construction Management group of LotusWorks. At LotusWorks Mr. Ostrowski oversaw the development and construction of over 2000 MW's of energy projects including 1000 MW's of wind projects in the Pacific Northwest. In addition Mr. Ostrowski has lead the development effort for the LotusWorks-Summit Ridge I Wind Farm located in Wasco County, Oregon. Mr. Ostrowski received a Bachelor of Science Degree in Business Management from Elmhurst College in Elmhurst, Illinois and holds an Electrical General Administrator's License in the State of Washington.

**Scott Nelson** (Independent Contractor) - Mr. Nelson has approximately twenty-three years of development, utility negotiations, construction, financing, and operations experience. He has been a part of over 5,000 MW's of successfully constructed wind and solar projects throughout the world. Mr. Nelson negotiated multiple frame agreements with wind turbine manufacturers, including but not limited to GE, Vestas, & Repower as well as negotiated international frame agreement with Vestas for EDF international. Prior to Summit Ridge Wind Holdings, he worked as the Vice president at enXco (EDF





renewable) for approximately 19 years. During this time, Mr. Nelson was instrumental in the growth of enXco, turning an operations company into one of the strongest developers in the U.S. After successful tenure in the accounting/finance group, Mr. Nelson was promoted to lead the wind and solar business groups at enXco and ultimately became a Vice President at the global energy company. Mr. Nelson began his renewable career as part of the accounting and finance team at enXco (known as "Difko") which managed multiple projects in the U.S. for Danish investment funds. Difko eventually became enXco which was sold to EDF in 2002. Mr. Nelson successfully completed the Certified Management Accountant (CMA) license program. Mr. Nelson received a Bachelor of Science in Accounting from Hawaii Pacific University in Honolulu, Hawaii.

**Josh Corbin** (Independent Contractor) - Mr. Corbin brings over 20 years of experience managing large industrial and commercial projects. In addition, Mr. Corbin has overseen or been involved in the installation and operations of over 1500 MWs of large commercial and utility PV and Wind systems in various capacities from project development, construction, and commissioning to operation of the facilities. Prior to Summit Ridge Wind Holdings, Mr. Corbin has acted as Owners Representative and Quality Assurance/Quality Control for some of the world's largest multinational energy producers including; British Petroleum, Shell, EnXco, Duke Energy, and AES.. In his most recent engagement Mr. Corbin focused primarily on solar as Head of Projects and Engineering at SolarWorld, the nation's largest solar module manufacture. Mr. Corbin is experienced in negotiating PPA's, EPC's and financial solutions and can provide all levels of service and support for large scale projects

**Bob Young** (Independent Contractor) – Mr. Young is an experienced power engineer. He has been plant manager and general manager of in the US and has completed power plant start-up services for several plants Mr. Young provided Construction Management support to over 1000 MWs of wind projects in the Pacific Northwest. He currently provides asset management oversight to the White Creek and Harvest Wind wind farms reporting directly the project owners.

(C) The qualifications of any architect, engineer, major component vendor, or prime contractor upon whom the applicant will rely in constructing and operating the facility, to the extent that the identities of such persons are known when the application is submitted.

**Response:** The project's engineering, construction and turbine supplier have yet been selected. However in each instance a short list of qualified firms has been identified and pre-qualified.

(D) The past performance of the applicant, including but not limited to the number and severity of any regulatory citations in constructing or operating a facility, type of equipment, or process similar to the proposed facility.



**Response:** The entity has received no regulatory citations in constructing or operating similar facilities

(E) If the applicant has no previous experience in constructing or operating similar facilities and has not identified a prime contractor for construction or operation of the proposed facility, other evidence that the applicant can successfully construct and operate the proposed facility. The applicant may include, as evidence, a warranty that it will, through contracts, secure the necessary expertise.

**Response:** Not Applicable

(F) 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, a description of the program.

**Response:** Not Applicable

(G) If the applicant relies on mitigation to demonstrate compliance with any standards of Division 22 or 24 of this chapter, evidence that the applicant can successfully complete such proposed mitigation, including past experience with other projects and the qualifications and experience of personnel upon whom the applicant will rely, to the extent that the identities of such persons are known at the date of submittal.

**Response:** Summit Ridge Wind Holdings as an entity does not have previous experience to demonstrate compliance with any standards of Division 22 or 24 of this chapter. However both Mr. Ostrowski and Mr. Young while employees at LotusWorks have previous experience with mitigation issues. In particular they were responsible for implementing mitigation issues for the Harvest Wind Project in Washington State where the following mitigation measures were implemented: native plant revegetation and reseeded of riparian and upland habitats: and installation of protective fencing in revegetation areas to minimize cattle intrusion, decrease vehicle traffic, and increase plant survival.





## **Attachment 1 - Exhibit M – Financial Analysis**

**OAR 345-021-0010(1)(M)** Information about the applicant's financial capability, providing evidence to support a finding by the Council as required by OAR 345-022-0050(2). Nothing in this subsection shall require the disclosure of information or records protected from public disclosure by any provision of state or federal law. The applicant shall include:

(A) An opinion or opinions from legal counsel stating that, to counsel's best knowledge, the applicant has the legal authority to construct and operate the facility without violating its bond indenture provisions, articles of incorporation, common stock covenants, or similar agreements.

**Response:** The legal opinion is attached as M-1

(B) The type and amount of the applicant's proposed bond or letter of credit to meet the requirements of OAR 345-022-0050.

**Response:** The Applicant proposes to, prior to construction of the Facility; obtain a bond or letter or credit in an amount up to \$9,000,000 to meet the financial security instrument. The actual value of the instrument will be determined upon finalization of design.

(C) Evidence that the applicant has a reasonable likelihood of obtaining the proposed bond or letter of credit in the amount proposed in paragraph (B), before beginning construction of the facility.

**Response:** A comfort letter from Heffernan Insurance Brokers is attached as M-2; it expresses interest in providing a bond in the amount of up to \$9,000,000, subject to their due diligence requirements.



## **ATTACHMENT M1**

**ATER WYNNE LEGAL OPINION**



February 10, 2016

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

RE: LotusWorks – Summit Ridge I, LLC Second Amended Site Certificate for the  
Summit Ridge Wind Farm (“**Amended Site Certificate**”)

Ladies and Gentlemen:

We have been engaged as counsel to LotusWorks – Summit Ridge I, LLC, an Oregon limited liability company (the “**Company**”) in connection with the Summit Ridge Wind Farm (the “**Project**”). This opinion is provided to the Oregon Department of Energy in connection with the issuance of the Amended Site Certificate.

For purposes of our opinion, we have examined only the following:

- A. Certified copy of the Company’s Articles of Organization issued by the Secretary of State of the State of Oregon;
- B. The Company’s First Amended and Restated Operating Agreement, dated as of February 2, 2016 (“**Operating Agreement**”); and
- C. Certificate of the Company dated as of even date herewith, a copy of which is attached.

In examining certificates A, B and C above, we have assumed, without investigation, the genuineness of all signatures, the accuracy of all statements contained therein, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, and the completeness of all documents furnished to us. As to various questions of fact relevant to this opinion, we have relied solely on the certificates listed as A, B and C above.

Whenever a statement herein is qualified by the expressions “to our knowledge,” “known to us,” or other similar phrases, it is intended to indicate that, during the course of our representation of the Company, no information that would give us actual knowledge of the inaccuracy of such statement has come to the attention of those attorneys in this firm who have rendered legal services to the Company, but beyond that we have made no investigation.

We disclaim any responsibility for any changes that may have occurred with respect to the status of the Company from and after the date of the certificates mentioned above. We also

Oregon Department of Energy  
February 10, 2016  
Page 2

assume that the Certificate of the Oregon Secretary of State and the public records upon which it is based are accurate and complete.

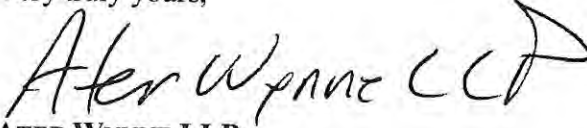
Except to the extent the information constitutes a statement, directly or in practical effect, of any legal conclusion at issue, we have relied without investigation or analysis upon the facts contained in the certificates mentioned above. We have made no independent investigation with regard to such facts.

On the basis of the foregoing, and subject to the limitations set forth above and below, to our knowledge, we are of the opinion that, subject to the Company meeting all applicable federal, state and local laws (including all rules and regulations promulgated thereunder), the Company has the legal authority to construct and operate the Project without violating the Company's Articles of Organization, Operating Agreement, bond indenture provisions, membership interest covenants, or similar agreements.

We are members of the Bar of the State of Oregon and our opinions expressed herein are limited to the laws of the State of Oregon.

The opinion is provided to you as a legal opinion only, and not as a guaranty or warranty of the matters discussed herein. The opinions expressed are rendered as of the date hereof, and we disclaim any undertaking or obligation to advise you of any changes that may occur after the date hereof which would affect this opinion. This opinion is intended solely for the benefit of the Oregon Department of Energy in connection with the issuance of the Amended Site Certificate.

Very truly yours,

  
ATER WYNNE LLP



## CERTIFICATE OF LOTUSWORKS - SUMMIT RIDGE I, LLC

This Certificate of LotusWorks - Summit Ridge I, LLC is made the 10<sup>th</sup> day of February, 2016, by LotusWorks - Summit Ridge I, LLC, an Oregon limited liability company ("**Company**") for reliance upon by Ater Wynne LLP ("**Ater Wynne**") in connection with the issuance of an opinion letter dated of even date herewith (the "**Opinion Letter**") by Ater Wynne as part of Company's application to the Energy Facility Siting Council of the State of Oregon Department of Energy for an amendment to the Company's Site Certificate relating to a wind facility proposed in Wasco County, Oregon (the "**Project**"). In connection with the Opinion Letter, Company hereby certifies to Ater Wynne for its reliance, the truth, accuracy and completeness of the following matters:

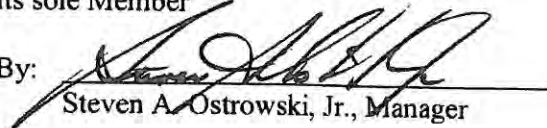
1. The First Amended and Restated Operating Agreement of Company dated February 2, 2016 (the "**Operating Agreement**") and the Articles of Organization of Company dated August 4, 2008 ("**Articles of Organization**") are the only documents creating or governing the internal affairs of Company or authorizing Company's construction and operation of the Project and the Operating Agreement and Articles of Organization have not been amended or modified.

2. Company is not subject to any (i) bond indenture provisions or (ii) membership interest covenants other than those set forth in the Articles of Organization or the Operating Agreement.

IN WITNESS WHEREOF, Company has executed this Certificate effective as of the date set forth above.

### LOTUSWORKS - SUMMIT RIDGE I, LLC

By: Summit Ridge Wind Holdings, LLC  
its sole Member

By:   
Steven A. Ostrowski, Jr., Manager



## **ATTACHMENT M2**

**HEFFERNAN INSURANCE LETTER OF FINANCIAL SECURITY**





HEFFERNAN INSURANCE BROKERS

A Member of the Heffernan Group

February 1, 2016

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

**Re: Summit Ridge Wind Farm  
Summit Ridge Wind Holdings, LLC**

Dear Sir or Ma'am:

Our client, Summit Ridge Wind Holdings, LLC (SRWH) has asked us to write to you about their surety credit for the Summit Ridge Wind Farm project. Our understanding is that in connection with this project, the State of Oregon (together with its agencies and instrumentalities at any level), may elect to require a bond. This bond will have a maximum face amount of \$9,000,000 and serve to meet the required financial security instrument.

We have reviewed SRWH's proposal for the project and are confident that they will be able to obtain said performance bond. These bonds have a term of one year with annual renewals.

Should you decide to request bonds from SRWH, their surety will give favorable consideration after reviewing the contract terms, plans and specifications, proposed bond forms and other pertinent factors at that time. You understand, of course, that any request for bonds is a matter between SRWH and its surety.

SRWH is a valued client of Heffernan Insurance Brokers and carries our highest recommendation. Should you have additional questions, please don't hesitate to contact me.

Sincerely,

Susan G. Brodahl  
Vice President



## **ATTACHMENT 2**

**DAVID EVANS & ASSOCIATES**

### **VISUAL ANALYSIS OF PROPOSED ADDITIONAL TURBINE OPTION**





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## MEMORANDUM

DATE: January 29, 2016  
TO: Steve Ostrowski  
LotusWorks – Summit Ridge I, LLC  
Todd Cornett  
Oregon Department of Energy  
FROM: Sean P. Sullivan, LA  
SUBJECT: Summit Ridge Wind Farm-Evaluation of Visual Changes  
PROJECT: LRNG0000-0001  
COPIES: File

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### INTRODUCTION

On August 7, 2015 Oregon Department of Energy (ODOE) issued the Final Order for Amendment 1 to the Site Certificate for the Summit Ridge Wind Farm in Wasco County, Oregon to allow for a different turbine component and layout than authorized in the original Site Certificate. The amendment authorized “Alternative B” which features 72 turbines with 91m hubs and 122m diameter rotors (Figure C-2B). LotusWorks–Summit Ridge I, LLC (LWSR I) is now considering “Alternative C” which features 64 turbines with 84m hubs and 132m diameter rotors (Figure C-2C). LWSR I wishes to evaluate the potential changes in visual impacts to Protected Areas (Exhibit L), Scenic Resources (Exhibit R), and Recreation (Exhibit T) that may result from Alternative C.

In order to evaluate the potential changes in visual impacts to Protected Areas (Exhibit L), Scenic and Aesthetic Values (Exhibit R), and Recreational Opportunities (Exhibit T), David Evans and Associates, Inc. (DEA) replicated the visual analyses described in the Application for Site Certificate (ASC) and in the development of Amendment 1 and RAI-1 to Amendment 1. Results of the visibility analysis for Alternative C has been compared to Alternative B to determine the relative amount of change in visual impact to the resources identified in Exhibits L, R, and T. A discussion of the changes in turbine visibility comparing the two alternatives follows. Figures and visual simulations are attached.

### METHODS

A visibility analysis was performed for Alternative C using Geographic Information Systems (GIS) and U.S. Geological Survey (USGS) digital elevation models (DEM), following the same methodology described in Exhibit R in the ASC. The results for Alternatives B and C are shown in Figures 1 and 2 for Protected Areas and Figures 4 and 5 for Scenic and Aesthetic Values, respectively. Analyses were not performed for Recreational Opportunities (i.e., Exhibit T) because as with the ASC and Amendment 1, the resources discussed in Exhibit T are also evaluated in Exhibits L and R. Cottonwood Canyon State Park was created in September 2013 and is located within the analysis area for Protected Areas; it was included in this analysis.

To clearly illustrate the net changes in visibility patterns between the two alternatives, comparative analyses were performed to determine where turbines would be newly visible, where turbines would no longer be visible, and where visibility would remain relatively unchanged. The results of these analyses are shown on Figure 3 for Protected Areas and Figures 6 for Scenic and Aesthetic Values. In these figures, blue shading represents areas where any portion of any turbine(s) would be visible in Alternative B, but would not be visible in Alternative C (i.e., a decrease in visibility). Red shading illustrates areas where any portion of any turbine(s) would be visible in the Alternative C, but would not be visible in Alternative B (i.e., an increase in visibility). Yellow shading identifies areas where visibility would remain about the same.

Visual simulations for Alternative C were prepared for each viewpoint location provided in the original ASC and compared against the Alternative B simulations developed for Amendment 1. The simulations provide a qualitative comparison of what could be seen from a given point in the landscape. As was the case with the original simulations, the view height was set to represent a person's eye level (about five foot six inches). The new simulations, shown alongside the Alternative B simulations, are shown in Figures 7 through 11.

Field studies were not conducted to verify the modeling results. As with the original analyses, the models do not account for vegetation, which would likely screen views of the project from the forested and riparian habitats present in the analysis area.

## **FINDINGS AND CONCLUSIONS**

The results of the analyses are summarized below for resources studied in Exhibits L, R, and T.

### **Exhibit L – Protected Areas**

Figure 3 illustrates the change in visibility for Protected Areas. The results indicate that visibility for Alternative C would remain about the same or slightly less than Alternative B. The reduction in visibility becomes intuitive when one considers two factors. First, the ground-to-tip distance for the Alternative B turbines is 152m; the distance for Alternative C turbines is 150m. Second, Alternative C includes eight fewer turbines than Alternative B.

As shown in the simulations (Figures 7-11), there would be a slight reduction in visibility from the Deschutes River. It should be noted that no turbines would be visible from Viewpoints 4 and 5 for either alternative (turbines were visible from these viewpoints in the original Site Certificate), and no turbines would be visible from Viewpoint 1 in Alternative C whereas one turbine would be visible in Alternative B. Visibility from Viewpoints 2 and 3 would remain about the same.

### **Exhibit R – Scenic and Aesthetic Values**

Figure 6 illustrates the change in visibility for Scenic and Aesthetic Values. The results indicate that visibility for Alternative C would remain about the same or slightly less than Alternative B for the same reasons explained for Protected Areas. Specifically, the greatest concentration of net difference - that is, red or blue shading - would occur within the Deschutes River corridor.

### **Exhibit T – Recreational Opportunities**

Figures for Exhibit T were not prepared because the resources identified in Exhibit T are considered in Exhibits L and R. Important recreational opportunities include: Deschutes River Corridor; Mack's Canyon Archaeological and Recreational Site; Lower Deschutes Back Country Byway; and Wasco County Scenic Highway Segment.



The Mack's Canyon Site and Lower Deschutes Back Country Byway occur within the Deschutes River Corridor and are included in Exhibits L and R. The Wasco County Scenic Highway Segment is included in Exhibit L.

### **Conclusions**

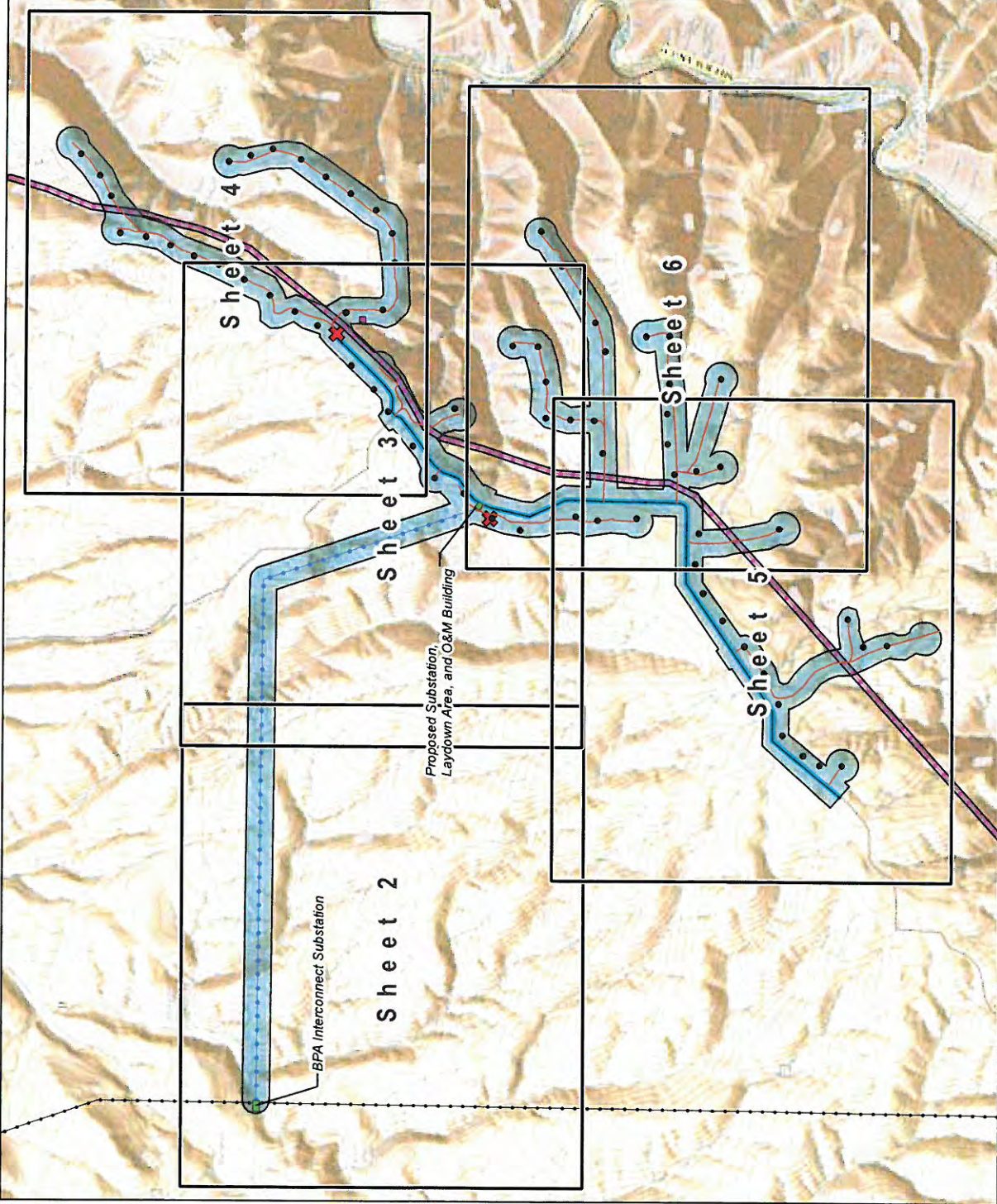
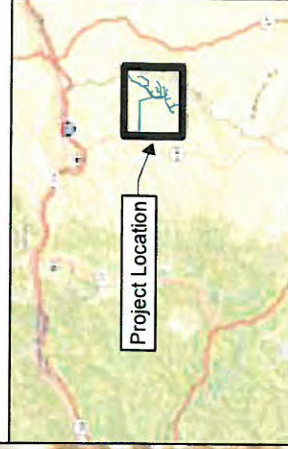
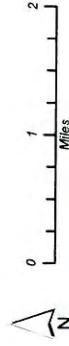
Based on these findings, potential visibility of turbines proposed in Alternative C seen from identified Protected Areas, Scenic and Aesthetic Values, and Recreational Opportunities would be about the same or slightly less when compared to Alternative B. Therefore, it would be reasonable for ODOE to accept the changes in turbine layout proposed by LWSR I without requiring additional analysis of resources studied under Exhibits L, R, and T.

### **Attachments/Enclosures:**

Figures C-2B, C-2C  
Figures 1 through 11

# **Figure C-2B** **Project Layout - Alternative B** **Index Map - Sheet 1 of 6**

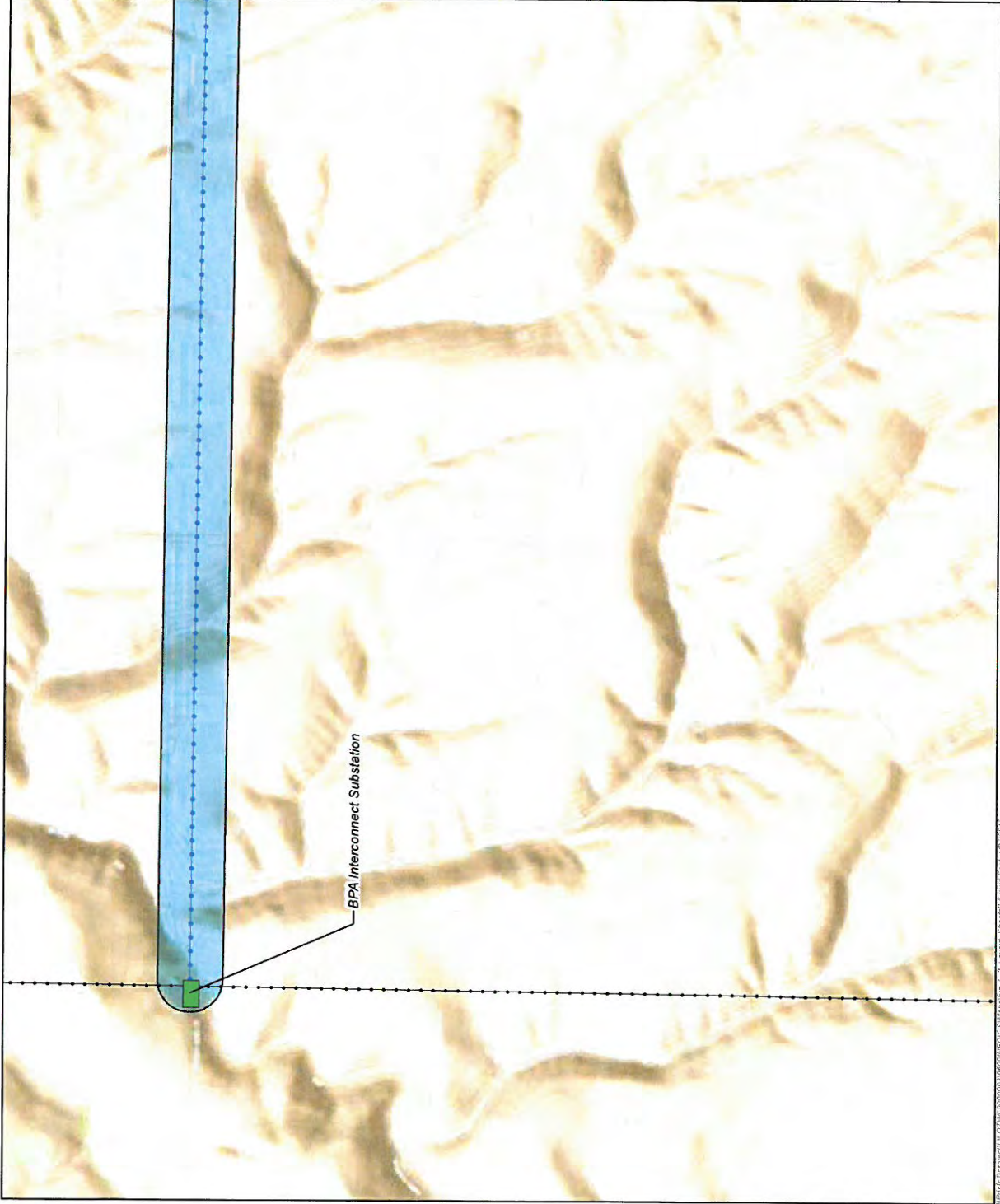
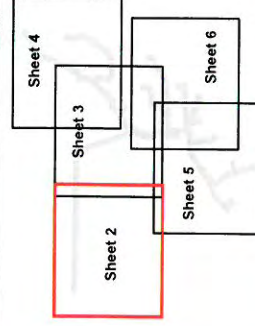
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  - Site Boundary
  - BPA Corridor Easement (150 ft)
  - Proposed Access Road
  - Existing Road to be Improved
  - Proposed Transmission Route
  - Bonneville 500 KV Line
  - Bonneville 230 KV Line
  - Proposed Substation/O&M Facility
  - Proposed Batch Plant Location
  - Proposed Laydown Areas
  - Proposed Met Tower Location





**Figure C-2B**  
**Project Layout - Alternative B**  
Sheet 2 of 6

- Legend**
- Proposed Turbine Location
  - Site Boundary
  - BPA Corridor Easement (150 ft)
  - Proposed Access Road
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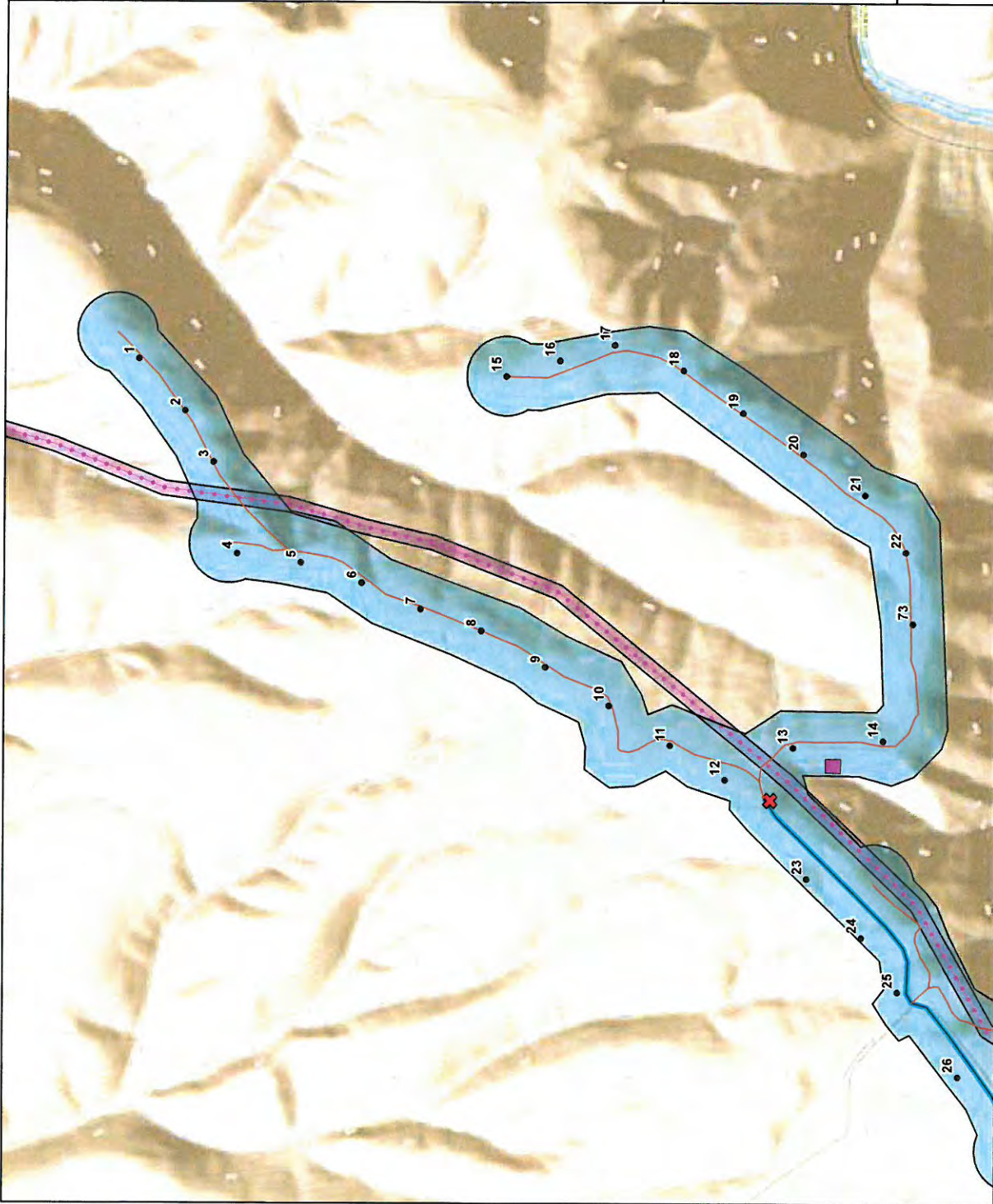
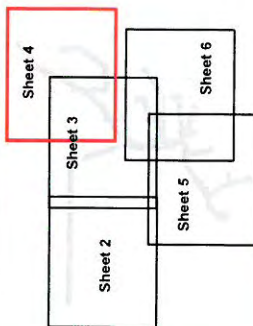
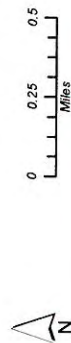




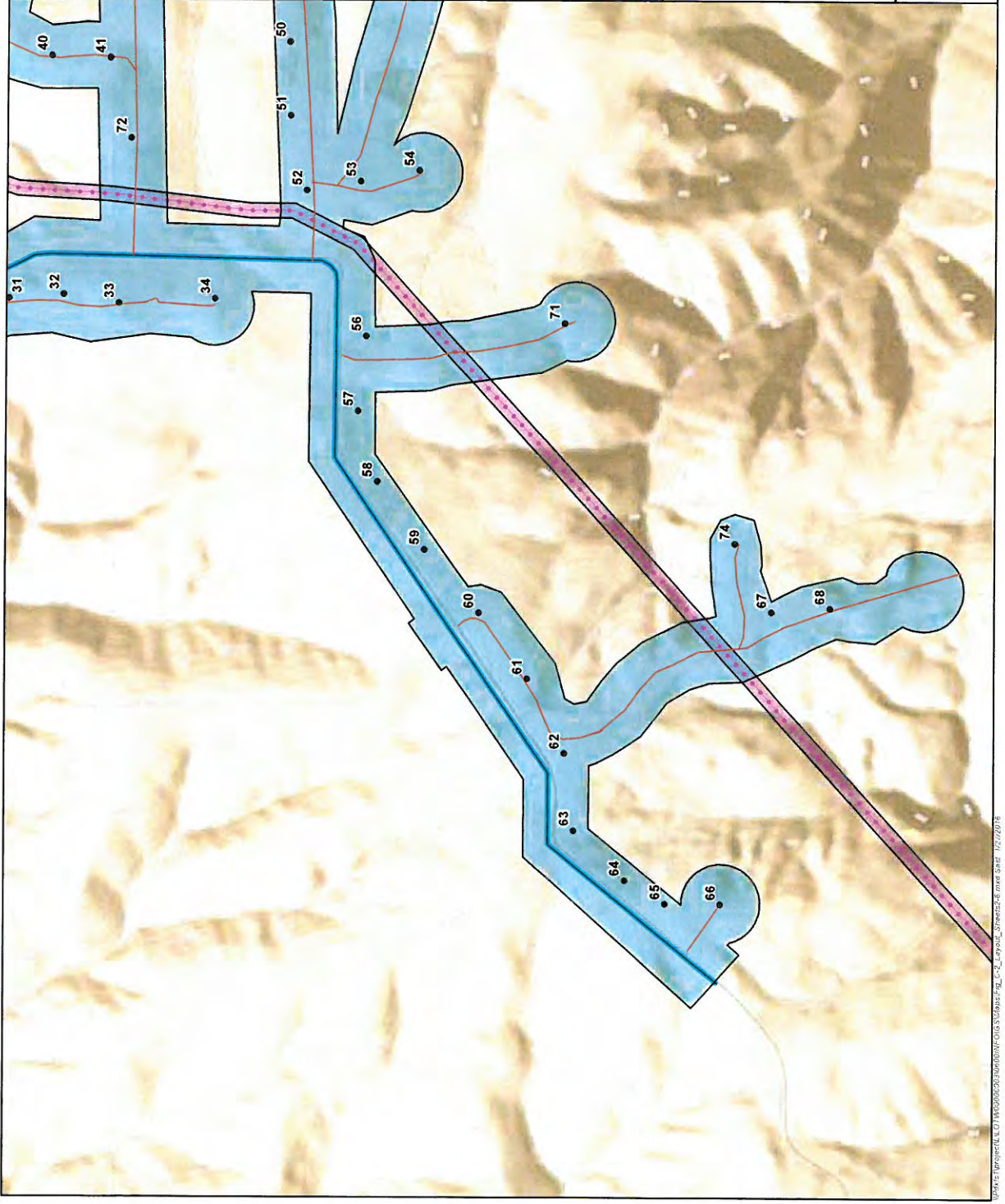


**Figure C-2B**  
**Project Layout - Alternative B**  
 Sheet 4 of 6

- Legend**
- Proposed Turbine Location
  - Site Boundary
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  - Proposed Access Road
  - Existing Road to be Improved
  - Proposed Transmission Route
  - Bonneville 500KV Line
  - Bonneville 230 KV Line
  - Proposed Substation/O&M Facility
  - Proposed Batch Plant Location
  - Proposed Laydown Area
  - ✗ Proposed Met Tower Location



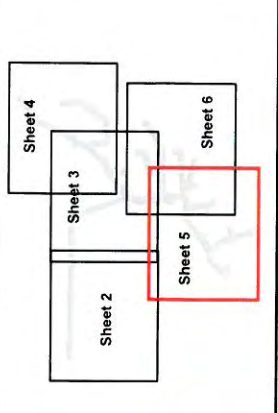




LotusWorks - Summit Ridge I, LLC

**Figure C-2B**  
**Project Layout - Alternative B**  
Sheet 5 of 6

- Legend**
- Proposed Turbine Location
  - Site Boundary
  - BPA Corridor Easement (150 ft)
  - Proposed Access Road
  - Existing Road to be Improved
  - Proposed Transmission Route
  - Bonneville 500kV Line
  - Bonneville 230 KV Line
  - Proposed Substation/O&M Facility
  - Proposed Batch Plant Location
  - Proposed Laydown Area
  - Proposed Met Tower Location

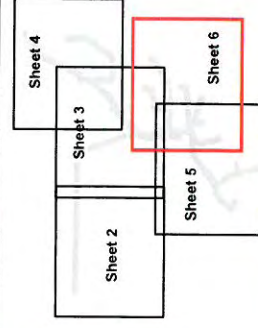
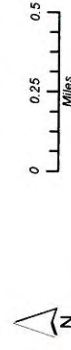
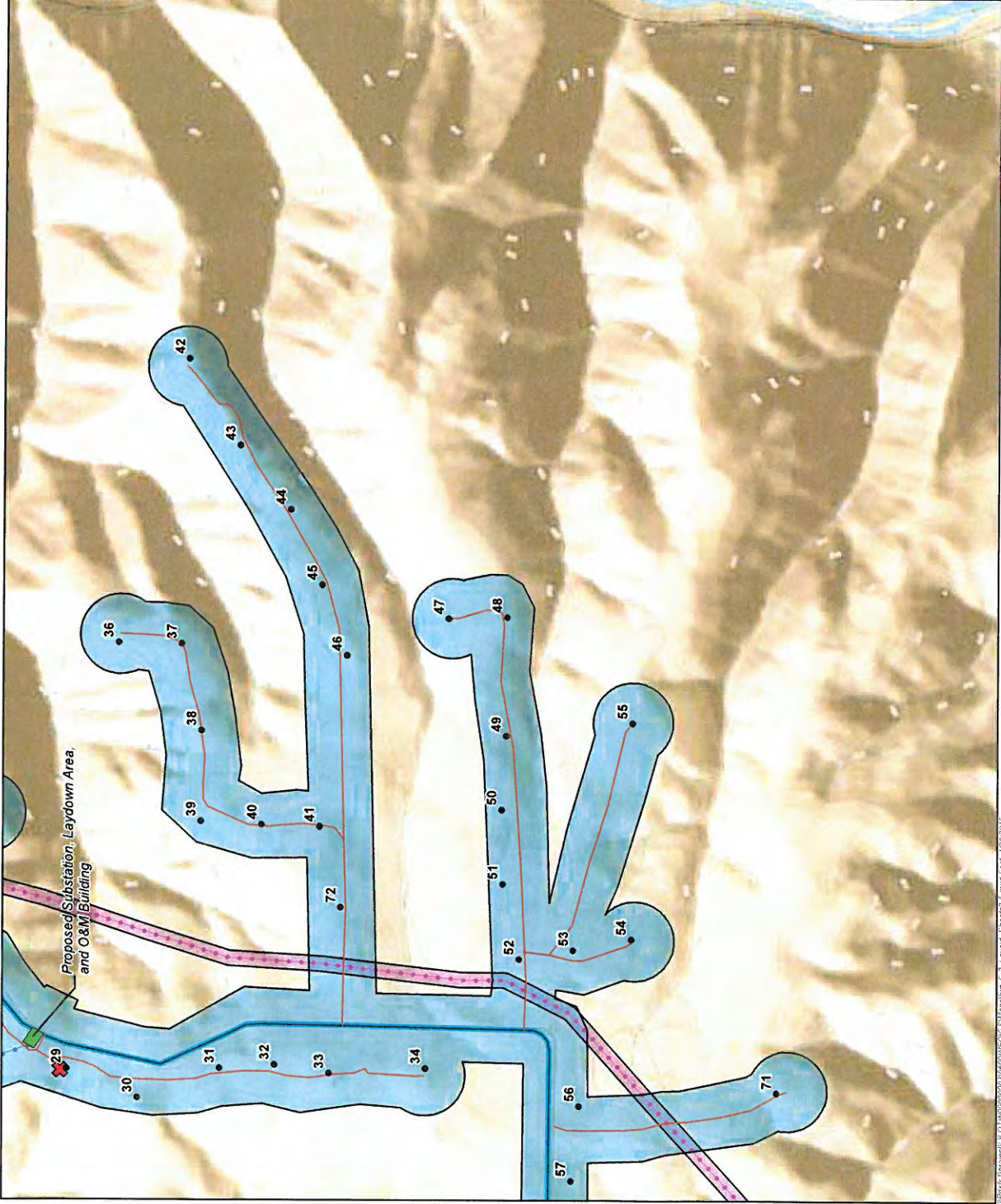


**Data Sources:**  
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LotusWorks, 2009, 2014  
Pioneer Surveying and Engineering, Inc., 2009

**Summit Ridge**



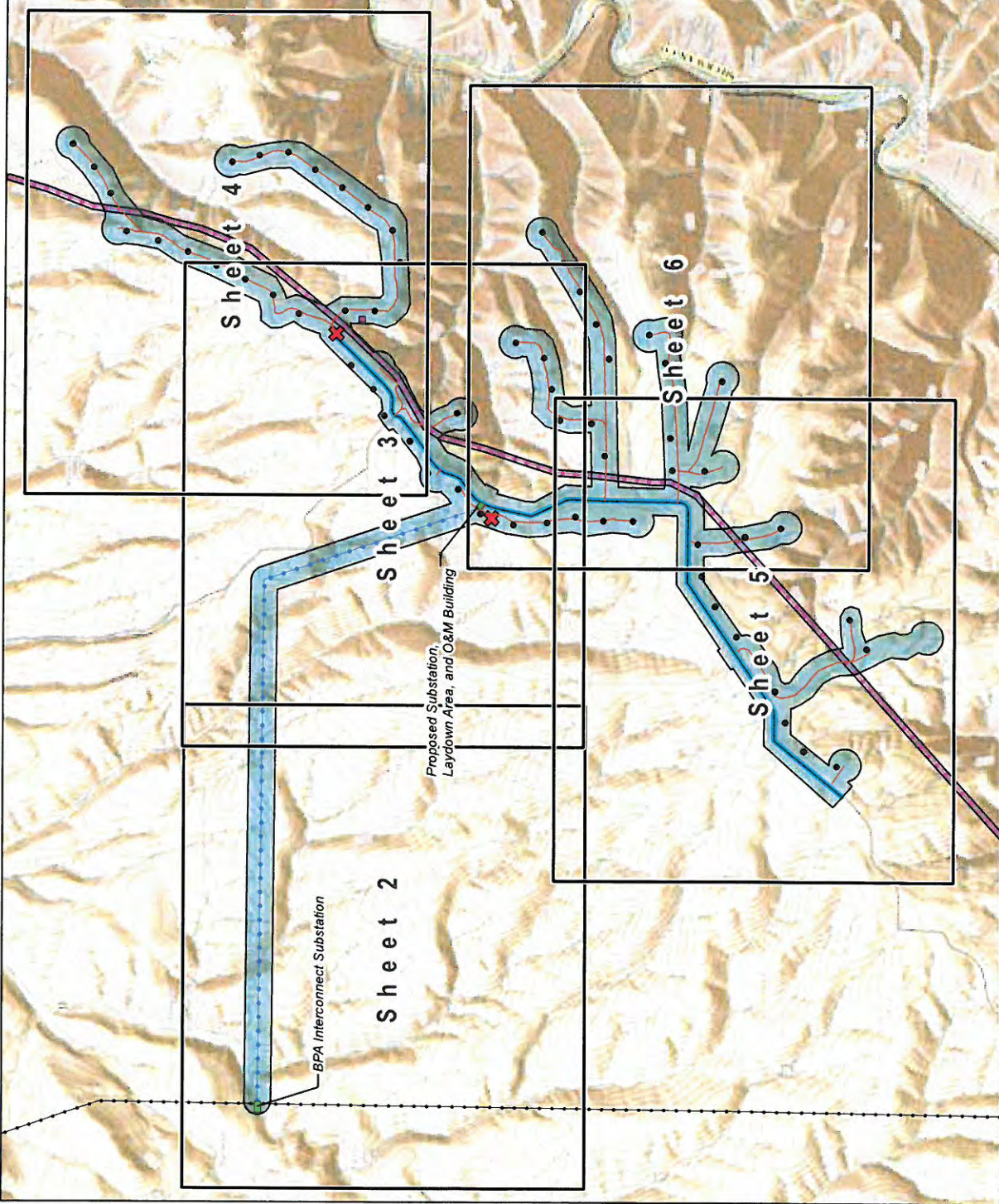
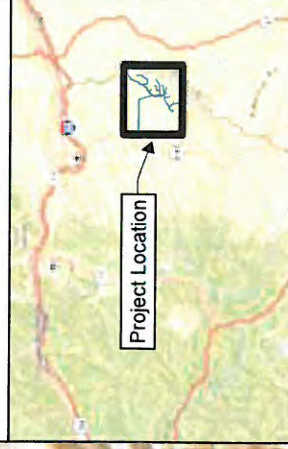
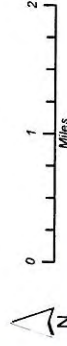
**Figure C-2B**  
*Project Layout - Alternative B*  
Sheet 6 of 6





**Figure C-2C**  
**Project Layout - Alternative C**  
**Index Map - Sheet 1 of 6**

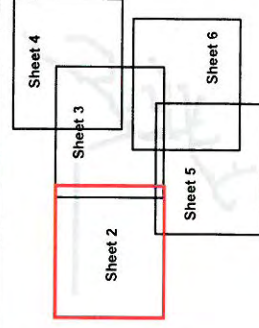
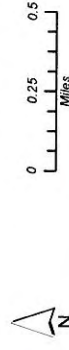
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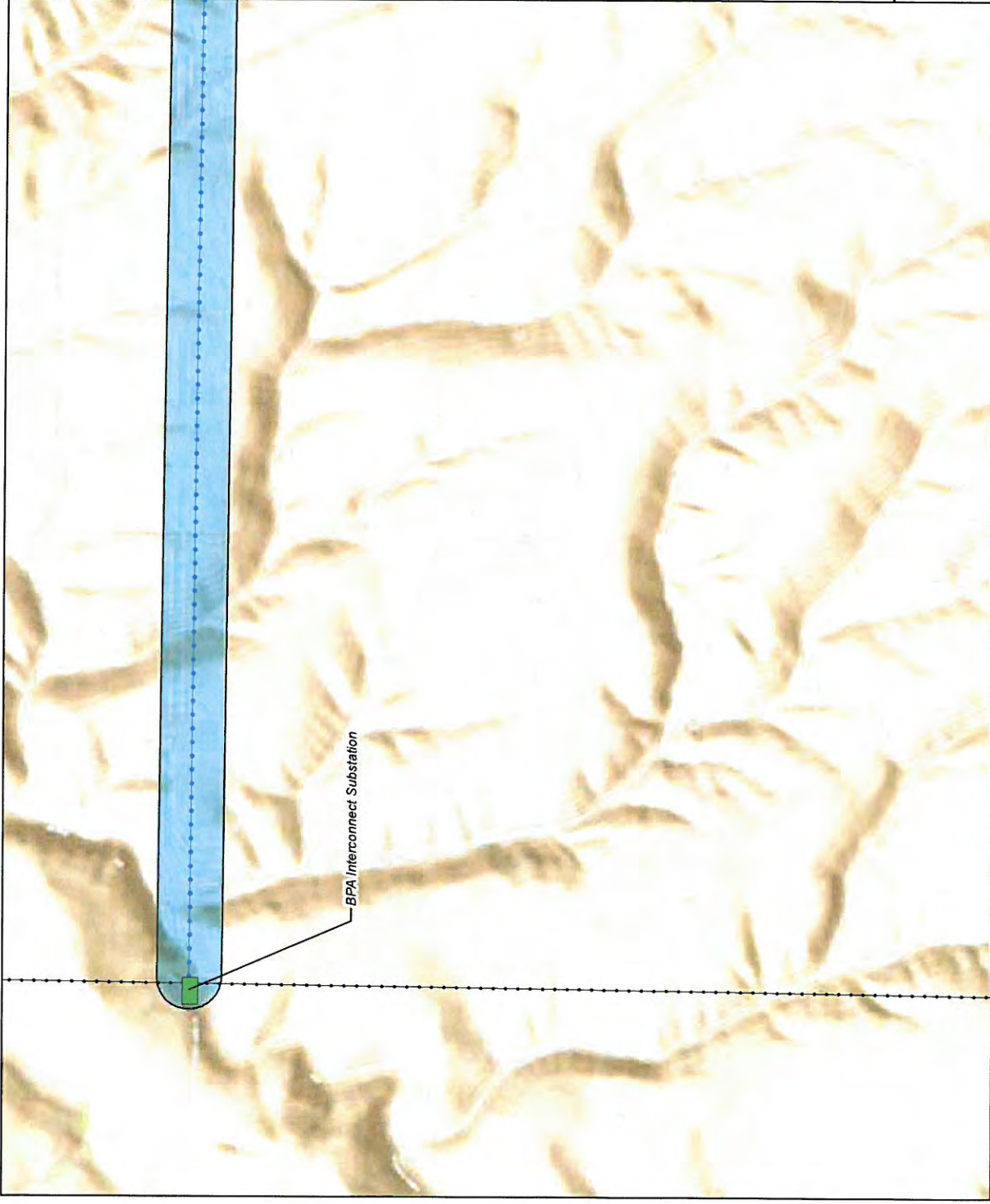


**Figure C-2C**  
**Project Layout - Alternative C**  
Sheet 2 of 6

- Legend**
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  - Proposed Access Road
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  - Proposed Laydown Area
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**Data Sources:**  
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LotusWorks, 2009, 2014  
Summit Ridge I, LLC  
Summit Ridge I, LLC  
Summit Ridge I, LLC

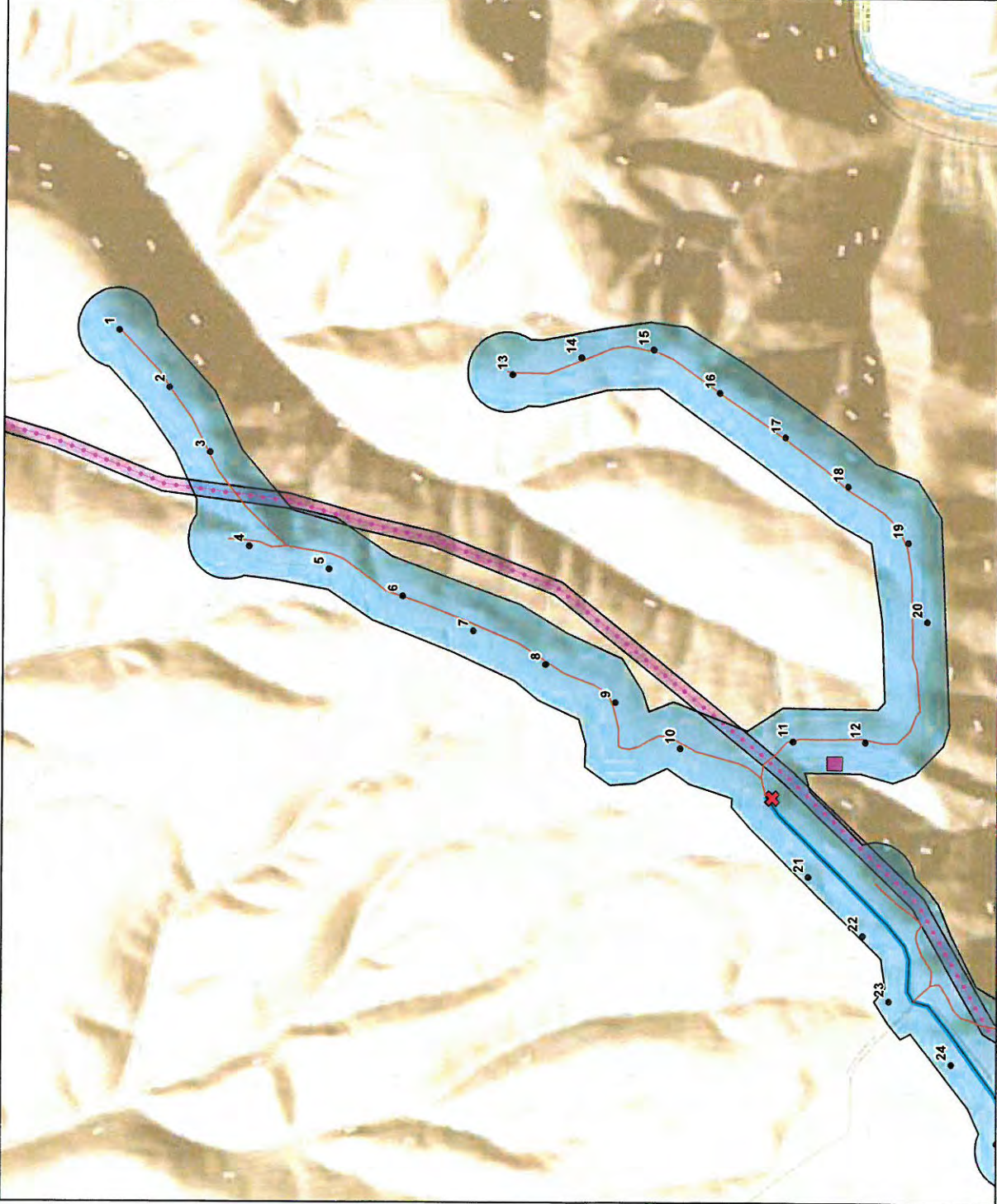
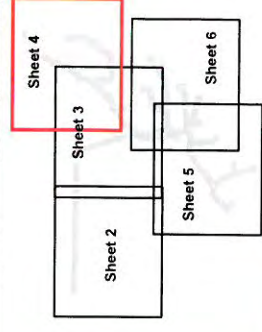
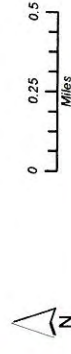






**Figure C-2C**  
**Project Layout - Alternative C**  
Sheet 4 of 6

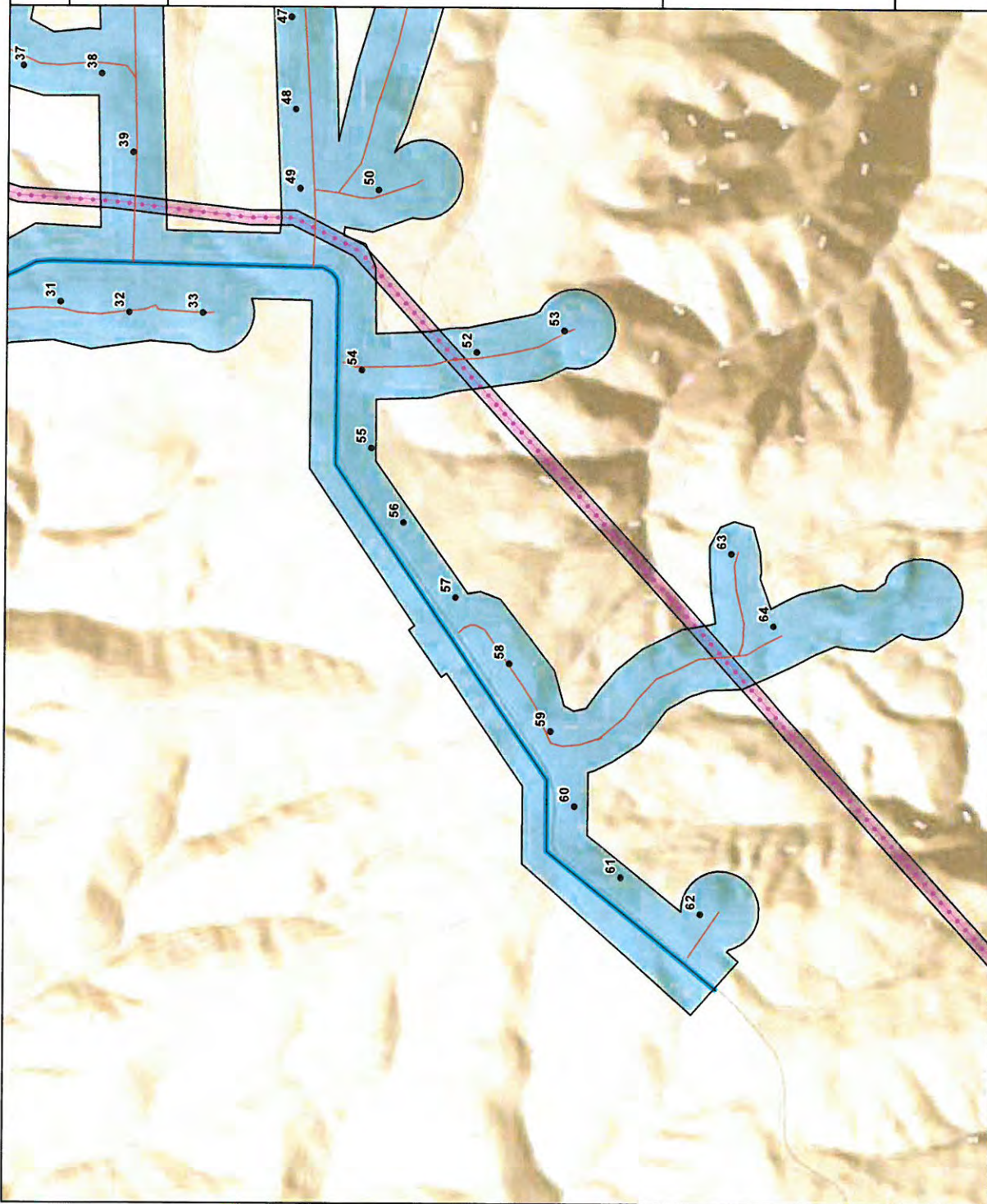
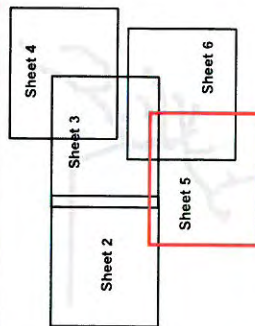
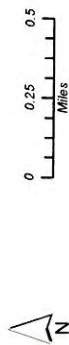
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  - Proposed Laydown Area
  - Proposed Met Tower Location





**Figure C-2C**  
Project Layout - Alternative C  
Sheet 5 of 6

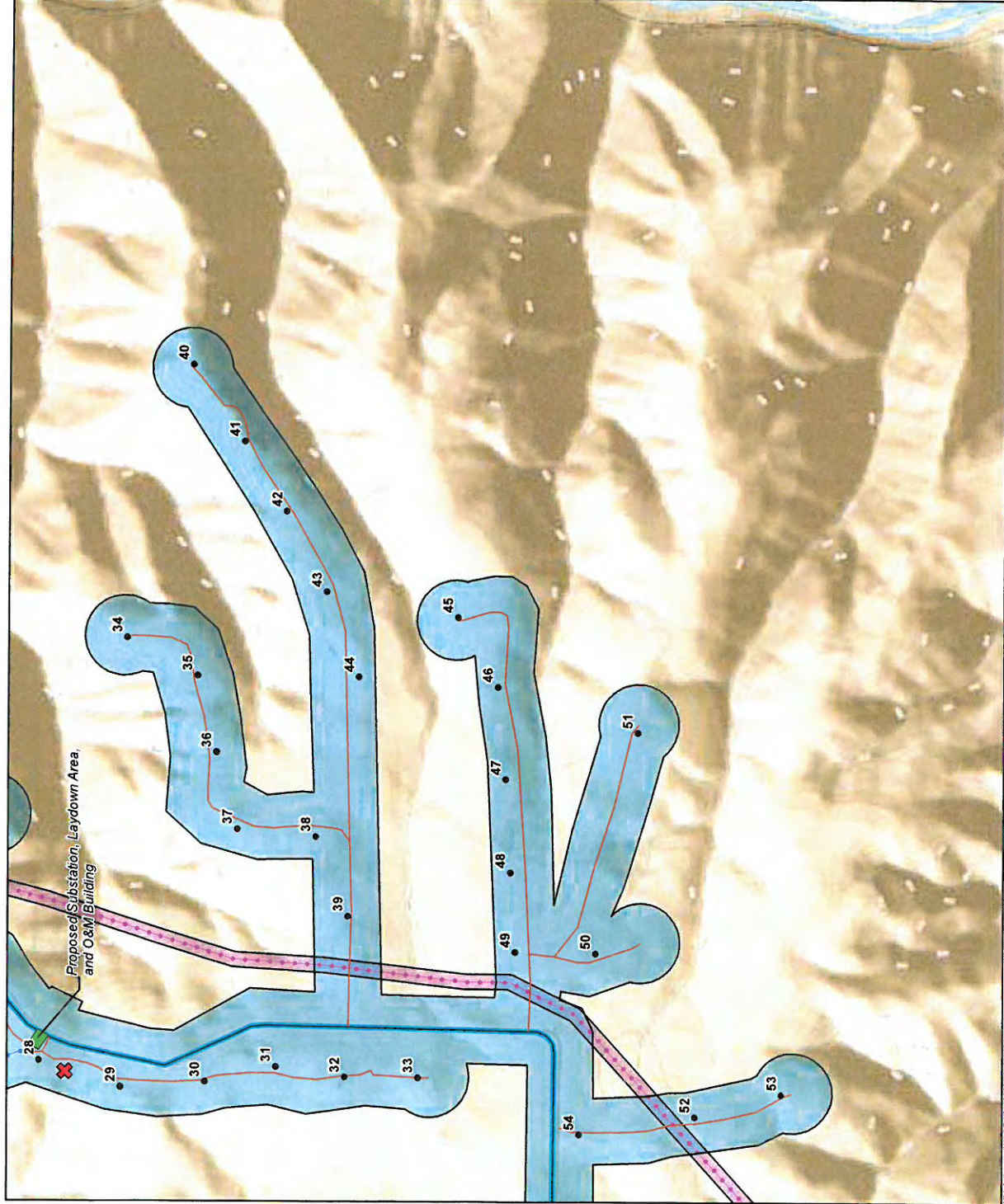
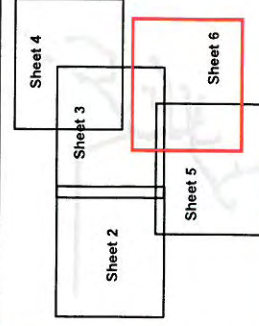
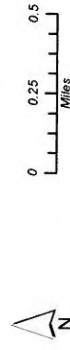
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**Figure C-2C**  
**Project Layout - Alternative C**  
Sheet 6 of 6

- Legend**
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  - Site Boundary
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  - Bonneville 230 KV Line
  - Proposed Substation/O&M Facility
  - Proposed Batch Plant Location
  - Proposed Laydown Area
  - ✕ Proposed Met Tower Location





# **Figure 1** **Visibility Analysis for Protected Areas, Alternative B**

## **Legend**

- Site Boundary
- Proposed Turbine Location
- Proposed Met Tower Location
- County Boundary
- Interstate Highway
- Other Highway
- Major Road
- Areas Where Proposed Turbines Likely Visible (shown only in Protected Areas)

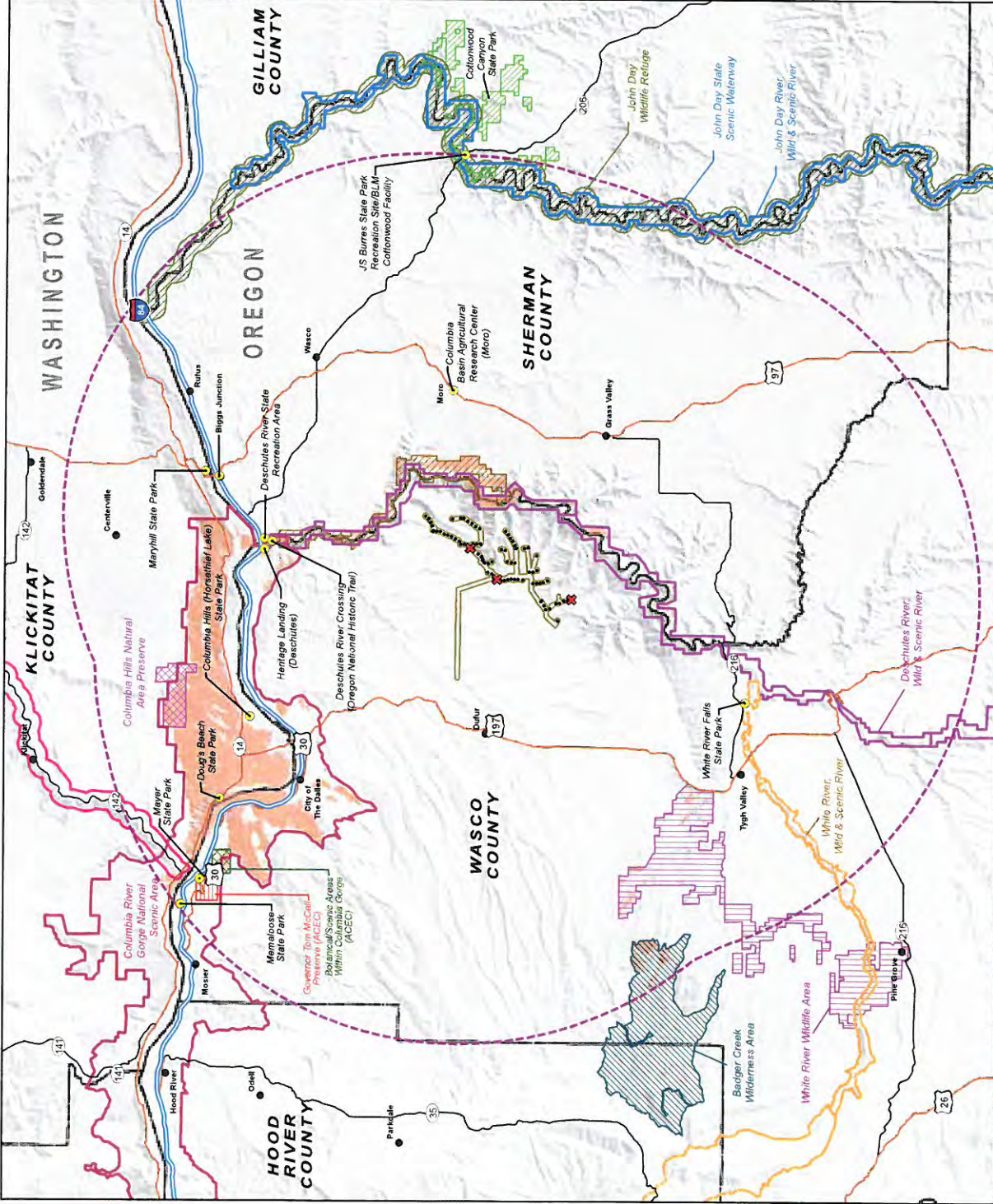
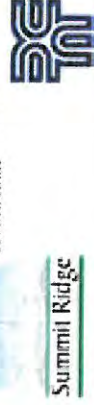
## **Protected Areas**

- Protected Areas Analysis Area (20 Mi)
- Cottonwood Canyon State Park
- Deschutes State Scenic Waterway
- John Day State Scenic Waterway
- White River State Scenic Waterway
- Klickitat River, Wild & Scenic River
- Columbia River Gorge National Scenic Area
- Lower Deschutes Wildlife Area
- White River Wildlife Area
- John Day Wildlife Refuge
- Columbia Hills Natural Area Preserve
- Botanical/Scenic Areas within Columbia Gorge (ACEC)
- Governor Tom McCall Preserve (ACEC)
- Site Specific Protected Areas



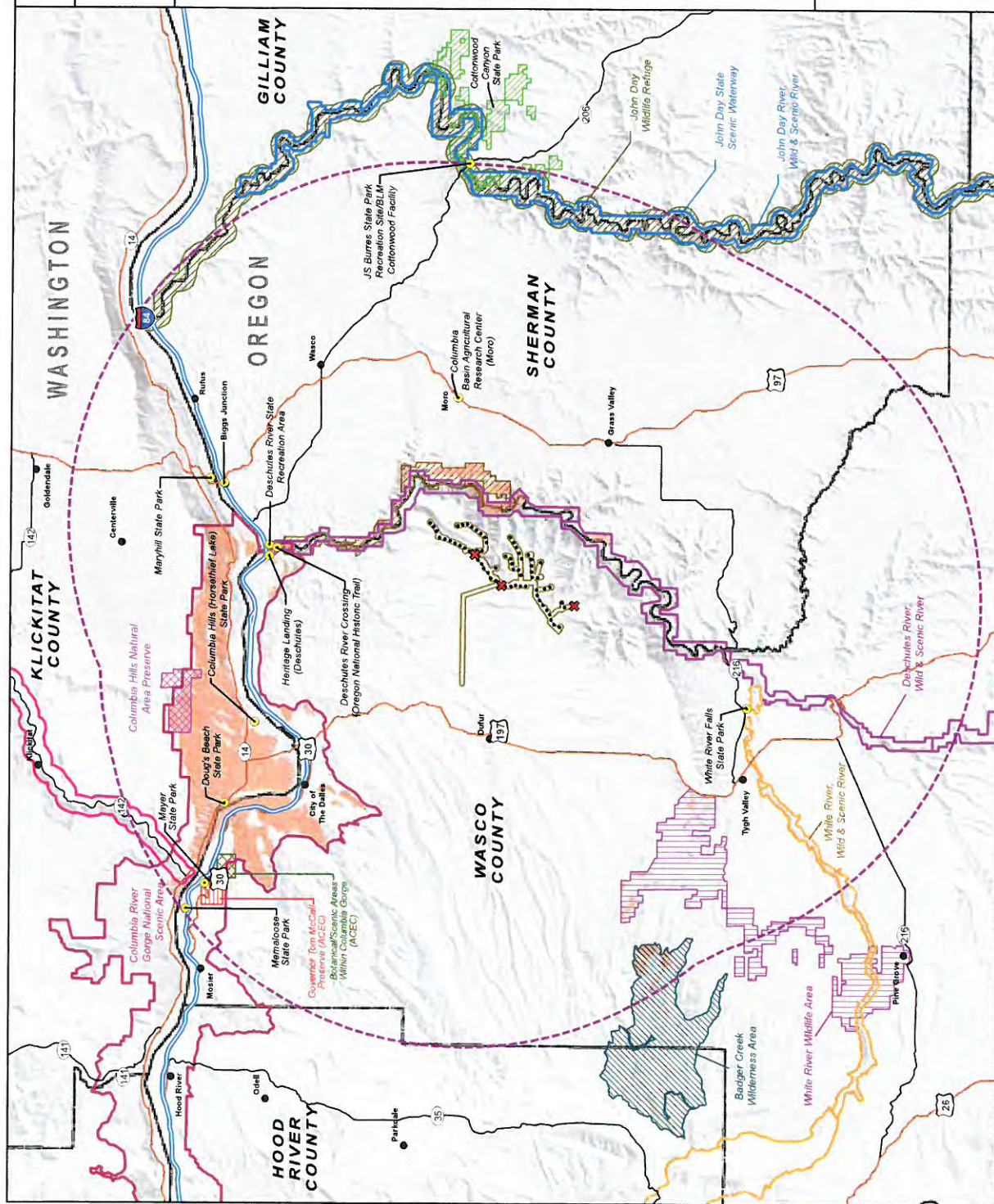
## **Data Sources:**

Bureau of Land Management  
 Learning/SLI, LLC (LSJ), 2015  
 LotusWorks, 2009, 2014  
 National Forest Service, Office (GEO)  
 Two Rivers Resource Management Plan,  
 Record of Decision, June 1986  
 US Forest Service





**Figure 2**  
*Visibility Analysis for Protected Areas, Alternative C*



**Data Sources:**

Bureau of Land Management  
LearningSt, LLC (LSI), 2015,  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service









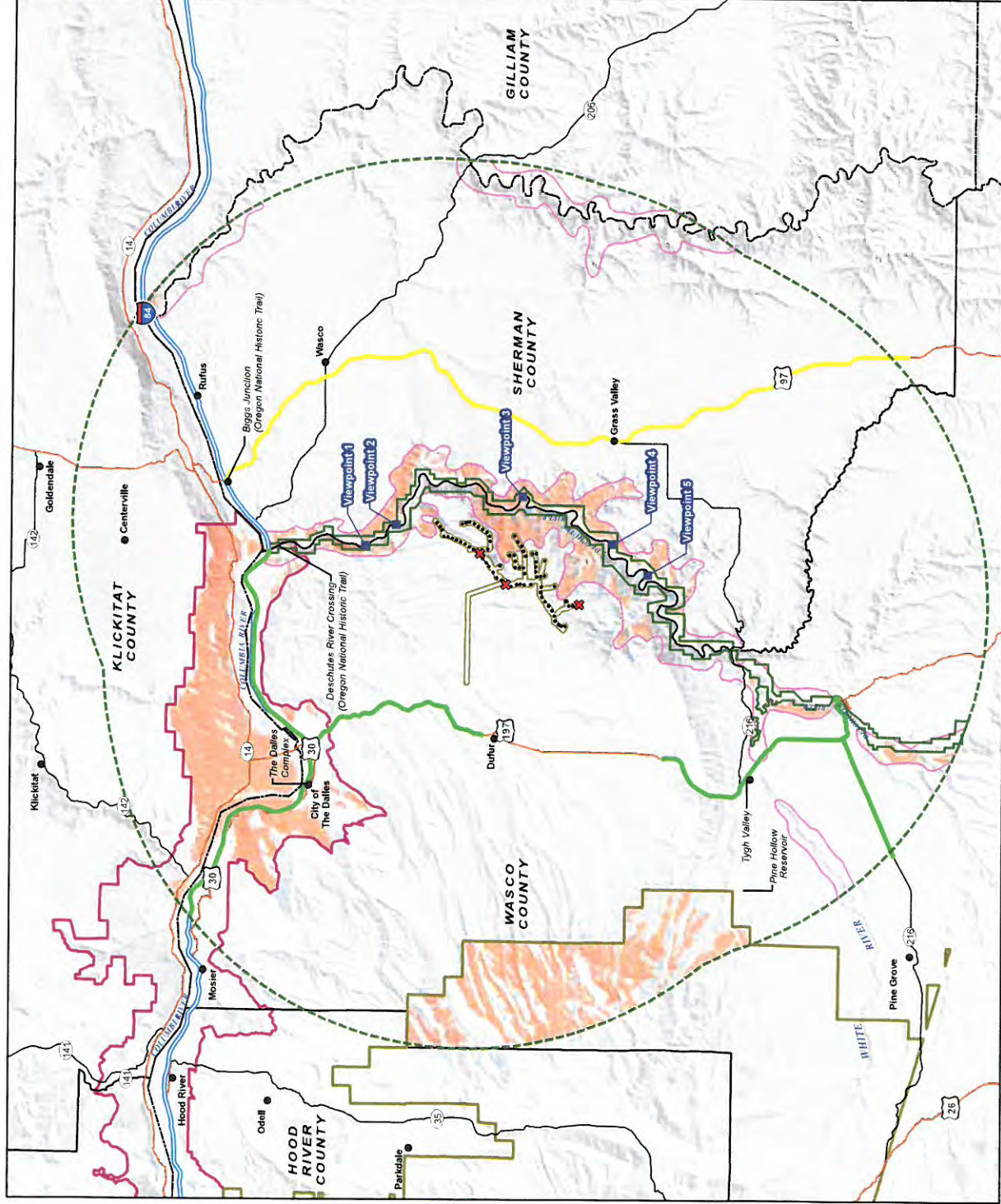
**Figure 4**  
**Visibility Analysis for**  
**Scenic and Aesthetic Values,**  
**Alternative B**

- Legend**
- Site Boundary
  - Proposed Turbine Location
  - Proposed Met Tower Location
  - Simulation Viewpoint Location
  - County Boundary
  - Interstate Highway
  - Other Highway
  - Major Road
  - Areas Where Proposed Turbines Likely Visible (shown only in Scenic and Aesthetic Resource Boundaries)
- Scenic Area**
- Scenic and Aesthetic Values Analysis Area (20 Mi)
  - Wasco County Scenic Highways
  - Journey Through Time Scenic Byway (US 97)
  - Federal Wild and Scenic River
  - BLM Area of High Visual Quality
  - Mt. Hood National Forest
  - Columbia River Gorge National Scenic Area



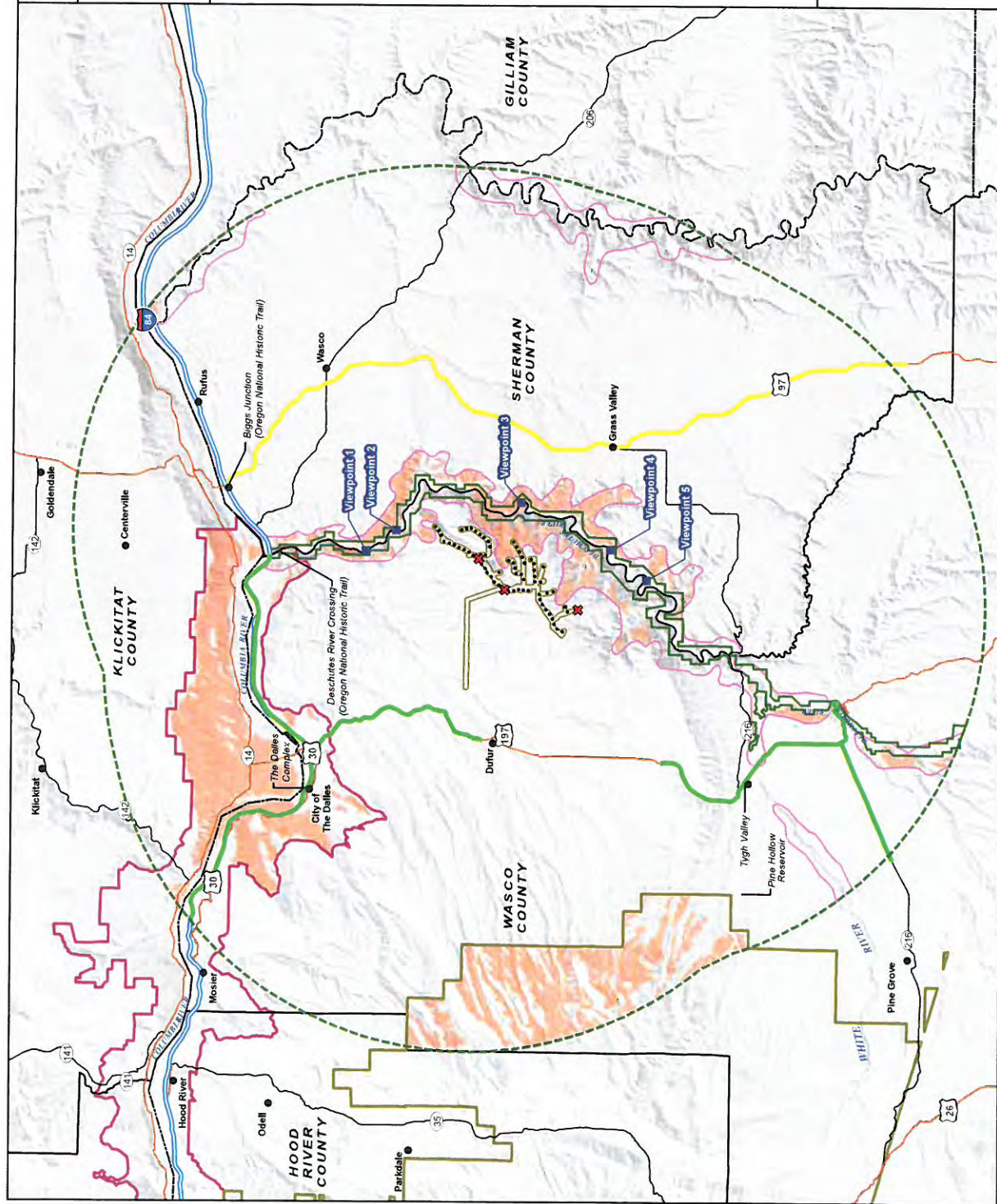
**Data Sources:**

Bureau of Land Management  
 Learning Solutions, 2015  
 Oregon Geospatial Enterprise Office (GEO)  
 Two Rivers Resource Management Plan,  
 US Forest Service, June 1986





**Figure 5**  
*Visibility Analysis for  
Scenic and Aesthetic Values,  
Alternative C*



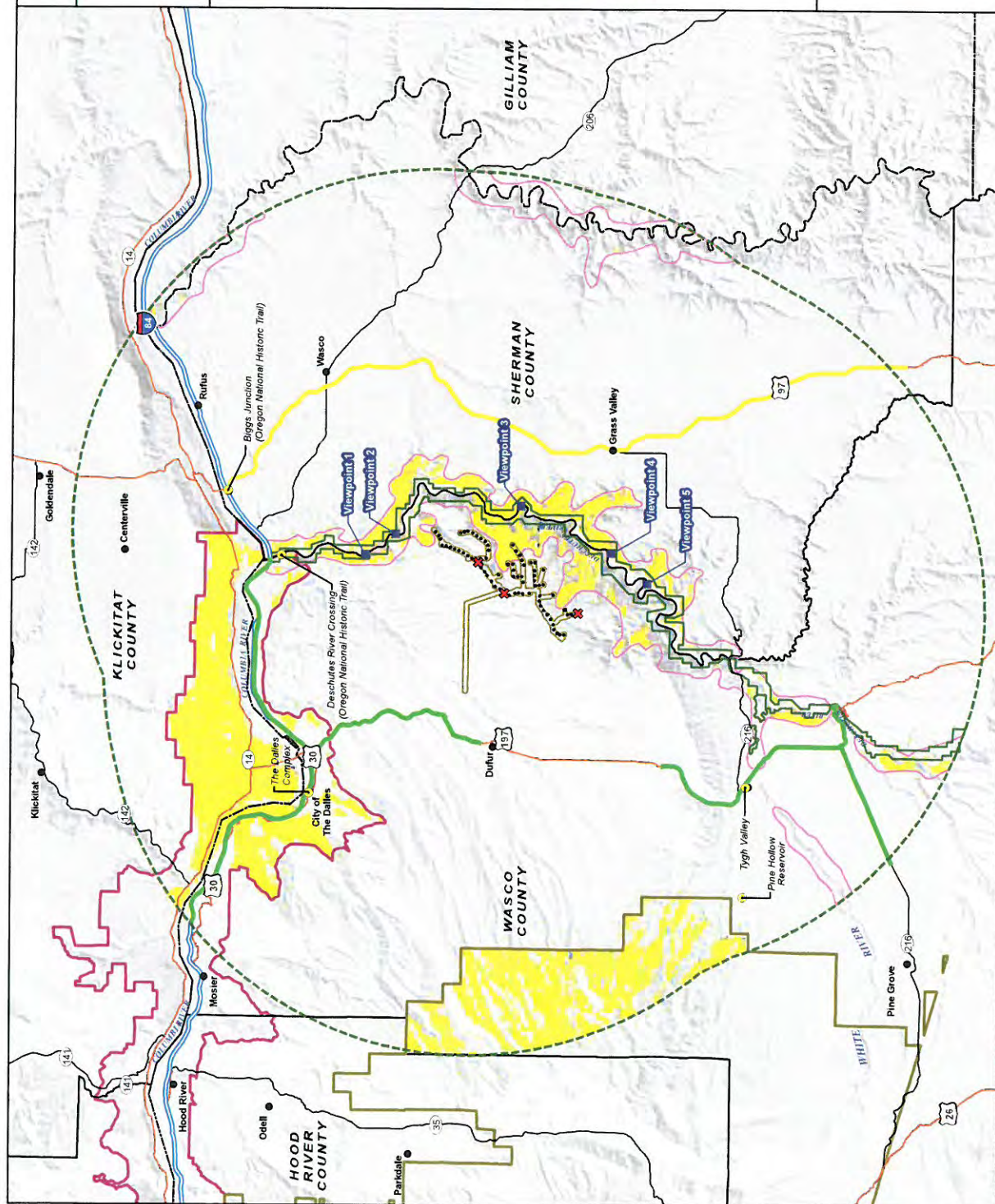
**Data Sources:**

Bureau of Land Management  
Learning SI LLC (LSI), 2015  
LolusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service





**Figure 6**  
Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values



**Data Sources:**

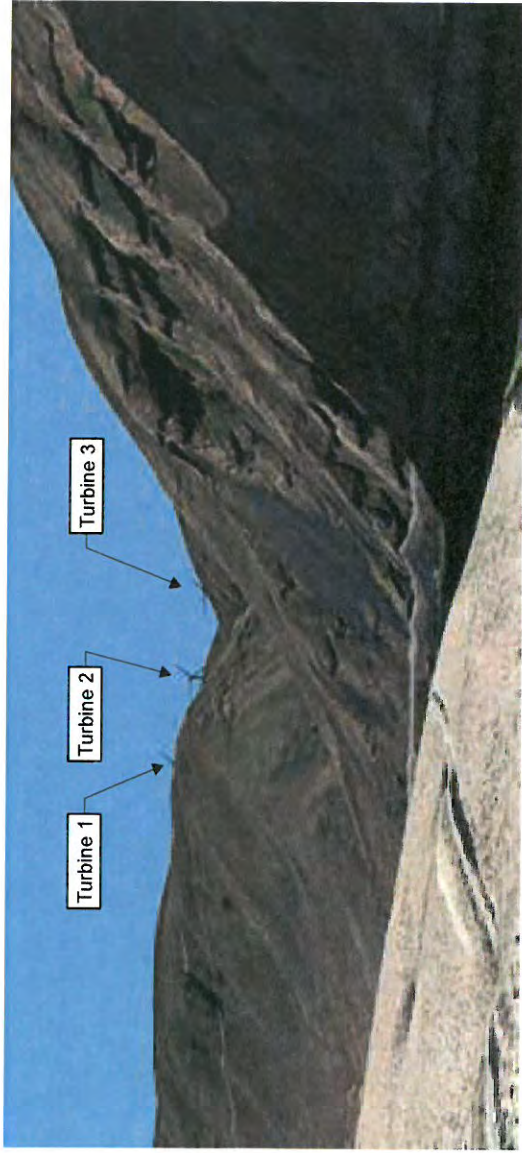
Bureau of Land Management  
LearningSI, LLC (LSI), 2015  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



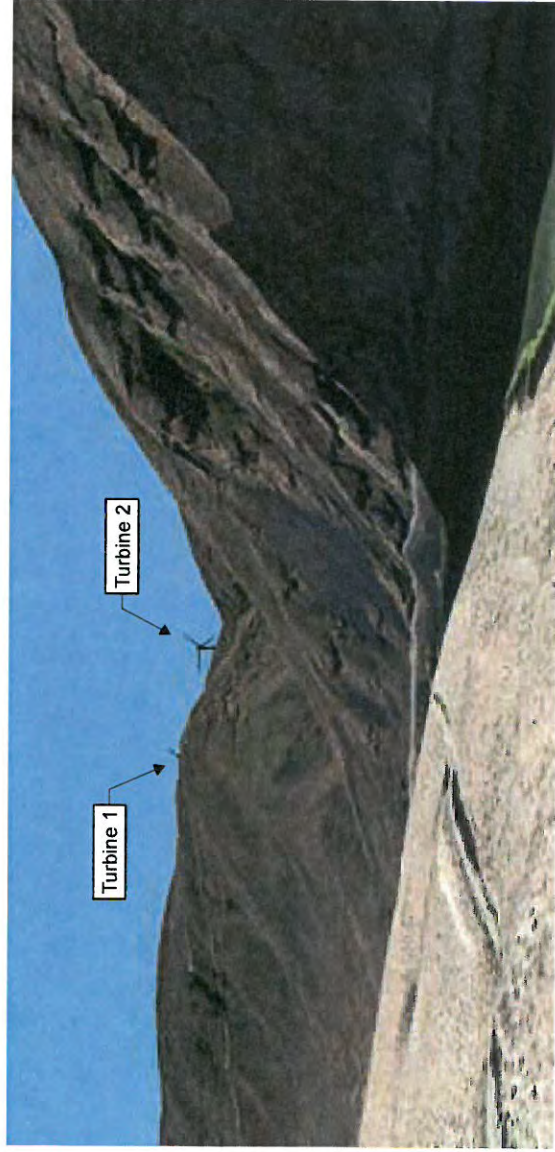








Alternative B



Alternative C

\\P:\K\T\proj\N\01\W00000002\0600\NFO\GSM\Map\N\2016 MAPS\Fig\_8\_Viewpoint2\_AIB\_AIB\_VisualSimulation.mxd Scaled 1/27/2016

LotusWorks - Summit Ridge I, LLC

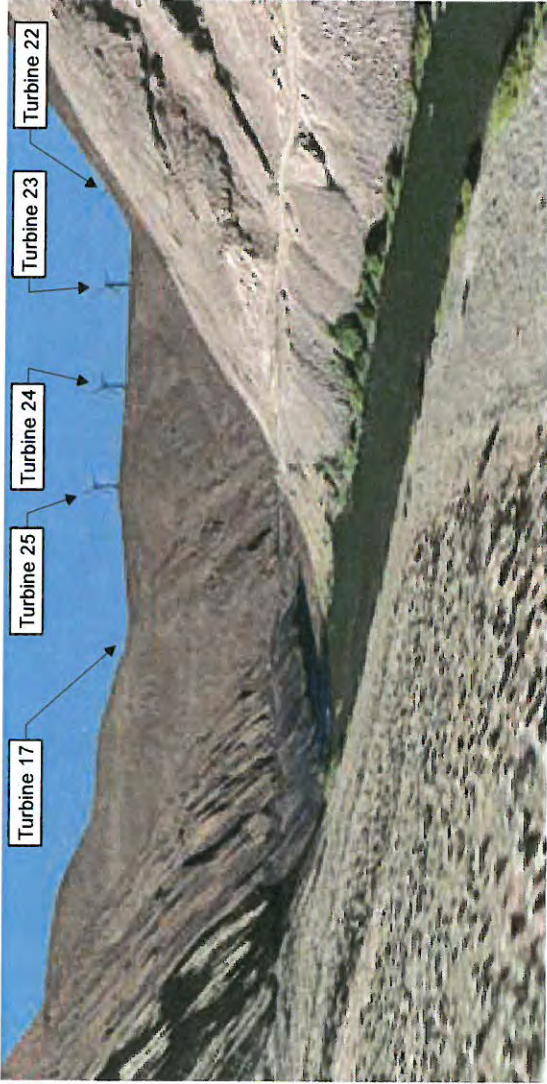
## Figure 8

Comparison of Visualizations  
Alternative B and Alternative C  
from Viewpoint 2, Bedsprings

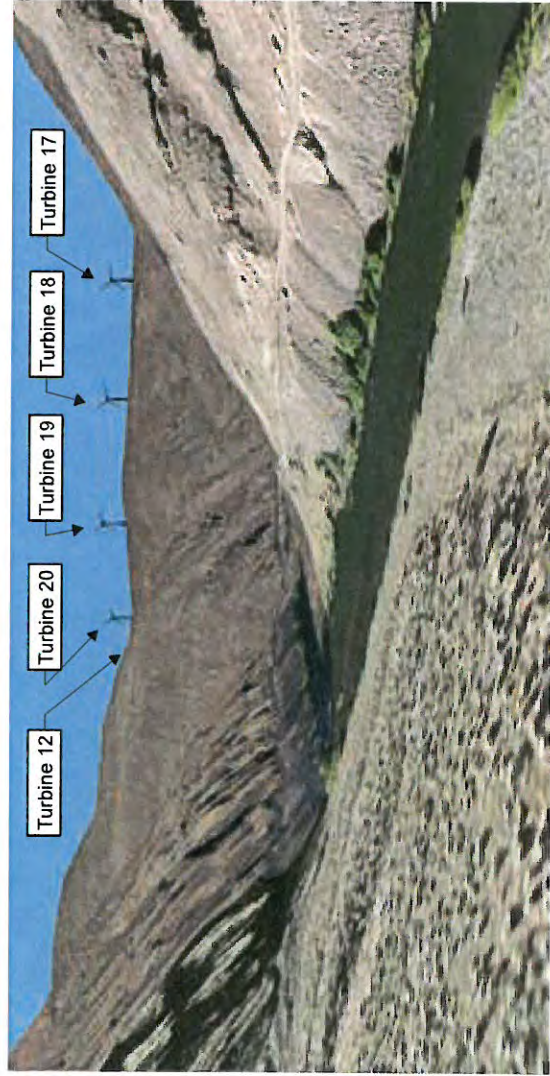


Simulations were created with ESRI ArcGlobe.





Alternative B



Alternative C

LotusWorks - Summit Ridge I, LLC

**Figure 9**  
Comparison of Visualizations  
Alternative B and Alternative C  
from Viewpoint 3,  
Snake-in-the-Box



Simulations were created with ESRI ArcGlobe.








Alternative B



Alternative C

\\P:\Projects\LOT16\00000003\5660\N\FG\GIS\Map\Map\_2016\_MAFS\Fig\_10\_Visuals\AltB\_AltC\_Visuals.mxd Sat: 1/27/2018

LotusWorks - Summit Ridge I, LLC

**Figure 10**  
Comparison of Visualizations  
Alternative B and Alternative C  
from Viewpoint 4,  
Box Elder Canyon

Simulations were created with ESRI ArcGlobe.




Alternative B



Alternative C

\\pa161-proj\proj\LOTW0000003\0600\NFGS\1\map\VAN\_2016\_Maps\Fig\_11\_Viewpoints\_AVB\_AVC\_VisualSimulation.mxd Sheet 1 of 2/16

|  |
|--|
| LotusWorks - Summit Ridge I, LLC   |
| <b>Figure 11</b><br>Comparison of Visualizations<br>Alternative B and Alternative C<br>from Viewpoint 5,<br>Cedar Island |

|   |   |
|---|---|
|  | Simulations were created with ESRI ArcGlobe.  |
|  |  |





## **ATTACHMENT 3**

**NORTHWEST WILDLIFE CONSULTANTS, INC**

### **ASSESSMENT OF IMPACTS TO WILDLIFE OF PROPOSED ADDITIONAL TURBINE OPTION**



Northwest  
Wildlife  
Consultants, Inc.

## MEMORANDUM

Date: January 29, 2016

To: Steven Ostrowski, LotusWorks

From: Rick Gerhardt, Wildlife Biologist, Northwest Wildlife Consultants, Inc.

Subject: Summit Ridge Wind Power Farm—Assessment of Impacts to Wildlife of Proposed Turbine Change

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LotusWorks is proposing to install different turbines at their Summit Ridge Wind Power Farm than those currently provided for in the Summit Ridge Site Certificate as amended (EFSC, 2015). The turbines now proposed will be 3 megawatts (as opposed to 2.7 MW), with rotors up to 132 meters (as opposed to 122 m) long; these will be centered at hubs 84 m (as opposed to 91 m) high. These changes will allow LotusWorks to decrease the total number of turbines from 72 to 64. Northwest Wildlife Consultants, Inc. (NWC) was contacted by LotusWorks to comment on the potential impacts to wildlife of this change in generator, rotor, and tower size. This memorandum represents those comments.

Intuitively, slight increases in rotor diameter—and thus in the area swept by rotors—involves a slight increase in the potential for collision by birds or bats at a particular turbine. Attempts to directly test this assumption (using turbines of different sizes in a single fatality monitoring study, e.g., Gritski et al., 2010; Downes et al., 2013) have yielded sample sizes too small to allow for any statistically-significant conclusions. Likewise, an *a posteriori* comparison by NWC of avian and bat fatality rates at various Columbia Plateau wind energy facilities found no patterns or correlations that suggest confirmation of the intuition that an increase in rotor-swept area is associated with an increase in fatalities.

More importantly, however, the decrease in the overall number of turbines (that this increase in rotor diameter allows) is expected to yield a decrease both in overall collision potential and in habitat loss and associated impacts to wildlife, such as habitat fragmentation, displacement, etc.

No state or federal threatened or endangered vertebrate wildlife species were encountered during surveys of the proposed project conducted in 2005, 2009-2010 (Gerhardt et al., 2010), and 2015 (Gerhardt, 2015a; Gerhardt, 2015b). There is, however, national and regional concern by the United States Fish and Wildlife Service (USFWS) regarding the potential of wind energy facilities to present a risk to golden eagles. With this in mind, LotusWorks contracted NWC to perform golden eagle nest surveys and monitoring (Gerhardt et al., 2010) and to conduct telemetry studies of a resident adult male from the active territory nearest the project (Gerhardt, 2014) and a young eagle from the next nearest territory (Gerhardt, 2012). Although both of these birds exhibited very little use of the project area as originally proposed and permitted, subsequent turbine changes allowed the elimination of those turbines nearest these golden eagle territories and in the areas where telemetry studies indicated use by these birds. The present proposed turbine change is expected to entail a further decrease in risk to golden eagles.



The proposed change to a smaller number of turbines—albeit with larger rotor diameters—is expected to result in a net benefit to wildlife and their habitats. It is anticipated that this change will result in fewer birds and bats colliding with turbines at this project. In addition, it will result in less temporary habitat disturbance and permanent habitat loss.

## References

- Downes, S., B. Gritski and S. Woods. 2013. Leaning Juniper II Wind Power Facility Wildlife Monitoring Study. January 2011–July 2013. Prepared for Iberdrola Renewables, Portland, Oregon. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.
- Energy Facility Siting Council (EFSC) of the State of Oregon. 2015. First Amended Site Certificate for the Summit Ridge Wind Farm. Available at:  
<http://www.oregon.gov/energy/Siting/docs/SRW/Council%20Action%20AMD1/SRW%20AMD1%20Site%20Certificate%202015-08-07.pdf>
- Gerhardt, R. 2012. Summit Ridge Wind Power Project—Summary of Results of Telemetry of Juvenile Golden Eagle at Oakbrook Territory June 15, 2011–Apr. 2, 2012. Prepared for LotusWorks, Vancouver, Washington. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.
- Gerhardt, R. 2014. Summit Ridge Wind Power Project—Summary of Results of Telemetry of Adult Golden Eagle at Beavertail Territory Feb. 9, 2011–Feb. 8, 2014. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.
- Gerhardt, R. 2015a. Summit Ridge 2015 Supplemental Raptor Nest Survey. Prepared for LotusWorks, Vancouver, Washington. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.
- Gerhardt, R. 2015b. Summit Ridge 2015 Supplemental Rare Plant Survey. Prepared for LotusWorks, Vancouver, Washington. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.
- Gerhardt, R., R. Gritski, and B. Anderson. 2010. Ecological baseline studies and impact assessment for the Summit Ridge Wind Power Project, Wasco County, Oregon, consolidated report. Prepared for LotusWorks, Vancouver, Washington. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.
- Gritski, B., S. Downes, and K. Kronner. 2010. Klondike III (Phase 1) Wind Power Project wildlife fatality monitoring study, October 2007–October 2009. Prepared for Iberdrola Renewables, Portland, Oregon. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon.



## **ATTACHMENT 4**

### **UPDATED LANDOWNER LIST**

**(Per Wasco County Tax Records as of 1/31/2016)**





| <b>PARTICIPATING LANDOWNERS</b>       |  |
|---------------------------------------|--|
| <b>Merril M Adkisson Family Trust</b> | <b>1000 Vey Way, #354<br/>The Dalles, OR 97058</b>         |
| <b>Carleton and Pamela R Clausen</b>  | <b>1816 Liberty Way<br/>The Dalles, OR 97058</b>           |
| <b>John F Clausen</b>                 | <b>83417 Dufur Valley Road<br/>Dufur, Oregon 97021</b>     |
| <b>John F and Patricia R Clausen</b>  | <b>83417 Dufur Valley Road<br/>Dufur, Oregon 97021</b>     |
| <b>John F Clausen ET AL</b>           | <b>83417 Dufur Valley Road<br/>Dufur, Oregon 97021</b>     |
| <b>Sharon Lee Craft ET AL</b>         | <b>63883 Center Ridge Road<br/>Dufur, Oregon 97021</b>     |
| <b>Robert Hammel</b>                  | <b>62250 Tygh Ridge Road<br/>Dufur, Oregon 97021</b>       |
| <b>William and Barbara K Hammel</b>   | <b>7075 Fifteen Mike Road<br/>The Dalles, Oregon 97058</b> |
| <b>Kortge Brothers LLC</b>            | <b>5663 Mill Creek Road<br/>The Dalles, Oregon 97058</b>   |
| <b>KC Kortge</b>                      | <b>1820 Liberty Way<br/>The Dalles, Oregon 97058</b>       |
| <b>Kortge Ranches LLC</b>             | <b>5215 Emerson Loop Road<br/>The Dalles, Oregon 97058</b> |
| <b>John and Marlene McManigal</b>     | <b>63470 Center Ridge Road<br/>Dufur, Oregon 97021</b>     |
| <b>R N Ranches</b>                    | <b>PO Box 1370<br/>Kenwood, CA 95452</b>                   |

| <b>Adjacent Landowners within 500 feet of Project</b> |   |
|---|---|
| <b>Dawn Kelly A RLT</b>                               | <b>15631 NW Clubhouse DR<br/>Portland, Oregon 97229-8724</b>  |
| <b>Kelly &amp; Rita Kieran LLC</b>                    | <b>2857 NE Hamblet ST<br/>Portland, Oregon 97212-1657</b>     |
| <b>United States of America</b>                       | <b>3050 NE 3<sup>rd</sup> ST<br/>Prineville, Oregon 97754</b> |



|   |  |
|---|--|
| <b>Adjacent Landowners within 500 feet of Project<br/>(who are also participating landowners)</b> |  |
| <b>Carleton and Pamela R Clausen</b>  | <b>1816 Liberty Way<br/>The Dalles, Oregon 97058</b> |
| <b>Robert Hammel</b>  | <b>62250 Tygh Ridge Road<br/>Dufur, Oregon 97021</b> |



**Attachment D:      Certificate Holder Request for Administrative Adjustment (Turbine Setbacks)**



**LotusWorks – Summit Ridge I, LLC**

9611 NE 117th Avenue  
Suite 2840  
Vancouver, WA 98662-2403

360.737.9692

March 22, 2016

Ms. Katie Clifford  
Energy Facility Siting Analyst  
**Oregon Department of Energy**  
625 Marion Street NE  
Salem, OR 97301

Subject: Request for Administrative Adjustment

Reference: LotusWorks-Summit Ridge I, LLC Site Certificate, Amendment #1

Ms. Clifford,

Amendment #1 to the LotusWorks-Summit Ridge I, LLC Site Certificate includes language that incorporates new land use standards into our project. This was the result of Wasco County's 2012 revision of their wind turbine land use ordinances and the incorporation of the updated ordinances into Addendum #1 of our Site Certificate this past August. The revised ordinances increase the setback distances for turbines along County roads to 1.5x the tip height of the turbine. Adhering to the new setback distances results in seventeen of our turbines being outside the current stated set back distances. Of those seventeen turbines, six or seven may be able to be moved within the existing site boundary and still meet the new setback requirement.

It should be noted that these turbines were located to take maximum advantage of the available wind and where placed based on the setback requirements that existed in 2010. Setting the turbines farther off the ridge has a definite negative impact on the amount of electricity each impacted turbine will produce. We readily acknowledge the requirements of changed and have examined the available options to identify the best solution for the project, the landowners and Wasco County.

After evaluating the available alternatives, we believe the best and least impactful solution for all concerned is to apply for an administrative adjustment to establish the setback distance along County roads impacted by our project at 1.1x the maximum height at the installed turbine rotor tip. The 1.1 multiplier would result in a safe and reasonable setback distance and should allow all turbines to fit inside the currently approved site boundary.

Wasco County ordinances clearly state an applicant may request an adjustment to non-project boundaries using the process described in 19.030(D)(1)(c)(3)(C) which states:

Adjustment Provision: Applicant may, as part of the wind energy permitting process, obtain an administrative adjustment to authorize a lesser setback from regulations addressing turbine

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setbacks from dwellings in resource zones. This may be authorized as part of the CUP pursuant to the Administrative Action process of Section 2.060(A) by the Director or designee and upon findings that demonstrate the following criteria are met:

- (1) The underlying landowner (or applicable road authority or utility as may be appropriate for non-project boundary setbacks) has consented, in writing, to an adjusted setback.
- (2) The proposed adjustment complies with DEQ noise standard.
- (3) The proposed adjustment will not force a significant change in accepted farm or forest practices on surrounding lands devoted to or available for farm or forest use.
- (4) The proposed adjustment will not unduly burden existing infrastructure (e.g., underground utilities or leach fields).
- (5) The proposed adjustment will not unduly impair safety in the area.
- (6) The proposed adjustment will minimize impacts to environmental resources (e.g., wetlands or identified EPDs).

Our response to each of the six criteria is as follows:

1. The underlying landowner (or applicable road authority or utility as may be appropriate for non-project boundary setbacks) has consented, in writing, to an adjusted setback. We have already confirmed the consent of landowners either side of the roads in question and provide that consent in writing if so required.

Response: The only non-boundary landowner affected by our request would be the Wasco County road department as property on either side of the road is within the current project boundary and owned by participating landowners. By submittal of this request we are requesting the Wasco County Road department to provide its consent in writing of our revised setback request.

2. The proposed adjustment complies with DEQ noise standard.

Response: The area along the roads in question is sparsely populated and the road receives minimal use under normal circumstances. Participating landowners on either side of the road have signed noise waivers. In addition Section 12.0 "Noise Control and Noise Complaint Response" of the current approved site permit establishes the criteria for noise at the site and requires us to submit a noise analysis prior to the start of construction. We also believe the road and wind noise along the roads in question will serve to mask turbine noise along the roads.

3. The proposed adjustment will not force a significant change in accepted farm or forest practices on surrounding lands devoted to or available for farm or forest use.  
Response: The proposed administrative adjustment actually lessens the impact on surrounding lands devoted to or available for farm use. At 1.5x the height of our tallest



available turbine tip, the setback distance would be 749' which places seventeen turbines outside the current project boundary. Using the 1.1x setback that distance is reduced to 549' and within the existing site boundary. The lesser setback distance would use approximately 5 acres less land and eliminate approximately 3400' in roads. The lesser setback distance would also prevent the expansion of the current site boundary by approximately an additional 122 acres to accommodate the 1.5x requirement.

4. The proposed adjustment will not unduly burden existing infrastructure (e.g., underground utilities or leach fields).

Response: The proposed adjustment places no additional burden on existing infrastructure. It actually reduces the quantity of water and chemicals needed for dust control.

5. The proposed adjustment will not unduly impair safety in the area.

Response: The proposed adjustment does not unduly impair safety in the area. The roads in question are lightly travelled. Even in the unlikely event a turbine would collapse, the distance from the road is sufficient for the turbine to extend its full fall height and not reach the road.

6. The proposed adjustment will minimize impacts to environmental resources (e.g., wetlands or identified EPDs).

Response: The proposed administrative setback actually reduces the impacts to environmental resources. Less farm land will be removed from production. Less habitat area will be disturbed and as stated previously less water will be used to control dust.

We ask that you pursue our request for an administrative adjustment to the setback requirement along county roads, included within the existing project boundary, with Wasco County at your earliest convenience.

Thank you for your support in this matter. Please contact me should you have questions or require further clarification of this request.

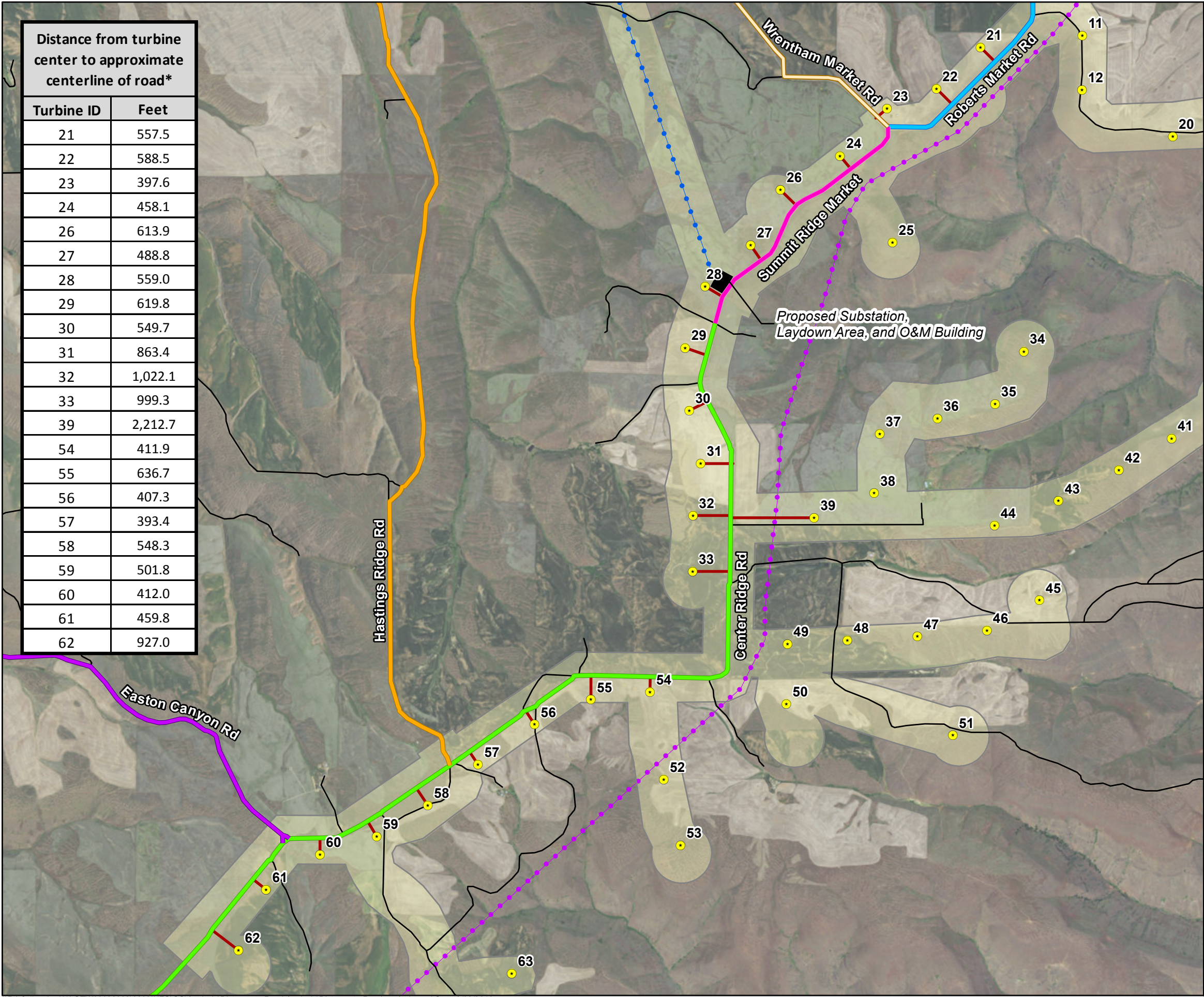
Best regards,



Steven A. Ostrowski, Jr.

Cc: File





# LotusWorks - Summit Ridge I, LLC

## Distance to Road Analysis

**Legend**

- Proposed Turbine Location
- Site Boundary
- Turbine center to approximate centerline of road\*

**Wasco County Road\*\***

- Center Ridge Rd
- Easton Canyon
- Hastings Ridge
- Roberts Market Rd
- Summit Ridge Market Rd
- Wrentham Market Rd
- Other road
- Proposed Transmission Route
- Bonneville 500 kV Line
- Proposed Substation/O&M Facility

\* Distance from center of turbine to road centerline based on ESRI world imagery  
\*\* County road linework data source: ESRI Streets basemap, 2010; county road names extracted from Wasco County Interactive Web Map: [http://co.wasco.or.us/county/dept\\_works\\_gis.cfm](http://co.wasco.or.us/county/dept_works_gis.cfm)

**Data Sources:**  
LearningSI, LLC, 2015  
LotusWorks, 2009, 2014  
Pioneer Surveying and Engineering, Inc., 2009



## ESTERSON Sarah \* ODOE

---

**From:** CLIFFORD Katie \* ODOE  
**Sent:** Tuesday, August 30, 2016 9:53 AM  
**To:** ESTERSON Sarah \* ODOE  
**Subject:** FW: Setback variance - Summit Ridge Wind Farm  
**Attachments:** 20160422-Revised Request for Adjustment.pdf; 20160422-Distance to Road Analysis.pdf

### Katie Clifford

Energy Facility Siting Analyst  
Oregon Department of Energy  
C: (503) 302-0267

---

**From:** Steven Ostrowski [mailto:SOstrowski@energysi.org]  
**Sent:** Friday, April 22, 2016 3:45 PM  
**To:** Clifford, Katie <katie.clifford@state.or.us>  
**Cc:** Angie Brewer <angieb@co.wasco.or.us>; Woods, Maxwell <maxwell.woods@state.or.us>  
**Subject:** RE: Setback variance - Summit Ridge Wind Farm

Hi Katie,

Per your instructions below, please find our formal letter with attachment.

Have an enjoyable weekend.

Steve

---

**From:** Clifford, Katie [mailto:katie.clifford@state.or.us]  
**Sent:** Friday, April 22, 2016 12:20 PM  
**To:** Steven Ostrowski  
**Cc:** Angie Brewer; Woods, Maxwell  
**Subject:** RE: Setback variance - Summit Ridge Wind Farm

Hi Steve,

In order for ODOE, in consultation the Wasco County Planning Department, to evaluate this additional information, please provide ODOE with a formal letter that includes both the information in your March 22, 2016 letter and the new information in your email below. In other words, we need a comprehensive response/full package that provides evidence addressing each of the six criteria in Section 19.030(D)(1)(c)(3)(c).

Katie

### Katie Clifford

Energy Facility Siting Analyst  
Oregon Department of Energy  
C: (503) 302-0267



---

**From:** Steven Ostrowski [<mailto:SOstrowski@energysi.org>]

**Sent:** Friday, April 22, 2016 9:27 AM

**To:** [angieb@co.wasco.or.us](mailto:angieb@co.wasco.or.us); Clifford, Katie ([katie.clifford@state.or.us](mailto:katie.clifford@state.or.us)) <[katie.clifford@state.or.us](mailto:katie.clifford@state.or.us)>

**Cc:** [arthurs@co.wasco.or.us](mailto:arthurs@co.wasco.or.us)

**Subject:** FW: Setback variance - Summit Ridge Wind Farm

Good morning Ms. Brewer,

As you are aware I met yesterday afternoon with Arthur Smith, Wasco County Road Master. As a result of our conversation, Mr. Smith consented to our requested setback variance. Below is a copy of the email in which Mr. Smith confirms his consent.

My discussions with Mr. Smith also provided the following daily traffic usage figures from a study Wasco County performed on the roads in question in 2013:

- Roberts Market Road – 33 vehicles/day
- Wrentham Market Road – 10 vehicles/day
- Summit Ridge Market Road – 11 vehicles/day
- Center Ridge Road – 23 vehicles/day

According to Mr. Smith, depending on whether you use a local or Federal reference, these figures would be considered either as no traffic or light traffic.

In reviewing the six criteria for approval of the variance Mr. Smith's consent as road authority would appear to fully satisfy requirement #1. Landowners along these roads are all project participants. Please confirm that as participating landowners proof of their consent is not required.

Criteria #2 is a pre-construction requirement and as you pointed out in your response will be determined by the ODOE

Criteria #3 appears self-evident from the information we provided that demonstrates less farm land will be used as a result of the change in setbacks

Criteria #4 also seems satisfied as there is no addition burden to existing infrastructure as a result of the requested setback variance.

Criteria #5 also appears satisfied as the setback does not unduly impair safety in the area. At the requested variance distance, in the unlikely event a turbine would collapse, it would not reach the road and create a safety hazard. The chance of collapse remains is the same for either position so there is no additional safety risk.

Criteria #6 also appears satisfied as there is no impact to wetlands or other environmental resources. This was confirmed in our most recent wetlands study performed in March and submitted to the State Department of Lands and available for your review should you so desire.

In addressing the specific reasons identified in your letter for finding our request incomplete we believe your concerns have now all been addressed.

Concern #1 – We are not requesting all turbines be subject to the variance. We are only seeking turbines located on County Roads. Per the attached map we seek to apply the variance to only those turbines that are currently less than 750' from the County roads. The specific Turbine ID's are: 21, 22, 23, 24, 26, 27, 28, 29, 30, 54, 55, 56, 57, 58, 59, 60, 61. In addition, for these turbines, where the distance currently exceeds 550' from the road, we will wherever possible use the distance from road currently indicated.

Concern #2 – This concern has been addressed by Mr. Smith's consent email below.

Concern #3 – As previously identified this is the responsibility of ODOE pre-construction review.

Concern #4 – The stated concern here is that our conclusions lacked sufficient evidence and support. Specifically:

- Our conclusion that safety was not unduly impaired was arrived at by concluding that should the unlikely event of a turbine collapse occur, the turbines would not reach the road. Therefore the safety risk using the setback variance of 1.1x would be similar to that of 1.5x. The turbines would collapse on privately owned participating owner farm land.
- The traffic study information provided by Mr. Smith as identified above confirms that the roads in question are lightly travelled.
- The distance between turbines exceeds 1000' in every instance. There is essentially no topographical differences between the locations. Previous geotechnical reviews of the entire site indicates similar conditions across the site. The turbines will be erected on land that is primarily used for agricultural purposes.

We believe with this additional information we have fully addressed this concern.

We appreciate the opportunity Wasco County and the Planning Department as afforded us to respond. We trust with this response we have resolved all items previously considered incomplete.

Best regards,

Steve



Steven A. Ostrowski, Jr.  
President  
Summit Ridge Wind Holdings, Inc.  
9611 NE 117<sup>th</sup> Ave  
Suite 2840  
Vancouver, WA 98662  
P 360.737.9692  
F 360.737.9835  
C 360.910.7625  
[sostrowski@energysi.org](mailto:sostrowski@energysi.org)

**From:** Arthur Smith [<mailto:arthurs@co.wasco.or.us>]  
**Sent:** Thursday, April 21, 2016 2:37 PM  
**To:** Steven Ostrowski  
**Cc:** Angie Brewer  
**Subject:** Setback variance - Summit Ridge Wind Farm

Steve,

Thank you for meeting with me and discussing the proposed setback variance for the Summit Ridge wind farm project. I really appreciate all the information you provided.



With regards to Wasco County LUDO, Section 19.030 (D)(1)(c)(3)(c)(1) and acting as the designated road authority for Wasco County, I am consenting to the requested setback variance of 1.1. This variance will not unduly impair safety on the county roads in the project area and it will not unduly burden any county infrastructure.

If you have any questions, please feel free to contact me. Thanks.

Arthur

--

**Arthur Smith, Director  
Wasco County Public Works  
541-506-2645**

Distance from turbine center to approximate centerline of road\*

| Turbine ID | Feet    |
|------------|---------|
| 21         | 557.5   |
| 22         | 588.5   |
| 23         | 397.6   |
| 24         | 458.1   |
| 26         | 613.9   |
| 27         | 488.8   |
| 28         | 559.0   |
| 29         | 619.8   |
| 30         | 549.7   |
| 31         | 863.4   |
| 32         | 1,022.1 |
| 33         | 999.3   |
| 39         | 2,212.7 |
| 54         | 411.9   |
| 55         | 636.7   |
| 56         | 407.3   |
| 57         | 393.4   |
| 58         | 548.3   |
| 59         | 501.8   |
| 60         | 412.0   |
| 61         | 459.8   |
| 62         | 927.0   |

LotusWorks - Summit Ridge I, LLC

Distance to Road Analysis

- Legend**
- Proposed Turbine Location
  - Site Boundary
  - Turbine center to approximate centerline of road\*
  - Wasco County Road\*\***
    - Center Ridge Rd
    - Easton Canyon
    - Hastings Ridge
    - Roberts Market Rd
    - Summit Ridge Market Rd
    - Wrentham Market Rd
  - Other road
  - Proposed Transmission Route
  - Bonneville 500 kV Line
  - Proposed Substation/O&M Facility

\* Distance from center of turbine to road centerline based on ESRI world imagery  
 \*\* County road linework data source: ESRI Streets basemap, 2010; county road names extracted from Wasco County Interactive Web Map:  
[http://co.wasco.or.us/county/dept\\_works\\_gis.cfm](http://co.wasco.or.us/county/dept_works_gis.cfm)



**Data Sources:**  
 LearningSI, LLC, 2015  
 LotusWorks, 2009, 2014  
 Pioneer Surveying and Engineering, Inc., 2009





**LotusWorks – Summit Ridge I, LLC**

9611 NE 117th Avenue  
Suite 2840  
Vancouver, WA 98662-2403

360.737.9692

April 22, 2016

Ms. Katie Clifford  
Energy Facility Siting Analyst  
**Oregon Department of Energy**  
625 Marion Street NE  
Salem, OR 97301

**Subject: Revised Request for Administrative Adjustment**

**Reference: LotusWorks-Summit Ridge I, LLC Site Certificate, Amendment #1, March 22, 2016 Letter Requesting Administrative Adjustment to Turbine Setback Requirements**

Ms. Clifford,

This letter is a revision to our March 22, 2016 request for an Administrative Adjustment to change the setback requirements for Summit Ridge. Amendment #1 to the LotusWorks-Summit Ridge I, LLC Site Certificate includes language that incorporates new land use standards into our project. This was the result of Wasco County's 2012 revision of their wind turbine land use ordinances and the incorporation of the updated ordinances into Addendum #1 of our Site Certificate this past August. The revised ordinances increase the setback distances for turbines along County roads to 1.5x the tip height of the turbine. Adhering to the new setback distances results in seventeen of our turbines being inside the current stated set back distances.

Based on using a 64 turbine layout, the seventeen turbines we are seeking setback exception are identified on the attached map as having Turbine ID # 21, 22, 23, 24, 26, 27, 28, 29, 30, 54, 55, 56, 57 58, 59, 60 and 61.

It should be noted that these turbines were originally located to take maximum advantage of the available wind and where placed based on the setback requirements that existed in 2010. Setting the turbines farther off the ridge has a definite negative impact on the amount of electricity each impacted turbine will produce. We acknowledge the requirements changed and have examined the available options to identify the best solution for the project, the landowners and Wasco County.

We believe the best and least impactful solution for all concerned is to apply for an administrative adjustment to establish the setback distance for the turbines listed above along County roads impacted by our project at 1.1x the maximum height at the installed turbine rotor tip. The 1.1 multiplier would result in a safe and reasonable setback distance and will allow all turbines to fit inside the currently approved site boundary. This would also have the minimum impact to the performance of the turbines in question.

---



Wasco County ordinances clearly state an applicant may request an adjustment to non-project boundaries using the process described in 19.030(D)(1)(c)(3)(C) which states:

Adjustment Provision: Applicant may, as part of the wind energy permitting process, obtain an administrative adjustment to authorize a lesser setback from regulations addressing turbine setbacks from dwellings in resource zones. This may be authorized as part of the CUP pursuant to the Administrative Action process of Section 2.060(A) by the Director or designee and upon findings that demonstrate the following criteria are met:

- (1) The underlying landowner (or applicable road authority or utility as may be appropriate for non-project boundary setbacks) has consented, in writing, to an adjusted setback.
- (2) The proposed adjustment complies with DEQ noise standard.
- (3) The proposed adjustment will not force a significant change in accepted farm or forest practices on surrounding lands devoted to or available for farm or forest use.
- (4) The proposed adjustment will not unduly burden existing infrastructure (e.g., underground utilities or leach fields).
- (5) The proposed adjustment will not unduly impair safety in the area.
- (6) The proposed adjustment will minimize impacts to environmental resources (e.g., wetlands or identified EPDs).

Our response to each of the six criteria is as follows:

1. The underlying landowner (or applicable road authority or utility as may be appropriate for non-project boundary setbacks) has consented, in writing, to an adjusted setback. We have already confirmed the consent of landowners either side of the roads in question and provide that consent in writing if so required.

Response: The only non-boundary landowner affected by our request would be the Wasco County road department as property on either side of the road is within the current project boundary and owned by participating landowners. Arthur Smith, Director of Wasco County Public Works, in an email dated April 21, 2016 provided his consent to our requested setback variance. A copy of Mr. Smith's email is included as an attachment to this letter.

2. The proposed adjustment complies with DEQ noise standard.

Response: The area along the roads in question is sparsely populated and the road receives minimal use under normal circumstances. Participating landowners on either side of the road have signed noise waivers. In addition Section 12.0 "Noise Control and Noise Complaint Response" of the current approved site permit establishes the criteria for noise at the site and requires us to submit a noise analysis prior to the start of





construction. We also believe the road and wind noise along the roads in question will serve to mask turbine noise along the roads.

3. The proposed adjustment will not force a significant change in accepted farm or forest practices on surrounding lands devoted to or available for farm or forest use.

Response: The proposed administrative adjustment actually lessens the impact on surrounding lands devoted to or available for farm use. At 1.5x the height of our tallest available turbine tip, the setback distance would be 749' which places seventeen turbines outside the current project boundary. Using the 1.1x setback that distance is reduced to 549' and within the existing site boundary. The lesser setback distance would use approximately 5 acres less land and eliminate approximately 3400' in roads. The lesser setback distance would also prevent the expansion of the current site boundary by approximately an additional 122 acres to accommodate the 1.5x requirement.

4. The proposed adjustment will not unduly burden existing infrastructure (e.g., underground utilities or leach fields).

Response: The proposed adjustment places no additional burden on existing infrastructure. It actually reduces the quantity of water and chemicals needed for dust control. In his email informing us of his consent of our request to change the setback provision, Mr. Smith acknowledges the change in setback will not unduly burden any county infrastructure.

5. The proposed adjustment will not unduly impair safety in the area.

Response: The proposed adjustment does not unduly impair safety in the area. The roads in question are lightly travelled. Based on information provided by Mr. Smith from a 2013 Wasco County traffic study, daily vehicle use on the roads in question is as follows:

- Roberts Market Road – 33 vehicles/day
- Wrentham Market Road – 10 vehicles/day
- Summit Ridge Market Road – 11 vehicles/day
- Center Ridge Road – 23 vehicles/day

According to Mr. Smith, depending on whether you use a local or Federal reference, these figures would be considered either as no traffic or light traffic.

Mr. Smith also states:

This variance will not unduly impair safety on the county roads in the project area and it will not unduly burden any county infrastructure.



In the unlikely event a turbine would collapse, the distance from the road is sufficient for the turbine to extend its full fall height and not reach the road.

Our conclusion that safety was not unduly impaired was arrived at by concluding that should the unlikely event of a turbine collapse occur, the turbines would not reach the road. Therefore the safety risk using the setback variance of 1.1x would be similar to that of 1.5x. The turbines would collapse on privately owned participating owner farm land.

The traffic study information provided by Mr. Smith as identified elsewhere in this document also confirms that the roads in question are lightly travelled.

The distance between turbines exceeds 1000' in every instance. There are essentially no topographical differences between the turbine locations. Previous geotechnical reviews of the entire project site indicate similar conditions across the site. The turbines will be erected on land that is primarily used for agricultural purposes.

6. The proposed adjustment will minimize impacts to environmental resources (e.g., wetlands or identified EPDs).

Response: There is no impact to wetlands or other environmental resources. This was confirmed in our most recent wetlands study performed in March of this year and submitted to the State Department of Lands. This study is available for your review should you so desire. The proposed administrative setback actually reduces the impacts to environmental resources. Less farm land will be removed from production. Less habitat area will be disturbed and as stated previously less water will be used to control dust.

We ask that you pursue our request for an administrative adjustment to the setback requirement along county roads, included within the existing project boundary, with Wasco County at your earliest convenience.

Thank you for your support in this matter. Please contact me should you have questions or require further clarification of this request.

Best regards,



Steven A. Ostrowski, Jr.

Cc: File



## Steven Ostrowski

---

**From:** Arthur Smith <arthurs@co.wasco.or.us>  
**Sent:** Thursday, April 21, 2016 2:37 PM  
**To:** Steven Ostrowski  
**Cc:** Angie Brewer  
**Subject:** Setback variance - Summit Ridge Wind Farm

Steve,

Thank you for meeting with me and discussing the proposed setback variance for the Summit Ridge wind farm project. I really appreciate all the information you provided.

With regards to Wasco County LUDO, Section 19.030 (D)(1)(c)(3)(c)(1) and acting as the designated road authority for Wasco County, I am consenting to the requested setback variance of 1.1. This variance will not unduly impair safety on the county roads in the project area and it will not unduly burden any county infrastructure.

If you have any questions, please feel free to contact me. Thanks.

Arthur

--  
**Arthur Smith, Director**  
**Wasco County Public Works**  
**541-506-2645**

**Attachment E: Certificate Holder Responses to Additional Information Requests**





**Oregon**  
Kate Brown, Governor



**OREGON**  
DEPARTMENT OF  
**ENERGY**

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May 26, 2016

Steven A. Ostrowski, Jr.  
LotusWorks-Summit Ridge I, LLC  
9611 NE 117<sup>th</sup> Avenue  
Suite 2840  
Vancouver, WA 98662-2403

*Sent via email: [SOstrowski@energysi.org](mailto:SOstrowski@energysi.org)*

RE: Summit Ridge Wind Farm Request for Amendment #2; Additional Information Request

Dear Mr. Ostrowski:

The Oregon Department of Energy (department) is in the process of reviewing the Summit Ridge Wind Farm Request for Amendment (RFA) #2 to the Site Certificate, including a supplemental request for an administrative adjustment to authorize a lesser setback from non-project boundaries (pursuant to the Wasco County Land Use and Development Ordinance). The department has determined that additional information is necessary in order for the department to complete its evaluation of the RFA and prepare the proposed order. An information request table accompanies this letter. The department may request further information during development of the proposed order.

Please provide the requested information in a single consolidated file, as red-line edits to the RFA document, no later than the end of the day on June 26, 2016. If you anticipate that you will need more time to complete the responses, or if you have any questions, please do not hesitate to call or email.

Sincerely,

Katie Clifford  
Energy Facility Siting Analyst  
[Katie.clifford@state.or.us](mailto:Katie.clifford@state.or.us)  
(503) 302-0267

**cc via e-mail distribution:**

Todd Cornett, Oregon Department of Energy  
Virginia Gustafson, Oregon Department of Energy  
Max Woods, Oregon Department of Energy  
Renee France, Oregon Department of Justice

## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number | RFA Page(s)                         | Additional Information Request   | Comment  |
|------------|-------------------------------------|--|--|
| 1          | 6, 12, 13, 14, 17, 52               | Clarify the minimum ground clearance for the blade tips under the requested 3.0 MW turbine option.   | <p>Pages 6, 13, 14, 17, and 52 of the RFA refer to a blade tip clearance of 18 meters above ground, whereas page 12 refers to a clearance of 17 meters.</p> <p><b>Rule:</b> OAR 345-021-0010(1)(b)(A)</p>  |
| 2          | 12 & 13, and page 2 of Attachment 2 | Clarify the overall height (ground-to-blade tip) of the turbines under the requested 3.0 MW turbine option.  | <p>Page 12 of the RFA refers to a 151 meter overall height. This is inconsistent with the reference on Page 13 of the RFA and page 2 of Attachment 2, which refer to a ground-to-tip distance of 150 meters.</p> <p><b>Rule:</b> OAR 345-021-0010(1)(b)(A)</p>   |
| 3          | 63                                  | Provide a list of the projects for which Mr. Ostrowski oversaw the development and construction while at LotusWorks and upon which the certificate holder relies to demonstrate compliance with the Council's Organizational Expertise Standard. | <p>Page 63 states, "Prior to Summit Ridge Wind Holdings, LLC, Mr. Ostrowski led the Construction Management group of LotusWorks. At LotusWorks Mr. Ostrowski oversaw the development and construction of over 2000 MW's of energy projects including 1000 MW's of wind projects in the Pacific Northwest." More thorough explanation is needed to establish how this statement supports the certificate holder's conclusion of compliance with the Organizational Expertise Standard.</p> <p><b>Rule:</b> OAR 345-021-0010(1)(d)(A) and OAR 345-022-0010</p> |
| 4          | General                             | In the description of the facility, provide the number of acres that would be temporarily disturbed as well as the number of acres that would be occupied by permanent facility structures and roads under the 3.0 MW turbine option.            | <p>OAR 345-021-0010(1)(c)(B) requires a description of areas of temporary disturbance and permanent disturbance. The RFA does not include this required information for the 3.0 MW turbine option.</p> <p><b>Rule:</b> OAR 345-021-0010(1)(c)(B)</p>   |



## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number | RFA Page(s)  | Additional Information Request   | Comment  |
|------------|--------------|--|--|
| 5          | Attachment 2 | Provide higher resolution versions of Figures 1 through 6 of Attachment 2. | <p>It is difficult to determine, based on looking at the figures, where differences in visibility between the two turbine options assessed in Attachment 2 would occur. For example, in Figures 3 and 6 there are two designations on the legend that are not readily visible within the map itself: "New Areas Where Proposed Turbines Now Likely Visible," and "Areas Where Proposed Turbines No Longer Visible."</p> <p>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 scenic resources and values identified as significant or important in management plans (OAR 345-022-0080), important recreational opportunities (OAR 345-022-0100), and the protected areas listed in OAR 345-022-0040. Higher resolution figures in the Summit Ridge Wind Farm-Evaluation of Visual Changes memorandum (Attachment 2 to the RFA) will assist the department in evaluating the potential visual impacts of the 3.0 MW turbine option on these resources.</p> <p><b>Rule:</b> OAR 345-021-0010(1)(l), OAR 345-021-0010(1)(r), OAR 345-021-0010(1)(t), OAR 345-022-0040, OAR 345-022-0080, OAR 345-022-0100</p> |



Oregon  
Kate Brown, Governor



OREGON  
DEPARTMENT OF  
ENERGY

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July 6, 2016

Steven A. Ostrowski, Jr.  
LotusWorks-Summit Ridge I, LLC  
9611 NE 117<sup>th</sup> Avenue  
Suite 2840  
Vancouver, WA 98662-2403

*Sent via email: [SOstrowski@energysi.org](mailto:SOstrowski@energysi.org)*

RE: Summit Ridge Wind Farm Request for Amendment #2; Additional Information Request

Dear Mr. Ostrowski:

The Oregon Department of Energy (department) is in the process of reviewing the Summit Ridge Wind Farm Request for Amendment (RFA) #2 to the Site Certificate, including a supplemental request for an administrative adjustment to authorize a lesser setback from non-project boundaries (pursuant to the Wasco County Land Use and Development Ordinance). The department requested additional information on May 26, 2016 and received the requested information on June 3, 2016. The department has determined that further information is necessary in order for the department to complete its evaluation of the RFA and finish preparing the proposed order. An information request table accompanies this letter.

Please provide the requested information in a single consolidated file no later than the end of the day on July 20, 2016. If you anticipate that you will need more time to complete the responses, or if you have any questions, please do not hesitate to call or email.

Sincerely,

Katie Clifford  
Energy Facility Siting Analyst  
[Katie.clifford@state.or.us](mailto:Katie.clifford@state.or.us)  
(503) 302-0267

**cc via e-mail distribution:**

Todd Cornett, Oregon Department of Energy  
Max Woods, Oregon Department of Energy



## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number* | RFA Page(s) | Additional Information Request  | Comment   |
|-------------|-------------|---|---|
| 6           | p. 26       | Provide confirmation that all facility structures, as amended, with the exception of the proposed transmission line, would be located a minimum of 200 feet from the property line of adjacent land used for perennial or annual crops.       | <p>RFA #2 states, "EFSC previously found that Summit Ridge complied with the Land Use Standard...No changes have been made that would warrant additional review or reconsideration of the prior finding." However, additional evidence is requested to confirm that the facility, as amended, would be in compliance with Wasco County's setback requirements. Please confirm that all facility structures, as amended, with the exception of the proposed transmission line, would comply with WCLUDO 3.210(F)(1)(a).</p> <p><b>Rule(s):</b> OAR 345-022-0030(2)(b)(A) and WCLUDO 3.210(F)(1)(a) Setbacks, Property Line</p> |
| 7           | p. 26       | Provide confirmation that the facility foundations and permanent structures, as amended, with the exception of the proposed access roads and transmission line, would be located at least 100 feet away from seasonal or permanent waterways. | <p>RFA #2 states, "EFSC previously found that Summit Ridge complied with the Land Use Standard...No changes have been made that would warrant additional review or reconsideration of the prior finding." However, additional evidence is requested to confirm that the facility, as amended, would be in compliance with Wasco County's setback requirements. Please confirm that the locations of facility foundations and permanent structures as proposed under RFA #2 would comply with WCLUDO 3.210(F)(1)(b)(1).</p> <p><b>Rule(s):</b> OAR 345-022-0030(2)(b)(A) and WCLUDO 3.210(F)(1)(b)(1) Setbacks, Waterways</p>  |

## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number* | RFA Page(s) | Additional Information Request  | Comment  |
|-------------|-------------|---|--|
| 8           | p. 26       | Using the most current Flood Insurance Rate Map available for Wasco County, provide confirmation that no facility components, as amended, would be located within the 100-year floodplain.                                  | <p>RFA #2 states, “EFSC previously found that Summit Ridge complied with the Land Use Standard...No changes have been made that would warrant additional review or reconsideration of the prior finding.” However, additional evidence is requested to confirm compliance with Wasco County’s setback requirements. Please provide confirmation that no facility components would be located within the 100-year floodplain, and the sources that were reviewed to make this confirmation.</p> <p><b>Rule(s):</b> OAR 345-022-0030(2)(b)(A) and WCLUDO 3.210(F)(1)(b)(2) Setbacks, Waterways</p> |
| 9           | p. 26       | Provide confirmation that the facility, as amended, would not include development within 50 feet of the centerline of an irrigation ditch that continues past the subject parcel to provide water to other property owners. | <p>RFA #2 states, “EFSC previously found that Summit Ridge complied with the Land Use Standard...No changes have been made that would warrant additional review or reconsideration of the prior finding.” However, additional evidence is requested to confirm compliance with Wasco County’s setback requirements. Please confirm that the facility, as amended, would comply with WCLUDO 3.210(F)(1)(c).</p> <p><b>Rule(s):</b> OAR 345-022-0030(2)(b)(A) and WCLUDO 3.210(F)(1)(c) Setbacks, Irrigation Ditches</p>   |



### Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number* | RFA Page(s) | Additional Information Request  | Comment  |
|-------------|-------------|---|--|
| 10          | p. 26       | Provide evidence (e.g., description, maps/figures) demonstrating that the facility components, as amended, would be located to avoid impacts to wetlands and waterways. | <p>RFA #2 states, “EFSC previously found that Summit Ridge complied with the Land Use Standard...No changes have been made that would warrant additional review or reconsideration of the prior finding.” In the April 22, 2016 Revised Request for Administrative Adjustment, the certificate holder stated that, “There is no impact to wetlands.” However, additional evidence is requested to confirm compliance with Wasco County’s setback requirements. Please provide evidence demonstrating that the energy facility components, as amended, would be sited to minimize or avoid impacts to wetlands and waterways.</p> <p><b>Rule(s):</b> OAR 345-022-0030(2)(b)(A) and WCLUDO 19.030(D)(1)(c)(3)(c) Setbacks, Criterion 6</p> |

|    |       |   |  |
|----|-------|---|--|
| 11 | p. 29 | <p>Provide a more detailed analysis of the impacts (under the proposed 3.0 MW turbine option as compared to the approved 2.7 MW turbine facility) to Cottonwood Canyon State Park and each protected area within the analysis area shown in the table entitled “Protected Areas Within 20 Miles of the Facility” in the <i>Final Order</i>.</p> | <p>RFA #2 states, “EFSC previously found that Summit Ridge complied with the Protected Area Standard. These requirements were previously reviewed with Wasco County. To provide the Council additional clarification on the matter we have included a third party independent review performed by David Evans and Associates (Attachment 2). We believe this independent review confirms that LotusWorks-Summit Ridge I, LLC meets the intent of the standard and EFSC should find Summit Ridge in compliance with the Protected Area Standard.” Attachment 2 states that, “Figures 3 [sic] illustrates the change in visibility for Protected Areas. The results indicate that visibility for Alternative C would remain about the same or slightly less than Alternative B.” However, with the exception of a brief analysis of impacts to the Deschutes River, the analysis fails to include a discussion of the specific impacts to each protected area within the analysis area shown in the table entitled “Protected Areas Within 20 Miles of the Facility” in the <i>Final Order</i>. In addition, compliance with WCLUDO 19.030(C)(4) requires a finding that the design, construction and operation of the energy facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified in Subsection (b) (Protected Areas) of that criterion. The one protected area that is not addressed by the Council’s Protected Area Standard is Cottonwood Canyon State Park. The assessment should therefore also include an analysis of impacts to Cottonwood Canyon State Park in order to evaluate compliance with WCLUDO 19.030(C)(4).</p> <p><b>Rule(s):</b> OAR 345-022-0040 and WCLUDO 19.030(C)(4) Visual Impact</p> |
|----|-------|---|--|



## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number* | RFA Page(s) | Additional Information Request   | Comment   |
|-------------|-------------|--|---|
| 12          | p. 30       | <p>Provide a more detailed analysis of the impacts (under the proposed 3.0 MW turbine option as compared to the approved 2.7 MW turbine facility) to the following scenic resources identified by the applicable resource plans within the analysis area: Columbia River Gorge National Scenic Area (CRGNSA), the White River Canyon, resources in the John Day River Canyon, the Mt. Hood National Forest, Oregon National Historic Trail, the Journey Through Time Scenic Byway, Wasco County Resources, and Sherman County Resources.</p> | <p>RFA #2 states, “EFSC previously found that Summit Ridge complied with the Scenic Resources Standard. These requirements were previously reviewed with Wasco County. To provide the Council additional clarification on the matter we have included a third party independent review performed by David Evans and Associates (Attachment 2). We believe this independent review confirms that LotusWorks-Summit Ridge I, LLC meets the intent of the standard and EFSC should find Summit Ridge in compliance with the Scenic Resources Standard.” Attachment 2 states that, “Figure 6 illustrates the change in visibility for Scenic and Aesthetic Values. The results indicate that visibility for Alternative C would remain about the same or slightly less than Alternative B for the same reasons explained for Protected Areas. Specifically, the greatest concentration of net difference - that is, red or blue shading – would occur within the Deschutes River corridor.” However, the analysis fails to include a discussion of the specific impacts to the following additional scenic resources identified by the applicable resource plans within the analysis area: CRGNSA, the White River Canyon, resources in the John Day River Canyon, Mt. Hood National Forest, Oregon National Historic Trail, the Journey Through Time Scenic Byway, Wasco County Resources, and Sherman County Resources.</p> <p><b>Rule(s):</b> OAR 345-022-0080</p> |

## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number* | RFA Page(s)  | Additional Information Request   | Comment  |
|-------------|--|--|--|
| 13          | pp. 42-44 and 54; and p. 4 of the April 22, 2016 Revised Request for Administrative Adjustment | Provide confirmation that the project would not require 50 cubic yards or more of material to be removed, filled, or altered within any “waters of the state.” | <p>Under ORS 469.503(3) and under the Council's General Standard of Review (OAR 345-022-0000), the Council must determine whether the proposed 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," including the Oregon Removal-Fill Law. The Oregon Removal-Fill Law (ORS 196.800 through .990) and DSL regulations (OAR 141-085-0005 through 141-085-0090) 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 requested information would enable a determination of whether or not a Removal-Fill Permit would be required. In the April 22, 2016 Revised Request for Administrative Adjustment, the certificate holder stated that “there is no impact to wetlands;” however, RFA #2 does not provide sufficient evidence to demonstrate that the project would not require 50 cubic yards or more of material to be removed, filled, or altered within any waters of the state.</p> <p><b>Rule(s):</b> OAR 345-022-0000</p> |



## Summit Ridge Wind Farm Request for Amendment (RFA) #2 - Additional Information Request (AIR)

| AIR Number*                           | RFA Page(s) | Additional Information Request   | Comment  |
|---------------------------------------|-------------|--|--|
| 14                                    | p. 60       | Provide confirmation that the Air Contaminant Discharge Permit required to operate the temporary batch plant would be obtained by the certificate holder and not by a third-party. | <p>ASC, Exhibit B states, “A temporary batch plant will be set up to prepare concrete for the project. It will be on a graveled 2-acre site, located within the site boundary, as shown on Figure C-2.” ASC, Exhibit E states that an “Air Contaminant Discharge Permit will be required to authorize operation of sources of air contaminants, such as those from the proposed batch plant.” ASC, Exhibit E further states that, “The Applicant will not rely on any third-party state or local third-party permit approval.” However, ASC, Exhibit E states that, “Washdown will be done by the contractor and will occur at a contractor-owned batch plant, either located in a proposed staging area or offsite at a contractor-owned facility.” RFA #2 does not request changes related to the batch plant but states that, “The applicant will not rely on any third-party permits or approvals to accomplish the project.” The requested information is needed to provide the information required by OAR 345-021-0010(1)(a)(B) and to ensure compliance with the Organizational Expertise Standard.</p> <p><b>Rules:</b> OAR 345-021-0010(1)(a)(B) and OAR 345-022-0010(3)</p> |
| 15                                    | n/a         | Provide a copy of Figure 1 of the Habitat Mitigation Plan (HMP; as revised October 22, 2014).  | The revised HMP refers to a Figure 1 but does not appear to include Figure 1 as part of the file.  |
| *AIRs 1-5 were issued on May 26, 2016 |             |  |  |



**Summit Ridge Wind, LLC**

9611 NE 117th Avenue  
Suite 2840  
Vancouver, WA 98662-2403

360.737.9692

June 3, 2016

Ms. Katie Clifford  
Energy Facility Siting Analyst  
**OREGON DEPARTMENT OF ENERGY**  
625 Marion St. NE  
Salem OR 97301-3737

Subject: Response to ODOE Additional Information Request #1 dated May 26, 2016

Reference: Summit Ridge Wind Farm, Wasco County, OR

Dear Ms. Clifford.

This letter and accompanying attachments serve as our consolidated response to your request for additional information dated May 26, 2016. We are responding to each of the five requests. Unfortunately two items are the result of our providing inconsistent information. We apologize for these errors and any inconvenience they may have caused.

**AIR Number 1**

The correct minimum ground clearance for the blade tips under the requested 3.0 MW turbine from the ground is 18 meters. A corrected copy of page 12 of our Request for Amendment #2 is included as an attachment to this letter.

**AIR Number 2**

The correct overall height (ground-to-blade tip) of the turbines under the requested 3.0 MW turbine option is 150 meters. A corrected copy of page 12 of our Request for Amendment #2 is included as an attachment to this letter.

**AIR Number 3**

The following is a list of wind projects where Mr. Ostrowski as President of LotusWorks CM division was responsible for overseeing the development and construction:

- **White Creek Wind Project – Roosevelt Washington**  
LotusWorks was the project manager and provided staff for the 205MW wind project. Responsibilities included pre construction management and construction management services, budget development, schedule, cash flow, training closeout and owner interface were also provided. LotusWorks also provided site inspectors, accounting services and support staff to the project.
-





- **Harvest Wind Project – Roosevelt Washington**  
LotusWorks was the project manager and provided staff for the 2100MW wind project. Responsibilities included pre construction management and construction management services, budget development, schedule, cash flow, training closeout and owner interface were also provided. LotusWorks also provided site inspectors, accounting services and support staff to the project.
- **Wild Horse Wind Project – Ellensburg Washington**  
LotusWorks was project manager and provided staff for a 250MW wind project. Construction Management, project closeout and owner interface services were also provided.
- **Elkhorn Wind Project – La Grande Oregon**  
LotusWorks Project and site management for a 100MW wind project. Responsibilities included turbine erection and managing all contractors responsible for construction of the BOP, including the roads, electrical collection systems and foundations. LotusWorks also had responsibility for cost and schedule and project the necessary site inspectors and support staff to the project.
- **Summit Power Group at White Creek Wind**  
LotusWorks provided asset management on an 89 turbine wind farm and supported the ownership group in the operation and maintenance of the wind project.
- **Summit Ridge – Wasco County Oregon**  
LotusWorks acquired and developed a 200 MW wind farm in Wasco County Oregon. Site Certificate was obtained. Project was subsequently acquired by Mr. Ostrowski.

An additional example of Mr. Ostrowski's expertise relative to the development and construction of wind farms is the **Mehoopany Wind farm located in Eaton Township Pennsylvania**. Mr. Ostrowski served as an expert witness in a legal dispute between the installation contractor and owner involving the development and construction of a 140MW wind farm.

A red-lined copy of pages 63 and 64 are included as attachments to this letter.

#### **AIR Number 4**

We would expect the area of disturbance for the 3 MW turbines to be very similar to the area previously identified for the approved 72 turbine layout. This would be especially true of temporary disturbance. Our conservative estimate for our temporary disturbance is 100 acres. This is temporary only and does not include the areas that will be permanently disturbed that will be used during construction.

While there would be 8 fewer turbines using the three MW turbines, the turbines are spread over essentially the same area. We would expect our final permanent lay-out to consume about 83 acres.

Both amounts will be confirmed upon completion of our final design of the wind farm.



**AIR Number 5**

In response to your request for higher resolution we have taken Figures 1-6 and divided each into six segments and provided a drawing for each segment. Drawing numbers will be Figure 1, sheet 1 of 6, sheet, 2 of 6 and so on. We believe this satisfies your request for additional resolution.

We trust the information above satisfies all requests of AIR #1. Please advise if you believe that is not the case.

Sincerely,



Steven A. Ostrowski, Jr.

Attachments

Cc: File





## **Attachment #1**

Redlines of Pages, 12, 63 & 64 of RAD #2



approximately 194 MW. The facility will be located on private land, approximately 17 miles southeast of The Dalles, Oregon. As currently permitted the facility consists of:

- 72 turbines with a maximum facility output of 194.4 MWs. Each turbine will be limited to a hub height no greater than 91 meters, a blade tip height no greater than 152 meters or a blade tip clearance not less than 23 meters above the ground.
- Substation with an approximately seven mile transmission line interconnecting to a new Bonneville Power Authority (BPA) on the Big Eddy – Maupin 230kV transmission line
- Operations and Maintenance (O&M) facility of approximately 10,000 square feet
- The project site boundary encompasses approximately 25,000 acres on privately owned land subject to long term wind leases with the landowners
- The Site Certificate was issued August 19, 2011 with Amendment #1 issued August 7, 2015 and has a current requirement to start construction by August 19, 2016 and complete construction activity by August 19, 2019

LotusWorks-Summit Ridge I, LLC is requesting that the Siting Council approve the following changes to the existing site certificate:

- An two year extension of The Site Certificate was issued August 19, 2011 with a resulting requirement to start construction by August 19, 2016 and complete construction activity by August 19, 2019
- The addition of a 3.0 MW turbine option that, if selected to be implemented, would reduce the total MW's of the facility to 192MWs. This turbine selection would also reduce the total number of turbines to 64 with each turbine having:
  - 84 meter hub height
  - 132 meter rotor diameter
  - 187 meter ground clearance
  - 1501 meter overall height

**OAR 345-027-0060 (1)(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:** 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)

The following changes are proposed for the Summit Ridge wind farm:

- The site certificate is extended for another two years thereby establishing a new construction start date of August 19, 2018.
- Likewise the completion date for construction is extended an additional two years so that construction must be complete within three years from the proposed new construction start date, August 19, 2021
- The siting corridor acreage of the project would remain at approximately 11,000 acres
- That an additional turbine option be approved that would meet the following parameters.





### **Attachment 1 - Exhibit D – Organization, Managerial and Technical Expertise**

**OAR 345-021-0010(1)(d)** Information about the organizational expertise of the applicant to construct and operate the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0010, including:

(A) The applicant's previous experience, if any, in constructing and operating similar facilities.

**Response:** Summit Ridge Wind Holdings, LLC as a new company has no prior direct experience as an entity building projects such as Summit Ridge. However the management team of Summit Ridge Wind Holdings has the combined experience of delivering more than 10,000 MWS of wind project combined experience. Steve Ostrowski, the member manager of Summit Ridge Wind Holdings was the President of LotusWorks-Summit Ridge I, LLC since the projects inception.

(B) The qualifications of the applicant's personnel who will be responsible for constructing and operating the facility, to the extent that the identities of such personnel are known when the application is submitted.

**Response:** **Steven Ostrowski** - Mr. Ostrowski brings nearly four decades of experience in heavy industry with the vast majority of that time focused in the energy industry. Over the course of his career Mr. Ostrowski has participated in the development and construction of over 10,000 MW's of energy projects across the US. The first 15 years of Mr. Ostrowski's career was spent in the nuclear industry where he served in various capacities including Project Manager for both the mechanical and Instrumentation and Controls installation contracts. The next ten years was spent primarily developing and constructing co-gen facilities, both as peaking and base load facilities and retrofitting control systems for utility sized coal fired power plants. Prior to Summit Ridge Wind Holdings, LLC, Mr. Ostrowski led the Construction Management group of LotusWorks. At LotusWorks Mr. Ostrowski oversaw the development and construction of over 2000 MW's of energy projects including 1000 MW's of wind projects in the Pacific Northwest. In addition Mr. Ostrowski has lead the development effort for the LotusWorks-Summit Ridge I Wind Farm located in Wasco County, Oregon. Mr. Ostrowski received a Bachelor of Science Degree in Business Management from Elmhurst College in Elmhurst, Illinois and holds an Electrical General Administrator's License in the State of Washington.

The following is a list of wind projects where Mr. Ostrowski as President of LotusWorks CM division was responsible for overseeing the development and construction:

- White Creek Wind Project – Roosevelt Washington  
LotusWorks was the project manager and provided staff for the 205MW wind project.  
Responsibilities included pre construction management and construction management services,



budget development, schedule, cash flow, training closeout and owner interface were also provided. LotusWorks also provided site inspectors, accounting services and support staff to the project.

- **Harvest Wind Project – Roosevelt Washington**

LotusWorks was the project manager and provided staff for the 2100MW wind project. Responsibilities included pre construction management and construction management services, budget development, schedule, cash flow, training closeout and owner interface were also provided. LotusWorks also provided site inspectors, accounting services and support staff to the project.

- **Wild Horse Wind Project – Ellensburg Washington**

LotusWorks was project manager and provided staff for a 250MW wind project. Construction Management, project closeout and owner interface services were also provided.

- **Elkhorn Wind Project – La Grande Oregon**

LotusWorks Project and site management for a 100MW wind project. Responsibilities included turbine erection and managing all contractors responsible for construction of the BOP, including the roads, electrical collection systems and foundations. LotusWorks also had responsibility for cost and schedule and project the necessary site inspectors and support staff to the project.

- **Summit Power Group at White Creek Wind**

LotusWorks provided asset management on an 89 turbine wind farm and supported the ownership group in the operation and maintenance of the wind project.

- **Summit Ridge – Wasco County Oregon**

LotusWorks acquired and developed a 200 MW wind farm in Wasco County Oregon. Site Certificate was obtained. Project was subsequently acquired by Mr. Ostrowski.

An additional example of Mr. Ostrowski's expertise relative to the development and construction of wind farms is the Mehoopany Wind farm located in Eaton Township Pennsylvania. Mr. Ostrowski served as an expert witness in a legal dispute between the installation contractor and owner involving the development and construction of a 140MW wind farm.

**Scott Nelson** (Independent Contractor) - Mr. Nelson has approximately twenty-three years of development, utility negotiations, construction, financing, and operations experience. He has been a part of over 5,000 MW's of successfully constructed wind and solar projects throughout the world. Mr. Nelson negotiated multiple frame agreements with wind turbine manufacturers, including but not limited to GE, Vestas, & Repower as well as negotiated international frame agreement with Vestas for

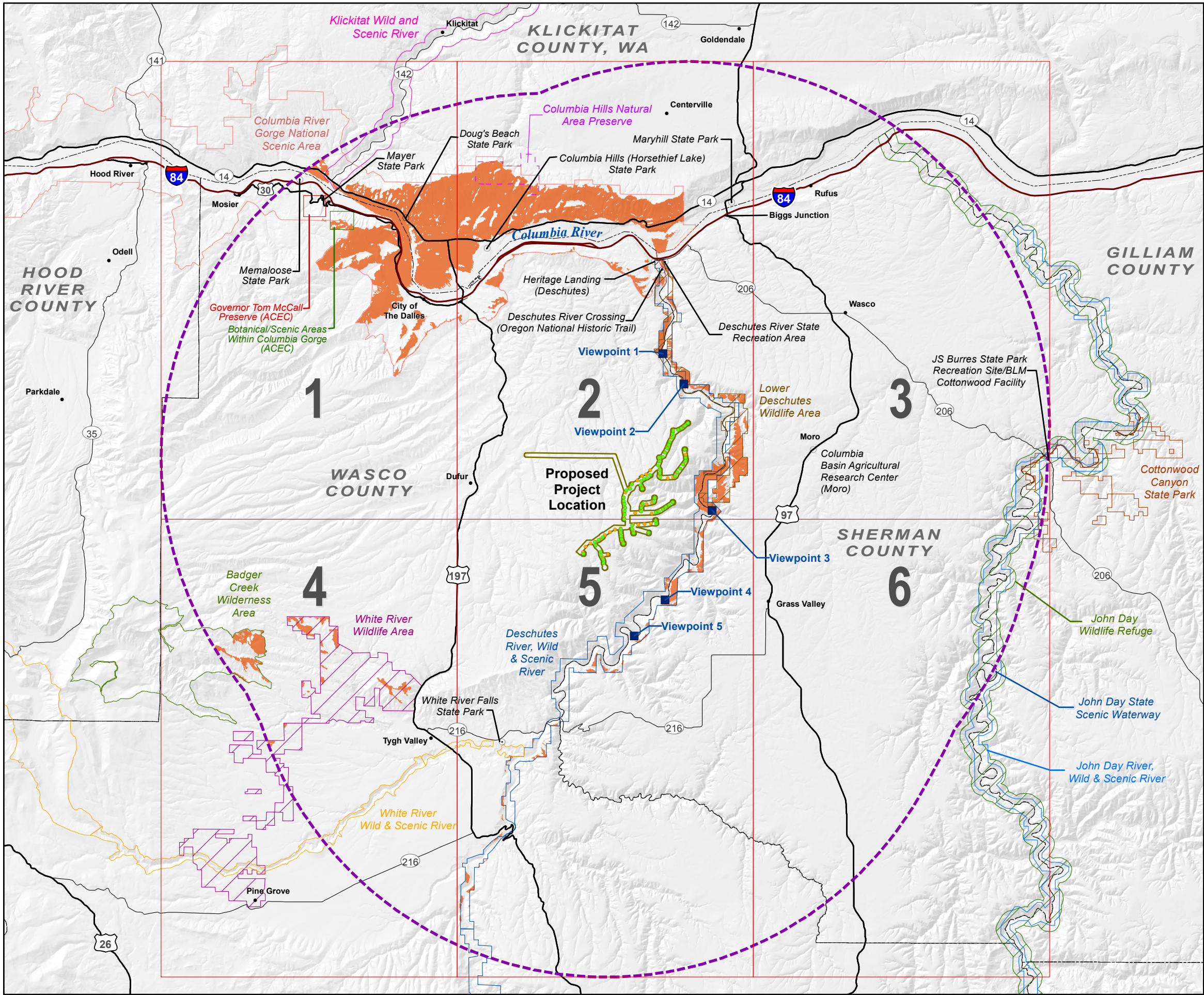


## **Attachment #2**

Expanded Drawings Figures 1, 2, 3, 4, 5 & 6 w/ 6 sheets per figure



Figure 1, Index Map  
Visibility Analysis for Protected  
Areas, Alternative B

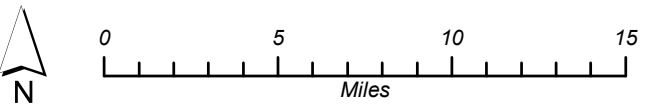


**Legend**

- Sheet Extent
- Protected Areas Analysis Area (20 Mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Boundary
- Simulation Viewpoint Location
- County Boundary
- Interstate Highway
- Other Highway
- Major Road
- Areas Where Proposed Turbines Likely Visible

**Protected Areas**

- Site Specific Protected Area
- Cottonwood Canyon State Park
- Deschutes State Scenic Waterway
- John Day State Scenic Waterway
- White River State Scenic Waterway
- Klickitat River, Wild & Scenic River
- Columbia River Gorge National Scenic Area
- Lower Deschutes Wildlife Area
- White River Wildlife Area
- John Day Wildlife Refuge
- Columbia Hills Natural Area Preserve
- Botanical/Scenic Areas within Columbia Gorge (ACEC)
- Governor Tom McCall Preserve (ACEC)

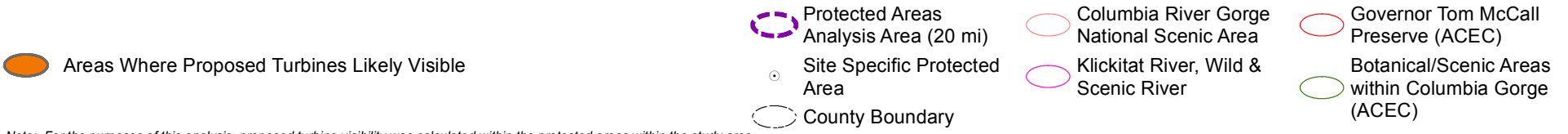
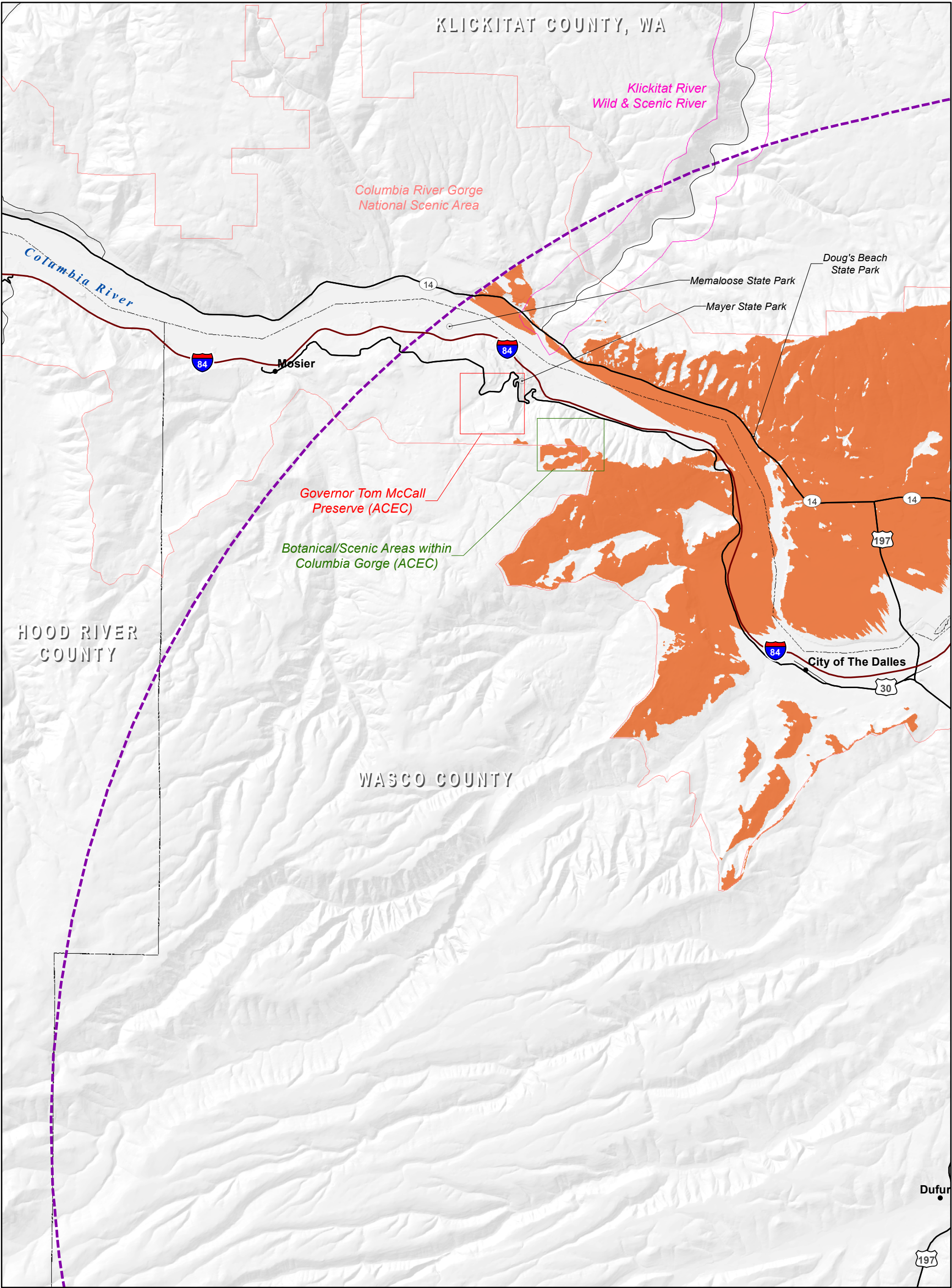


**Data Sources:**

- Bureau of Land Management
- LearningSI, LLC (LSI), 2015.
- LotusWorks, 2009, 2014
- Oregon Geospatial Enterprise Office (GEO)
- Two Rivers Resource Management Plan,
- Record of Decision, June 1986
- US Forest Service





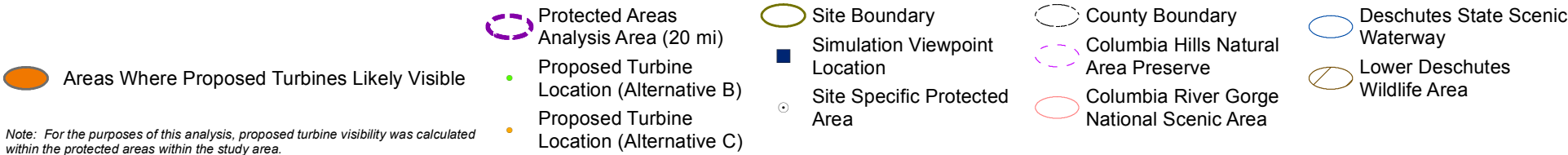
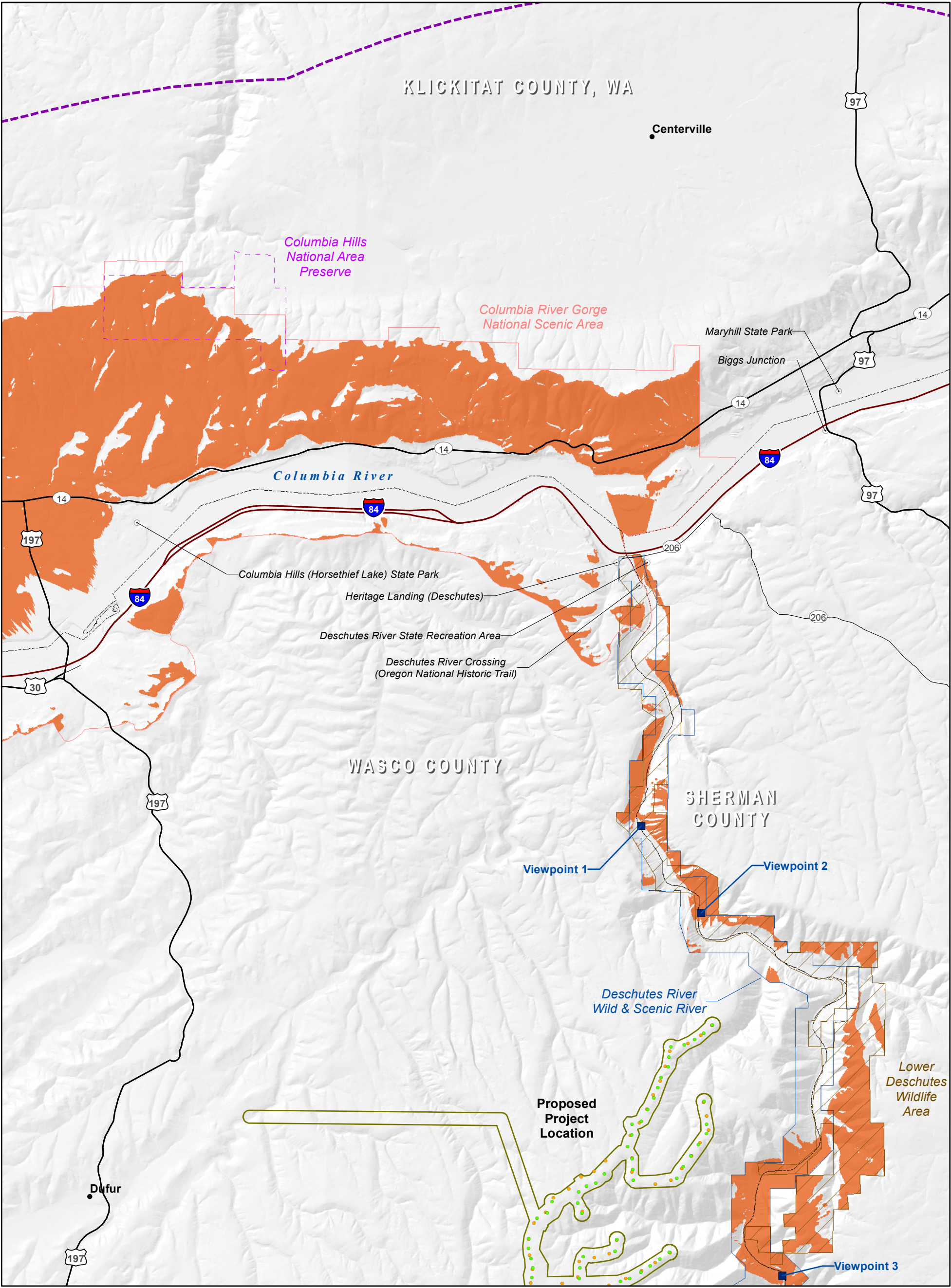


**Data Sources:**  
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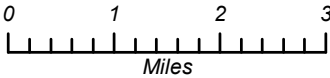


**Figure 1, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative B*



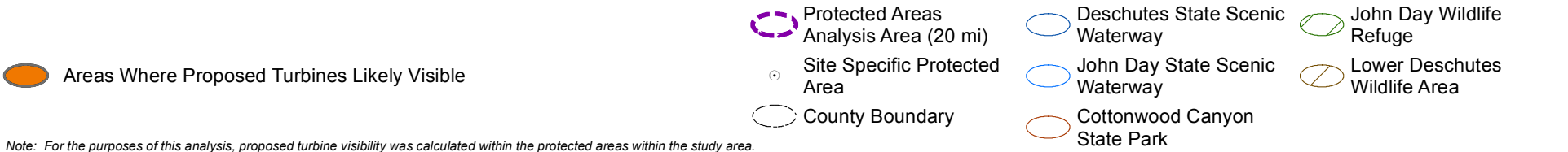
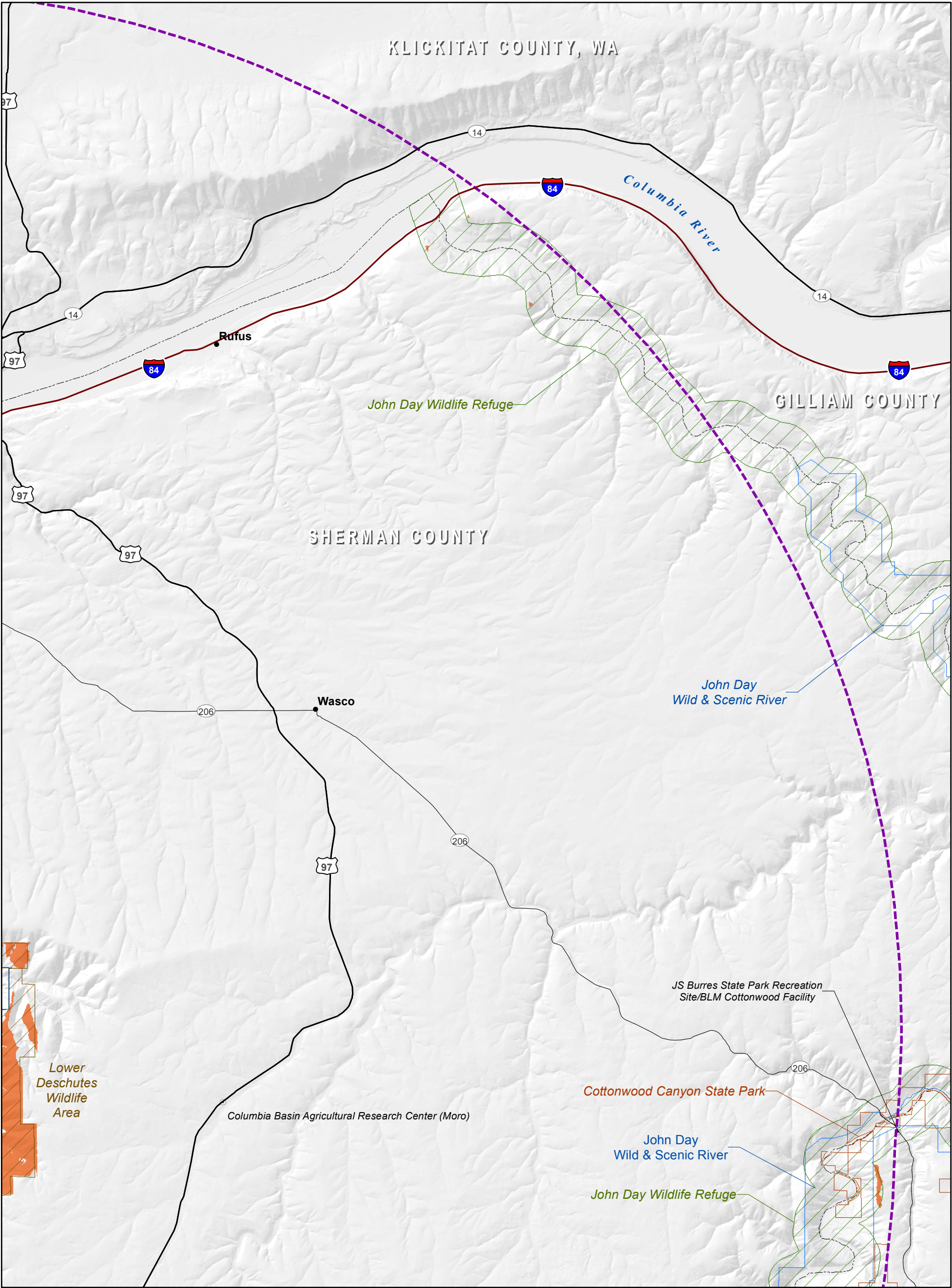


**Data Sources:**  
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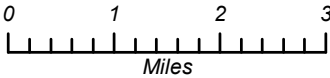


**Figure 1, Sheet 2 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative B*



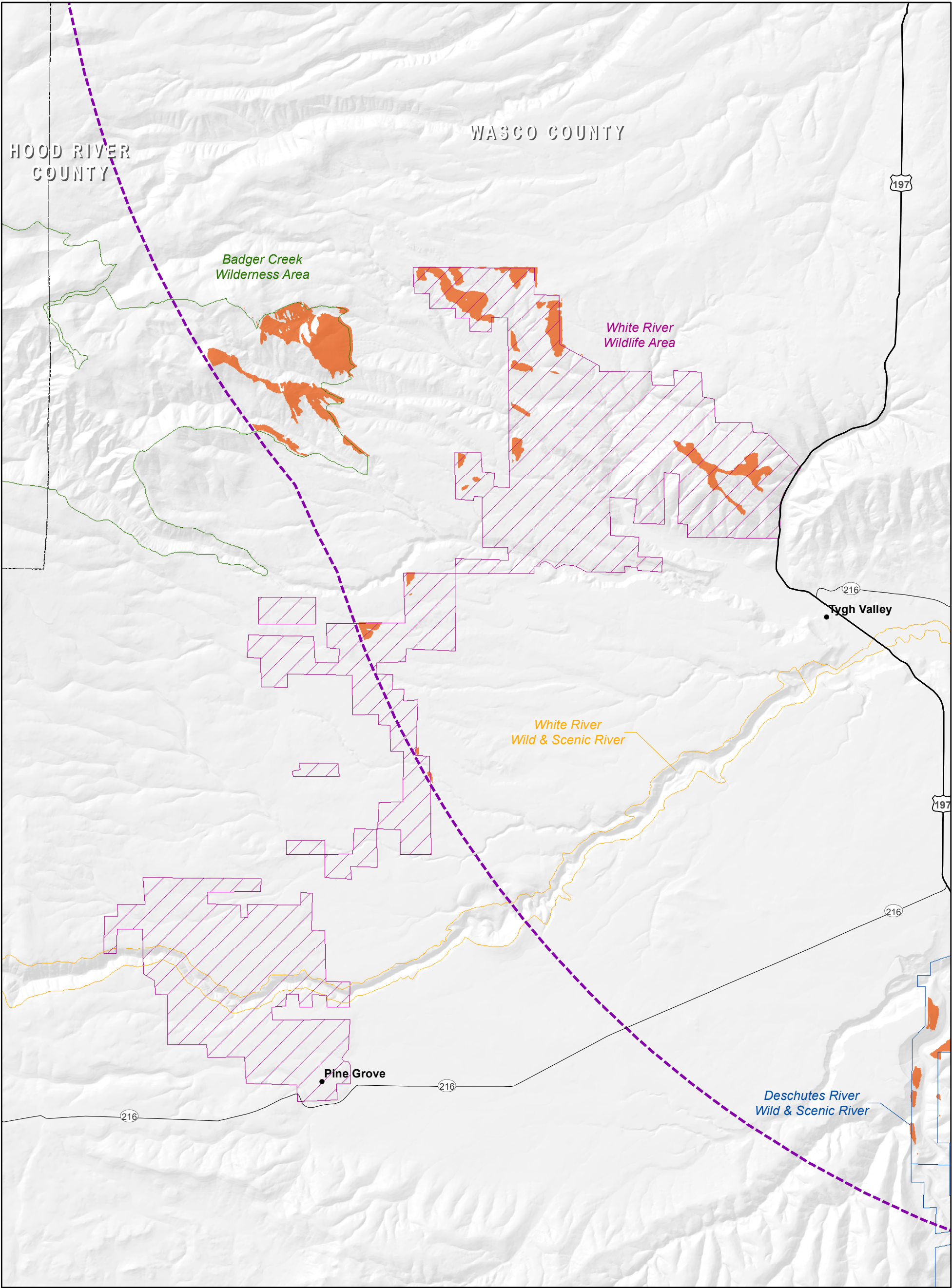









**Data Sources:**  
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Oregon Geospatial Enterprise Office (GEO)  
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US Forest Service



**Figure 1, Sheet 3 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative B*



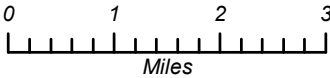


-  Areas Where Proposed Turbines Likely Visible
-  Protected Areas Analysis Area (20 mi)
-  County Boundary
-  Badger Creek Wilderness
-  White River Wildlife Area
-  Deschutes State Scenic Waterway
-  White River State Scenic Waterway

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

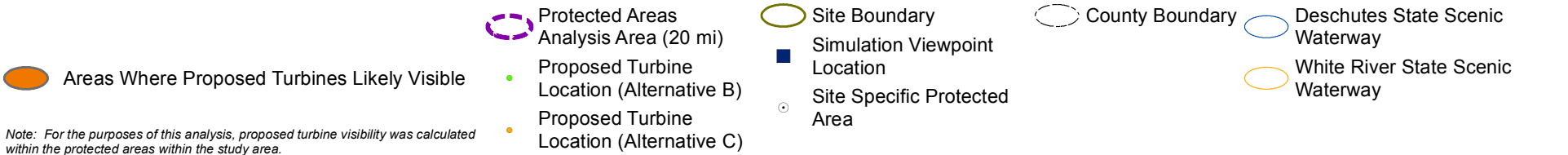
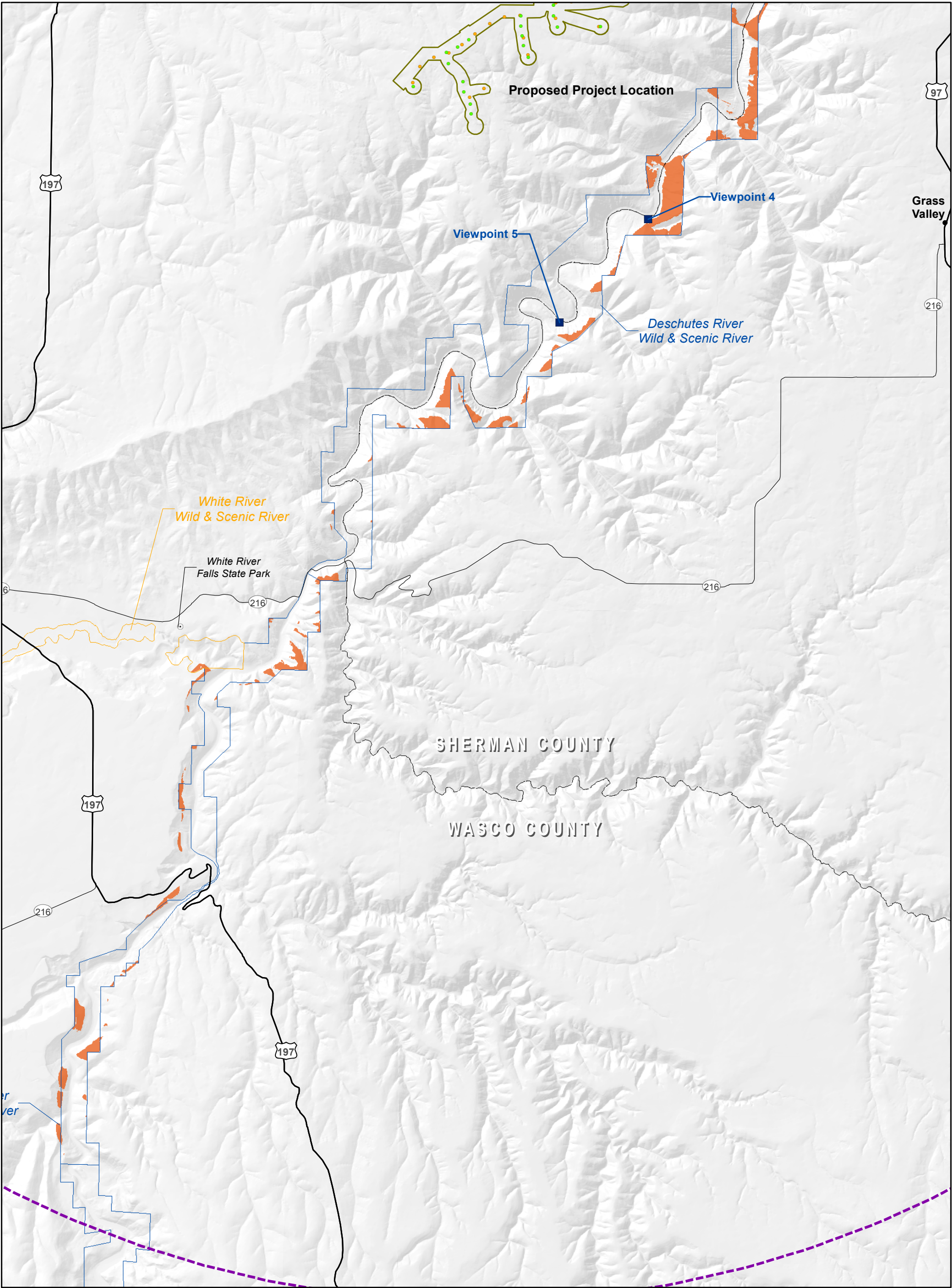


**Data Sources:**  
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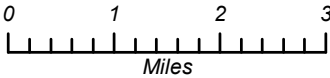


**Figure 1, Sheet 4 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative B*



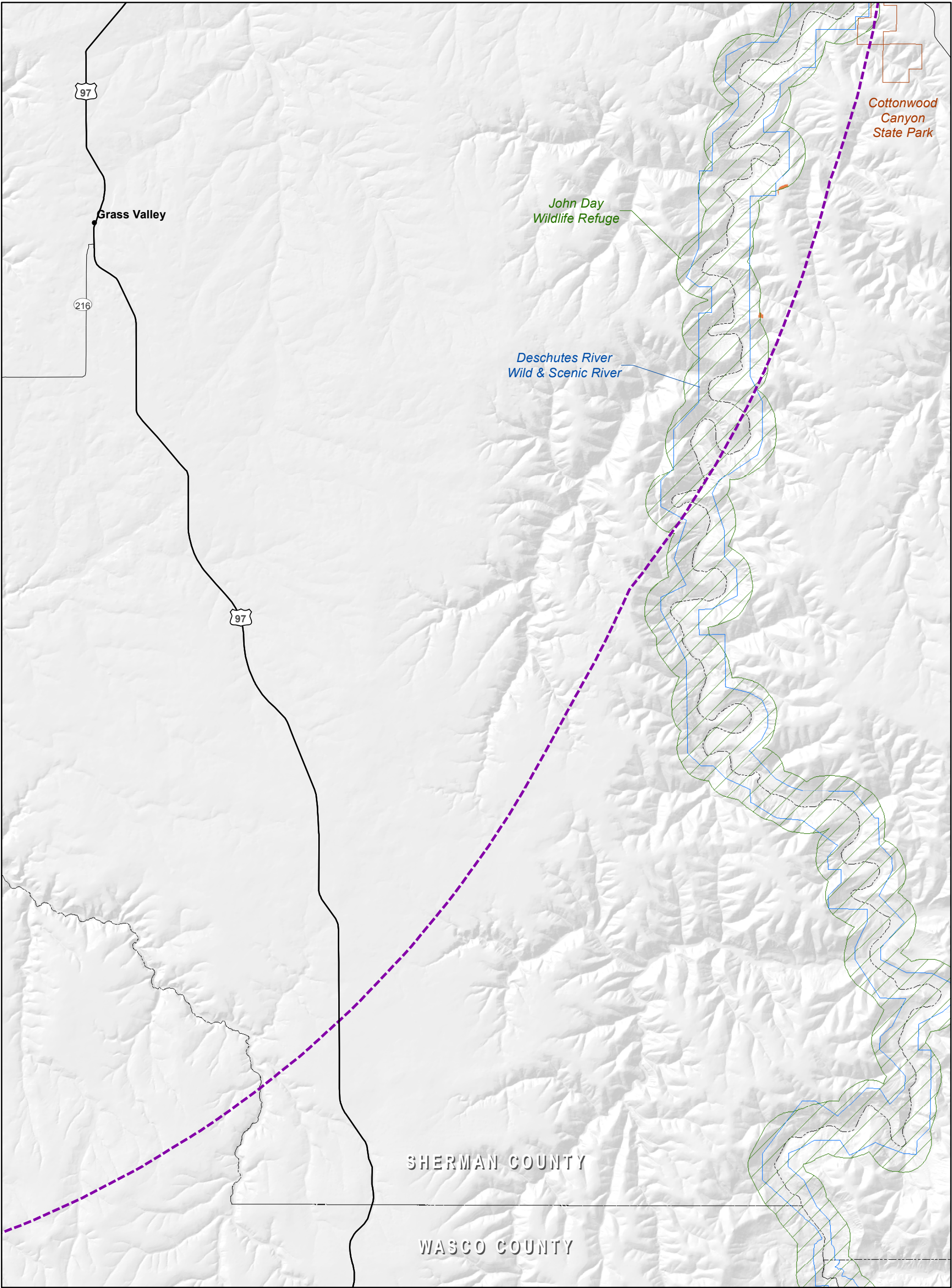


**Data Sources:**  
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**Figure 1, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative B*





Areas Where Proposed Turbines Likely Visible

Protected Areas Analysis Area (20 mi)  
County Boundary

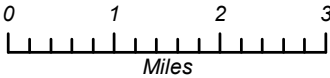
John Day State Scenic Waterway  
Cottonwood Canyon State Park

John Day Wildlife Refuge

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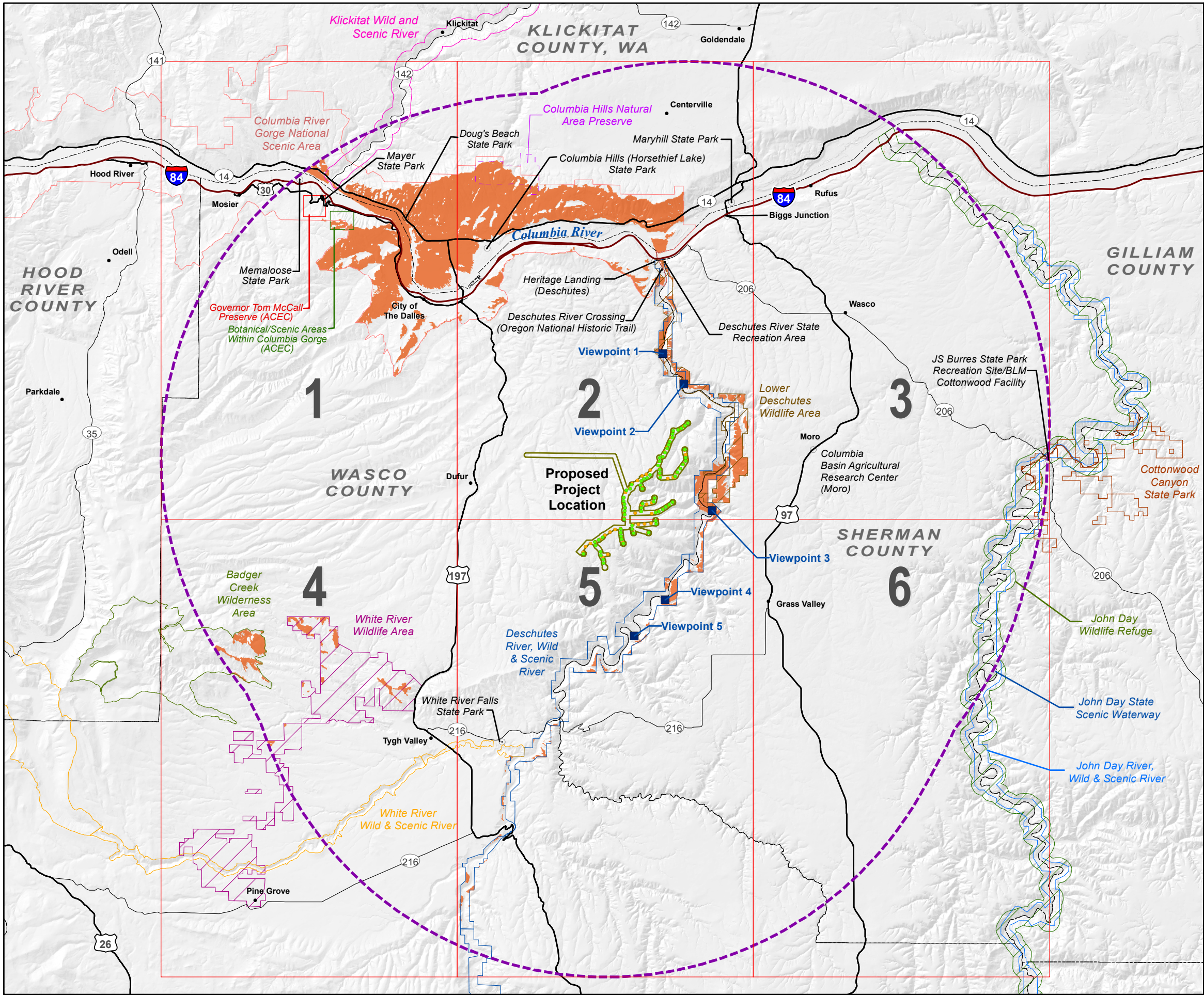
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**Figure 1, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative B*



Figure 2, Index Map  
Visibility Analysis for Protected  
Areas, Alternative C

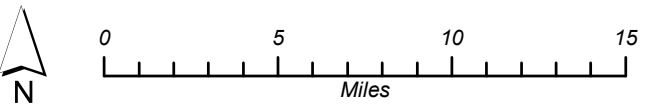


**Legend**

- Sheet Extent
- Protected Areas Analysis Area (20 Mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Boundary
- Simulation Viewpoint Location
- County Boundary
- Interstate Highway
- Other Highway
- Major Road
- Areas Where Proposed Turbines Likely Visible

**Protected Areas**

- Site Specific Protected Area
- Cottonwood Canyon State Park
- Deschutes State Scenic Waterway
- John Day State Scenic Waterway
- White River State Scenic Waterway
- Klickitat River, Wild & Scenic River
- Columbia River Gorge National Scenic Area
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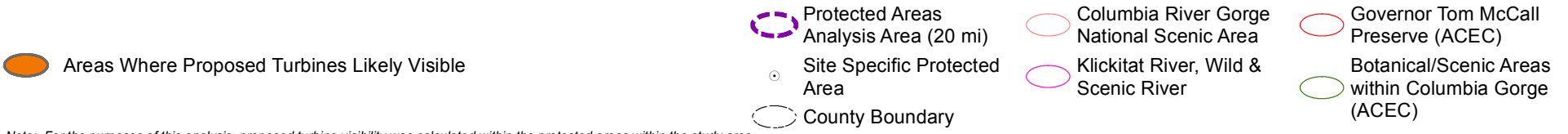
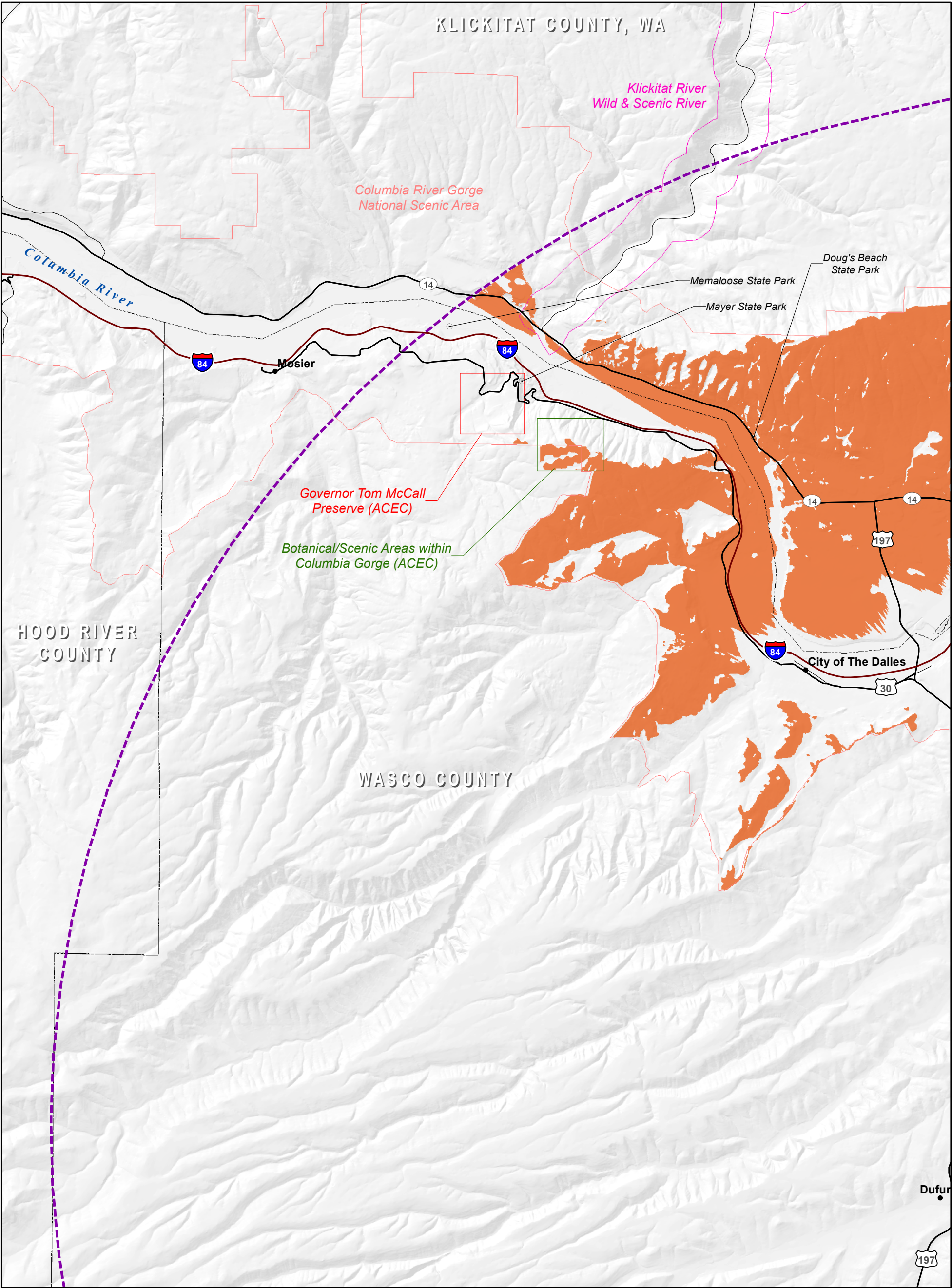


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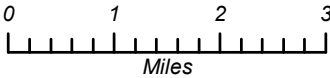




Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

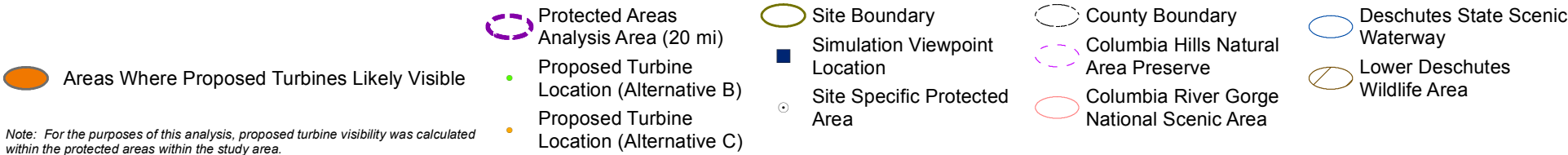
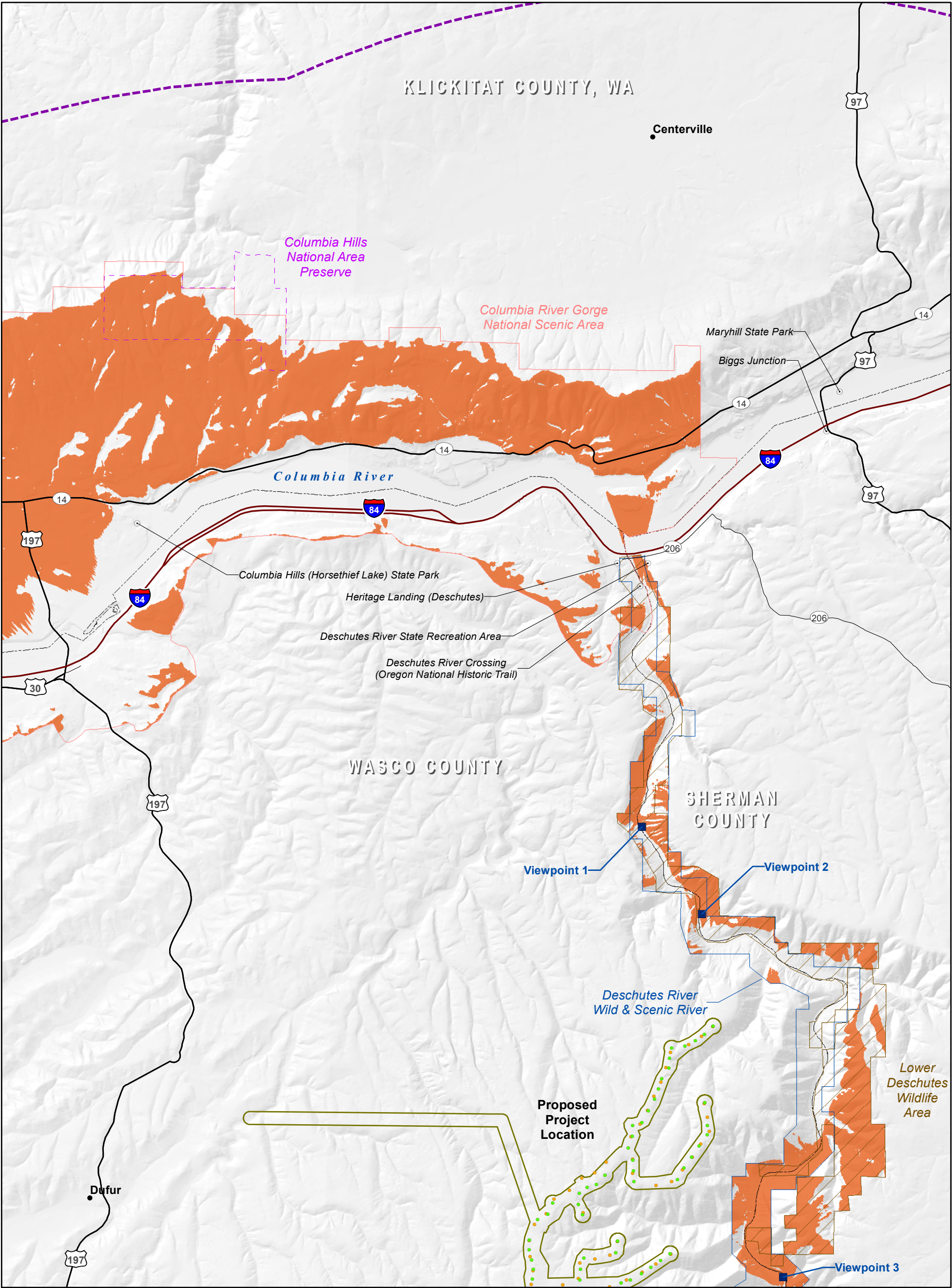


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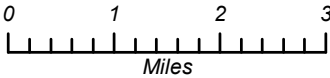


**Figure 2, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative C*



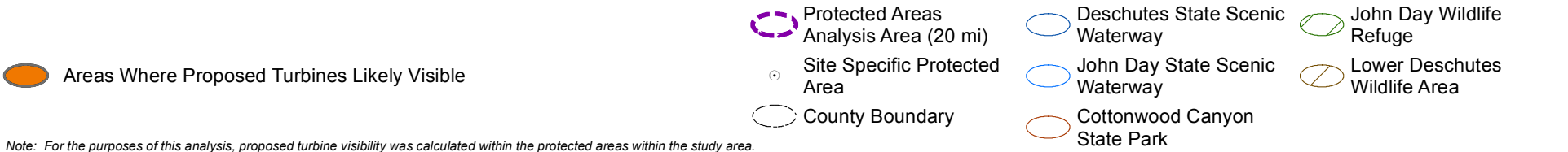
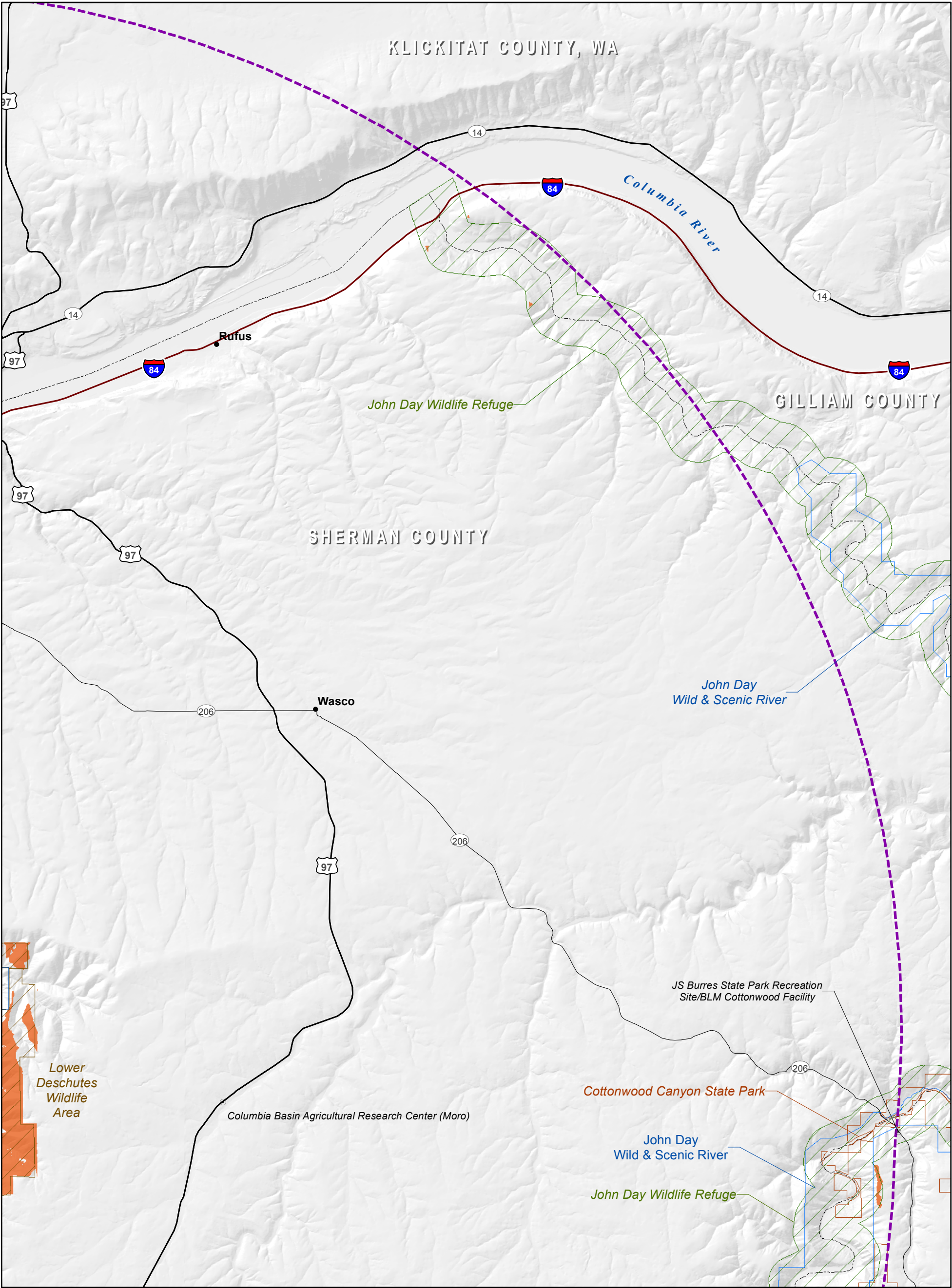


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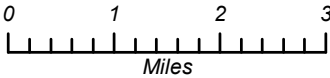


**Figure 2, Sheet 2 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative C*



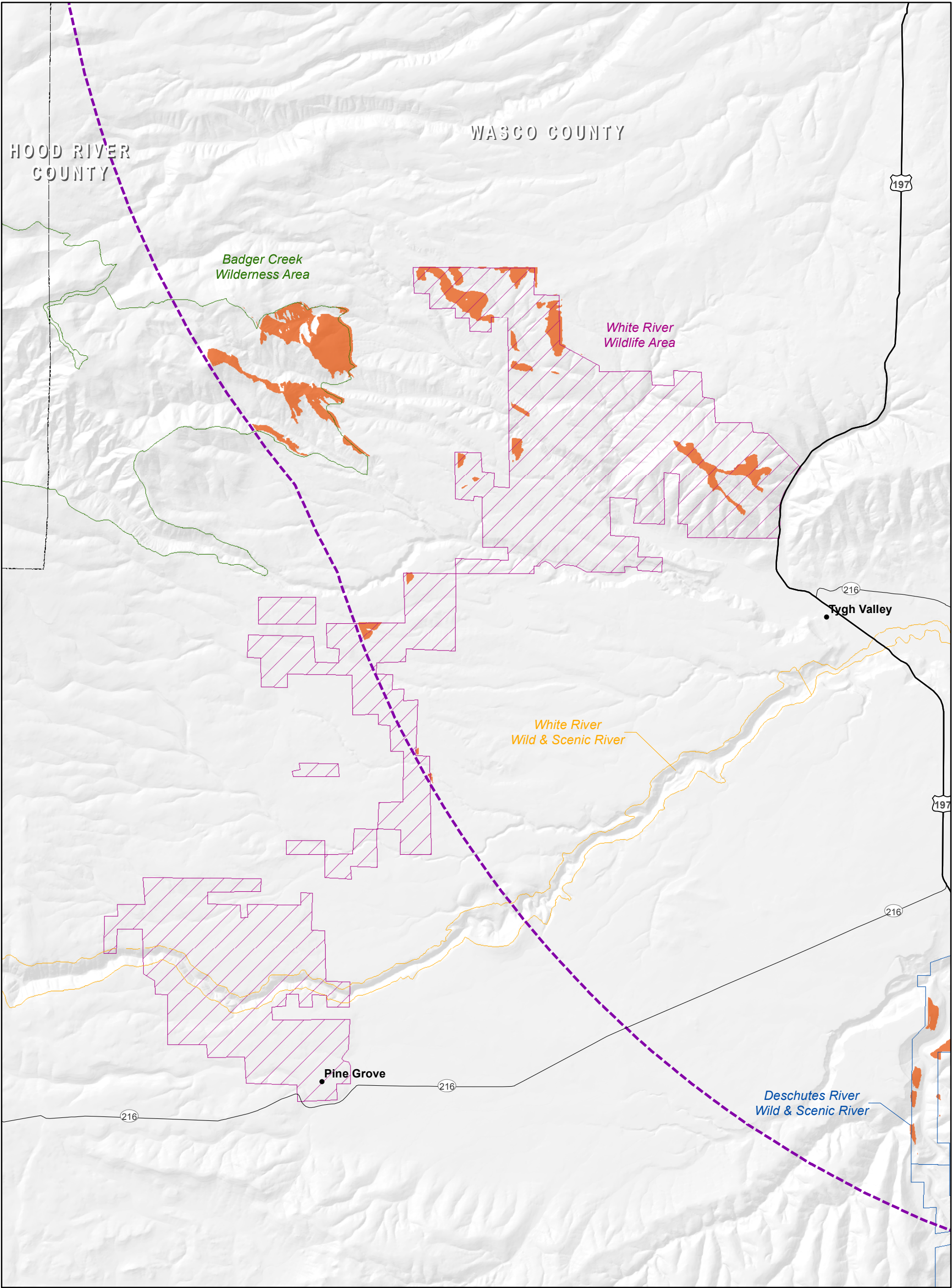









**Data Sources:**  
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**Figure 2, Sheet 3 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative C*



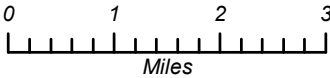


-  Areas Where Proposed Turbines Likely Visible
-  Protected Areas Analysis Area (20 mi)
-  County Boundary
-  Badger Creek Wilderness
-  White River Wildlife Area
-  Deschutes State Scenic Waterway
-  White River State Scenic Waterway

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

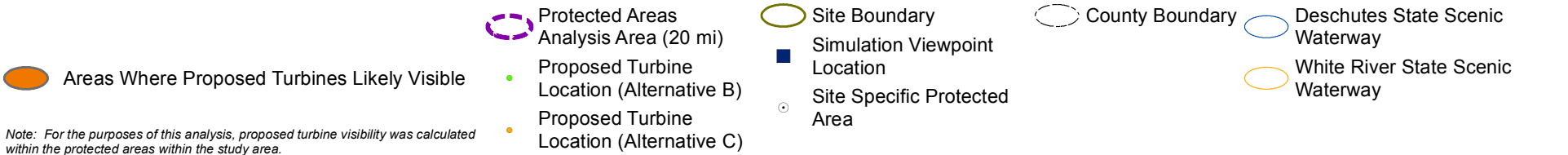
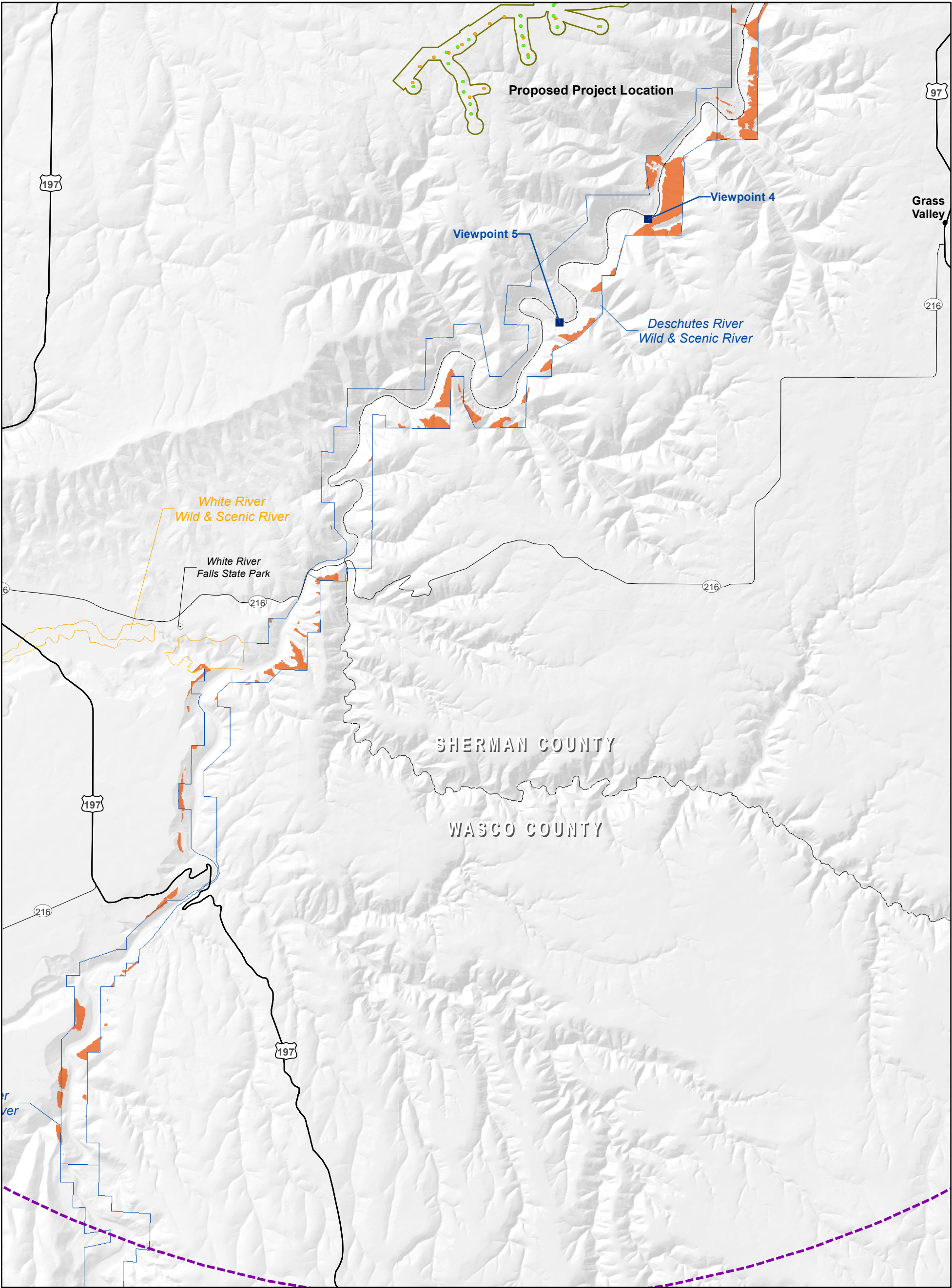


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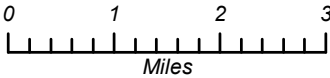


**Figure 2, Sheet 4 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative C*



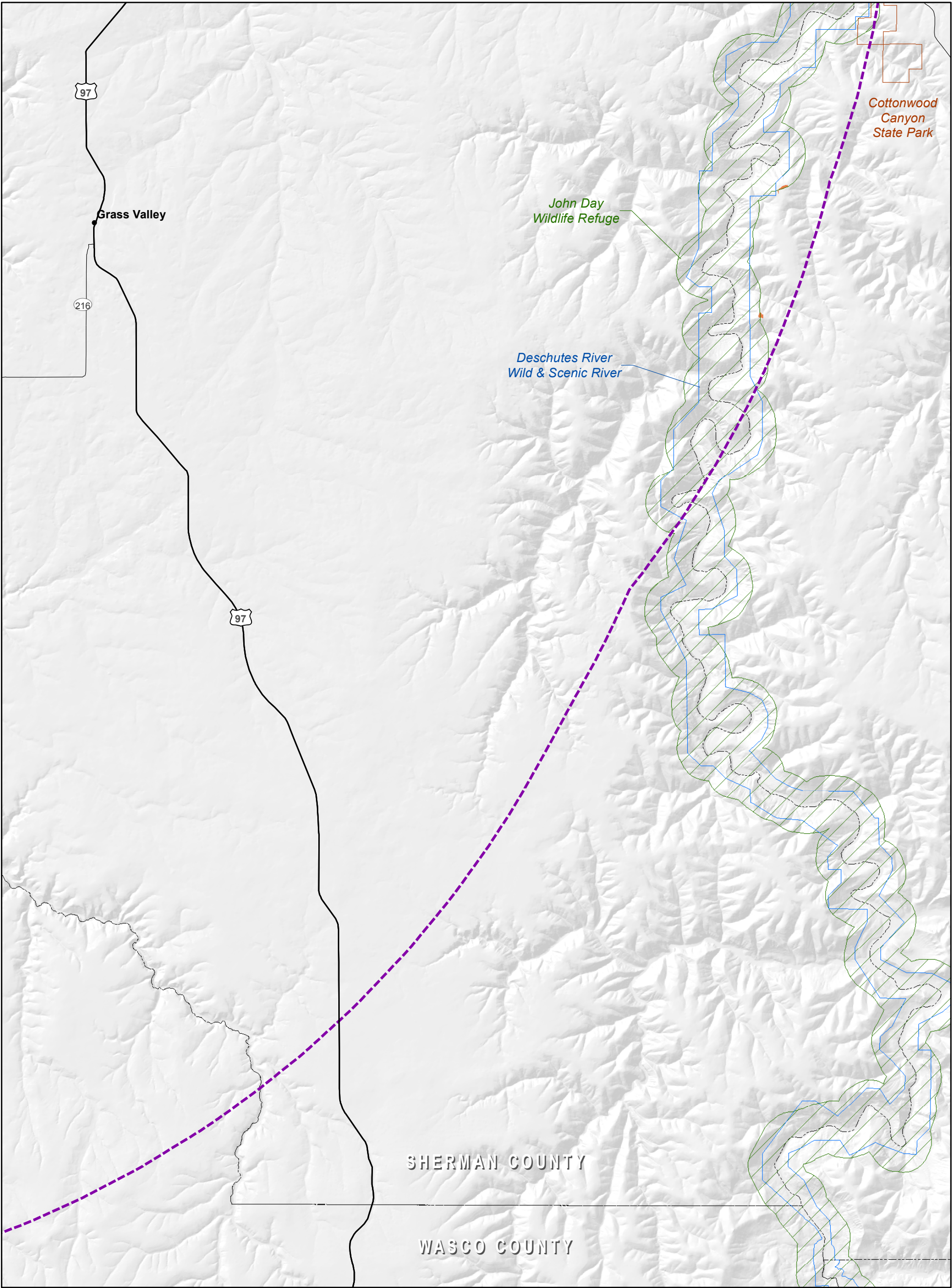


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**Figure 2, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative C*





Areas Where Proposed Turbines Likely Visible

Protected Areas Analysis Area (20 mi)  
County Boundary

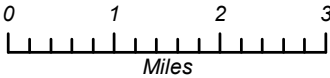
John Day State Scenic Waterway  
Cottonwood Canyon State Park

John Day Wildlife Refuge

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.



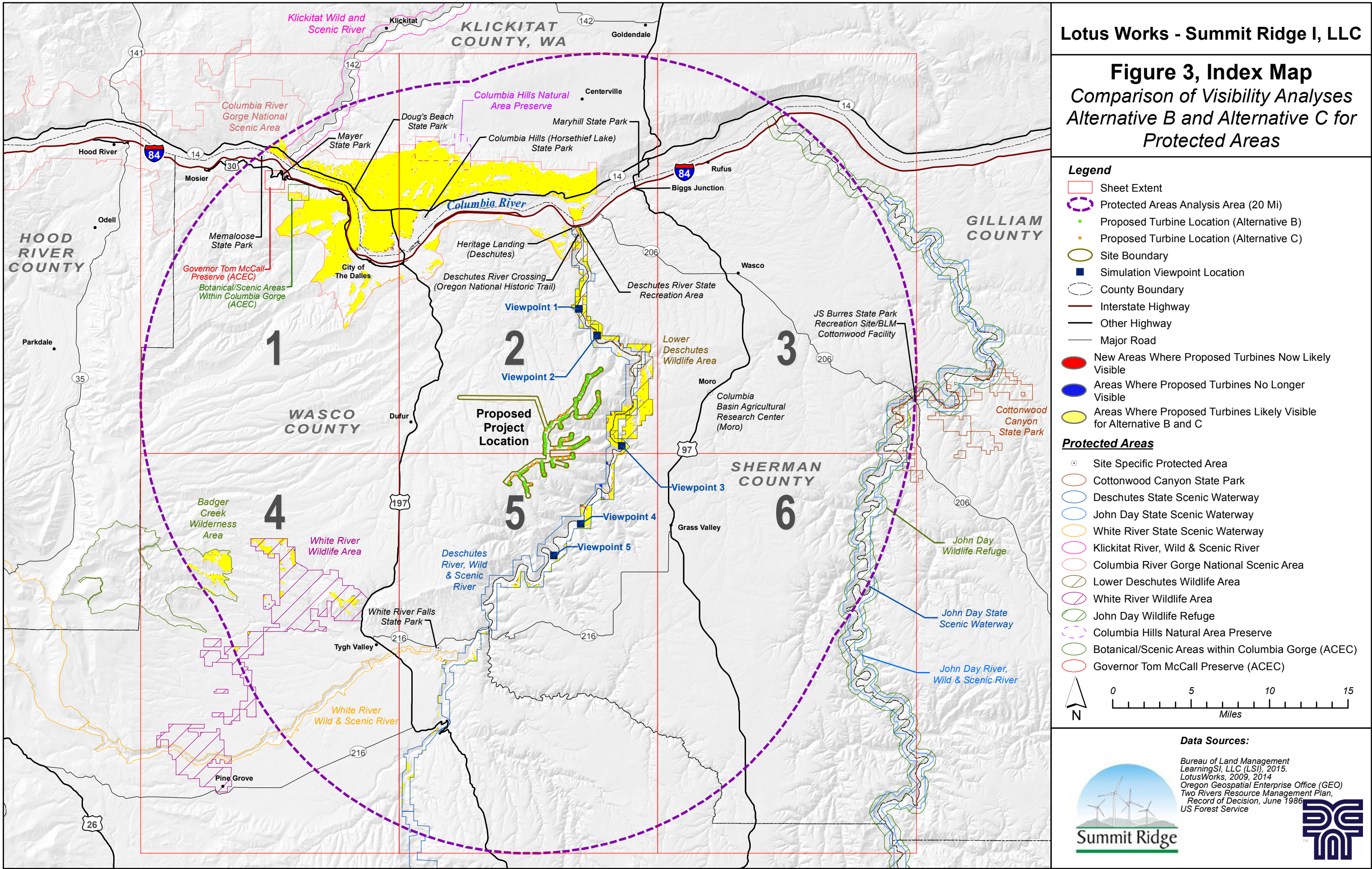
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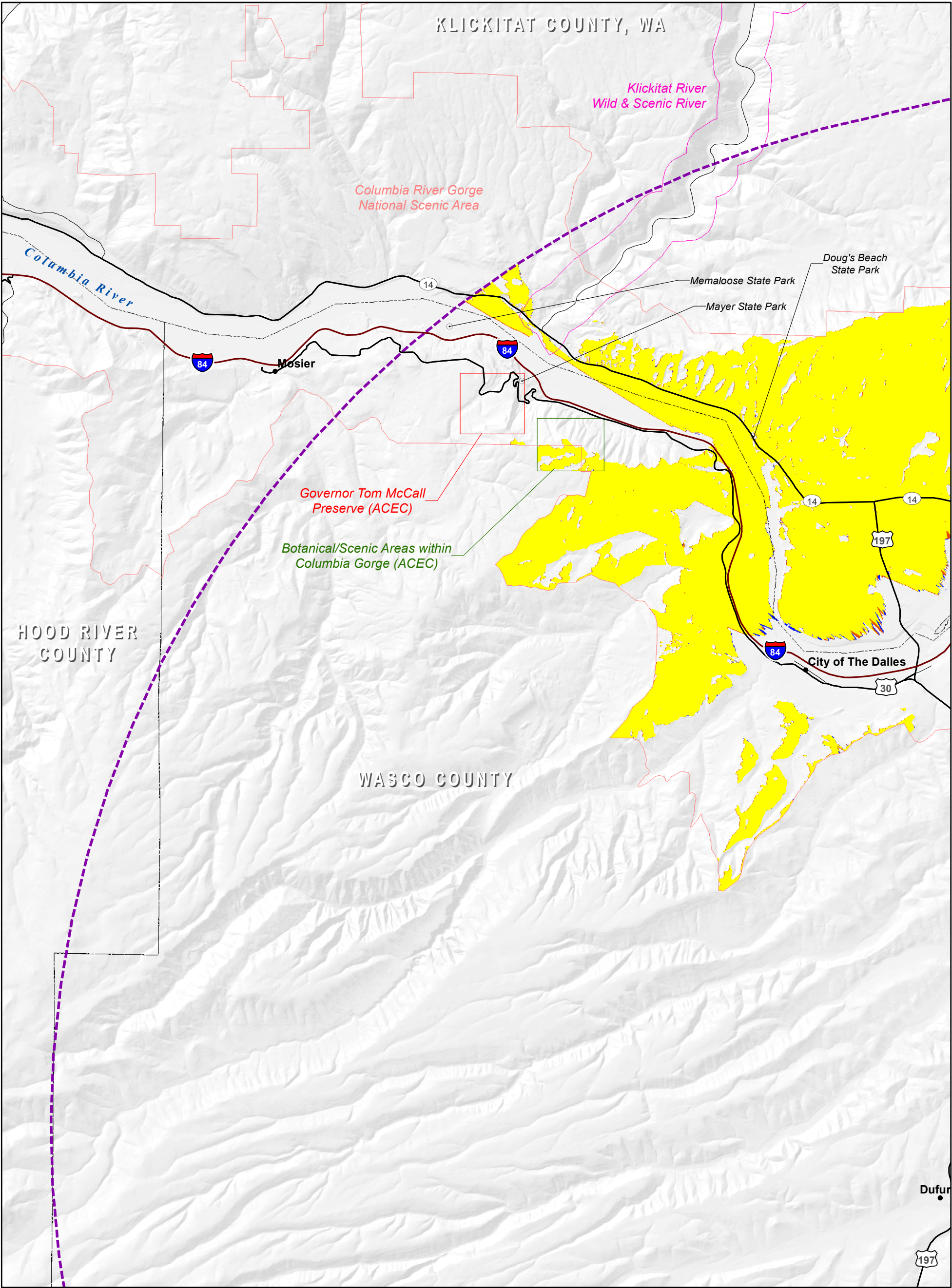
**Figure 2, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
for Protected Areas, Alternative C*



**Figure 3, Index Map**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C for  
Protected Areas*







- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)

Site Specific Protected Area

County Boundary
- Columbia River Gorge National Scenic Area

Klickitat River, Wild & Scenic River

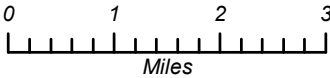
Governor Tom McCall Preserve (ACEC)

Botanical/Scenic Areas within Columbia Gorge (ACEC)

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

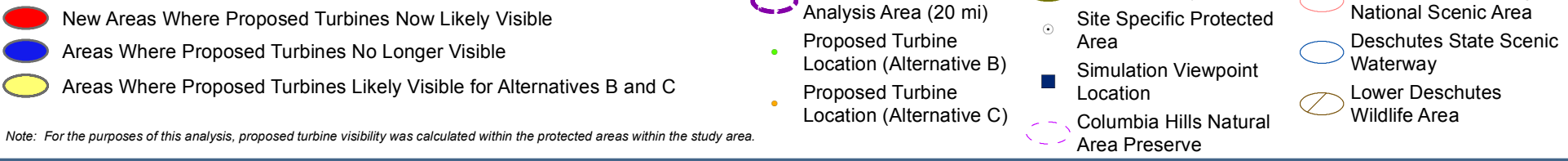
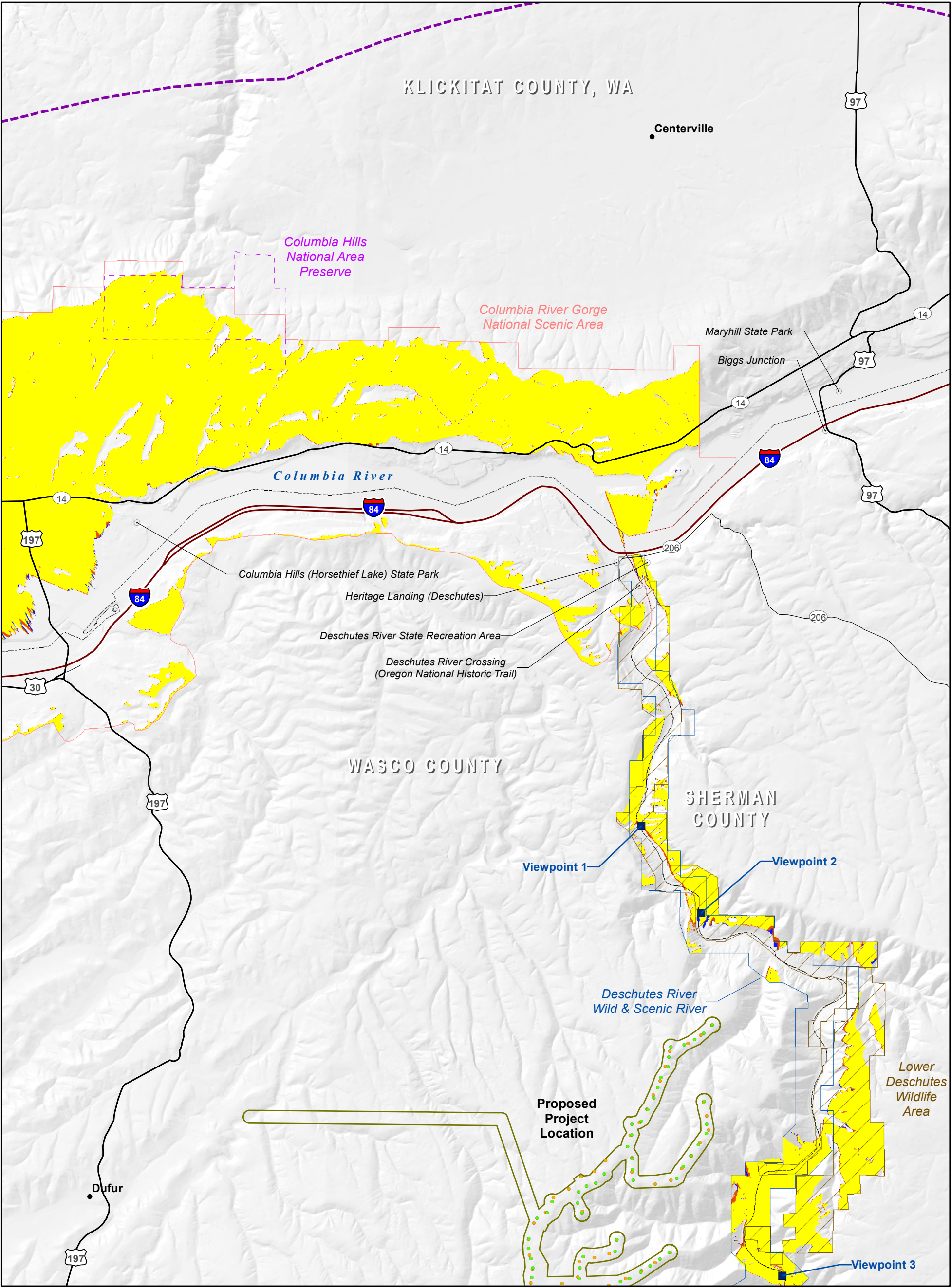


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US Forest Service

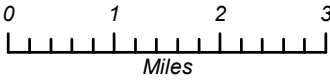


**Figure 3, Sheet 1 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Protected Areas**



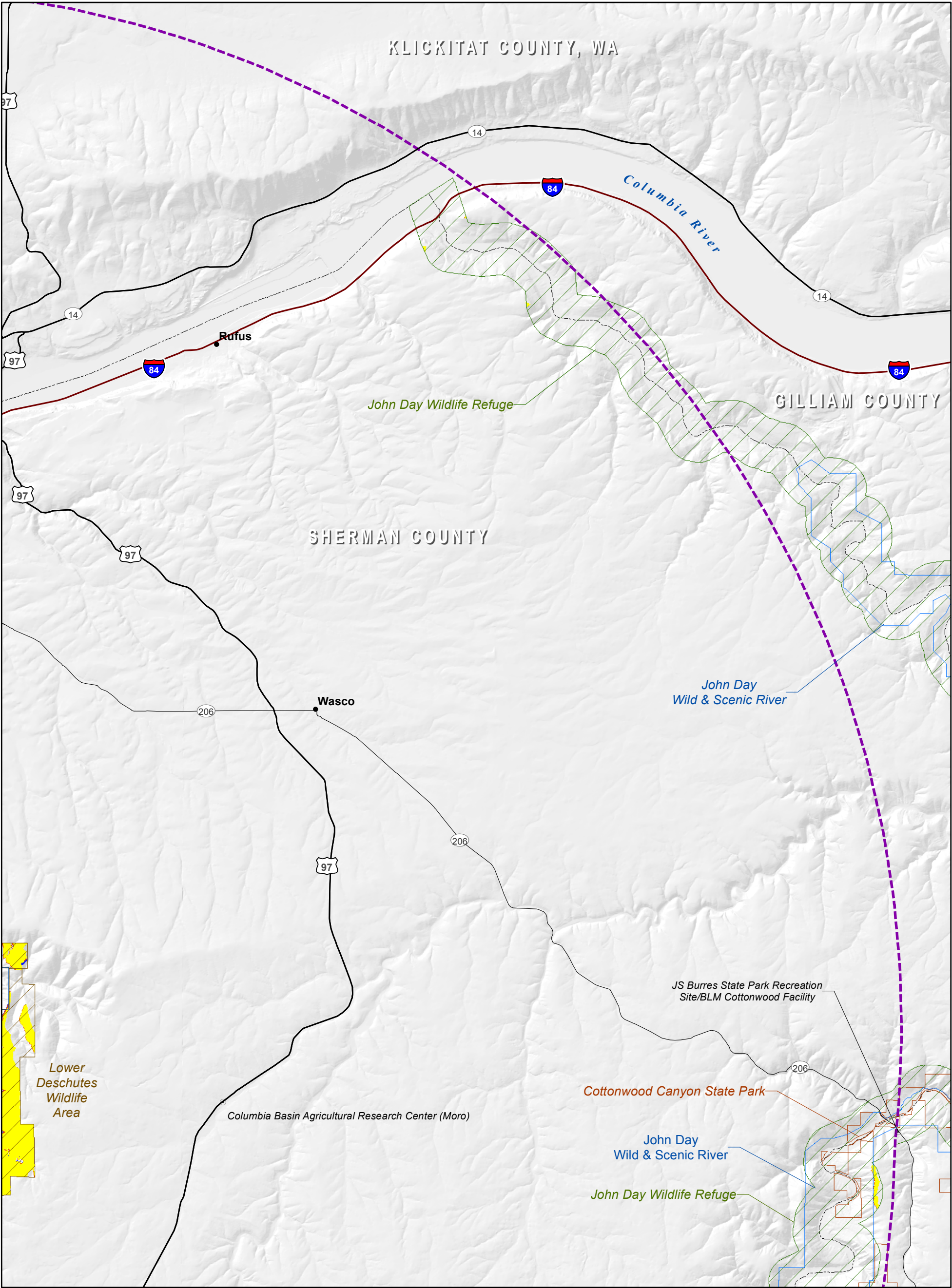


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 3, Sheet 2 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Protected Areas**





New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C

Protected Areas Analysis Area (20 mi)

Site Specific Protected Area

County Boundary

Deschutes State Scenic Waterway

John Day State Scenic Waterway

Cottonwood Canyon State Park

John Day Wildlife Refuge

Lower Deschutes Wildlife Area

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

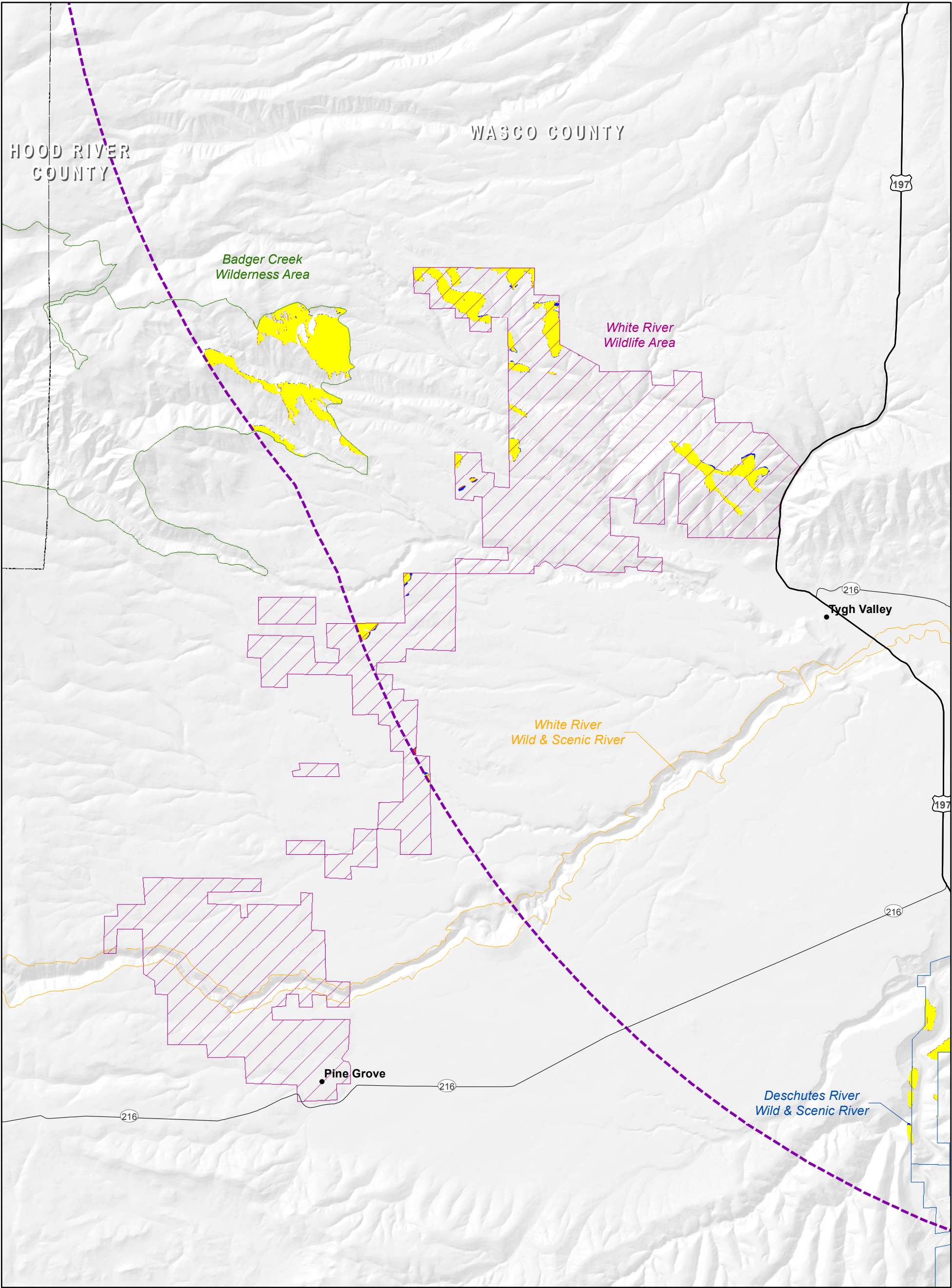


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 3, Sheet 3 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Protected Areas**





- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)

Site Specific Protected Area

County Boundary
- Badger Creek Wilderness

Deschutes State Scenic Waterway

White River State Scenic Waterway
- White River Wildlife Area
- Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

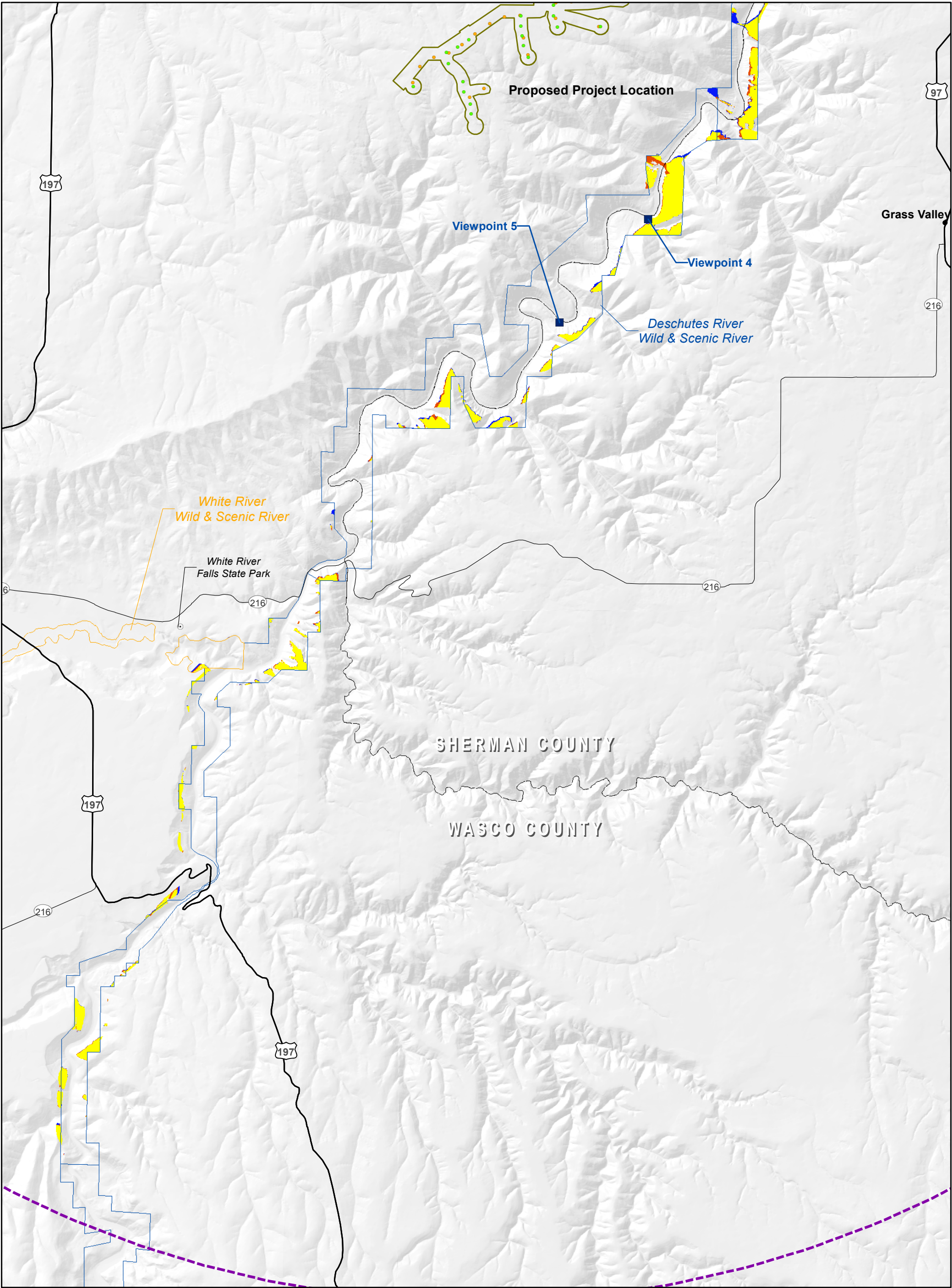


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service

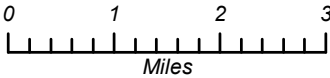


**Figure 3, Sheet 4 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Protected Areas**



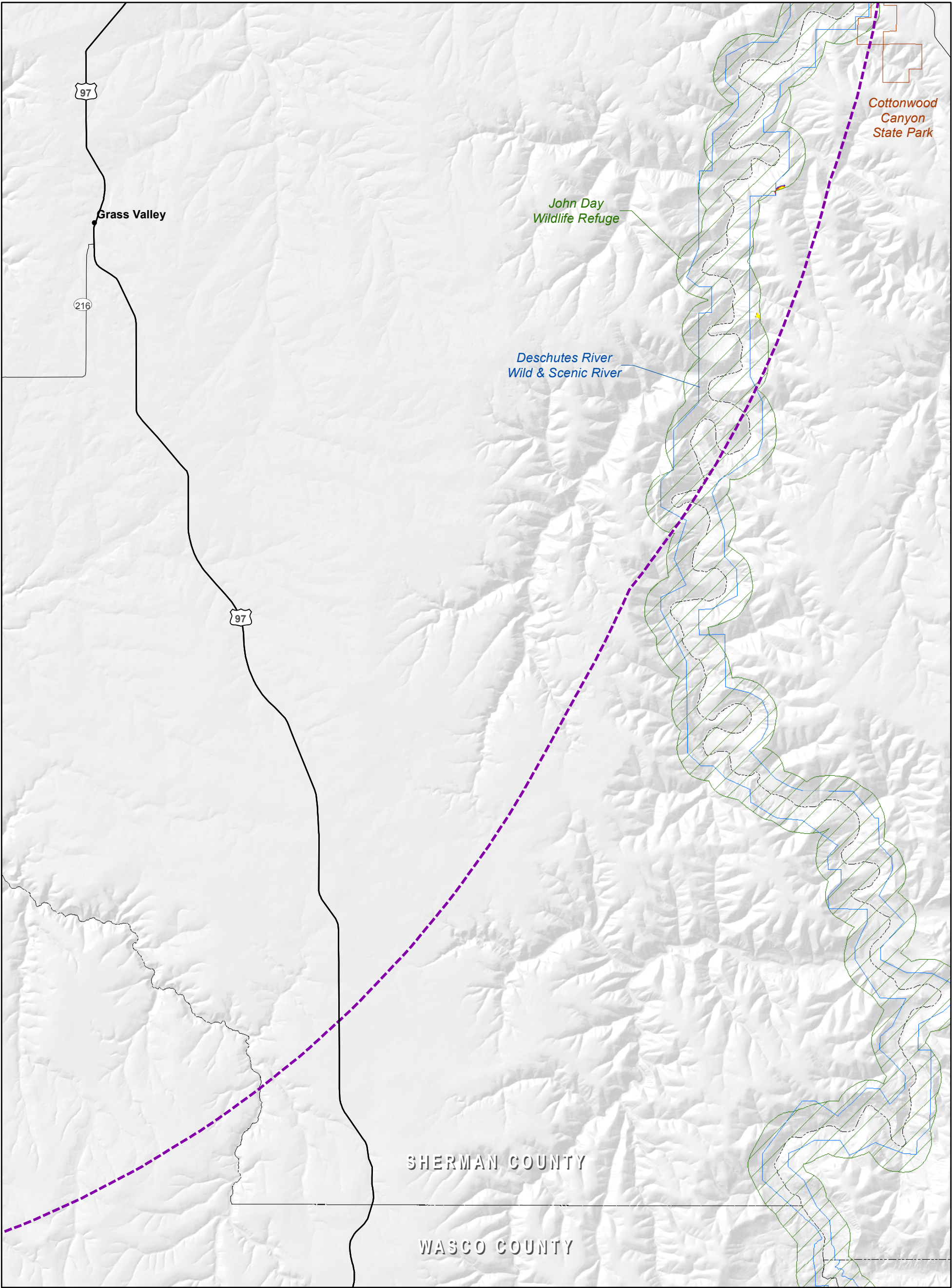


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 3, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Protected Areas*



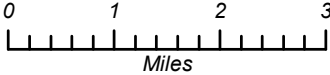


- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)
- County Boundary
- John Day State Scenic Waterway
- Cottonwood Canyon State Park
- John Day Wildlife Refuge

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.



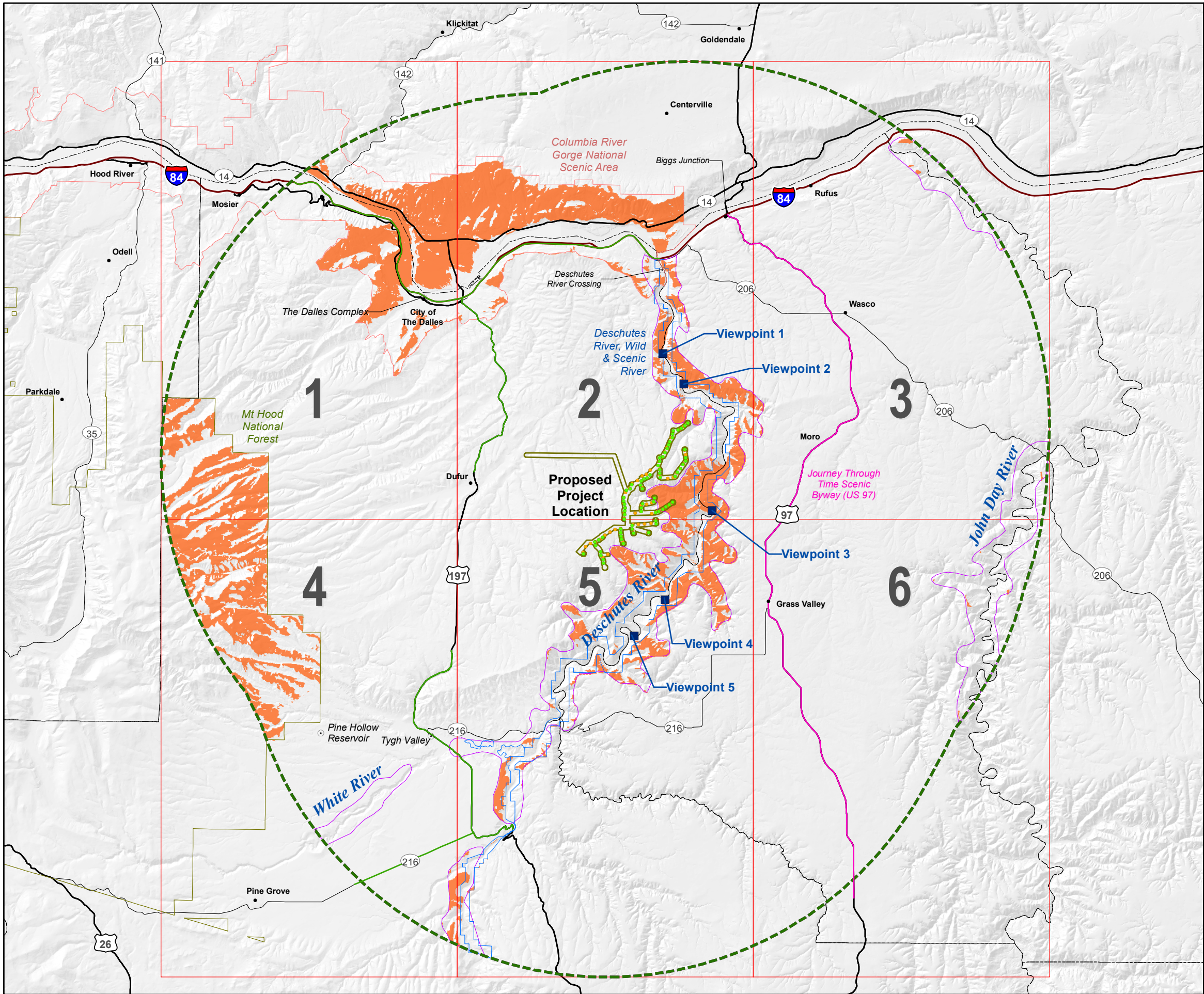
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LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 3, Sheet 6 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Protected Areas**

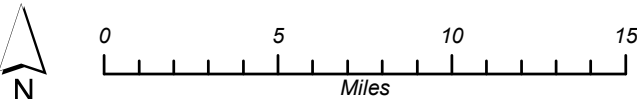


Figure 4, Index Map  
Visibility Analysis for  
Scenic and Aesthetic Value  
Areas, Alternative B



- Legend**
- Sheet Extent
  - Scenic and Aesthetic Values Analysis Area (20 mi)
  - Proposed Turbine Location (Alternative B)
  - Proposed Turbine Location (Alternative C)
  - Site Boundary
  - Simulation Viewpoint Location
  - County Boundary
  - Interstate Highway
  - Other Highway
  - Major Road
  - Areas Where Proposed Turbines Likely Visible

- Scenic Areas**
- Site Specific Scenic Areas
  - Wasco County Scenic Highway
  - Journey Through Time Scenic Byway (US 97)
  - Federal Wild and Scenic Rivers
  - BLM Area of High Visual Quality
  - Mt. Hood National Forest
  - Columbia River Gorge National Scenic Area

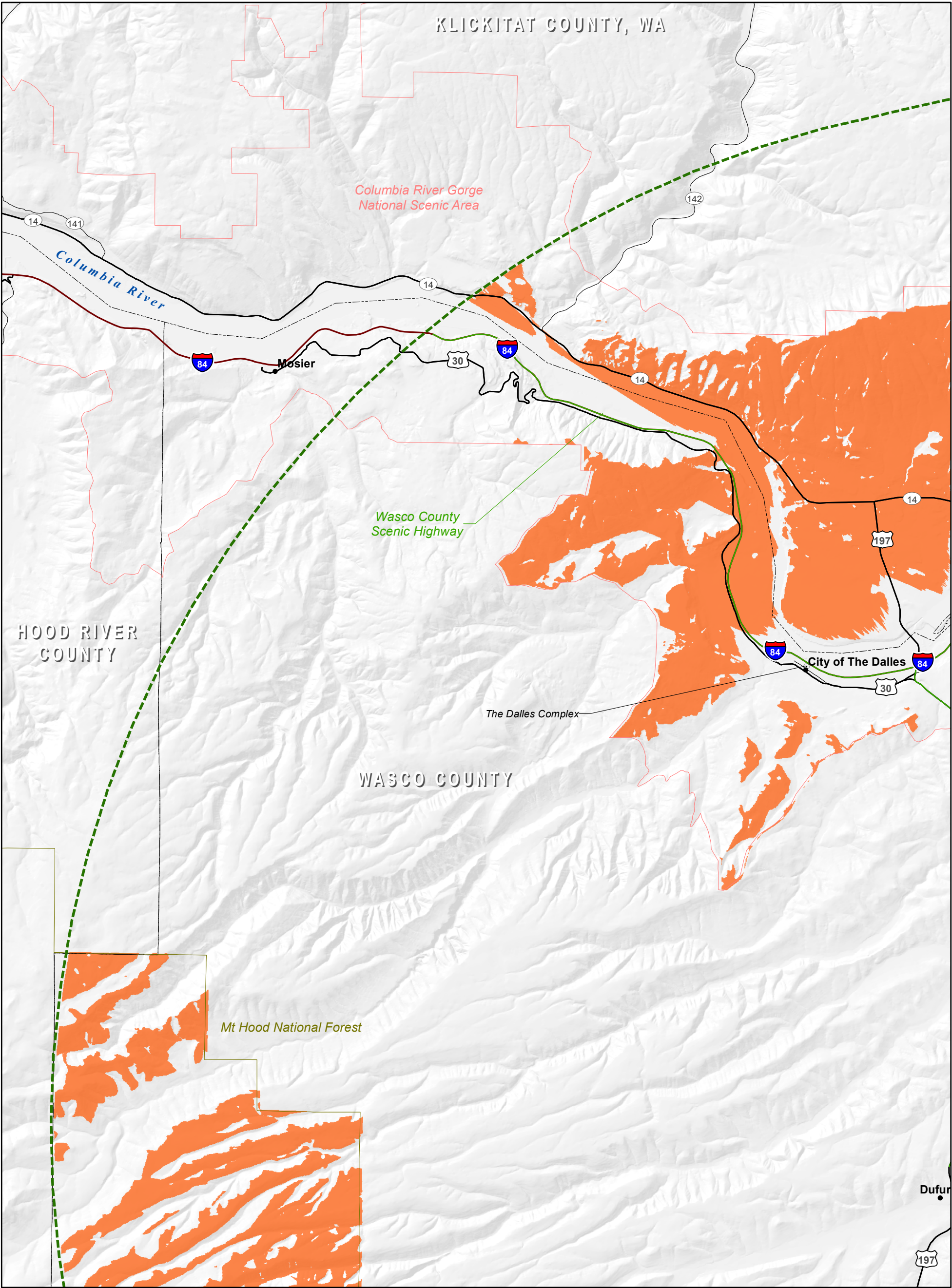


**Data Sources:**

Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service







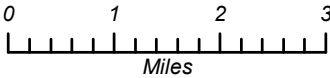
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Wasco County Scenic Highway
- Site Specific Scenic Area
- Mt. Hood National Forest
- County Boundary
- Columbia River Gorge National Scenic Area

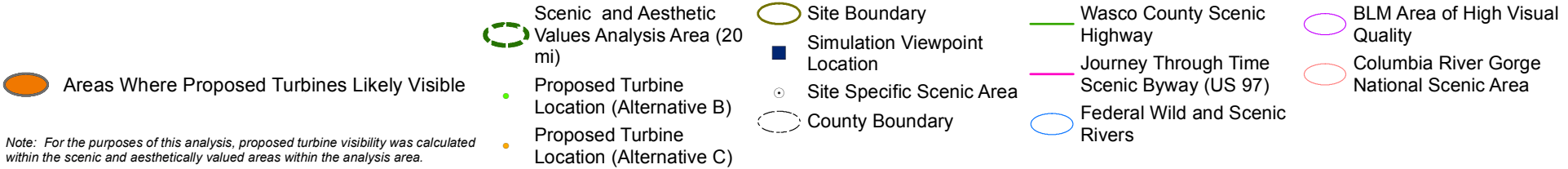
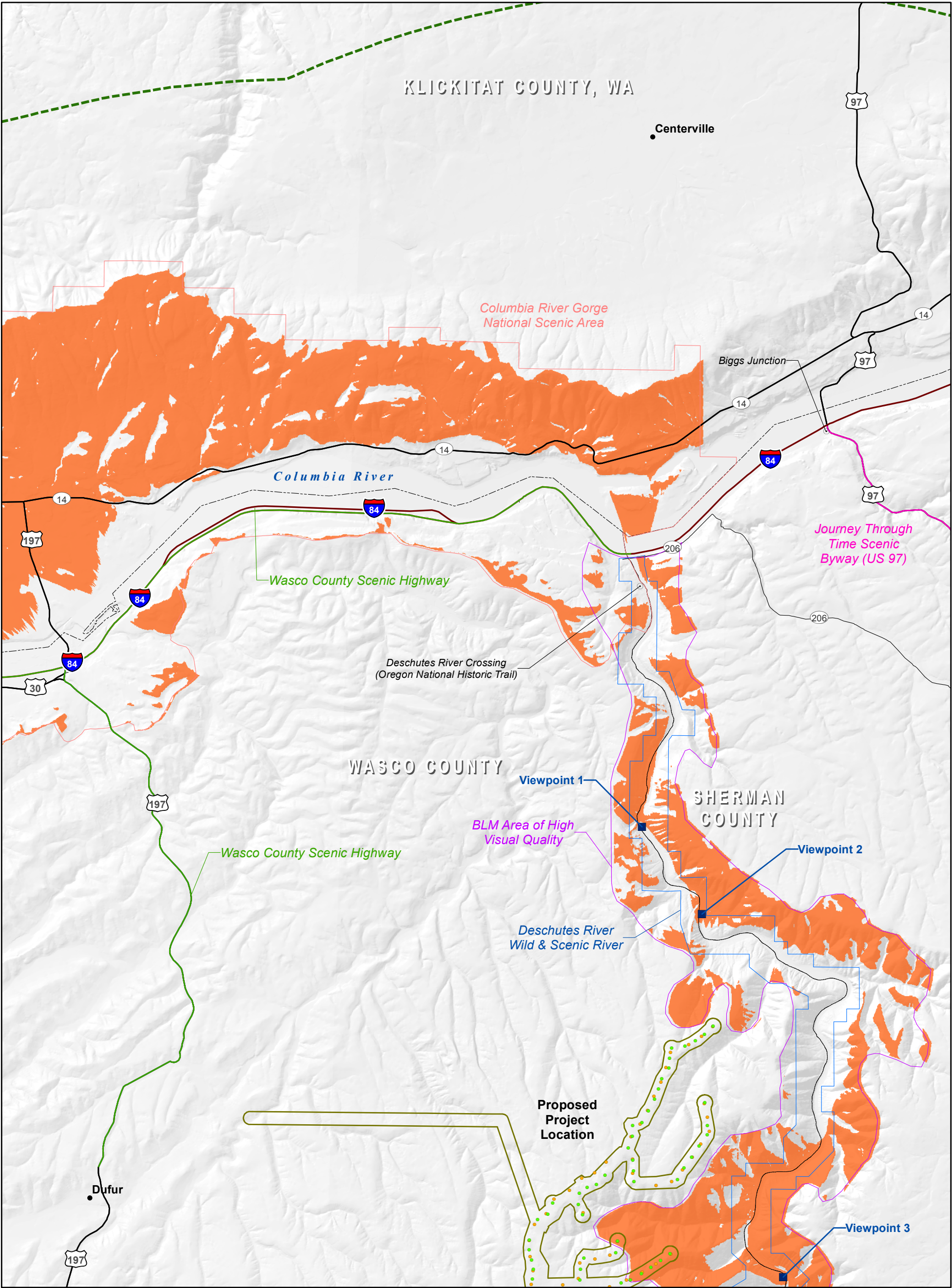


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service

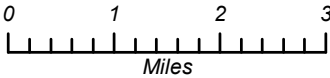


**Figure 4, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative B*



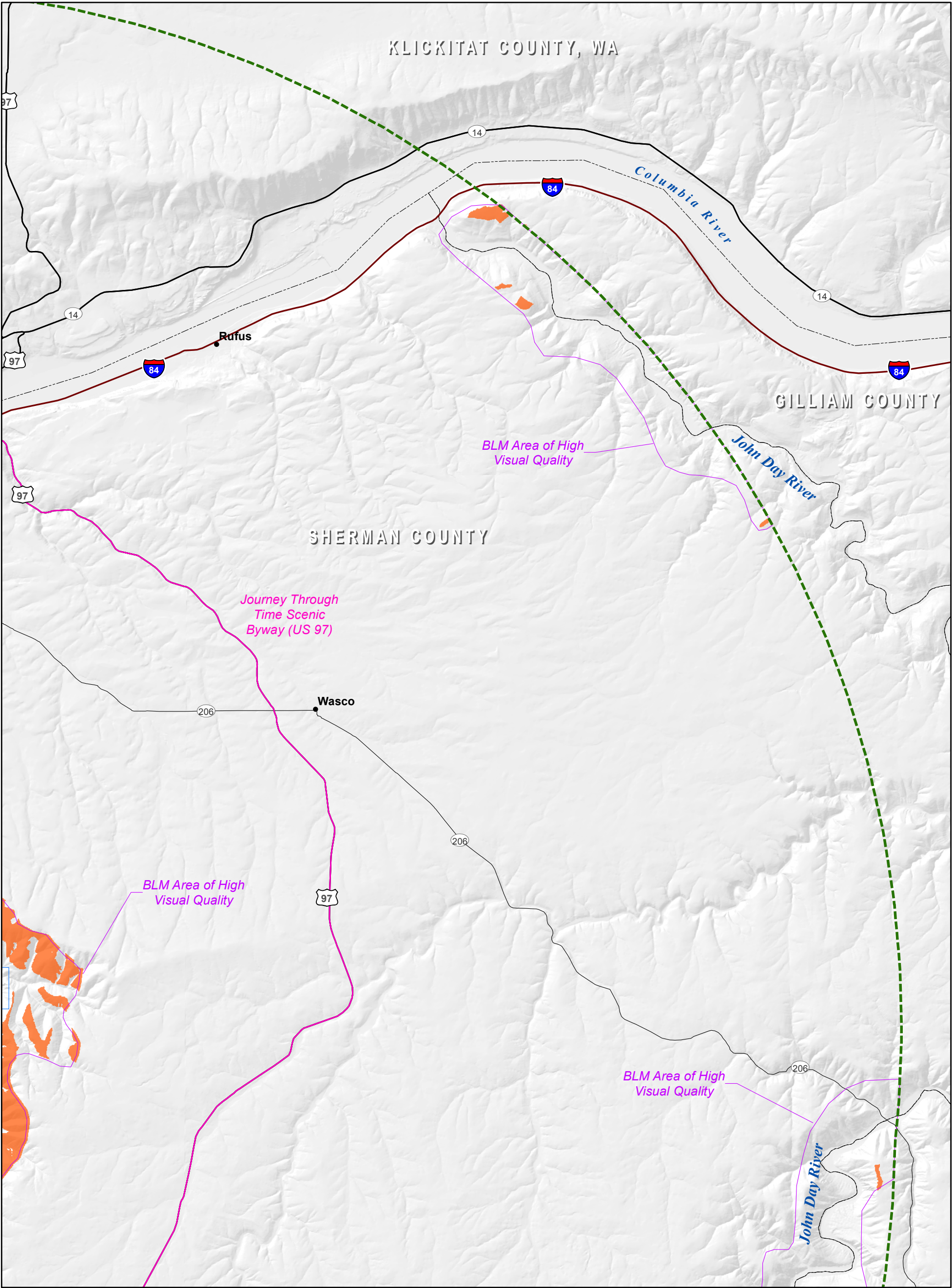


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
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**Figure 4, Sheet 2 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative B*





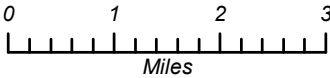
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- County Boundary
- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality

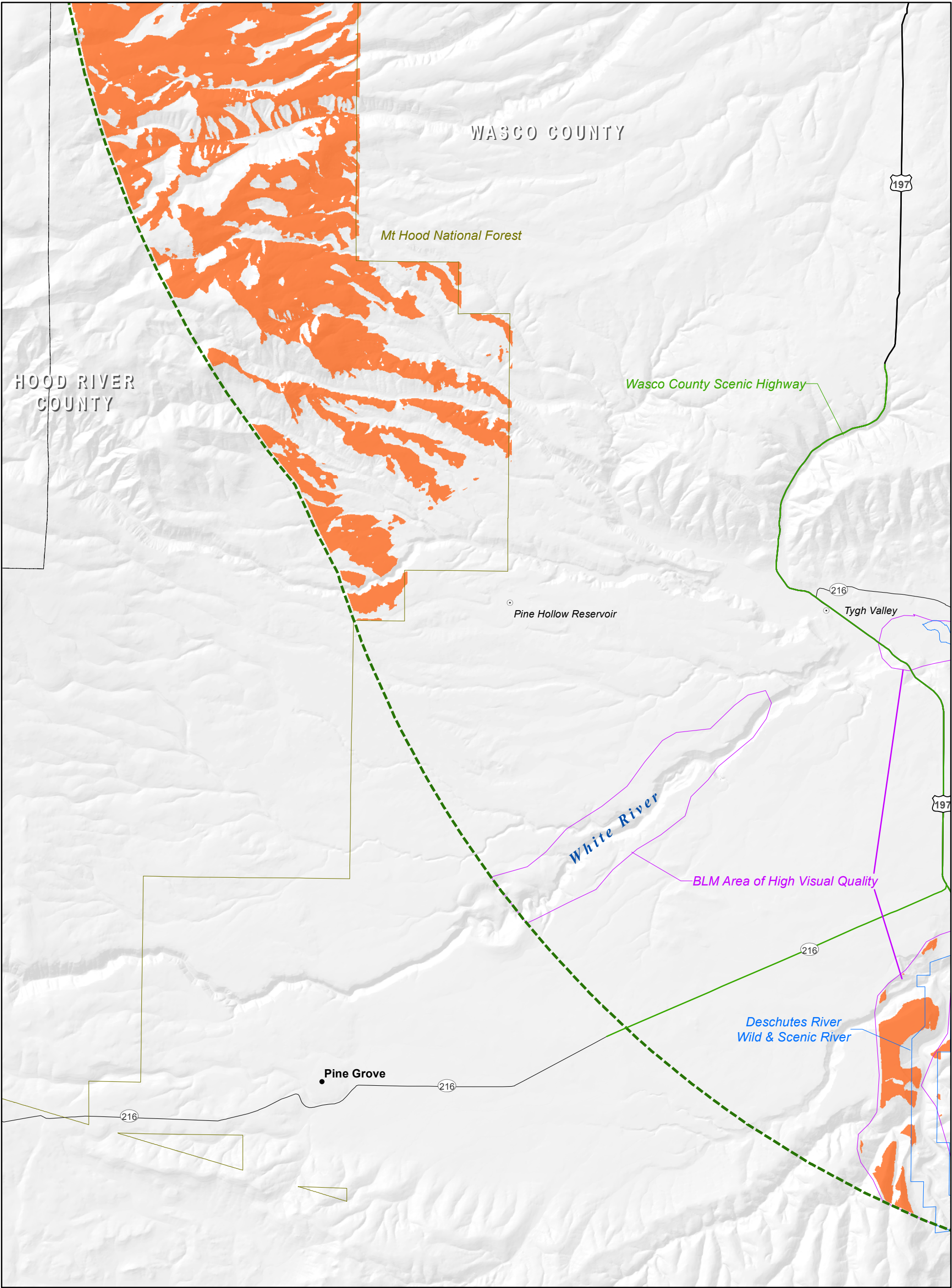


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 4, Sheet 3 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative B*





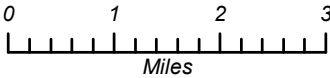
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Wasco County Scenic Highway
- BLM Area of High Visual Quality
- Site Specific Scenic Area
- Federal Wild and Scenic Rivers
- Mt. Hood National Forest
- County Boundary

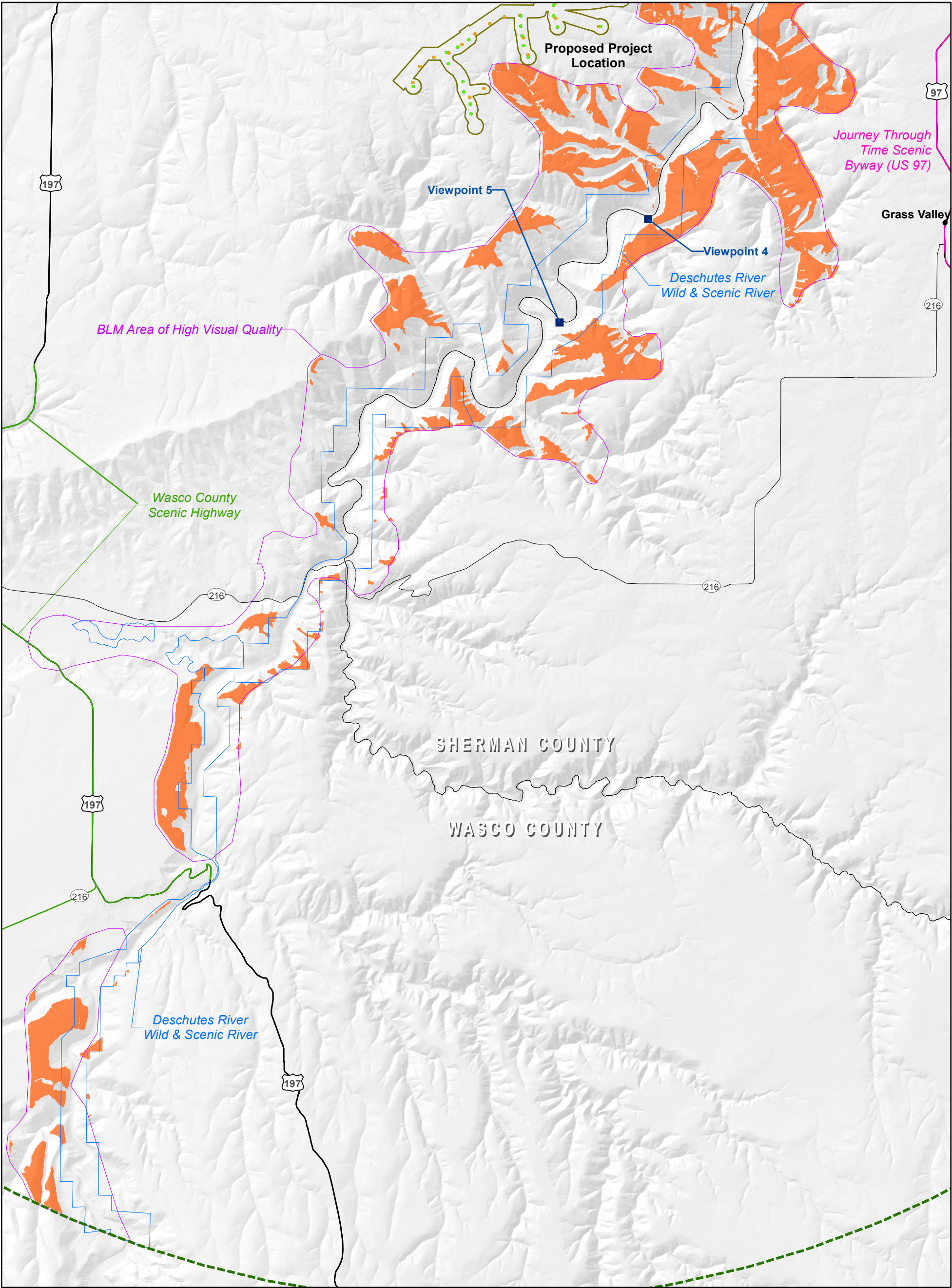


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 4, Sheet 4 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative B*





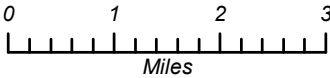
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- |   |                               |   |
|---|-------------------------------|---|
| Scenic and Aesthetic Values Analysis Area (20 mi) | Site Boundary                 | Journey Through Time Scenic Byway (US 97) |
| Proposed Turbine Location (Alternative B)         | Simulation Viewpoint Location | Federal Wild and Scenic Rivers            |
| Proposed Turbine Location (Alternative C)         | County Boundary               | BLM Area of High Visual Quality           |
|   | Wasco County Scenic Highway   |   |

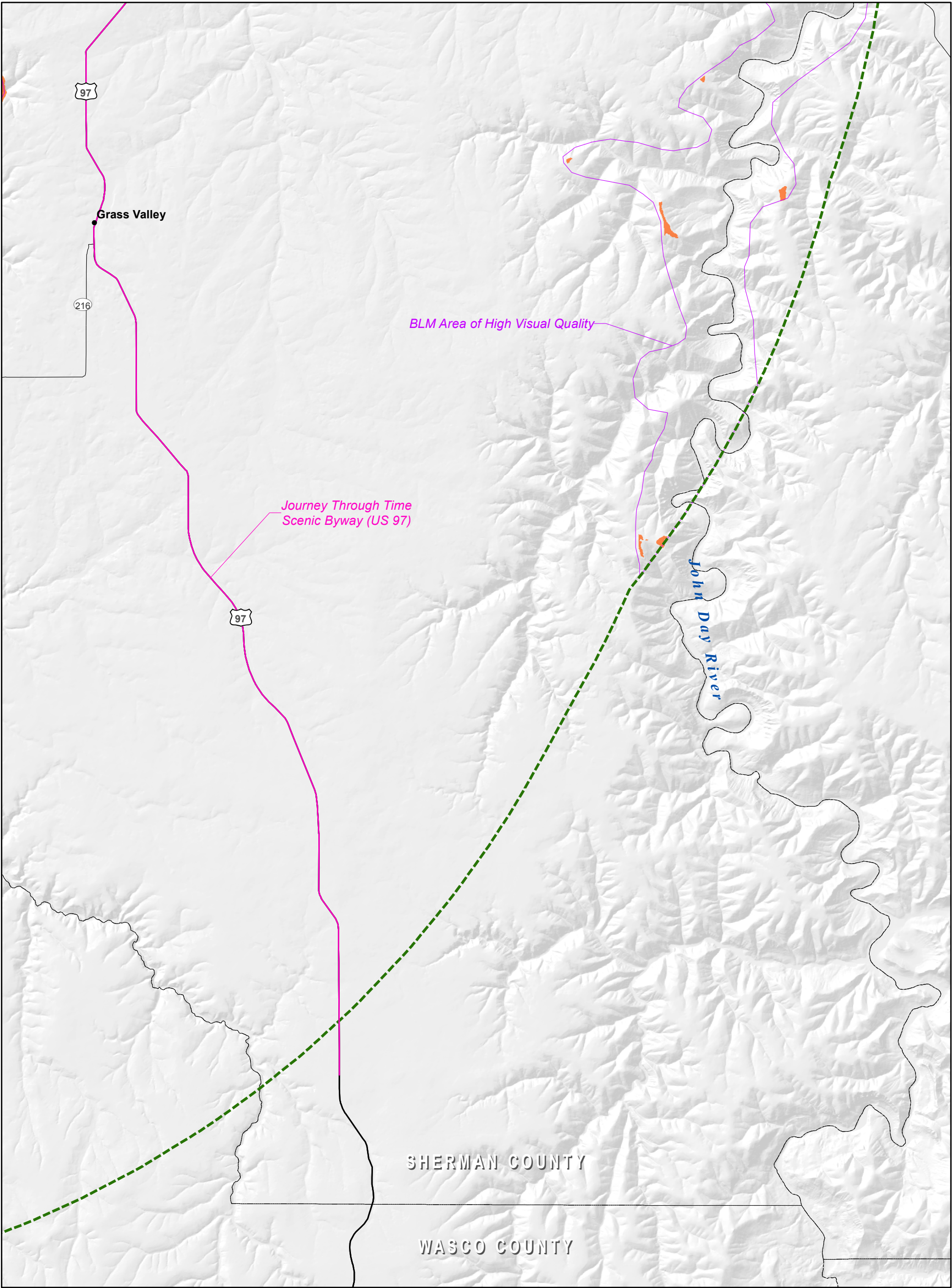







**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 4, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative B*



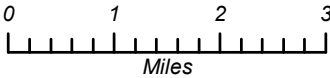


-  Areas Where Proposed Turbines Likely Visible
-  Scenic and Aesthetic Values Analysis Area (20 mi)
-  Journey Through Time Scenic Byway (US 97)
-  BLM Area of High Visual Quality
-  County Boundary

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.



**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 4, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative B*



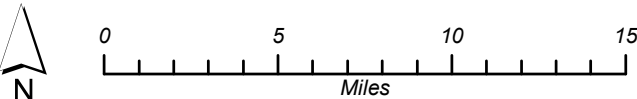
Figure 5, Index Map  
Visibility Analysis for  
Scenic and Aesthetic Value  
Areas, Alternative C

**Legend**

- Sheet Extent
- Scenic and Aesthetic Values Analysis Area (20 mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Boundary
- Simulation Viewpoint Location
- County Boundary
- Interstate Highway
- Other Highway
- Major Road
- Areas Where Proposed Turbines Likely Visible

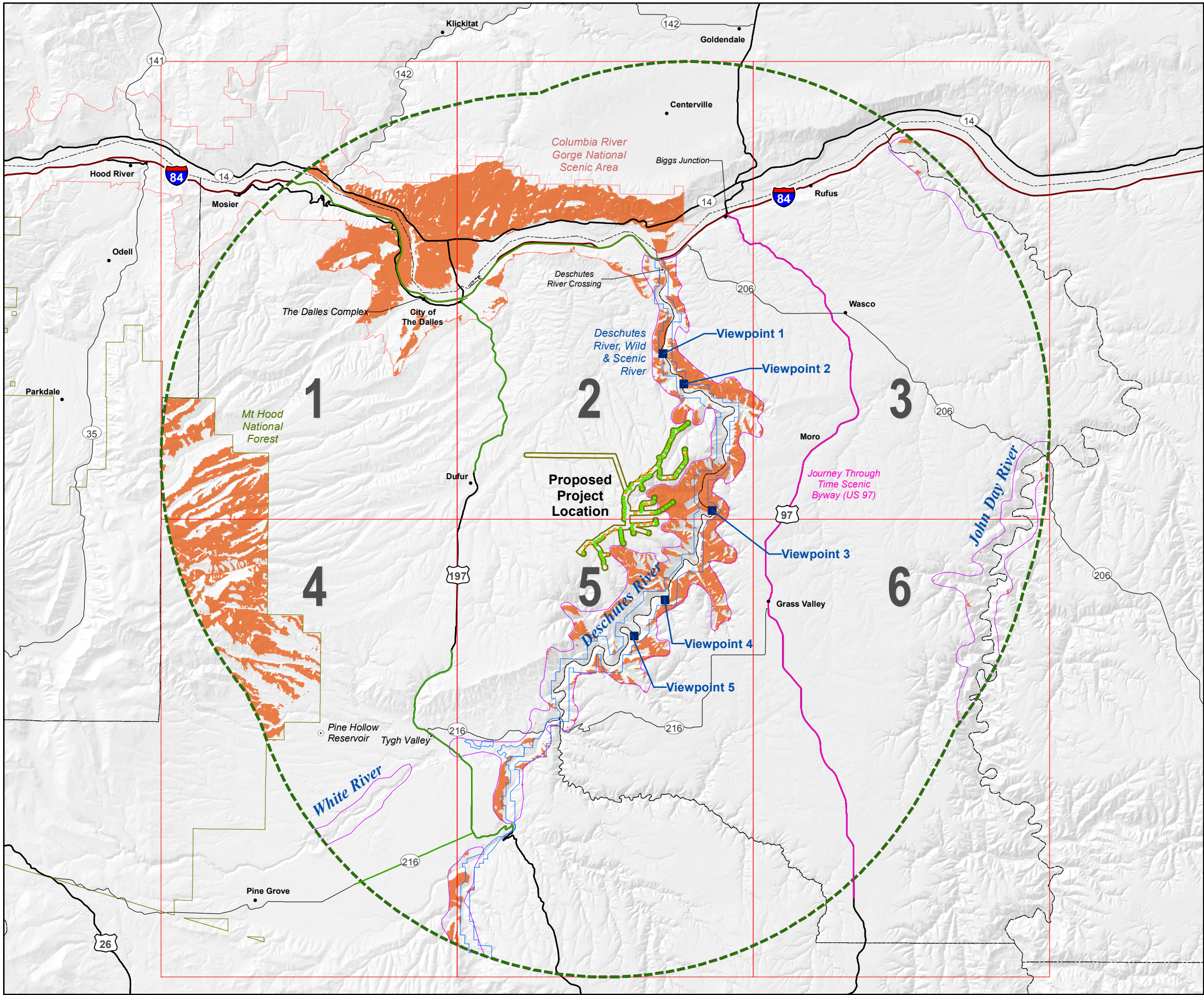
**Scenic Areas**

- Site Specific Scenic Areas
- Wasco County Scenic Highway
- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality
- Mt. Hood National Forest
- Columbia River Gorge National Scenic Area

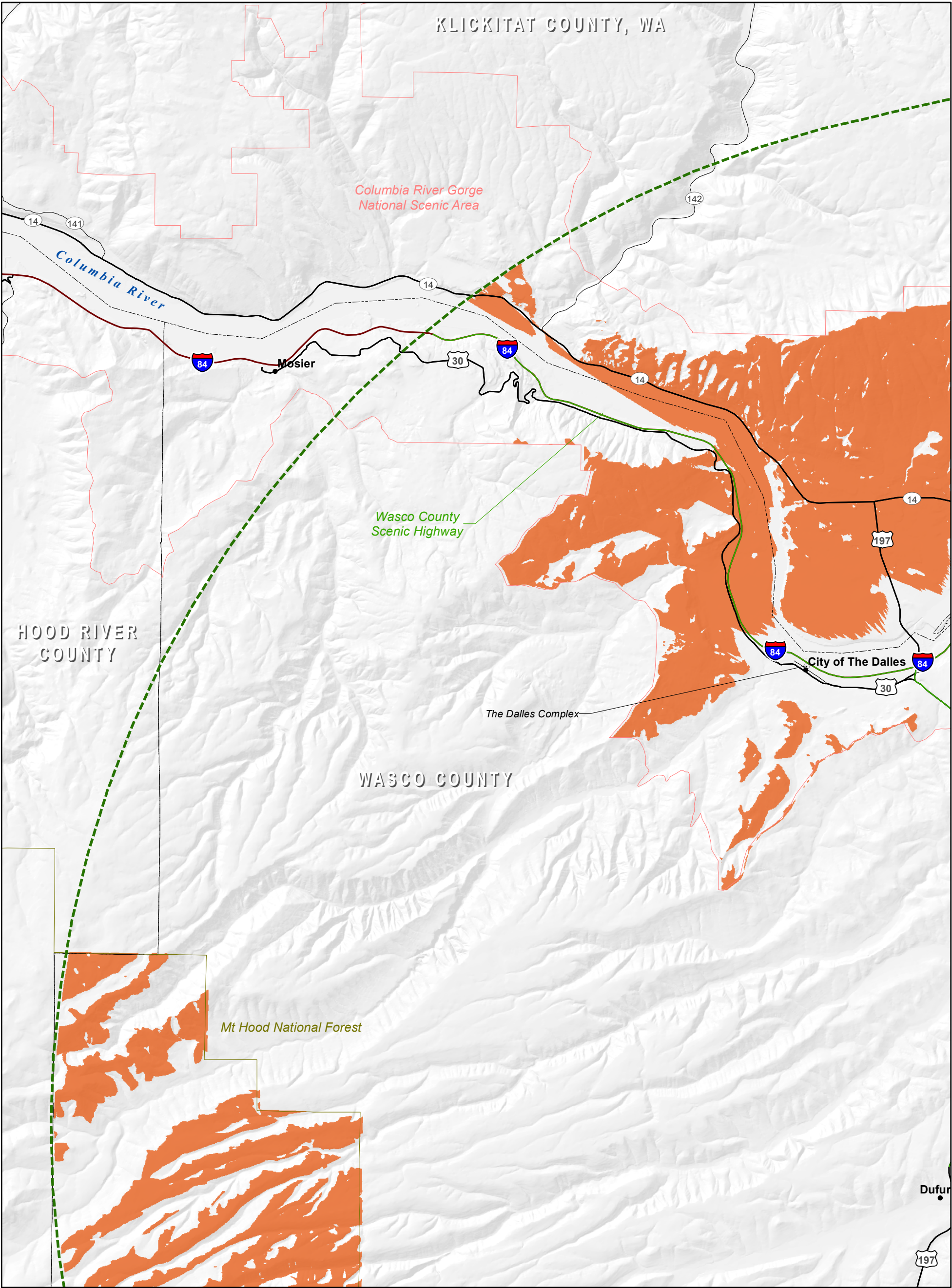



**Data Sources:**

Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service













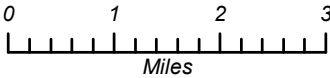
 Areas Where Proposed Turbines Likely Visible

*Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.*

- |   |   |
|---|---|
|  Scenic and Aesthetic Values Analysis Area (20 mi) |  Wasco County Scenic Highway               |
|  Site Specific Scenic Area                         |  Mt. Hood National Forest                  |
|  County Boundary                                   |  Columbia River Gorge National Scenic Area |

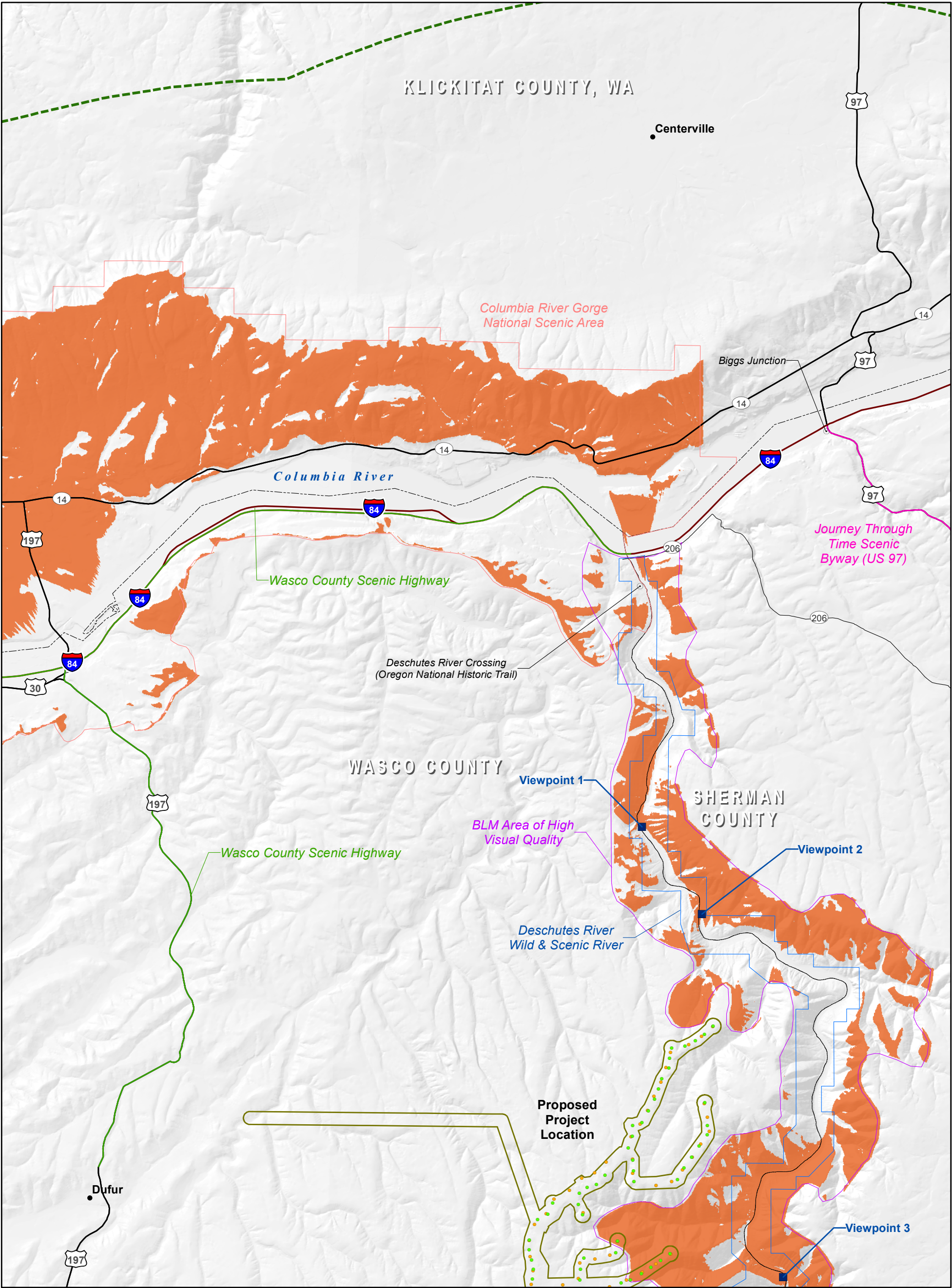


**Data Sources:**  
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Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative C*





- |  |   |                                |   |   |
|--|---|--------------------------------|---|---|
| Areas Where Proposed Turbines Likely Visible | Scenic and Aesthetic Values Analysis Area (20 mi) | Site Boundary                  | Wasco County Scenic Highway               | BLM Area of High Visual Quality           |
| Proposed Turbine Location (Alternative B)    | Simulation Viewpoint Location                     | Site Specific Scenic Area      | Journey Through Time Scenic Byway (US 97) | Columbia River Gorge National Scenic Area |
| Proposed Turbine Location (Alternative C)    | County Boundary                                   | Federal Wild and Scenic Rivers |   |   |

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

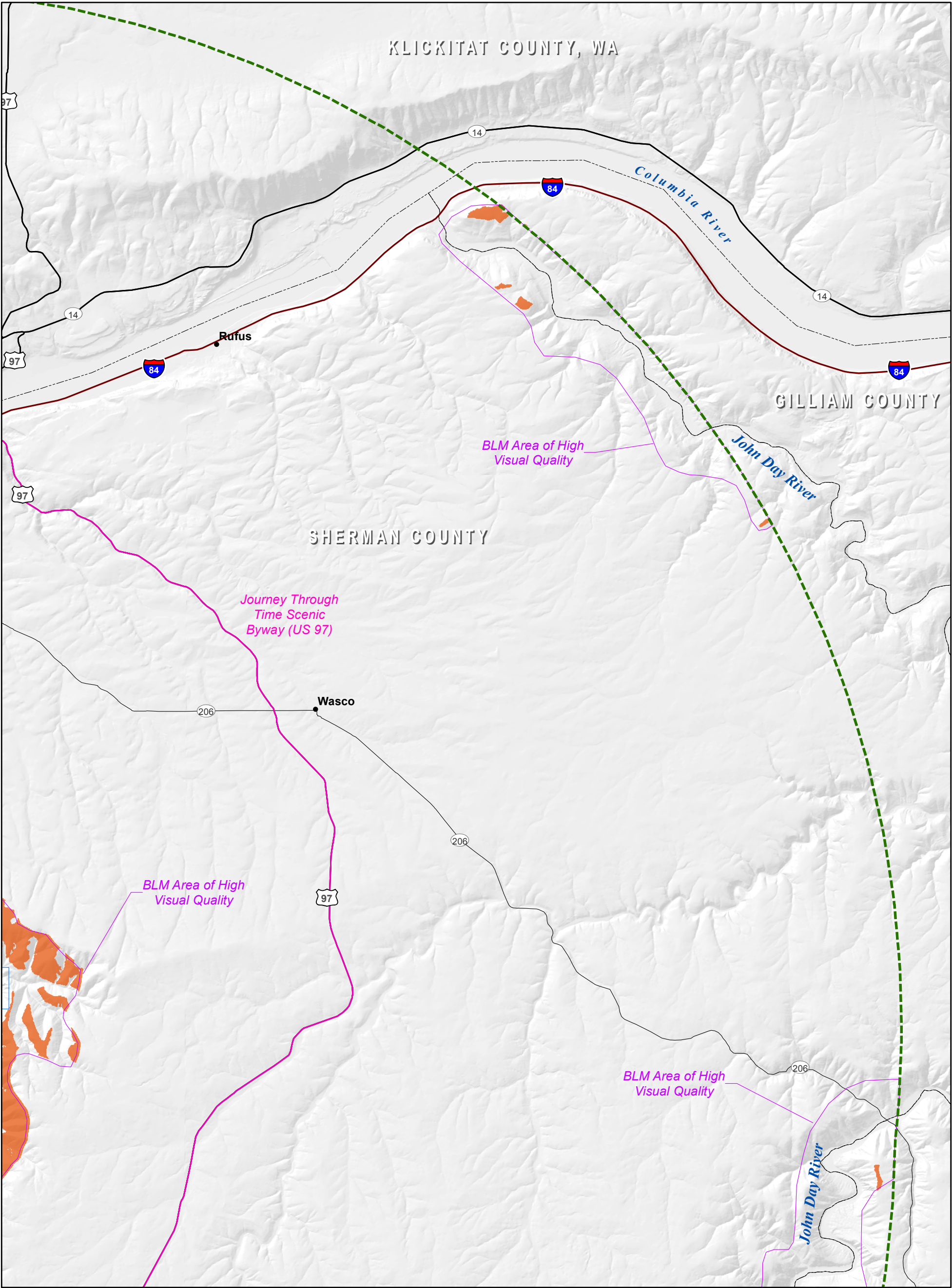
**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
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Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 2 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative C*







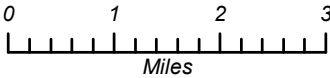
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- County Boundary
- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality

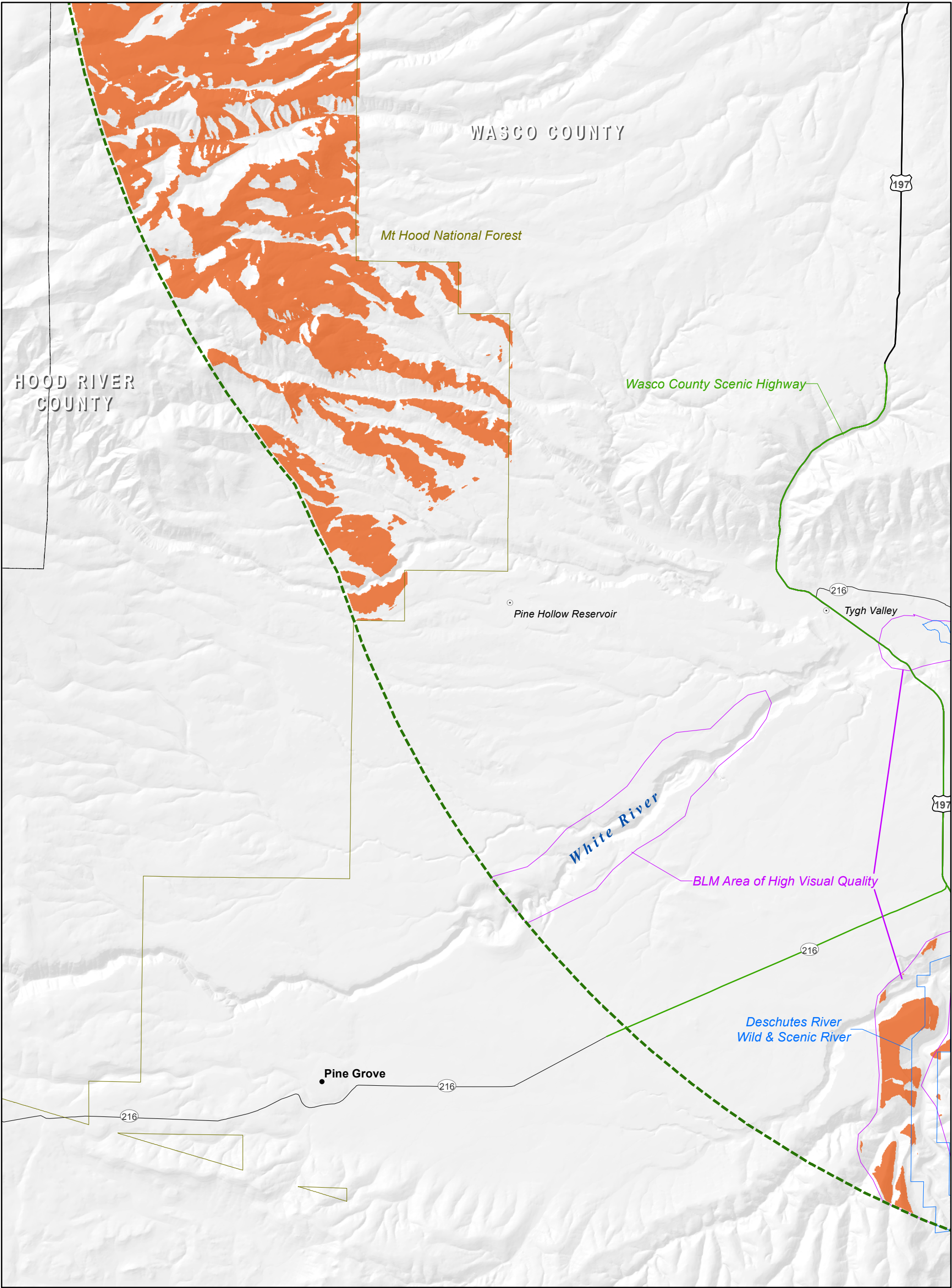


**Data Sources:**  
Bureau of Land Management  
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LotusWorks, 2009, 2014  
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Record of Decision, June 1986  
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**Figure 5, Sheet 3 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative C*





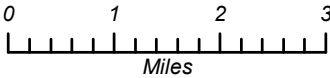
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Wasco County Scenic Highway
- BLM Area of High Visual Quality
- Site Specific Scenic Area
- Federal Wild and Scenic Rivers
- Mt. Hood National Forest
- County Boundary

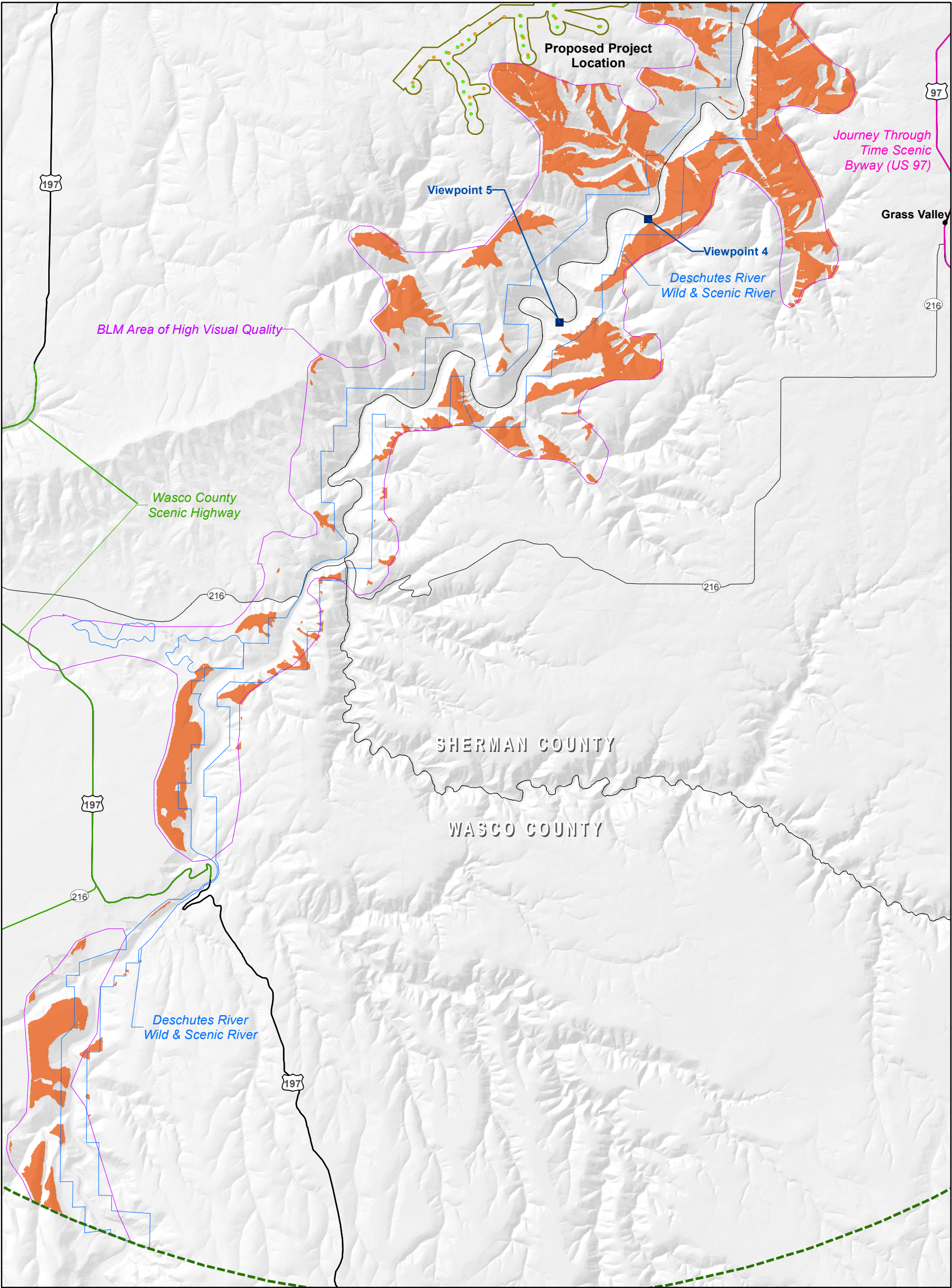


**Data Sources:**  
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LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5 , Sheet 4 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative C*





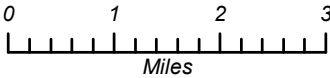
Areas Where Proposed Turbines Likely Visible

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- |   |                               |   |
|---|-------------------------------|---|
| Scenic and Aesthetic Values Analysis Area (20 mi) | Site Boundary                 | Journey Through Time Scenic Byway (US 97) |
| Proposed Turbine Location (Alternative B)         | Simulation Viewpoint Location | Federal Wild and Scenic Rivers            |
| Proposed Turbine Location (Alternative C)         | County Boundary               | BLM Area of High Visual Quality           |
|   | Wasco County Scenic Highway   |   |

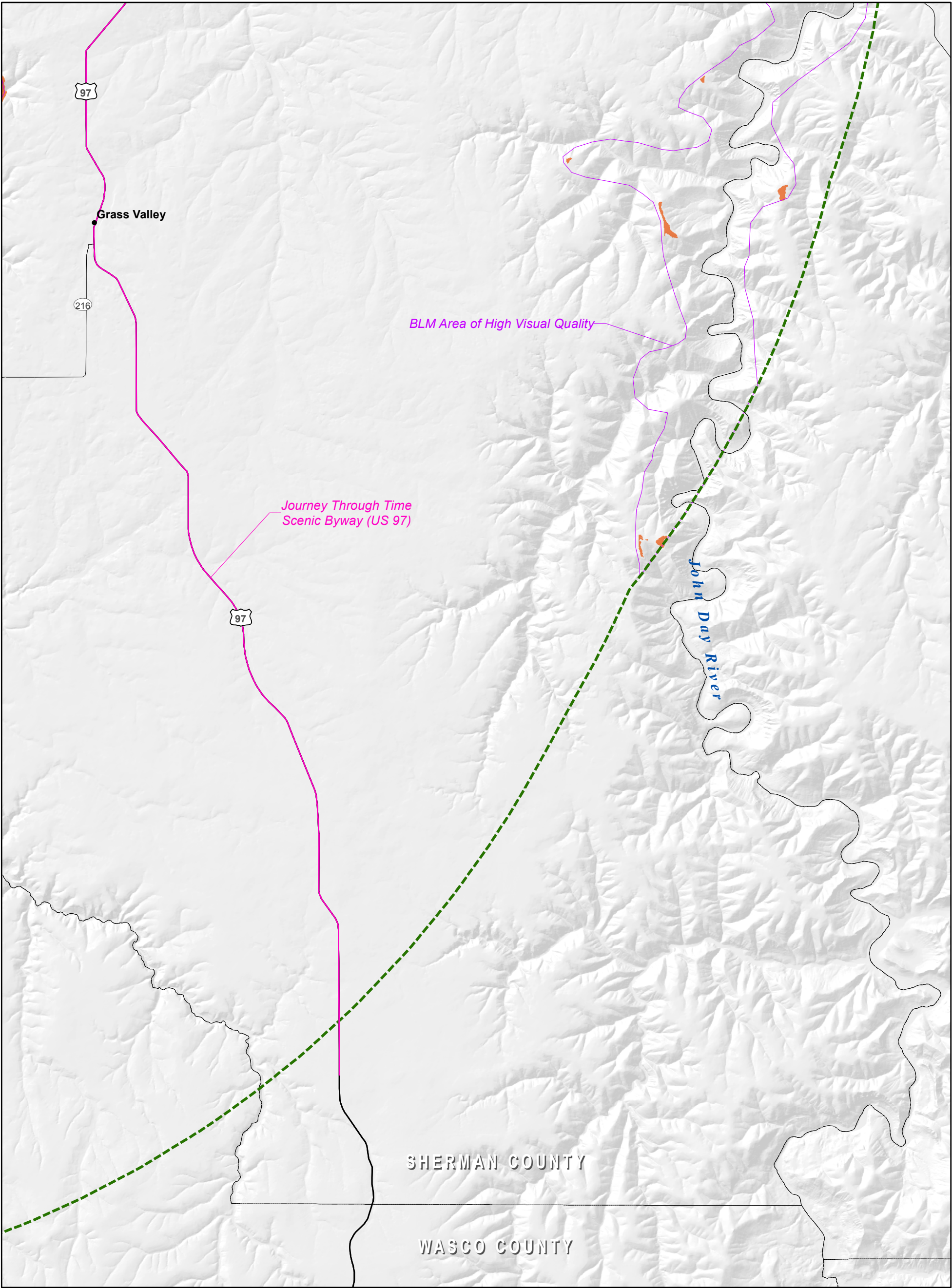







**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative C*



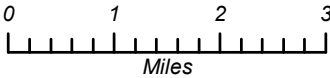


-  Areas Where Proposed Turbines Likely Visible
-  Scenic and Aesthetic Values Analysis Area (20 mi)
-  Journey Through Time Scenic Byway (US 97)
-  BLM Area of High Visual Quality
-  County Boundary

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.



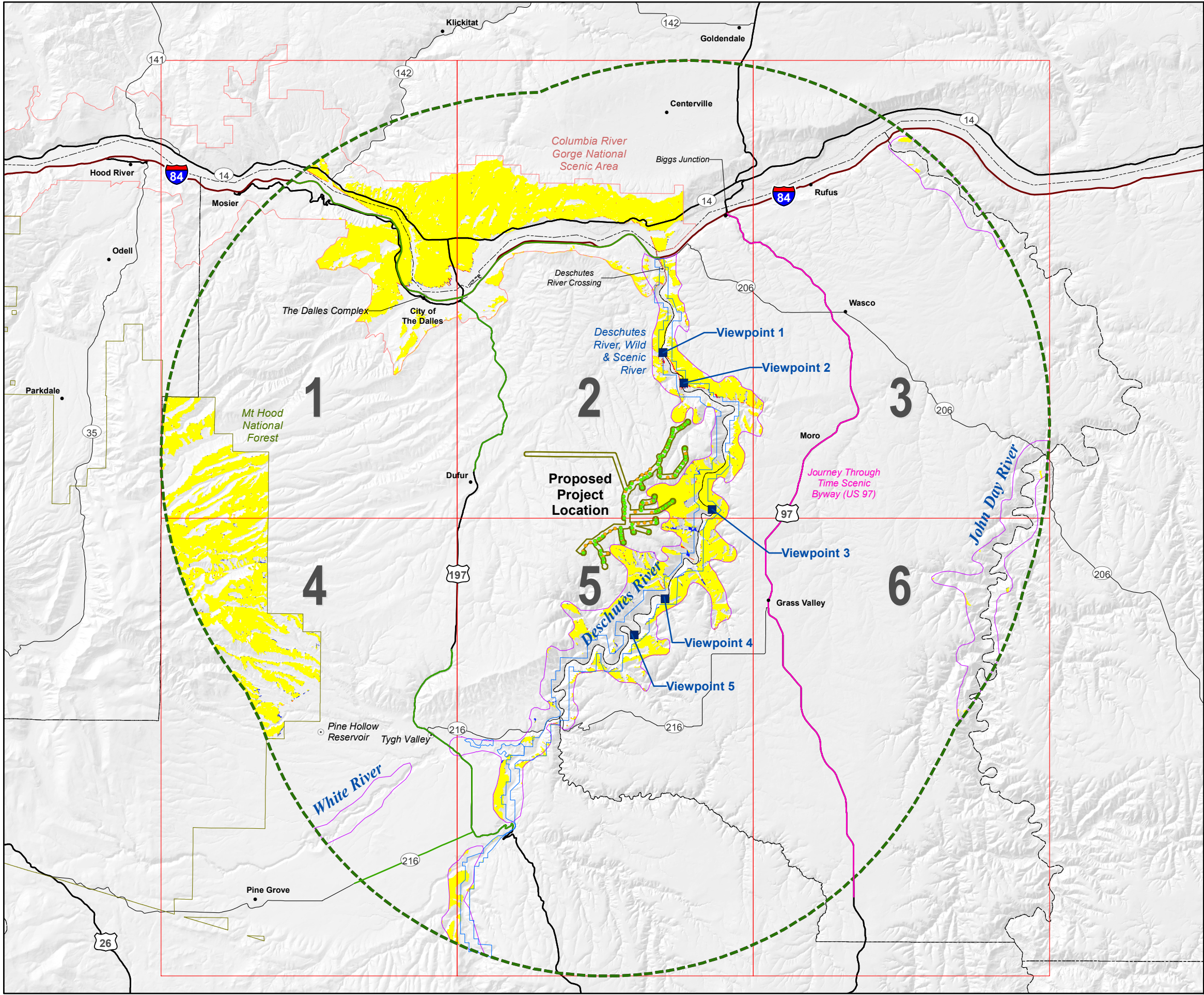
**Data Sources:**  
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LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
for Scenic and Aesthetic Values,  
Alternative C*



**Figure 6, Index Map**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C for  
Scenic and Aesthetic Value Areas*

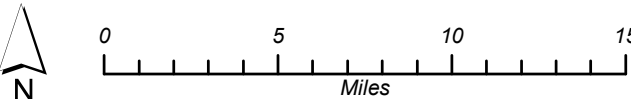


**Legend**

- Sheet Extent
- Scenic and Aesthetic Values Analysis Area (20 mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Boundary
- Simulation Viewpoint Location
- County Boundary
- Interstate Highway
- Other Highway
- Major Road
- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternative B and C

**Scenic Areas**

- Site Specific Scenic Areas
- Wasco County Scenic Highway
- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality
- Mt. Hood National Forest
- Columbia River Gorge National Scenic Area

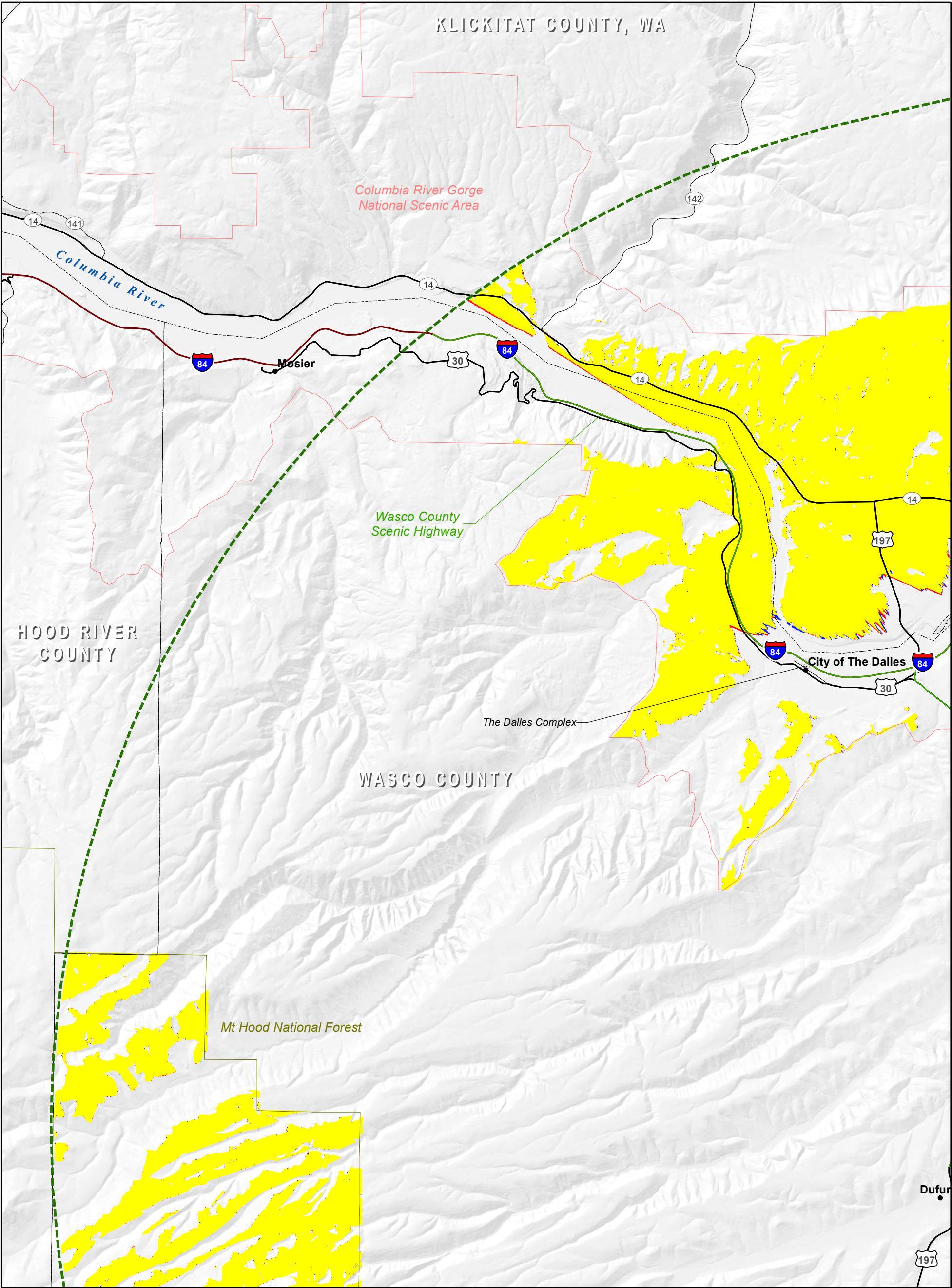


**Data Sources:**

Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
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Record of Decision, June 1986  
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**Legend:**

- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C

*Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.*

**Legend:**

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Site Specific Scenic Area
- County Boundary
- Wasco County Scenic Highway
- Mt. Hood National Forest
- Columbia River Gorge National Scenic Area

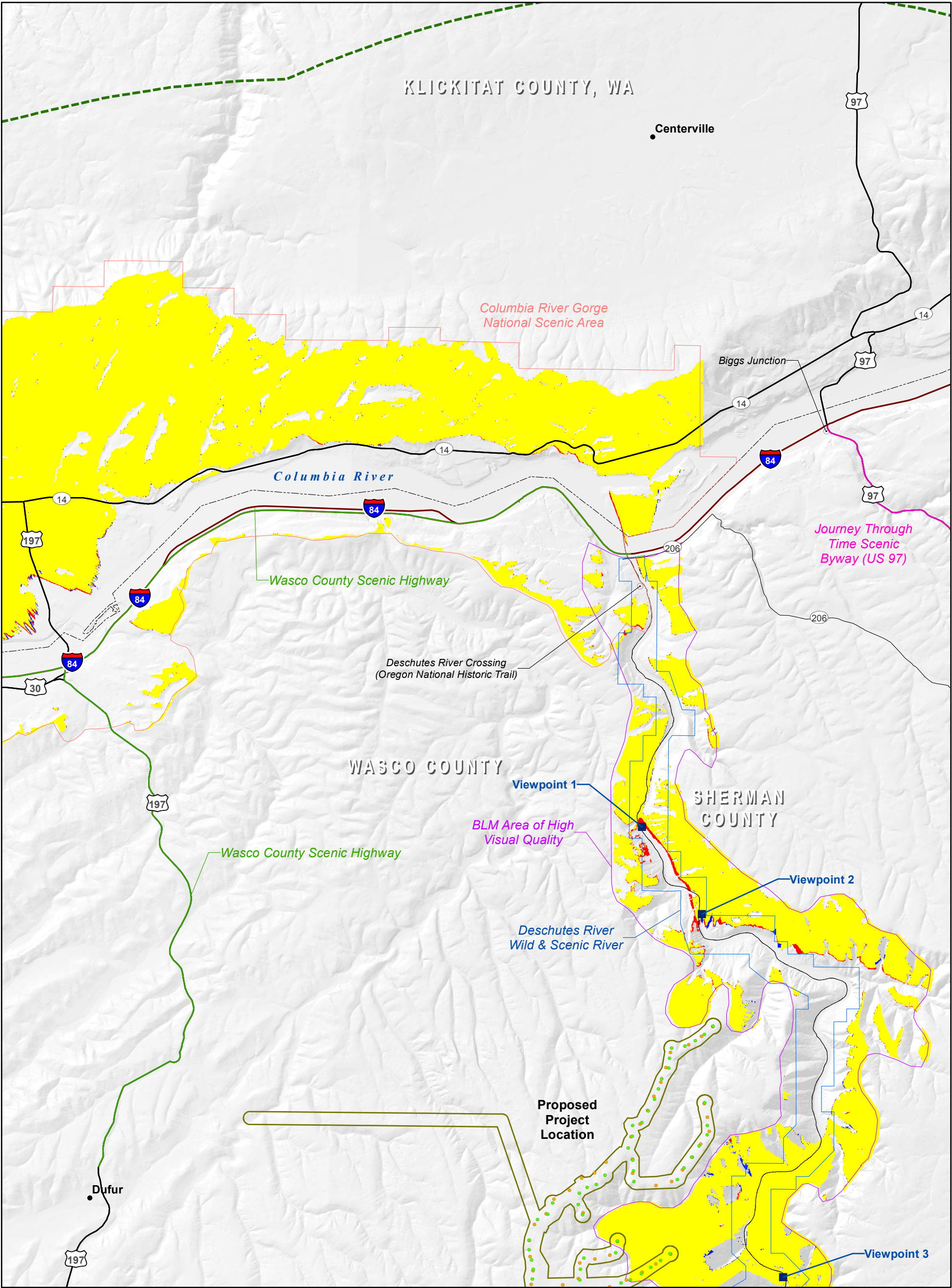


**Data Sources:**  
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Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





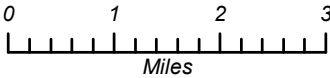
- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Boundary
- Simulation Viewpoint Location
- Site Specific Scenic Area
- Wasco County Scenic Highway
- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality
- Columbia River Gorge National Scenic Area

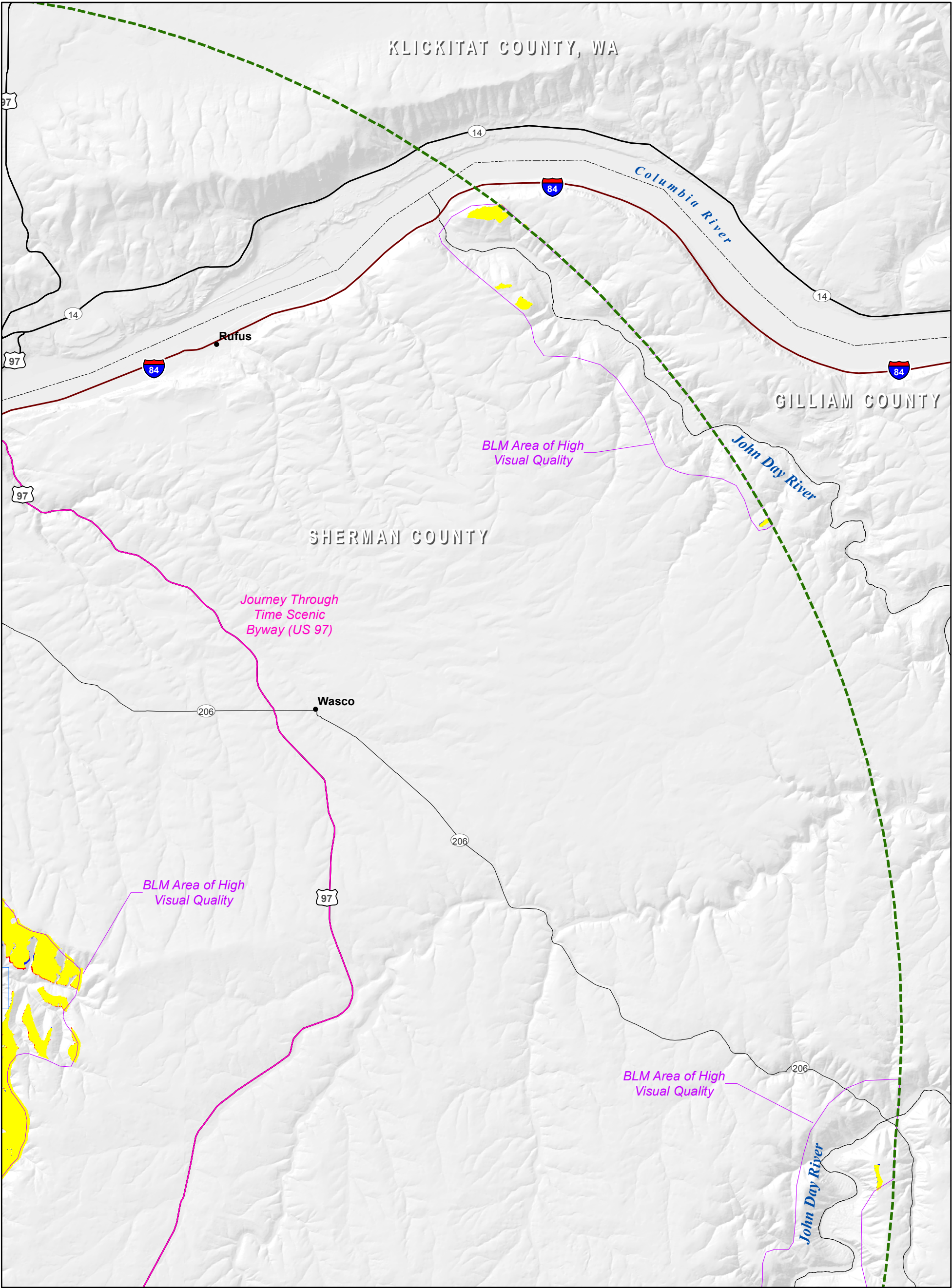


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 2 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Scenic and Aesthetic Values**





- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C

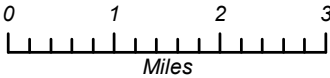
Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- County Boundary

- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality

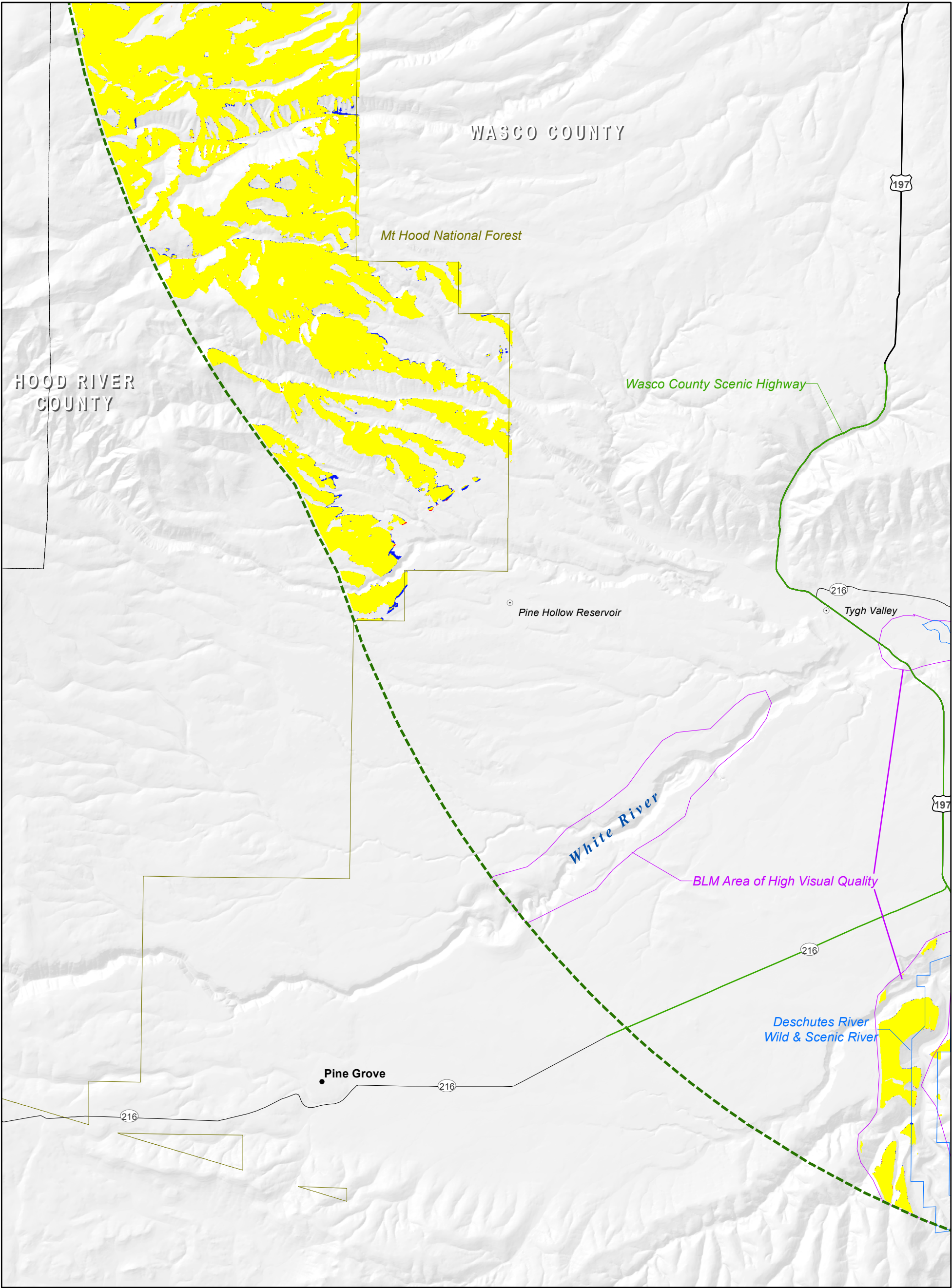


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 3 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





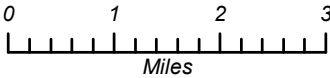
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- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Site Specific Scenic Area
- County Boundary
- Wasco County Scenic Highway
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality
- Mt. Hood National Forest

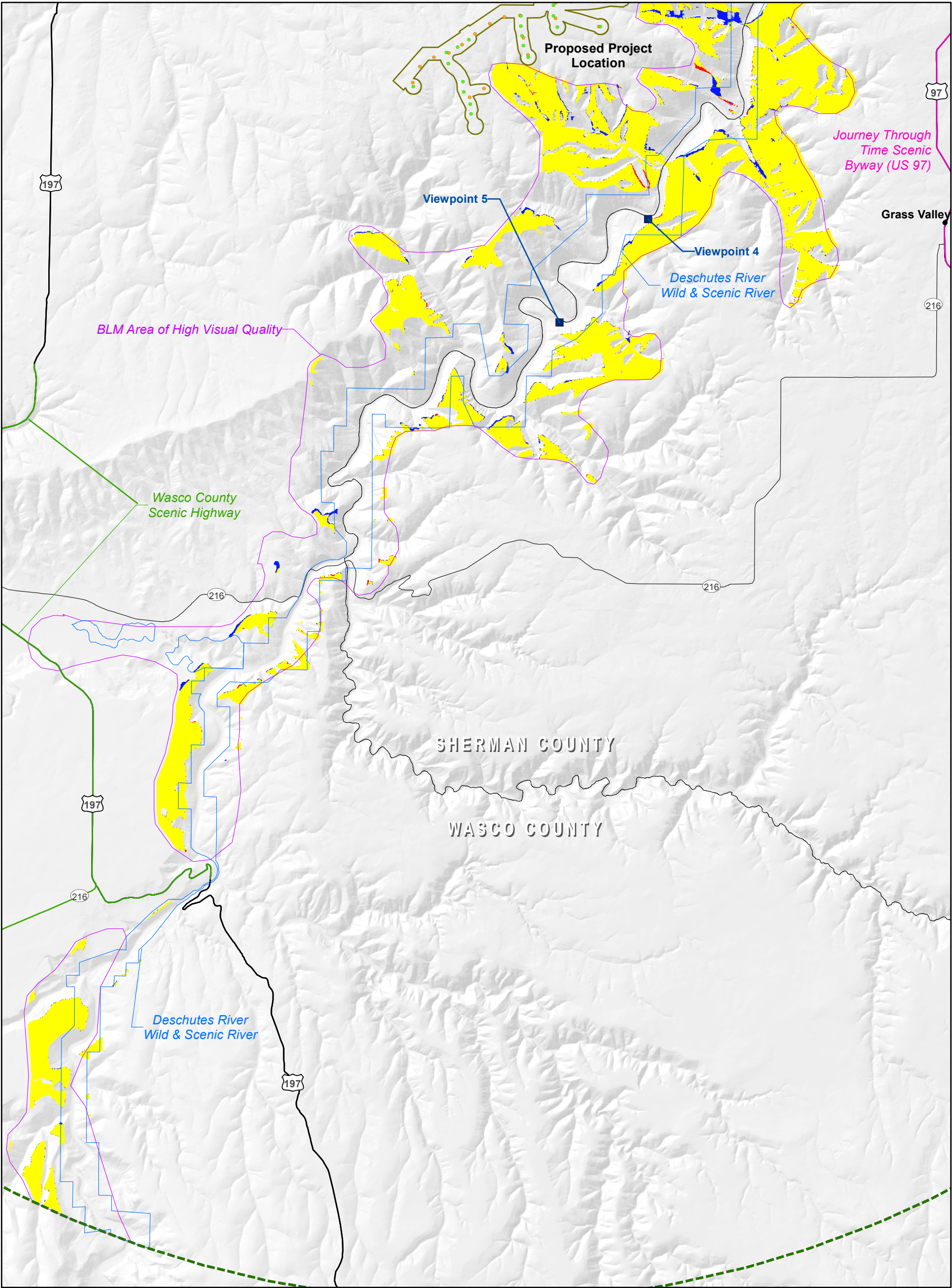


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 4 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





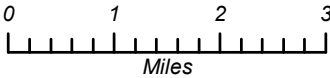
● New Areas Where Proposed Turbines Now Likely Visible  
● Areas Where Proposed Turbines No Longer Visible  
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Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Boundary
- Simulation Viewpoint Location
- County Boundary
- Wasco County Scenic Highway
- Journey Through Time Scenic Byway (US 97)
- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality

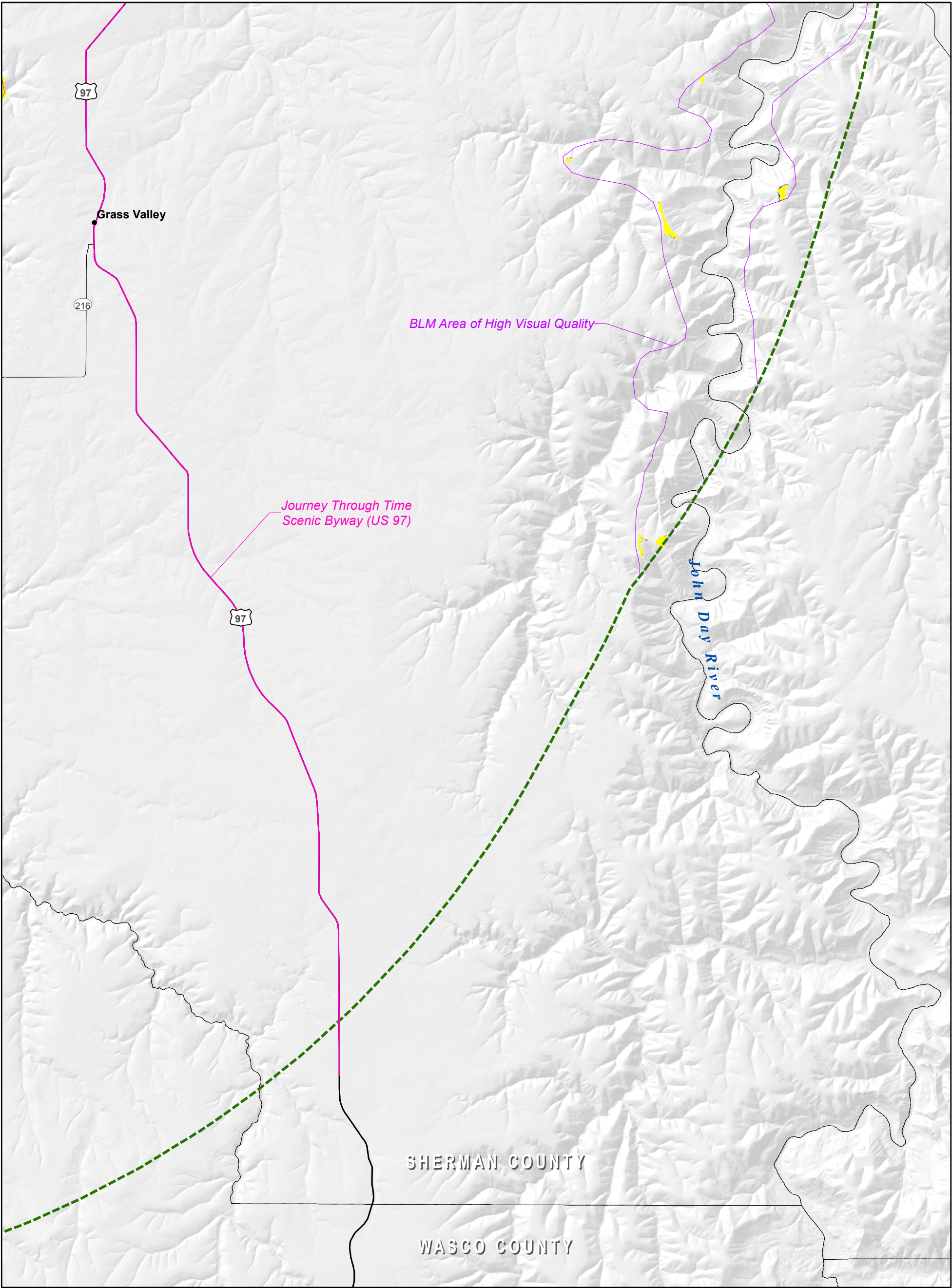


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*



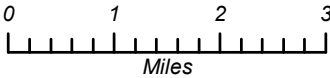


- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Scenic and Aesthetic Values Analysis Area (20 mi)
- County Boundary
- Journey Through Time Scenic Byway (US 97)
- BLM Area of High Visual Quality

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.



**Data Sources:**  
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LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*



**LotusWorks – Summit Ridge I, LLC**

9611 NE 117th Avenue  
Suite 2840  
Vancouver, WA 98662-2403

360.737.9692

May 09, 2016

Ms. Katie Clifford  
Energy Facility Siting Analyst  
**Oregon Department of Energy**  
625 Marion Street NE  
Salem, OR 97301

Subject: Response to Oregon Department of Fish and Wildlife letter of April 25, 2016

Reference: Summit Ridge Wind – Request for Amendment #2

Ms. Clifford,

In their April 25, 2016 letter, ODFW recommends six actions to be incorporated into Amendment #2 of the Summit Ridge Site Certificate. These recommendations deal with the performance of raptor nest surveys; use of current raptor survey protocols; use of pre-emergent herbicide to target annual grasses; coordination with adjacent Columbia Plateau Ecoregion wind farms on avian fatality monitoring; curtailment of construction activities from December 1<sup>st</sup> to April 15<sup>th</sup> and a revision to our Habitat Mitigation Plan to reflect Habitat Category 2 mitigation goals. The purpose of this letter is to demonstrate to the Department of Energy how we have or will comply with ODFW's recommendations.

**Raptor Nest Surveys and Raptor Survey Protocols** – We have performed additional raptor nest surveys in 2015 and 2016. The 2015 survey results have been provided to the Department of Energy. We anticipate the 2016 survey results to be provided to the Department of Energy next month. Attached is a string of emails between Northwest Wildlife (our consultant), the Department of Energy, and Jeremy Thompson of the Department of Fish and Wildlife. In his May 2, 2016 email (attached) response Mr. Thompson identifies that the 2015/2016 raptor survey satisfies ODFW's request for pre-construction raptor surveys. Since these raptor surveys were accepted by ODFW we conclude the protocol used is also acceptable.

**Use of Pre-Emergent Herbicide to Target Annual Grasses** - Our current weed control plan states the following:

21        Control of cheatgrass during the fall establishment period is essential in order to reduce  
22        competition with seeded plants. As a general strategy, the herbicide Plateau® may be applied  
23        during the fall prior to fall rains, as a pre-emergent cheatgrass treatment; however, this should  
24        only be done where seed application will be by rangeland drill such that the desirable grass seed  
25        will have minimal contact with the herbicide.  
26

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Although Cheatgrass is typically the most common species of concern, we will modify our plan to say "cheatgrass and other non-native annual grasses."

**Coordination with Adjacent Columbia Plateau Ecoregion Wind Farms on Avian Fatality Monitoring –** We will work with adjacent Columbia Plateau wind farm to coordinate Avian Fatality Monitoring studies after our initial year of post-construction surveys.

**Curtailment of construction activities from December 1<sup>st</sup> to April 15<sup>th</sup>** – This requirement is already a condition of Amendment #1 to the Summit Ridge Site Certificate. We refer you to paragraph 10.12 and 10.15 of Amendment #1 of the Summit Ridge Site Certificate.

**Revision to our Habitat Mitigation Plan to Reflect Habitat Category 2 Mitigation Goals –** This requirement is also addressed in Amendment #1 of the Summit Ridge Site Certificate. We refer to paragraphs 10.4. Also included for your information is our as amended Habitat Mitigation Plan dated October 21, 2014 which was submitted in response to RAI #1 of the Amendment #1 permit extension process. The site boundary has not changed in Amendment #2 so there would be no additional changes to the plan to accommodate additional mitigation needs.

We believe with the submission of this response we have addressed all of ODFW's recommendations and that our Summit Ridge project is compliant in all regards to ODFW's recommendations.

Please contact me should you have any additional questions or require further clarification.

Best regards,

A handwritten signature in black ink, appearing to read "Steven A. Ostrowski, Jr." The signature is fluid and cursive, with the first name "Steven" being the most prominent.

Steven A. Ostrowski, Jr.

Cc: File

Attachments

## Steven Ostrowski

---

**From:** Rick Gerhardt <R.Gerhardt@NW-WildlifeConsultants.com>  
**Sent:** Monday, May 02, 2016 2:44 PM  
**To:** Steven Ostrowski  
**Subject:** FW: ODFW comments on Summit Ridge Amendment #2

Steve:

Go to the bottom to read the entire thread; I think this should take care of things.

Rick

---

**From:** Jeremy Thompson [mailto:Jeremy.L.Thompson@coho2.dfw.state.or.us]  
**Sent:** Monday, May 02, 2016 10:22 AM  
**To:** CLIFFORD Katie; THOMPSON Jeremy L  
**Cc:** WOODS Maxwell; REIF Sarah J; Rick Gerhardt  
**Subject:** RE: ODFW comments on Summit Ridge Amendment #2

The 2015/16 raptor surveys will satisfy our request for pre-construction raptor surveys.

Rick and I briefly discussed the other comments from our letter, and the applicant is aware that the Mitigation plan will need to be revisited, which is the other major component to our comment letter.

No other issues were discussed in our call.

*Jeremy Thompson*

**From:** Clifford, Katie [mailto:katie.clifford@state.or.us]  
**Sent:** Monday, May 02, 2016 10:16 AM  
**To:** THOMPSON Jeremy L <jeremy.l.thompson@state.or.us>  
**Cc:** WOODS Maxwell <Maxwell.Woods@state.or.us>; REIF Sarah J <sarah.j.reif@state.or.us>; Rick Gerhardt <R.Gerhardt@NW-WildlifeConsultants.com>  
**Subject:** RE: ODFW comments on Summit Ridge Amendment #2

Thanks Jeremy. I assume the 2015 and 2016 raptor surveys will address ODFW's request that ODOE/the Council require the applicant to reassess raptor nesting on the site for a two year period prior to initiation of construction activities. Is that correct?

Did that discussion resolve any of the other issues raised in ODFW's letter?

Katie

**Katie Clifford**  
Energy Facility Siting Analyst  
Oregon Department of Energy  
C: (503) 302-0267



**From:** Jeremy Thompson [<mailto:jeremy.l.thompson@state.or.us>]  
**Sent:** Friday, April 29, 2016 3:23 PM  
**To:** CLIFFORD Katie <[katie.clifford@state.or.us](mailto:katie.clifford@state.or.us)>; Rick Gerhardt <[R.Gerhardt@NW-WildlifeConsultants.com](mailto:R.Gerhardt@NW-WildlifeConsultants.com)>  
**Cc:** WOODS Maxwell <[Maxwell.Woods@state.or.us](mailto:Maxwell.Woods@state.or.us)>; REIF Sarah J <[sarah.j.reif@state.or.us](mailto:sarah.j.reif@state.or.us)>  
**Subject:** RE: ODFW comments on Summit Ridge Amendment #2

Katie,

I spoke with Rick today. His concern was that we did not make specific mention of the 2015 raptor surveys that have already been conducted. I assured him that our concern was that the 2015 and the ongoing 2016 raptor survey data were utilized in assessing potential impacts during final micrositeing.

From my conversation with Rick I don't see the need for a conference call. If you would still like to put one together let us know.

*Jeremy Thompson*

**From:** Clifford, Katie [<mailto:katie.clifford@state.or.us>]  
**Sent:** Thursday, April 28, 2016 3:39 PM  
**To:** THOMPSON Jeremy L <[jeremy.l.thompson@state.or.us](mailto:jeremy.l.thompson@state.or.us)>  
**Cc:** WOODS Maxwell <[Maxwell.Woods@state.or.us](mailto:Maxwell.Woods@state.or.us)>; REIF Sarah J <[sarah.j.reif@state.or.us](mailto:sarah.j.reif@state.or.us)>  
**Subject:** RE: ODFW comments on Summit Ridge Amendment #2

Hi Jeremy,

I requested information from the site certificate holder based on ODFW's letter. Steve Ostrowski and one of his consultants (Rick Gerhardt) would like to have a phone call with ODFW to discuss a few of the agency's comments, which ODOE agrees could be helpful to make sure we're all on the same page. My understanding is that Rick will be reaching out soon, if he hasn't already, to set up a phone call between the applicant team, ODFW, and ODOE.

Katie

**Katie Clifford**  
Energy Facility Siting Analyst  
Oregon Department of Energy  
C: (503) 302-0267

**From:** Jeremy Thompson [<mailto:jeremy.l.thompson@state.or.us>]  
**Sent:** Tuesday, April 26, 2016 7:49 AM  
**To:** CLIFFORD Katie <[katie.clifford@state.or.us](mailto:katie.clifford@state.or.us)>  
**Cc:** GERMOND Jon P <[jon.p.germond@state.or.us](mailto:jon.p.germond@state.or.us)>; MOORE Michael <[michael.moore@state.or.us](mailto:michael.moore@state.or.us)>; HOOTON Robert M <[robert.m.hooton@state.or.us](mailto:robert.m.hooton@state.or.us)>; REIF Sarah J <[sarah.j.reif@state.or.us](mailto:sarah.j.reif@state.or.us)>; WRAY Simon N <[simon.n.wray@state.or.us](mailto:simon.n.wray@state.or.us)>  
**Subject:** ODFW comments on Summit Ridge Amendment #2

Katie,

Please see the attached letter regarding the proposed amendment to Summit Ridge Wind facility.

If possible, could you provide me with the updated shapefiles for the project boundary? The map on the website appears to still include areas no longer under consideration for development.

Please let me know if I can provide you any other information.

**Jeremy Thompson**

District Wildlife Biologist

Mid-Columbia District, ODFW

3701 W. 13<sup>th</sup>. St.

The Dalles, OR 97058

541-296-4628 office

541-980-8524 cell

541-298-4993 fax



**Habitat Mitigation Plan  
for the  
Summit Ridge Wind Project  
(As Amended)**

*Prepared for:*

**LotusWorks**  
9611 NE 117<sup>th</sup> Avenue, Suite 2840  
Vancouver, Washington 98662

*Prepared by:*

Rick Gerhardt  
**Northwest Wildlife Consultants, Inc.**  
815 NW 4<sup>th</sup> St.  
Pendleton, Oregon 97801



Revised October 21, 2014

## **Introduction**

This document was originally prepared for the Summit Ridge Wind Project (Project) Site Certificate Application (SCA) submitted to the Oregon Department of Energy (ODOE) in 2010. It has been updated in association with a request by LotusWorks for an Amendment to the Site Certificate in order to address two sets of changes. One is a decrease in the number of turbines proposed for installation, which resulted in a decrease in the acreages of both permanent and temporary impacts. The other is a change (in 2013) in the way the Oregon Department of Fish and Wildlife (ODFW) categorizes several habitat types (including exotic annual grassland, old field, revegetated grassland, native perennial grassland, and rabbitbrush/buckwheat shrub-steppe habitats) when they lie within designated deer and/or elk winter habitat (ODFW, 2013). The proposed concepts of this Habitat Mitigation Plan (HMP) were originally discussed with the Oregon Department of Fish and Wildlife in December 2009 and again on March 30, 2010; the changes contained herein were made in response to ODFW comments on the Request for an Amendment and were discussed with ODFW personnel in October 2014.

The Summit Ridge Wind Project is located in Wasco County, Oregon. As part of the SCA (Exhibits P and Q), Northwest Wildlife Consultants, Inc. (NWC) completed habitat mapping and quality assessment of the Project area, and conducted site-specific biological studies that included rare plant surveys, avian use surveys, a grassland bird displacement study, special status vertebrate wildlife species surveys, a raptor nest survey, an inventory of bat species, and big game observations, as well as reviews for potential occurrence of or records of special status species (Gerhardt et al., 2009a, 2009b). Based on a combination of the results of these studies, Project impact estimates provided by LotusWorks and David Evans Associates (DEA), experience with such mitigation, and knowledge of the wildlife and habitats impacted by wind energy development in the Columbia Plateau, NWC offers the concepts in this document as recommendations for inclusion in the Project's final Habitat Mitigation Plan. Details on habitat types, subtypes, and Categories 1–6 can be found in the SCA, Exhibit P.

## **Description of Project Impacts**

As presently designed (as of October 17, 2014), the Summit Ridge Wind Project will consist of up to 72 2.7 megawatt (MW) turbines. The Project is expected to have a generating capacity of 200 megawatts. Other associated facilities include turbine pads, maintenance roads, overhead and underground electrical cables, an operations and maintenance building, a batch plant, and one 230-kilovolt overhead transmission line.

Most of the Project's footprint (area to be covered by permanent facilities) will occupy dryland agriculture, which is Category 6 habitat. No Category 1 habitat will be impacted, but a small amount of habitat traditionally designated Category 2 (big sagebrush shrub-steppe) will be permanently impacted. Most of the remaining footprint will occupy habitats originally designated Category 3 (revegetated grassland, native perennial grassland, or rabbitbrush/buckwheat shrub-steppe) or Category 4 (old field or exotic annual grassland)



but now designated by ODFW as Category 2 because the land lies within designated deer and/or elk winter range (ODFW, 2013).

In addition to the permanent impacts mentioned above, construction of the Project will entail temporary impacts to the same types and categories of habitat. Temporary impacts are summarized as follows: no Category 1 impacts, a small amount of impact to traditional Category 2 habitat, some impacts to habitats traditionally designated Category 3 and Category 4 but now designated by ODFW as Category 2, and mostly Category 6 habitat will be impacted. Grassland habitats that were traditionally Category 3 (revegetated grassland and native perennial grassland) are expected to require two to five years after restoration activities start to achieve a trend towards recovery to a mature state of grassland cover. Old field and exotic annual grassland habitats are expected to be improved—within two or three years—as restoration will result in more native grasses and far fewer of the invasive, noxious weeds that existed prior to disturbance). Native forbs in perennial grasslands (as well as in shrub-steppe) may not recover to pre-construction diversity or will take longer to recolonize the restored areas. Shrub-steppe habitats—Category 2 and (traditionally) Category 3—may take much longer to achieve the shrub species maturity and height that existed prior to construction.

### **Calculation of the Size of the Mitigation Area**

The Habitat Mitigation Area (HMA) must be large enough and have the characteristics to meet the standards set by the Oregon Department of Fish and Wildlife (ODFW) in their Wildlife Habitat Mitigation Policy (OAR 635-415-0025). These standards include “no net loss” and a “net benefit” in habitat quality and quantity for Category 2 habitats, and “no net loss” of habitat for Categories 3 and 4. Mitigation standards for Category 6 involve minimizing direct habitat loss and avoiding impacts to off-site habitat.

For the purposes of this discussion, the acreages of impact are the current estimate of the maximum affected area. The actual areas of disturbance will be determined based on the final design layout of the Project. It is anticipated that ODOE and ODFW will require that they be provided with the final design layout and the associated impact acreages prior to the beginning of Project construction.

Current maximum habitat impact estimates of the Summit Ridge Wind Project (including the transmission line) are:

| <u>Habitat Category</u>  | <u>Permanent Impacts</u> | <u>Temporary Impacts</u> |
|--------------------------|--------------------------|--------------------------|
| Category 2 (traditional) | 0.43                     | 0.37                     |
| Category 2 (big game)    | 25.80                    | 35.15                    |
| Category 6*              | 41.78                    | 47.16                    |
| Total Acres              | 68.01                    | 82.68                    |

\* no mitigation required

Based on these impact estimates, calculation of the mitigation area requirement is as follows:

### Category 2 (Traditional)

Footprint: 0.43 acres (2:1 ratio)

Temporary impacts: 0.37 acres (2:1 ratio)

Mitigation area required:  $(0.43 \times 2) + (0.37 \times 2) = 1.60$  acres

### Category 2 (Big Game)

Footprint: 25.80 acres (>1:1 ratio)

Temporary impacts: revegetated grassland 17.19 acres (1:1); native perennial grassland and shrub-steppe 6.23 acres (1:1 ratio); old field and exotic annual grassland 10.86 acres (1:1)

Mitigation area required:  $25.80 + 17.19 + 6.23 + 10.86 = > 60.08$  acres

**Total mitigation area required: Approximately 65 acres (i.e., > 61.68 acres)**

### **Description of the Habitat Mitigation Area (HMA)**

According to ODFW standards, areas appropriate for mitigation of Category 2 habitat impacts must be "in proximity" to the Project and have potential for habitat and enhancement. The applicant has identified four habitat parcels for consideration by ODFW and ODOE (Figure 1). These range in size from 15 to 77 acres, and are revegetated grasslands of varying quality. NWC believes that the identified parcels have adequate potential for mitigating the habitat loss expected to occur and for providing benefit for the wildlife species most likely to be impacted by habitat loss associated with the Project, including grasshopper sparrow (*Ammodramus savannarum*), Brewer's sparrow (*Spizella breweri*), vesper sparrow (*Pooecetes gramineus*), and loggerhead shrike (*Lanius ludovicianus*). The referenced parcels for mitigation have been discussed with ODFW, LotusWorks, NWC, and the associated landowners, and other parcels may be considered as well.

### **Possible Habitat Enhancement Options**

It is assumed that the habitat designated for mitigation will be conserved and protected from alteration for the life of the Project. Besides such legal protection, actions that are proposed for enhancement of the mitigation area include fencing out livestock (if not already fenced), modification of livestock grazing (wildlife habitat values take precedence over livestock grazing), weed control, revegetation with native plants, and fire control.

### **Monitoring**

It is expected that a comprehensive program of monitoring the HMA and the success of its protection and enhancements will be required by ODOE and ODFW. Such monitoring will be conducted by an independent and qualified specialist (wildlife biologist/botanist). Annual monitoring will include assessments of quality of vegetation, success of weed control measures, recovery of native grasses and forbs (in response to reductions in livestock grazing), and success of revegetation measures (where applicable). In addition, some requirement for periodic monitoring of avian species use of the area (especially during the breeding season) is recommended for understanding the enhancement success. Details of monitoring time frames and success criteria will be designed after the final site is selected.



Results of all monitoring will be reported to ODOE and ODFW on an annual basis, along with a report of the mitigation/enhancement measures undertaken that year.

### **Criteria for Success**

Success of this Habitat Mitigation Plan will be predicated upon several criteria. These include increased vegetative cover consisting of desired native vegetation (relative to the structure prior to initiation of enhancement actions), similar or increased avian use of the area (similar or increased diversity of species), success of noxious weed control, increased recruitment of native forbs, and increased seed production of native bunchgrasses.

### **References**

- Gerhardt, R., R. Gritski, B. Anderson. 2009a. Ecological baseline studies and impact assessment for the Summit Ridge Wind Power Project, Wasco County, Oregon—Interim Report. Prepared for LotusWorks, Vancouver, Washington. Prepared by Northwest Wildlife Consultants, Pendleton, Oregon.
- Gerhardt, R., R. Gritski, B. Anderson. 2009b. Ecological baseline studies and impact assessment for the Summit Ridge Wind Power Project, Wasco County, Oregon—Addendum. Prepared for LotusWorks, Vancouver, Washington. Prepared by Northwest Wildlife Consultants, Pendleton, Oregon.
- Oregon Department of Fish and Wildlife (ODFW). 2013. ODFW's data clearinghouse: ODFW winter range for eastern Oregon. Available online at:  
<http://nrmp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=885.xml>.



**Summit Ridge Wind, LLC**

9611 NE 117th Avenue  
Suite 2840  
Vancouver, WA 98662-2403

360.737.9692

July 20, 2016

Ms. Katie Clifford  
Oregon Department of Energy  
625 Marion Street NE  
Salem, OR 97301

Sent via email: Clifford, Katie <katie.clifford@state.or.us>

Subject: Response to AIR Request #2

Reference: July 6, 2016 ODOE Additional Information Request #2; Summit Ridge Wind Farm Request for Amendment #2

Dear Ms. Clifford,

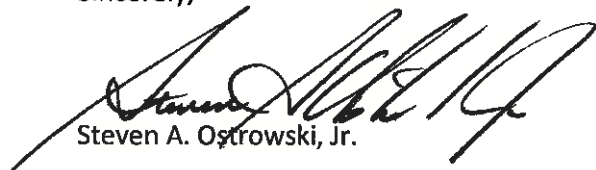
This letter serves as our response to the above referenced Request for Additional information. Our response addresses all ten items (AIR #6 – AIR #15). AIR #6 through AIR # 13 are responded to via the attached July 19, 2016 David Evans and Associates memo and associated drawings. Air #14 and AIR # 15 are addressed below.

AIR #14 – Summit Ridge Wind, LLC confirms that the Air Containment Discharge Permit required to operate the Batch Plant will be obtained by the certificate holder.

AIR #15 – A copy of the Figure 1 of the Habitat Mitigation Plan (HMP: as revised October 22, 2014) is included as an attachment to this letter. An informal copy was provided to ODOE via email on July 14, 2016.

We trust you will find our response complete. Please advise should you have questions or require additional clarification.

Sincerely,



Steven A. Ostrowski, Jr.

Cc: File

Attachments

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DAVID EVANS  
AND ASSOCIATES INC.

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## MEMORANDUM

DATE: July 19, 2016  
TO: Steve Ostrowski  
LotusWorks – Summit Ridge I, LLC  
Katie Clifford  
Oregon Department of Energy  
FROM: Sean P. Sullivan  
SUBJECT: Summit Ridge Wind Farm - Request for Amendment #2; Additional Information Request #1 Response  
PROJECT: LRNG0000-0001  
COPIES: File

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On July 6, 2016, Oregon Department of Energy (ODOE) provided LotusWorks – Summit Ridge I, LLC (LWSR I) with an Additional Information Request (AIR) pertaining to LWSR I's Request for Amendment #2 (RFA 2) for the Summit Ridge Wind Farm (herein "Project") in Wasco County. This memorandum provides responses to AIR 6 through 13.

Project facilities subject to the AIR are shown on Figure 1. The Bonneville Power Administration (BPA) interconnect substation is included for context; BPA will be responsible for the siting and design of its facility.

### **AIR 6**

Provide confirmation that all facility structures, as amended, with the exception of the proposed transmission line, would be located a minimum of 200 feet from the property line of adjacent land used for perennial or annual crops.

#### ***Response:***

David Evans and Associates, Inc. (DEA) assumes the property line of adjacent land pertains to non-participating landowners only. In other words, the request applies to parcels beyond the lease boundary. Figure 2 illustrates the lease boundary, a 200-foot buffer inward from the boundary, and facility structures. No facilities occur within the 200-foot buffer. Therefore all facilities would be located a minimum of 200 feet from the property line of adjacent land used for perennial or annual crops.

#### **AIR 7**

Provide confirmation that the facility foundations and permanent structures, as amended, with the exception of the proposed access roads and transmission line, would be located at least 100 feet away from seasonal or permanent waterways.

***Response:***

Regarding waterways, Wasco County Land Use & Development Ordinance (WCLUDO) 3.216(A)(2)(a) establishes that “all bottoms of foundations of permanent structures, or similar permanent fixtures shall be setback from the high water line or mark, along all streams, lakes, rivers, or wetlands.” The best available information for identifying the high water line or wetlands for the Project is Wetland Delineation Report #2009-0445R, for which Oregon Department of State Lands (ODSL) issued concurrence on April 5, 2010, and re-issued concurrence on May 31, 2016.

Facility foundations and structures subject to this AIR include the turbine foundations, and substation and O&M buildings and associated foundations. As shown in Figure 3, these facilities and structures avoid the 100-foot setback from seasonal or permanent waterways (i.e., delineated wetlands and waters of the state).

#### **AIR 8**

Using the most current Flood Insurance Rate Map available for Wasco County, provide confirmation that no facility components, as amended, would be located within the 100-year floodplain.

***Response:***

Figure 4 illustrates the relationships between the 100-year floodplain and facility components. DEA acquired the digital data for the National Flood Hazard Layer from Federal Emergency Management Agency in July 2016. As shown in Figure 4, project components avoid the 100-year floodplain (i.e., Type A Flood Zone). Flood Insurance Rate Maps for the Project area are included as Attachment 8-1.

#### **AIR 9**

Provide confirmation that the facility, as amended, would not include development within 50 feet of the centerline of an irrigation ditch that continues past the subject parcel to provide water to other property owners.

***Response:***

Agriculture in the Project area is predominately comprised of dry-land wheat and cattle ranching. As such, there are no irrigation ditches or pipelines in the Site Boundary. LWSR I confirmed this with local rancher and project participant KC Kortge (Kortge, pers. comm., 2016). Therefore, development will not occur within 50 feet of the centerline of an irrigation ditch or pipeline.



## **AIR 10**

Provide evidence (e.g., description, maps/figures) demonstrating that the facility components, as amended, would be located to avoid impacts to wetlands and waterways.

### ***Response:***

As shown in Figure 3, facility components avoid impacts to wetlands and waterways. While the transmission line crosses wetlands and waters, it is reasonable to assume the transmission line can span these resources and that the transmission poles can be sited to avoid them.

## **AIR 11**

Provide a more detailed analysis of the impacts (under the proposed 3.0 MW turbine option as compared to the approved 2.7 MW turbine facility) to Cottonwood Canyon State Park and each protected area within the analysis area shown in the table entitled “Protected Areas Within 20 Miles of the Facility” in the Final Order.

### ***Response:***

As part of LWSR I’s RFA 2, DEA prepared a comparative analysis of Alternative B and Alternative C to illustrate the net changes in visibility patterns for Protected Areas. The analysis used computer modeling to predict where turbines would be newly visible, where turbines would no longer be visible, and where visibility would remain relatively unchanged. Figure 5 (which includes an Index Map and Sheets 1 through 6) details the results of this analysis.

In the figure, blue shading represents areas where any portion of any turbine(s) would be visible in Alternative B, but would not be visible in Alternative C (i.e., a decrease in visibility). Red shading illustrates areas where any portion of any turbine(s) would be visible in Alternative C, but would not be visible in Alternative B (i.e., an increase in visibility). Yellow shading identifies areas where visibility would remain about the same. As with the original visual impact analyses used by ODOE to develop the Final Order, it is important to note the model does not consider vegetation, distance, and atmospheric conditions which limit visibility.

The results indicate that visibility for Alternative C would remain about the same or slightly less than Alternative B. The reduction in visibility becomes intuitive when one considers two factors. First, the ground-to-tip distance for the Alternative B turbines is 152m; the distance for Alternative C turbines is 150m. Second, Alternative C includes eight fewer turbines than Alternative B. Slight increases in visibility (i.e., the red areas) occur because turbine locations in Alternative C have shifted within the Site Boundary and the new locations may be more visible than previous locations.

According to the modeling results and DEA’s best professional judgment which considers the entire Project record, viewing distance, and the presence of vegetation in certain areas, Alternative C would not be visible from the following Protected Areas. Therefore no impact would occur.

- Botanical/Scenic Areas within Columbia Gorge ACEC
- Columbia Hills (Horsethief Lake) State Park

- Cottonwood Canyon State Park
- Doug's Beach State Park
- John Day Federal Wild and Scenic River
- John Day State Scenic Waterway
- JS Burres State Recreation Site (BLM)
- Lower Klickitat Federal Wild and Scenic River
- Maryhill State Park
- Mayer State Park
- Memaloose State Park
- Tom McCall Preserve ACEC
- White River Falls State Park

Similar to the results ODOE relied upon to develop the Final Order, portions of the facility may be visible from these Protected Areas:

- Badger Creek Wilderness Area
- Deschutes River State Recreation Area
- Heritage Landing (Deschutes) State Park
- John Day Wildlife Refuge
- White River Federal Wild and Scenic River
- White River State Wildlife Area

As evidenced in Figure 5, the significant amount of yellow shading indicates there is very little change in visibility patterns among these Protected Areas. The facility would be visible from isolated, limited rims of White River Canyon and John Day River Canyon, but not from the rivers themselves. Badger Creek Wilderness features significant vegetation that would screen views of the facility which is located at least 18 miles away. Views of the facility from Deschutes River Recreation Area and Heritage Landing are also impaired by vegetation and distances of at least nine miles. For these reasons, it is reasonable to conclude that Alternative C will result in negligible, if any, impact to these Protected Areas.

Model results predict that the facility will be visible from these Protected Areas:

- Columbia Basin Agricultural Research Center – This research facility is located approximately six miles from the facility and is not managed for scenic quality. In the Final Order, ODOE concludes the Project is not expected to adversely impact the research center or interfere with its management objectives. Given the similar nature in impacts and the Center's management objectives, it is reasonable to conclude Alternative C will not adversely affect this Protected Area.



- Columbia Hills Natural Area Preserve – This preserve is located at least 14 miles from the facility and is managed for rare plant habitat rather than scenic quality. In the Final Order, ODOE concludes the facility is not expected to adversely impact the preserve or interfere with its management objectives. As shown in Figure 5, visibility patterns within this resource remain almost identical to previous analyses. Therefore, it is reasonable to conclude that Alternative C will not adversely impact the preserve or interfere with its management objectives.
- Columbia River Gorge National Scenic Area – As shown in Figure 5, visibility patterns remain very similar when viewed from the Columbia River Gorge National Scenic Area (CRGNSA). Much of the land within CRGNSA from which the facility would be visible is not accessible to the public, as there are limited roads and most land is privately owned. The most likely locations from which the facility may be visible occur along SR-14 in the vicinity of Wishram, Washington at distances of over 14 miles. In the Final Order, ODOE concludes that the facility is not expected to adversely impact the CRGNSA. Given the similar patterns in visibility and viewing distances, it is reasonable to conclude that Alternative C will not adversely impact CRGNSA.
- Deschutes Federal Wild and Scenic River; Deschutes State Scenic Waterway; and Lower Deschutes Wildlife Area (collectively “Lower Deschutes River Canyon”). Modeling predicts that views from the river for Alternative C would be about the same or slightly less than previous analyses. Computer simulations for Alternative C suggest the facility would no longer be visible from Viewpoints 1, 4, and 5. Views would be about the same from Viewpoints 2 and 3. However, the model results predict that visibility will increase slightly in isolated, generally inaccessible areas along the canyon walls and rim, as evidenced by red shading in Figure 5. Because these areas are generally inaccessible, and the previously submitted simulations predict a reduction in visibility from the river, it is reasonable to conclude the facility will not result in significant adverse impacts to the Lower Deschutes River Canyon, which is consistent with the conclusions of the Final Order.

## **AIR 12**

Provide a more detailed analysis of the impacts (under the proposed 3.0 MW turbine option as compared to the approved 2.7 MW turbine facility) to the following scenic resources identified by the applicable resource plans within the analysis area: Columbia River Gorge National Scenic Area (CRGNSA), the White River Canyon, resources in the John Day River Canyon, the Mt. Hood National Forest, Oregon National Historic Trail, the Journey Through Time Scenic Byway, Wasco County Resources, and Sherman County Resources.

### ***Response:***

Consistent with the approach used to assess impacts to Protected Areas (see AIR 11 response), DEA prepared a comparative analysis of Alternative B and Alternative C to illustrate the net changes in visibility patterns for Scenic and Aesthetic Resources. Figure 6 (which includes an Index Map and Sheets 1 through 6) details the results of this analysis.

The results indicate that visibility for Alternative C would remain about the same or slightly less than Alternative B for the same reasons stated in the AIR 11 response.

The Project record, including the Final Order, identifies nine scenic resources within the analysis area for Scenic and Aesthetic Values. AIR 12 requests additional information for eight of these resources, discussed below.

- Columbia River Gorge National Scenic Area – As evidenced in Figure 6 (and consistent with the response to AIR 11), visibility patterns from CRGNSA remain about the same for Alternative C. In the Final Order, ODOE concludes that based on the amount of existing development in the foreground and middleground, viewing distances, and limited opportunities to view turbines, the facility would likely result in minimal impacts, if any, to CRGNSA. Given the similarity in visibility patterns modeled for Alternative C, it is reasonable to conclude that Alternative C will not have significant adverse impacts on the CRGNSA.
- White River Canyon – Computer modeling and previous field investigations indicate the facility would not be visible from White River Falls State Park, and that portions of turbines may be visible at distances greater than eight miles from higher canyon walls and rims. Access to the canyon walls and rim are very limited. The facility would not be visible from the river itself. In the Final Order, ODOE concludes the facility is not likely to have significant adverse impacts on the White River Canyon. Given the similarity in visibility patterns, viewing distance, and limited access to canyon rims and walls, it is reasonable to conclude Alternative C will not have significant adverse impacts on the White River Canyon.
- John Day River Canyon – Computer modeling results for Alternative C are consistent with previous analyses, indicating the facility will not be visible from the John Day River, and may be visible from extremely limited portions of the canyon rims at distances over 18 miles. Given these factors, it is reasonable to conclude Alternative C will not likely have significant adverse impacts on the John Day River Canyon, which is consistent with ODOE's conclusion in the Final Order.
- Mt. Hood National Forest – Figure 6 indicates very similar visibility patterns for Alternative C when compared to previous analyses. While modeling suggests the facility will be visible from significant portions of the Forest, these results are skewed because the Forest is heavily treed, which the model does not consider. Further, access is rather limited and viewing distances are greater than 15 miles. Given these considerations, it is reasonable to conclude Alternative C will not result in significant adverse impacts on the Mt. Hood National Forest, which is consistent with ODOE's conclusion in the Final Order.
- Oregon National Historic Trail – Computer modeling indicates the facility will not be visible from the four identified high-potential sites: Deschutes River Crossing, The Dalles Complex, Tygh Valley, and Biggs Junction. Therefore, the facility will not impact these resources of the Oregon National Historic Trail.
- Journey Through Time Scenic Byway – Visibility patterns for Alternative C closely mimic previous analyses as shown in Figure 6. While turbines will be visible primarily between Wasco and Grass Valley, ODOE states in the Final Order that the facility is compatible with the byway's stated goals, particularly the goals of job creation and building regional identity. Further, ODOE concludes the facility will not significantly impact the byway. Since the visibility patterns of the facility viewed from the byway are largely the same, it is reasonable to conclude the Alternative C will not result in significant adverse impacts to the Journey Through Time Scenic Byway.



- Wasco County Resources – Scenic and aesthetic values in Wasco County include CRGNSA, Pine Hollow Lake, and three scenic highways within the analysis area: Interstate 84 (I-84) east of The Dalles city limits; Oregon Highway 197 (Hwy 197) between I-84 and Dufur; and a second segment of Hwy 197 beginning at the summit of Tygh Ridge continuing south approximately 13 miles before leaving the analysis area.

Regarding Wasco County Resources, CRGNSA is addressed above. The facility is not visible from Pine Hollow Lake; therefore impacts to this resource will not occur. The facility is not visible from I-84 and intermittently visible along Hwy 197. In the Final Order ODOE concludes the facility would have minimal impacts, if any, on the scenic highways given the intermittent nature of the views, distance, presence of other infrastructure including transmission and distribution facilities, and the fact that the turbines and transmission line would be subordinate to the surrounding landscape. Considering these circumstances and the similar patterns in visibility for Alternative C, it is reasonable to conclude Alternative C will not result in significant adverse impacts to the scenic and aesthetic values in Wasco County.

- Sherman County Resources – Scenic and aesthetic values in Sherman County include the rural nature of the Sherman County landscape and trees. The facility is located completely within Wasco County and will not impact trees in Sherman County or affect the rural nature of the Sherman County landscape. Therefore, the facility will not impact Sherman County scenic and aesthetic values.

### **AIR 13**

Provide confirmation that the project would not require 50 cubic yards or more of material to be removed, filled, or altered within any “waters of the state.”

#### ***Response:***

As shown in Figure 3, the Project avoids impacts to wetlands and waters of the state. Therefore, the Project will not require 50 cubic yards or more of material to be removed, filled, or altered within any wetlands or waters of the state.

### **REFERENCES**

Kortge, KC. Personal Communication. July 14, 2016.

#### **Attachments/Enclosures:**

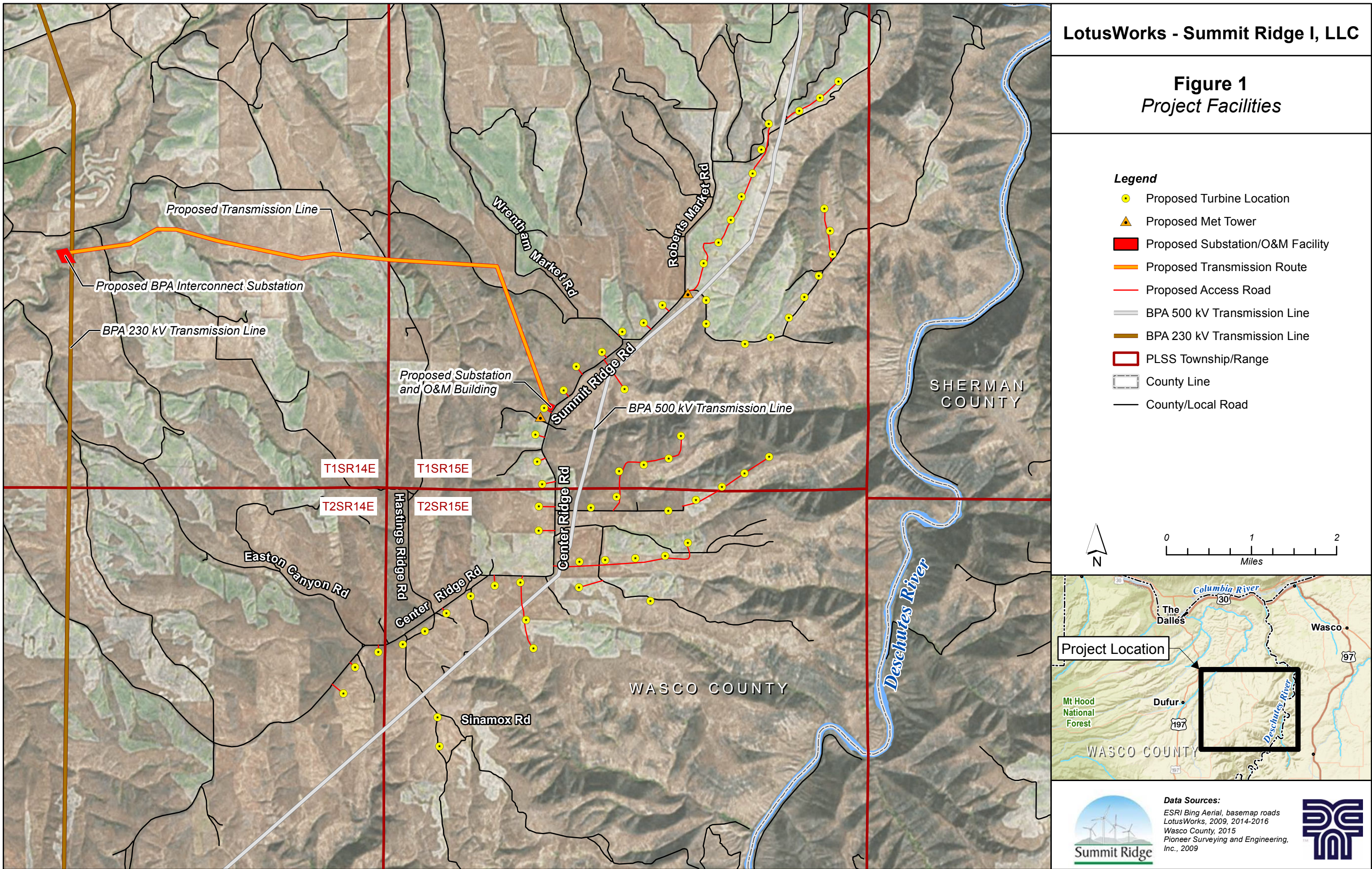
Figures 1 through 6

Attachment 8-1: FIRM Maps

**Figures 1 through 6**

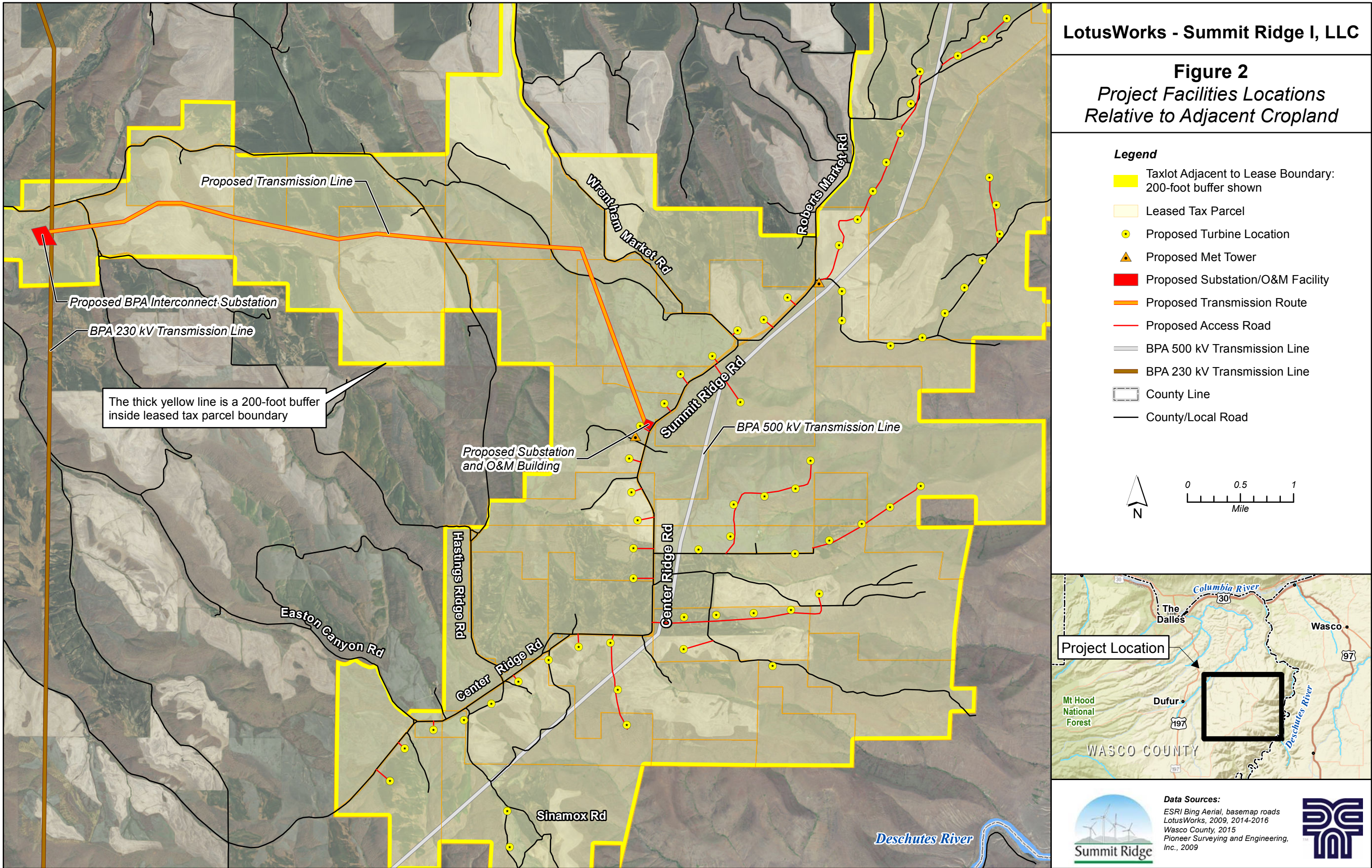


Figure 1  
Project Facilities





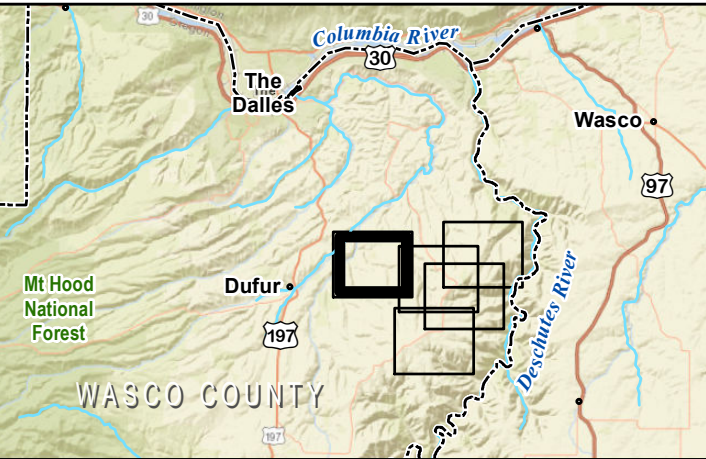
**Figure 2**  
*Project Facilities Locations  
Relative to Adjacent Cropland*



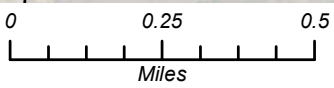


**Figure 3, Sheet 1**  
*Facility Foundations and Permanent Structure Locations Relative to Wetlands and Waters of the State*

- Legend**
- Wetland Delineation Study Area\*
  - Delineated Wetland\*
  - Delineated Wetland with 100-foot buffer\*
- Delineated Streams\***
- Ordinary High Water (OHW)
  - Perennial Water
  - Intermittent Water
  - Ephemeral Water
  - Bridge
  - Delineated Streams: 100-foot buffer\*
  - Deschutes River
- Proposed Turbine Foundation (70' diameter)
  - Proposed BPA Interconnect Substation
  - Proposed Transmission Route
  - BPA 230 kV Transmission Line
  - County/Local Road



\*Delineation boundaries per WD #2009-0445R; DSL concurrence reissued 5/31/2016.
















**Data Sources:**  
USGS NHD, 2016  
ESRI Bing Aerial, basemap roads  
LotusWorks, 2009, 2014-2016  
Wasco County, 2015  
Pioneer Surveying and Engineering, Inc., 2009

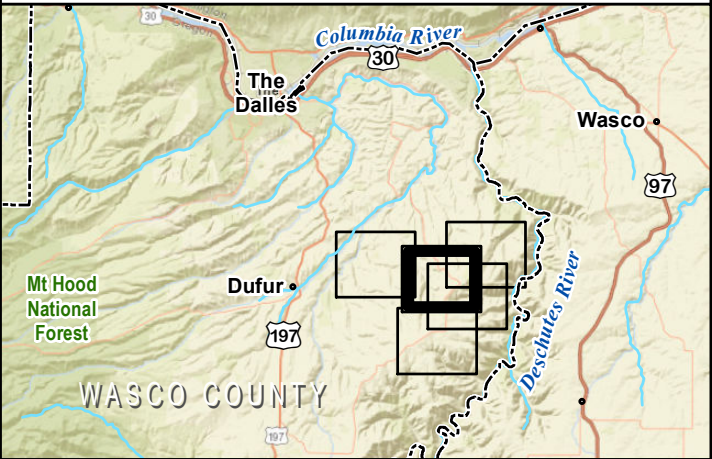




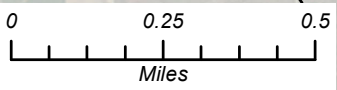
**Figure 3, Sheet 2**  
*Facility Foundations and Permanent Structure Locations Relative to Wetlands and Waters of the State*

**Legend**

-  Wetland Delineation Study
- Delineated Streams\*
  -  Perennial Water
  -  Intermittent Water
  -  Ephemeral Water
  -  Delineated Streams: 100-foot buffer\*
  -  Deschutes River
-  Proposed Turbine Foundation (70' diameter)
-  Proposed Met Tower
-  Proposed Access
-  Proposed Substation/O&M Facility
-  Proposed Transmission Route
-  BPA 500 kV Transmission Line
-  County/Local Road

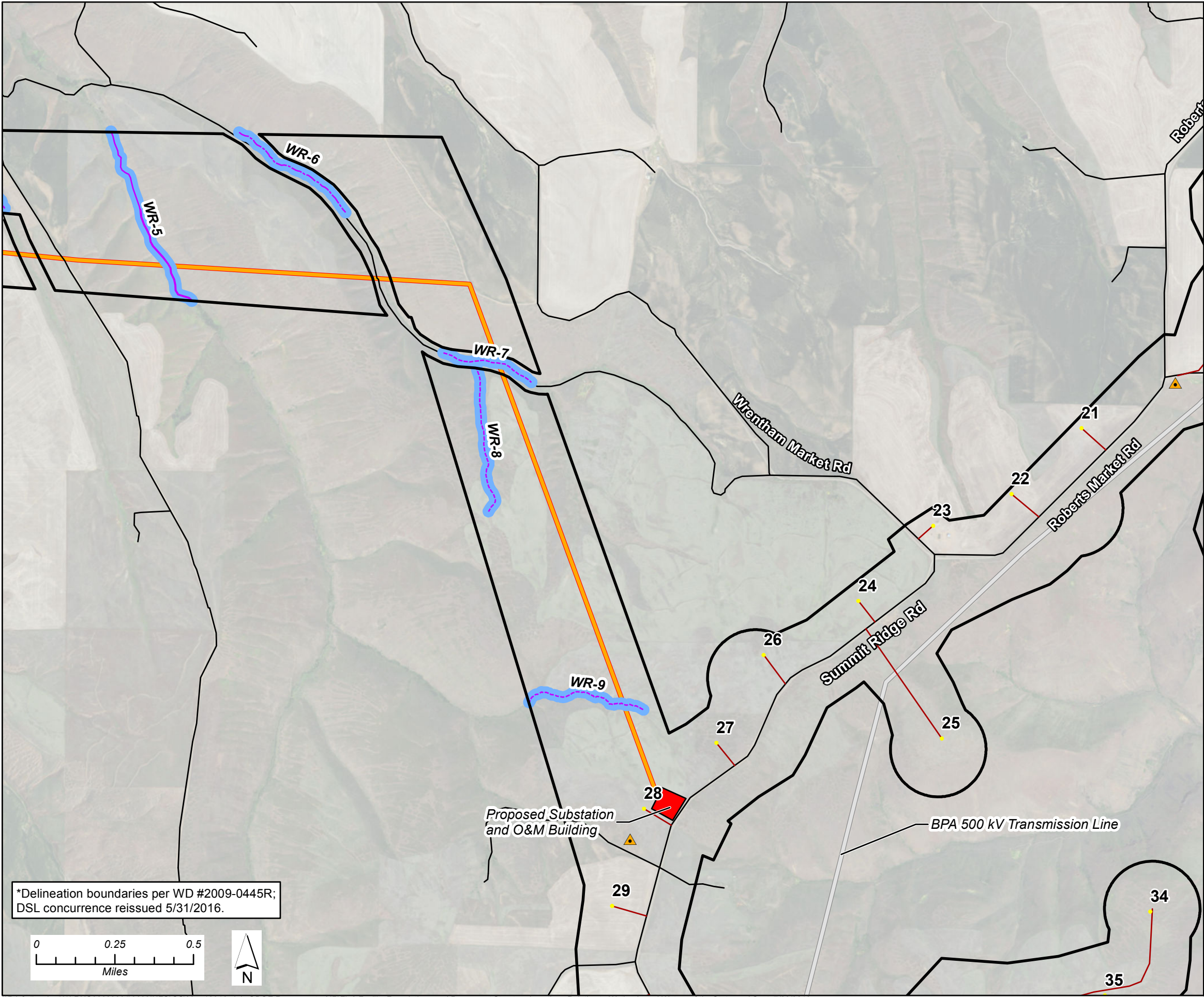


\*Delineation boundaries per WD #2009-0445R;  
DSL concurrence reissued 5/31/2016.



Proposed Substation  
and O&M Building

BPA 500 kV Transmission Line



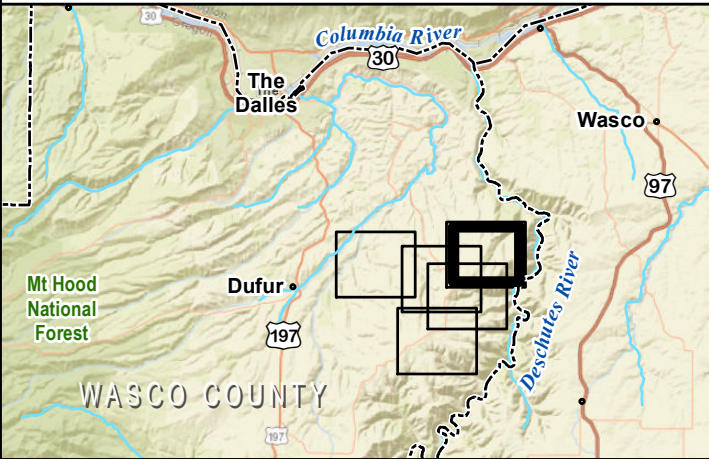
**Data Sources:**  
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ESRI Bing Aerial, basemap roads  
LotusWorks, 2009, 2014-2016  
Wasco County, 2015  
Pioneer Surveying and Engineering,  
Inc., 2009



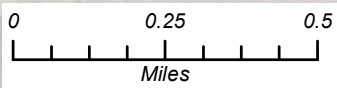


**Figure 3, Sheet 3**  
*Facility Foundations and Permanent Structure Locations Relative to Wetlands and Waters of the State*

- Legend**
- Wetland Delineation Study
  - Delineated Streams\***
    - Ephemeral Water
    - Delineated Streams: 100-foot buffer\*
    - Deschutes River
  - Proposed Turbine Foundation (70' diameter)
  - Proposed Met Tower
  - Proposed Access
  - Proposed Substation/O&M Facility
  - BPA 500 kV Transmission
  - County/Local Road



\*Delineation boundaries per WD #2009-0445R; DSL concurrence reissued 5/31/2016.



**Data Sources:**  
USGS NHD, 2016  
ESRI Bing Aerial, basemap roads  
LotusWorks, 2009, 2014-2016  
Wasco County, 2015  
Pioneer Surveying and Engineering, Inc., 2009

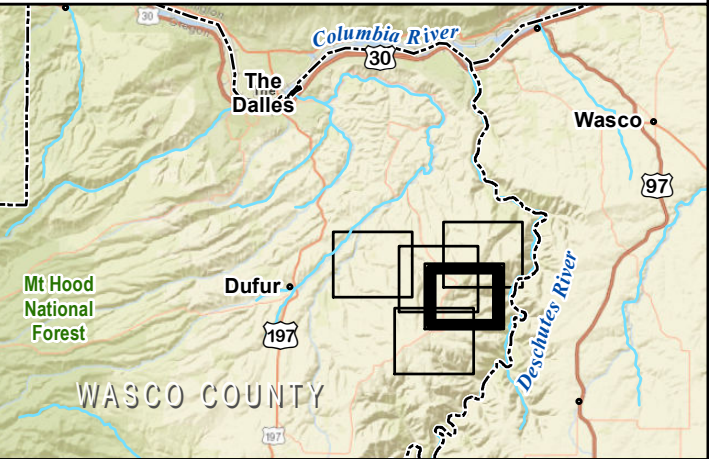




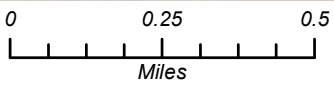
**Figure 3, Sheet 4**  
*Facility Foundations and Permanent Structure Locations Relative to Wetlands and Waters of the State*

**Legend**

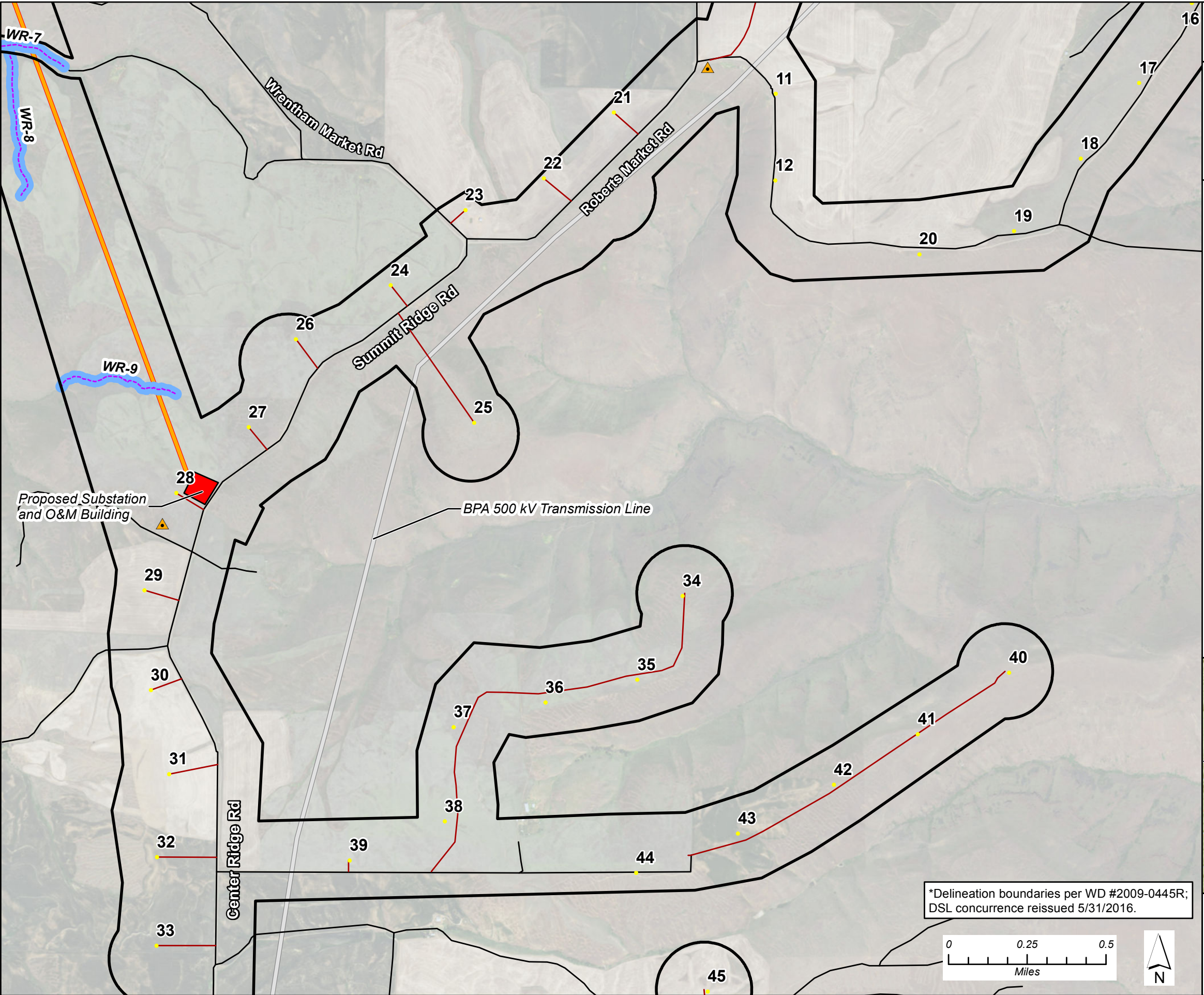
- Wetland Delineation Study
- Delineated Streams\*
  - Ephemeral Water
  - Delineated Streams: 100-foot buffer\*
  - Deschutes River
- Proposed Turbine Foundation (70' diameter)
- Proposed Met Tower
- Proposed Access
- Proposed Substation/O&M Facility
- Proposed Transmission
- BPA 500 kV Transmission
- County/Local Road



\*Delineation boundaries per WD #2009-0445R;  
DSL concurrence reissued 5/31/2016.



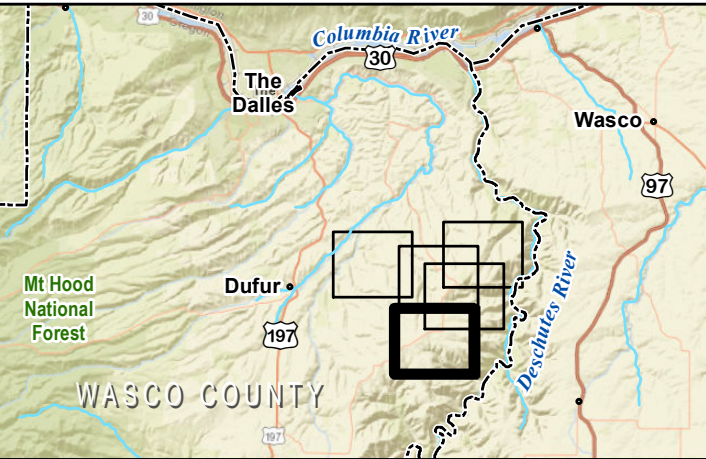
**Data Sources:**  
USGS NHD, 2016  
ESRI Bing Aerial, basemap roads  
LotusWorks, 2009, 2014-2016  
Wasco County, 2015  
Pioneer Surveying and Engineering,  
Inc., 2009



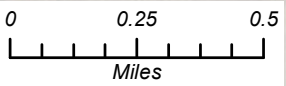


**Figure 3, Sheet 5**  
*Facility Foundations and Permanent Structure Locations Relative to Wetlands and Waters of the State*

- Legend**
- Wetland Delineation Study
  - Delineated Wetland\*
  - Delineated Wetland with 100-foot buffer\*
  - Deschutes River
  - Proposed Turbine Foundation (70' diameter)
  - Proposed Access
  - Proposed Substation/O&M Facility
  - BPA 500 kV Transmission
  - County/Local Road



\*Delineation boundaries per WD #2009-0445R; DSL concurrence reissued 5/31/2016.

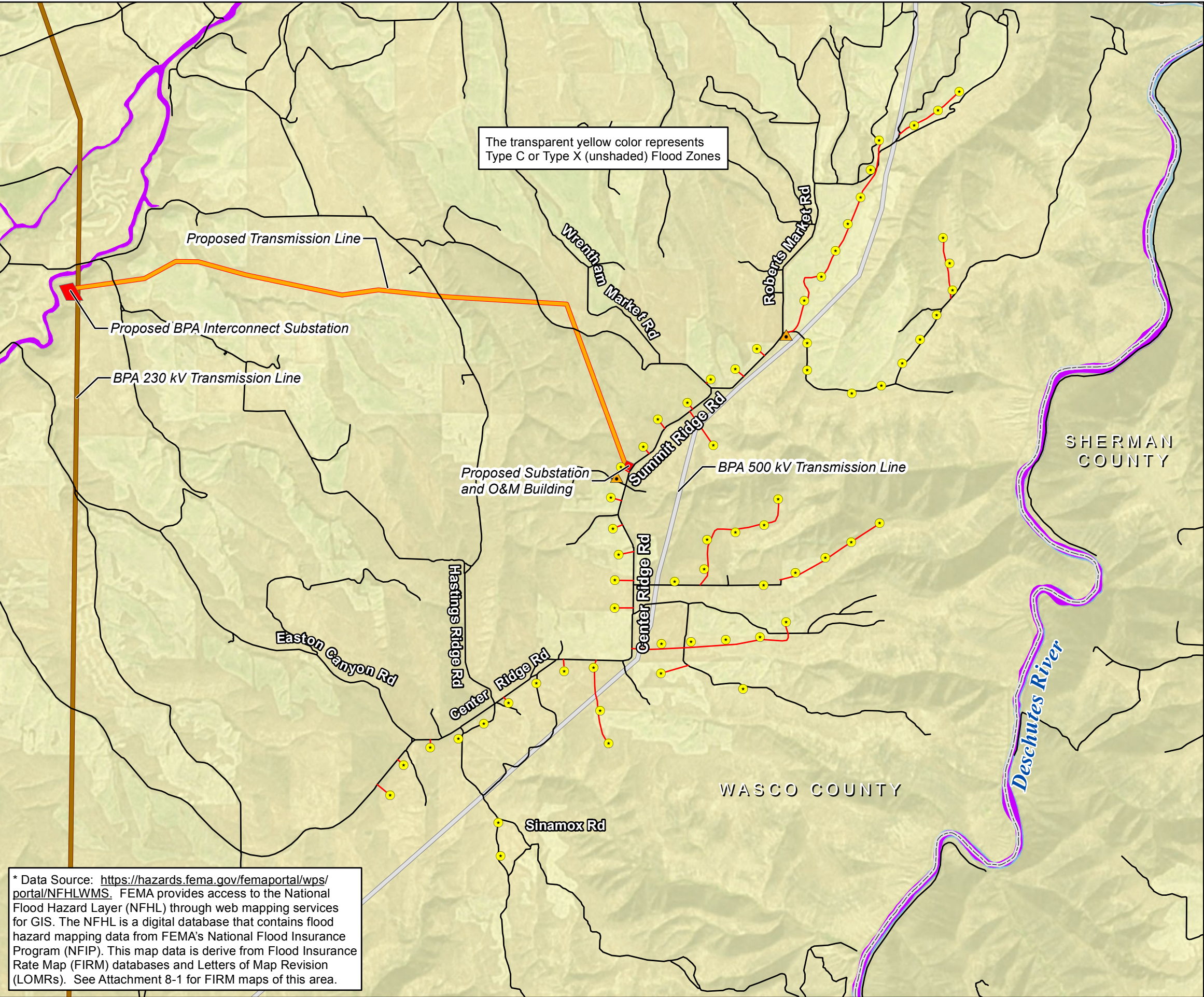


**Data Sources:**  
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ESRI Bing Aerial, basemap roads  
LotusWorks, 2009, 2014-2016  
Wasco County, 2015  
Pioneer Surveying and Engineering, Inc., 2009

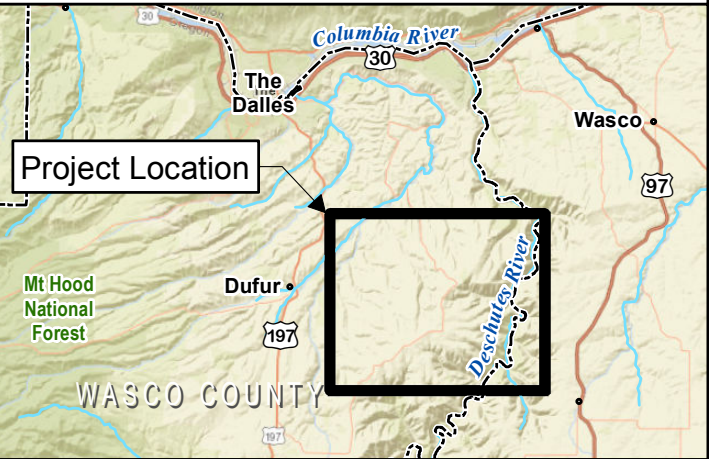




Figure 4  
Facility Component Locations  
Relative to FIRM 100-yr Floodplain



- Legend**
- (Type A Flood Zone)\* Areas subject to inundation by the 1-percent-annual-chance flood event
  - (Types C, X (unshaded) Flood Zone)\* Areas of minimal flood hazard; higher than the elevation of the 0.2-percent-annual-chance flood
  - Proposed Turbine Location
  - Proposed Met Tower
  - Proposed Substation/O&M Facility
  - Proposed Transmission Route
  - Proposed Access Road
  - BPA 500 kV Transmission Line
  - BPA 230 kV Transmission Line
  - County Line
  - County/Local Road



\* Data Source: <https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS>. FEMA provides access to the National Flood Hazard Layer (NFHL) through web mapping services for GIS. The NFHL is a digital database that contains flood hazard mapping data from FEMA's National Flood Insurance Program (NFIP). This map data is derive from Flood Insurance Rate Map (FIRM) databases and Letters of Map Revision (LOMRs). See Attachment 8-1 for FIRM maps of this area.

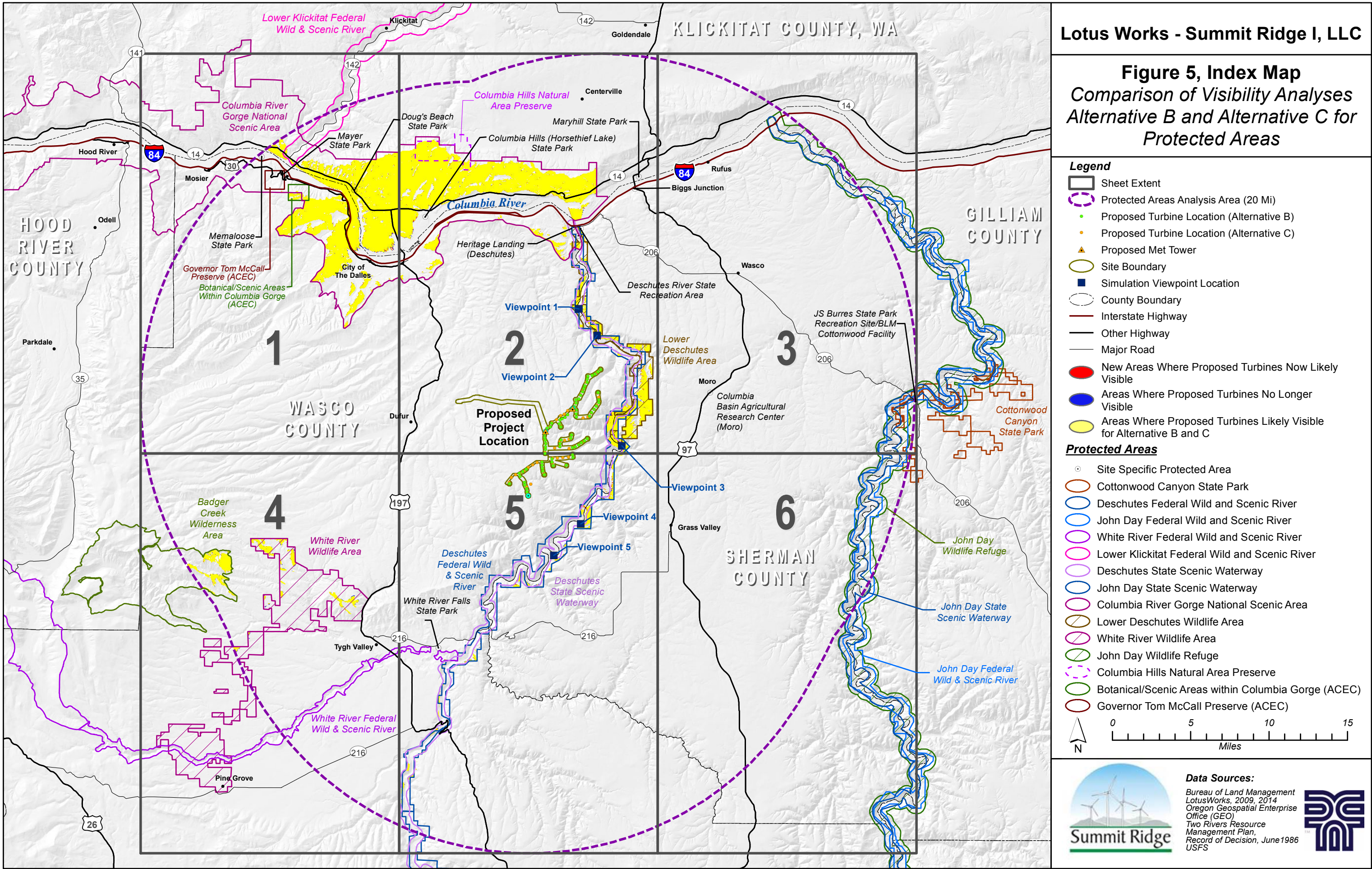


**Data Sources:**  
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ESRI Bing Aerial, basemap roads  
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Wasco County, 2015  
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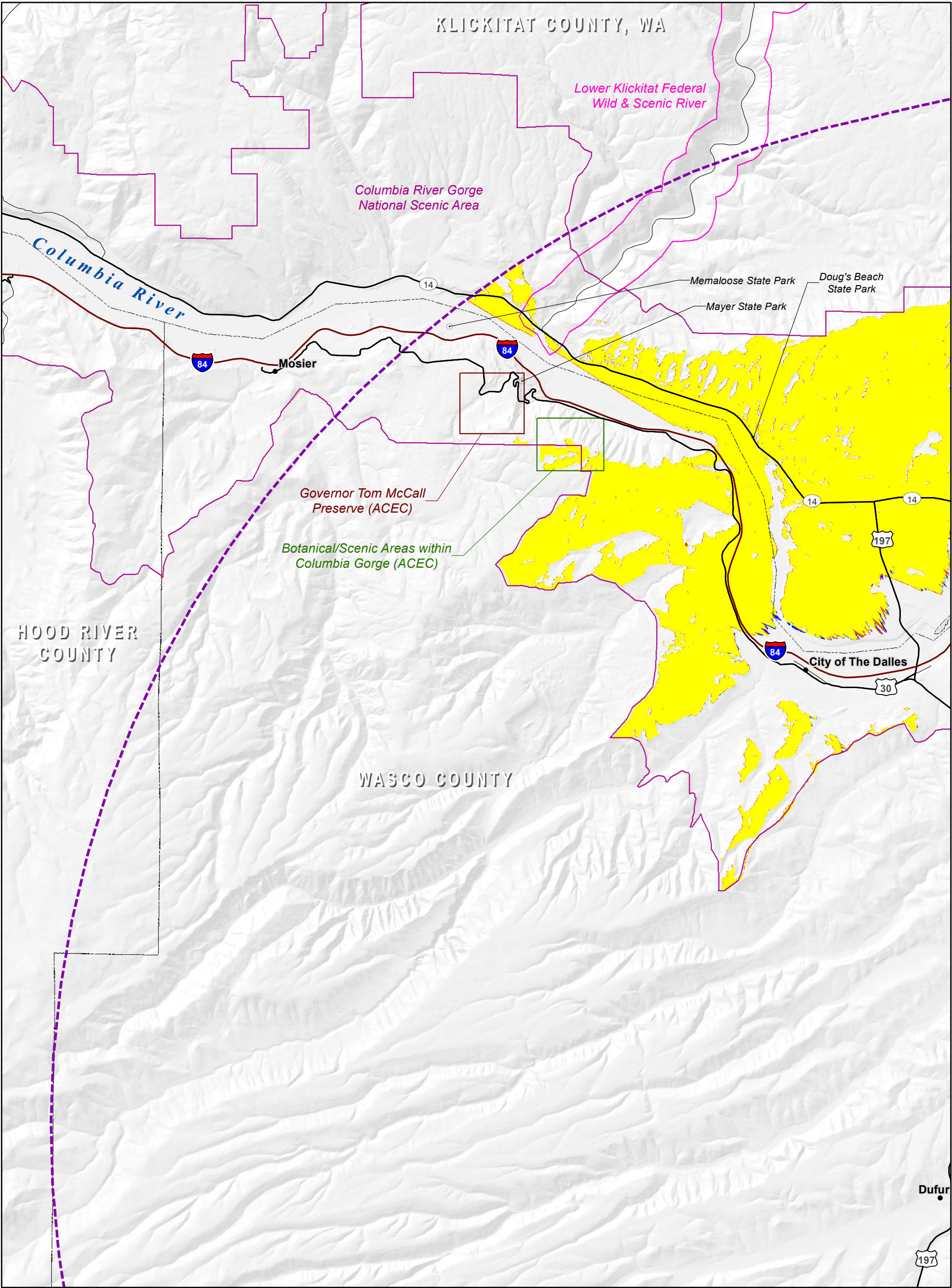




Figure 5, Index Map  
Comparison of Visibility Analyses  
Alternative B and Alternative C for  
Protected Areas







- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)

Site Specific Protected Area
- Columbia River Gorge National Scenic Area

Lower Klickitat Wild and Scenic River

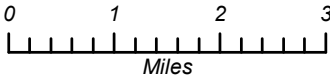
Governor Tom McCall Preserve (ACEC)

Botanical/Scenic Areas within Columbia Gorge (ACEC)

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.



**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service

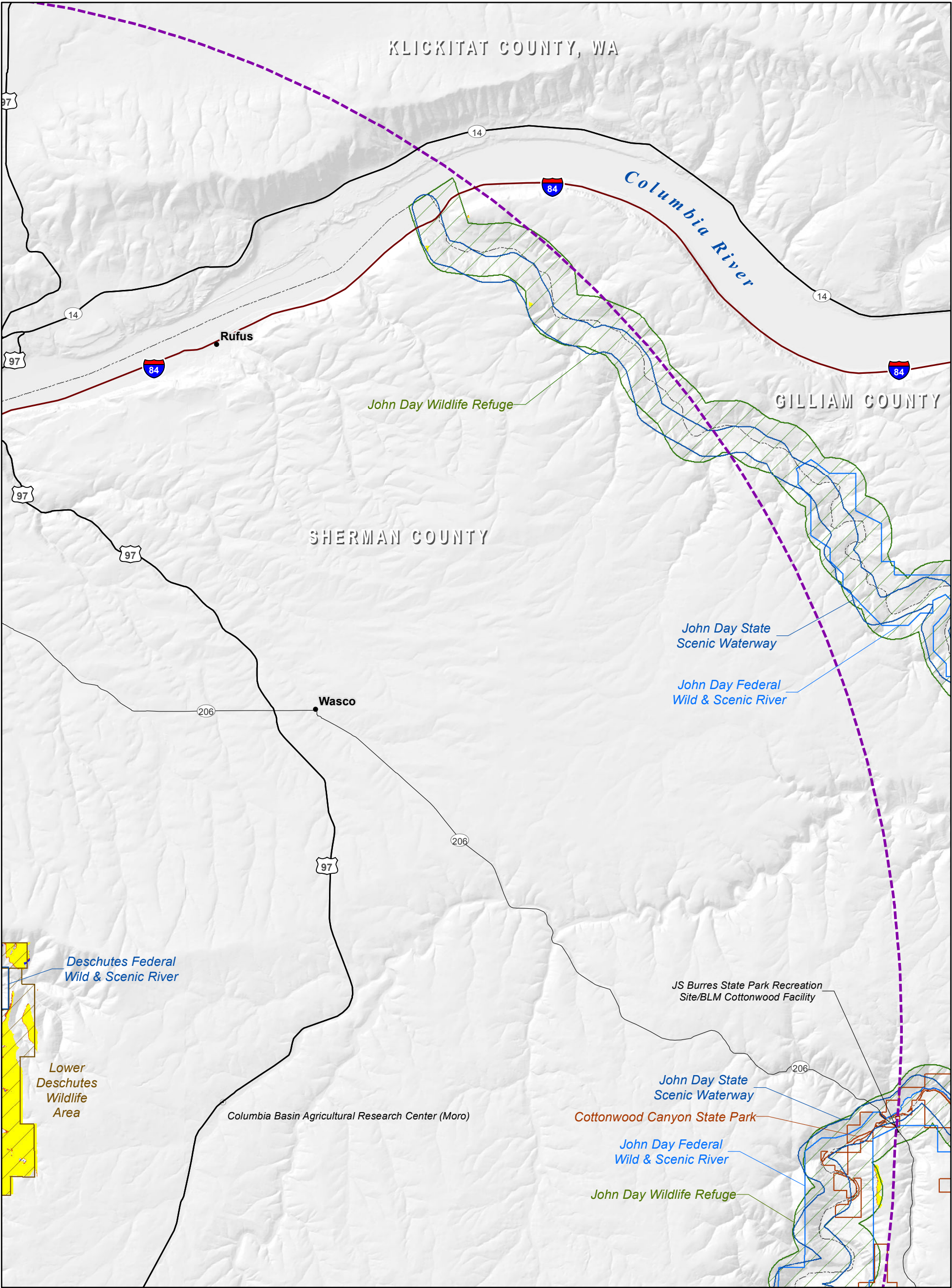


**Figure 5, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Protected Areas*







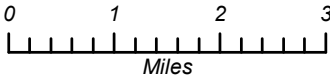


- |   |                                       |   |                              |
|---|---------------------------------------|---|------------------------------|
| New Areas Where Proposed Turbines Now Likely Visible                  | Protected Areas Analysis Area (20 mi) | Deschutes River Federal Wild and Scenic River | Cottonwood Canyon State Park |
| Areas Where Proposed Turbines No Longer Visible                       | Site Specific Protected Area          | John Day Federal Wild and Scenic River        | John Day Wildlife Refuge     |
| Areas Where Proposed Turbines Likely Visible for Alternatives B and C | John Day State Scenic Waterway        | Lower Deschutes Wildlife Area                 |                              |

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

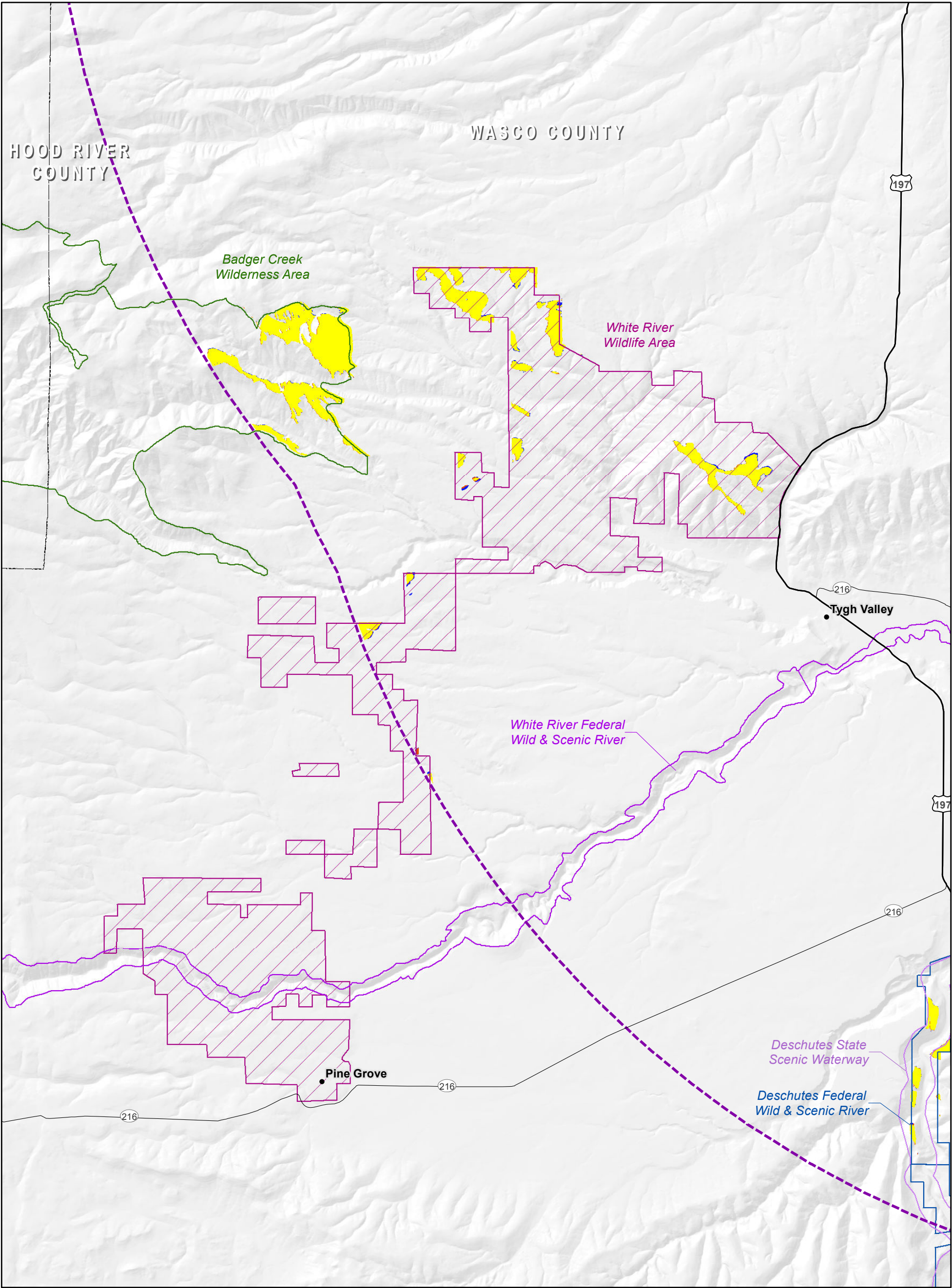


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 3 of 6**  
**Comparison of Visibility Analyses**  
**Alternative B and Alternative C**  
**for Protected Areas**





- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)

Badger Creek Wilderness

Deschutes State Scenic Waterway
- Deschutes River Federal Wild and Scenic River

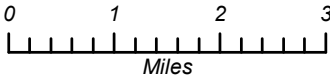
White River Federal Wild and Scenic River

White River Wildlife Area

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

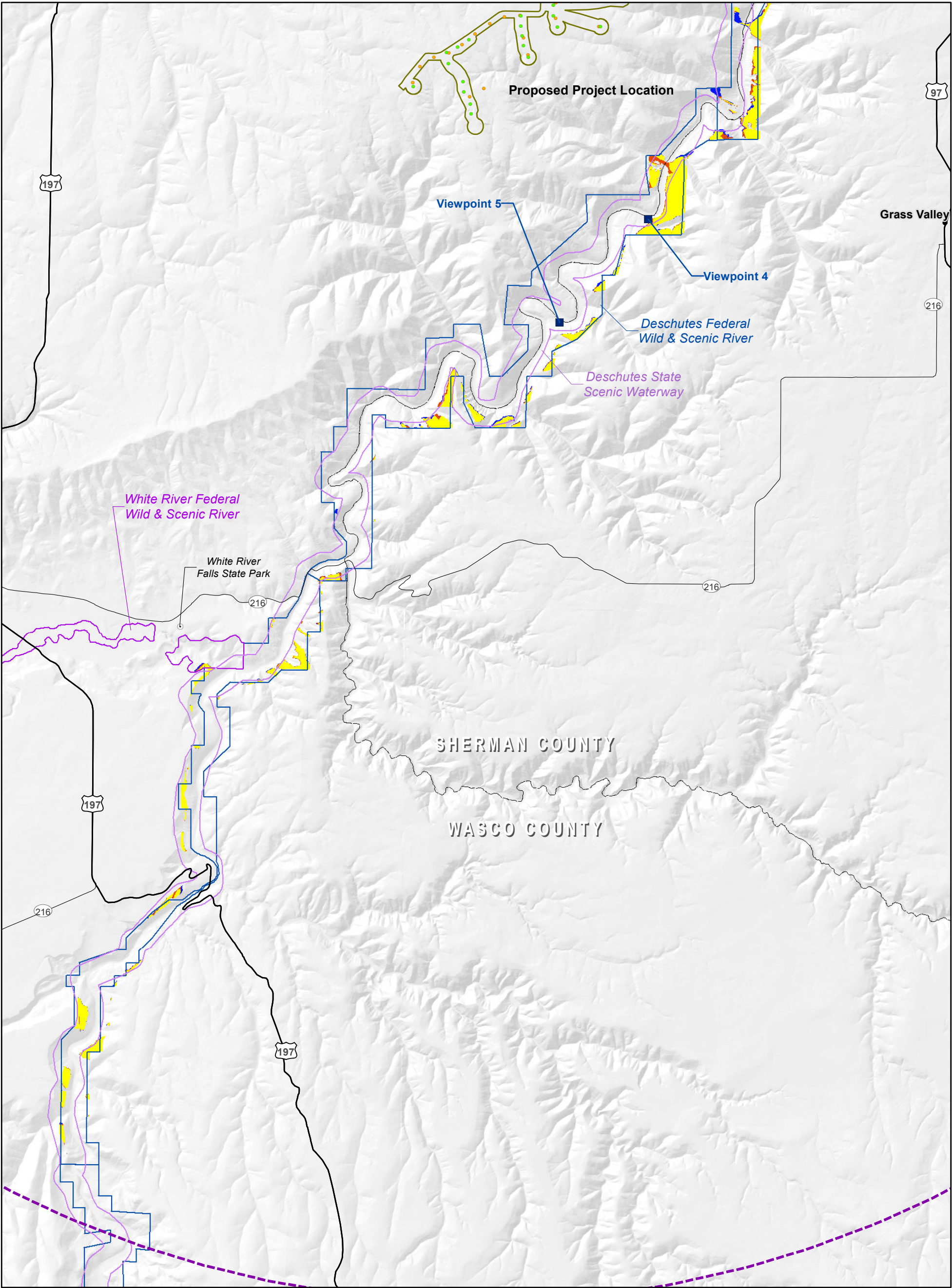


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 4 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Protected Areas*





- New Areas Where Proposed Turbines Now Likely Visible

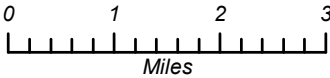
Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)
- Proposed Turbine Location (Alternative B)
- Proposed Turbine Location (Alternative C)
- Site Specific Protected Area
- Simulation Viewpoint Location
- Deschutes State Scenic Waterway
- Deschutes River Federal Wild and Scenic River
- White River Federal Wild and Scenic River

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.

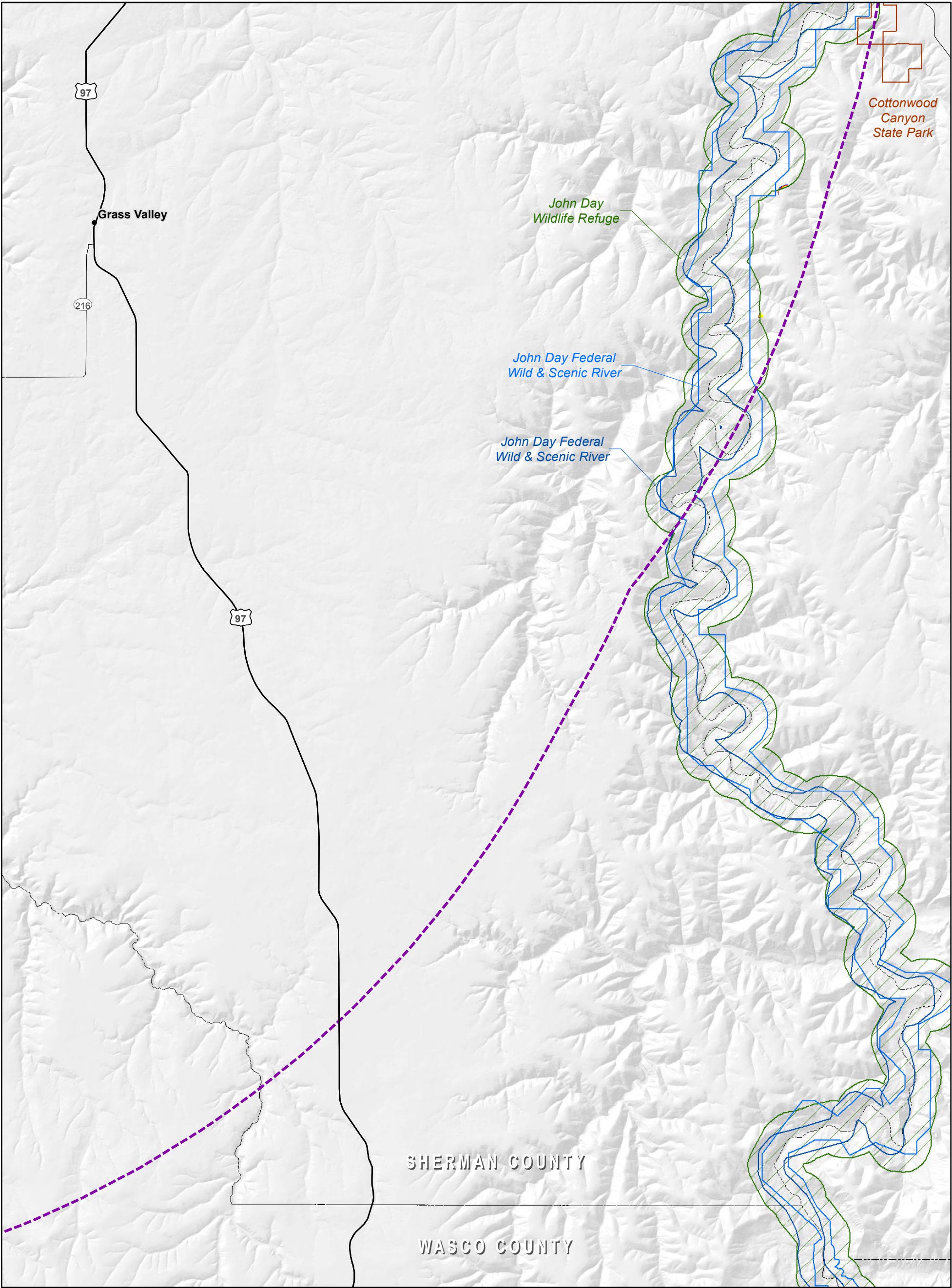


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 5, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Protected Areas*





- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Protected Areas Analysis Area (20 mi)

John Day State Scenic Waterway
- John Day Federal Wild and Scenic River

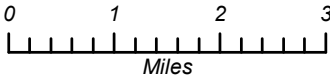
Cottonwood Canyon State Park

John Day Wildlife Refuge

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the protected areas within the study area.



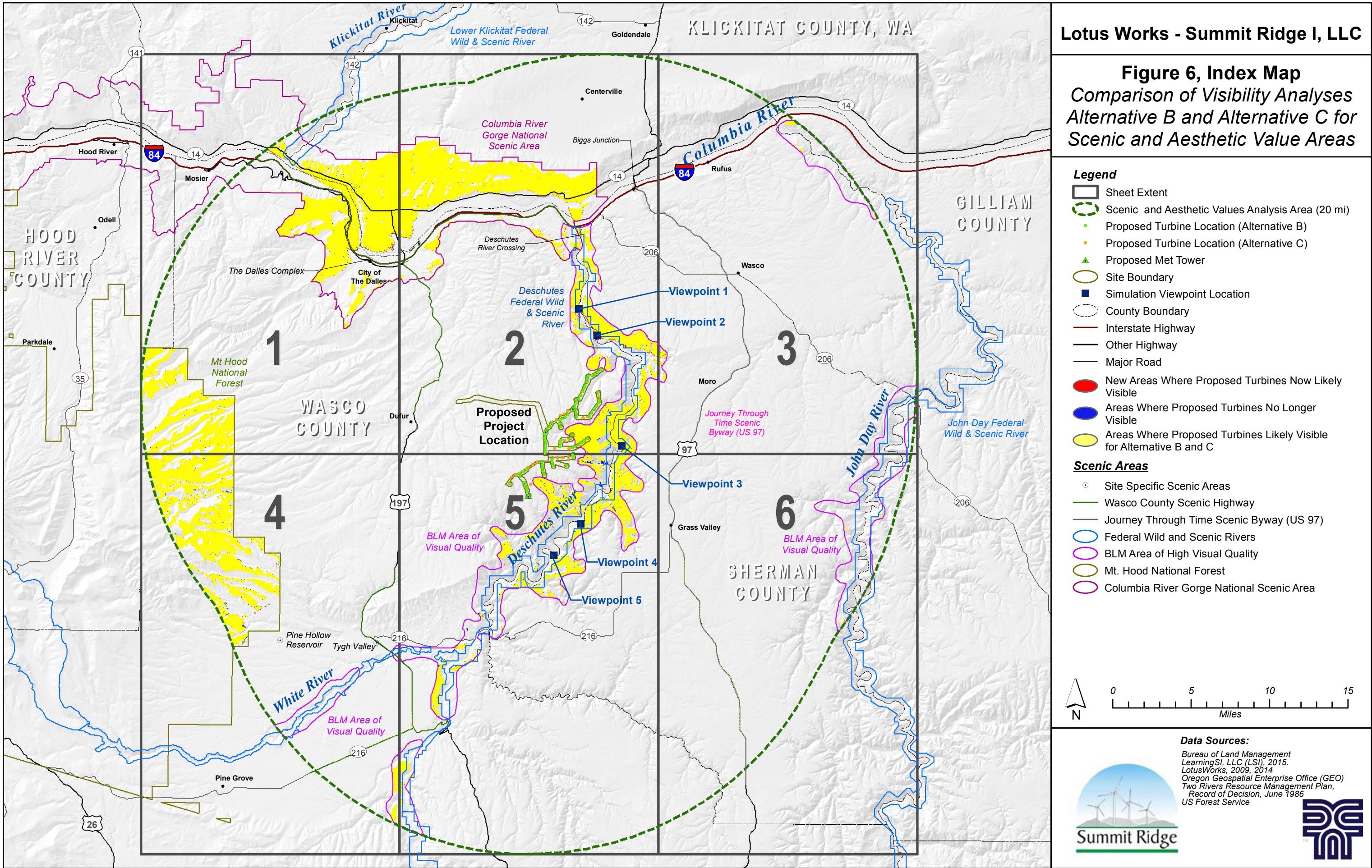
**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



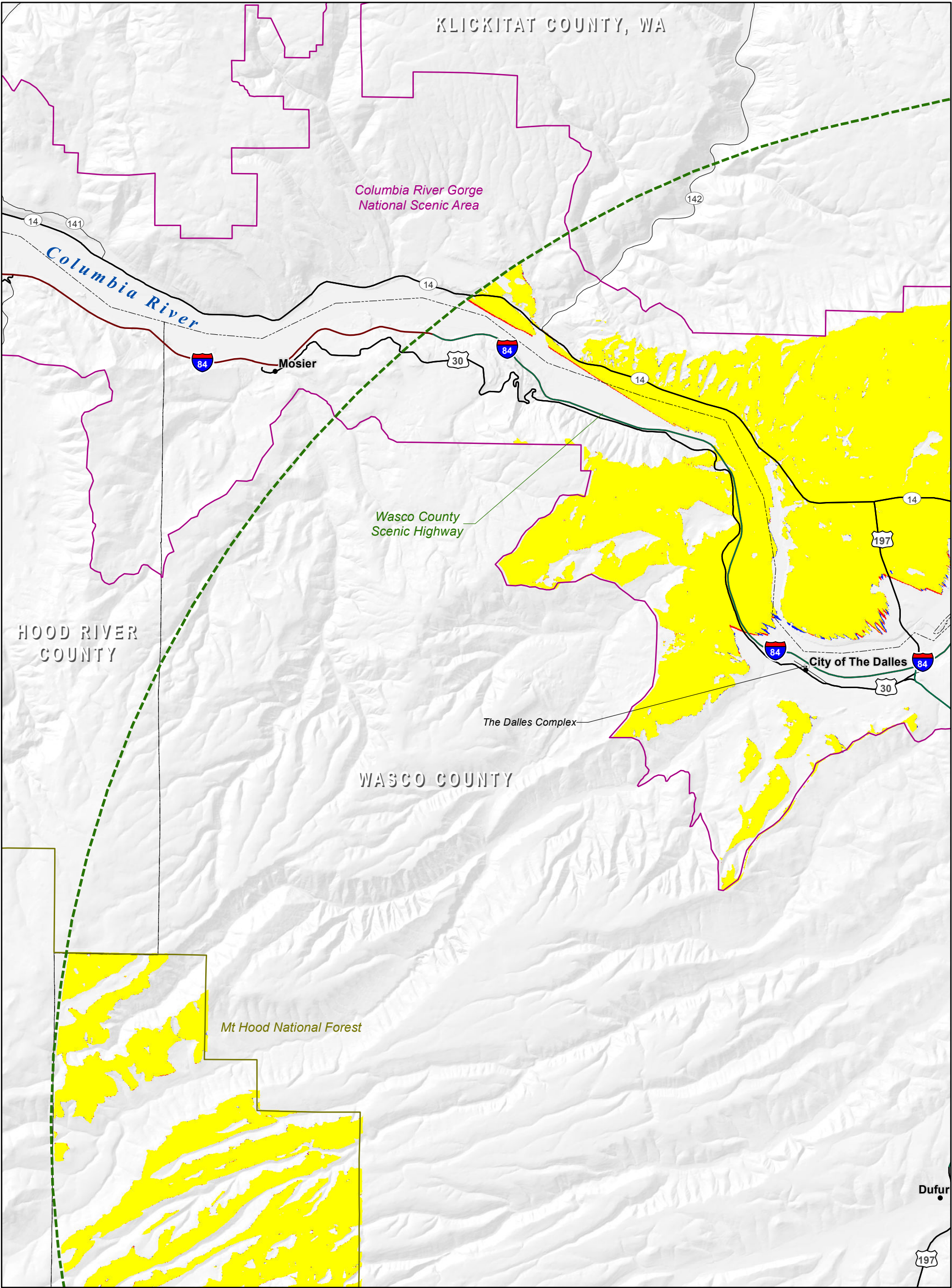
**Figure 5, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Protected Areas*



Figure 6, Index Map  
Comparison of Visibility Analyses  
Alternative B and Alternative C for  
Scenic and Aesthetic Value Areas







- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Scenic and Aesthetic Values Analysis Area (20 mi)

Site Specific Scenic
- Wasco County Scenic Highway

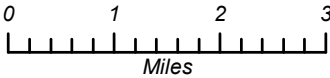
Mt. Hood National Forest

Columbia River Gorge National Scenic Area

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

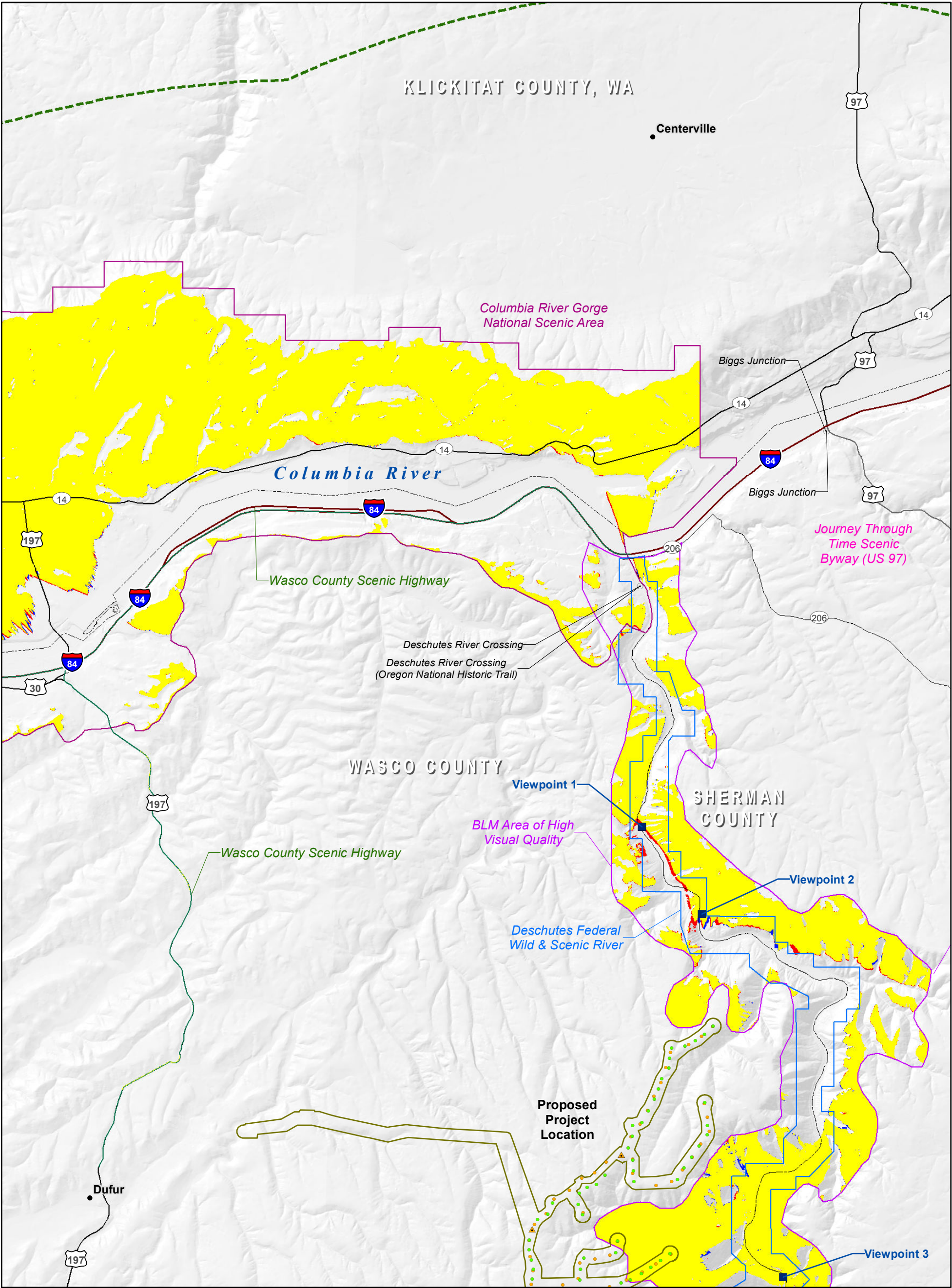


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 1 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C

Scenic and Aesthetic Values Analysis Area (20 mi)

Proposed Turbine Location (Alternative B)

Proposed Turbine Location (Alternative C)

Proposed Met Tower

Simulation Viewpoint Location

Site Specific Scenic Area

Wasco County Scenic Highway

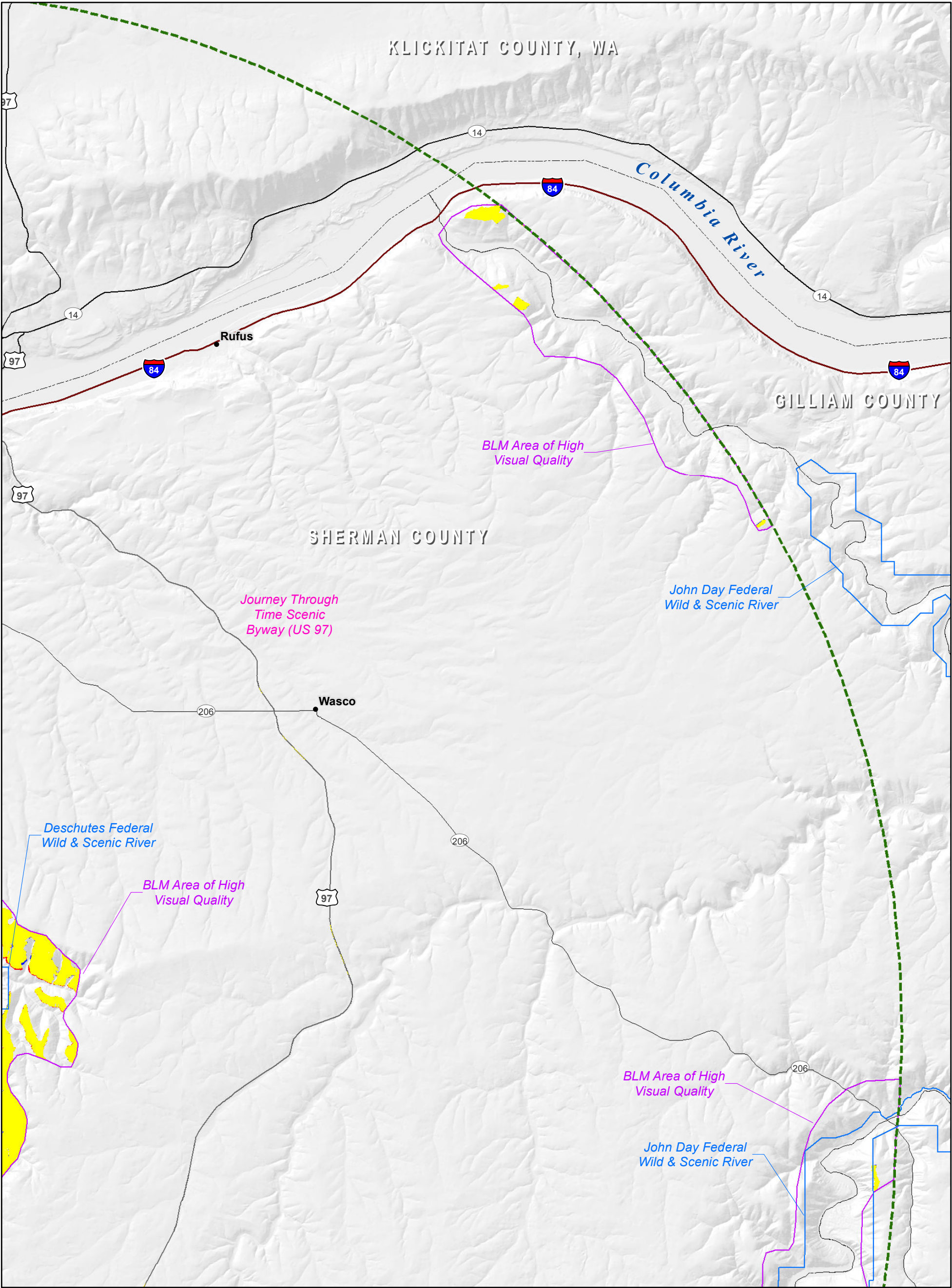
Journey Through Time Scenic Byway (US 97)

Federal Wild and Scenic Rivers

BLM Area of High Visual Quality

Columbia River Gorge National Scenic Area
- Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.
- Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service
- 
- 
- Figure 6, Sheet 2 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C

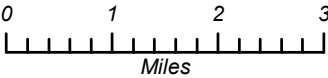
- Scenic and Aesthetic Values Analysis Area (20 mi)
- Journey Through Time Scenic Byway (US 97)

- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

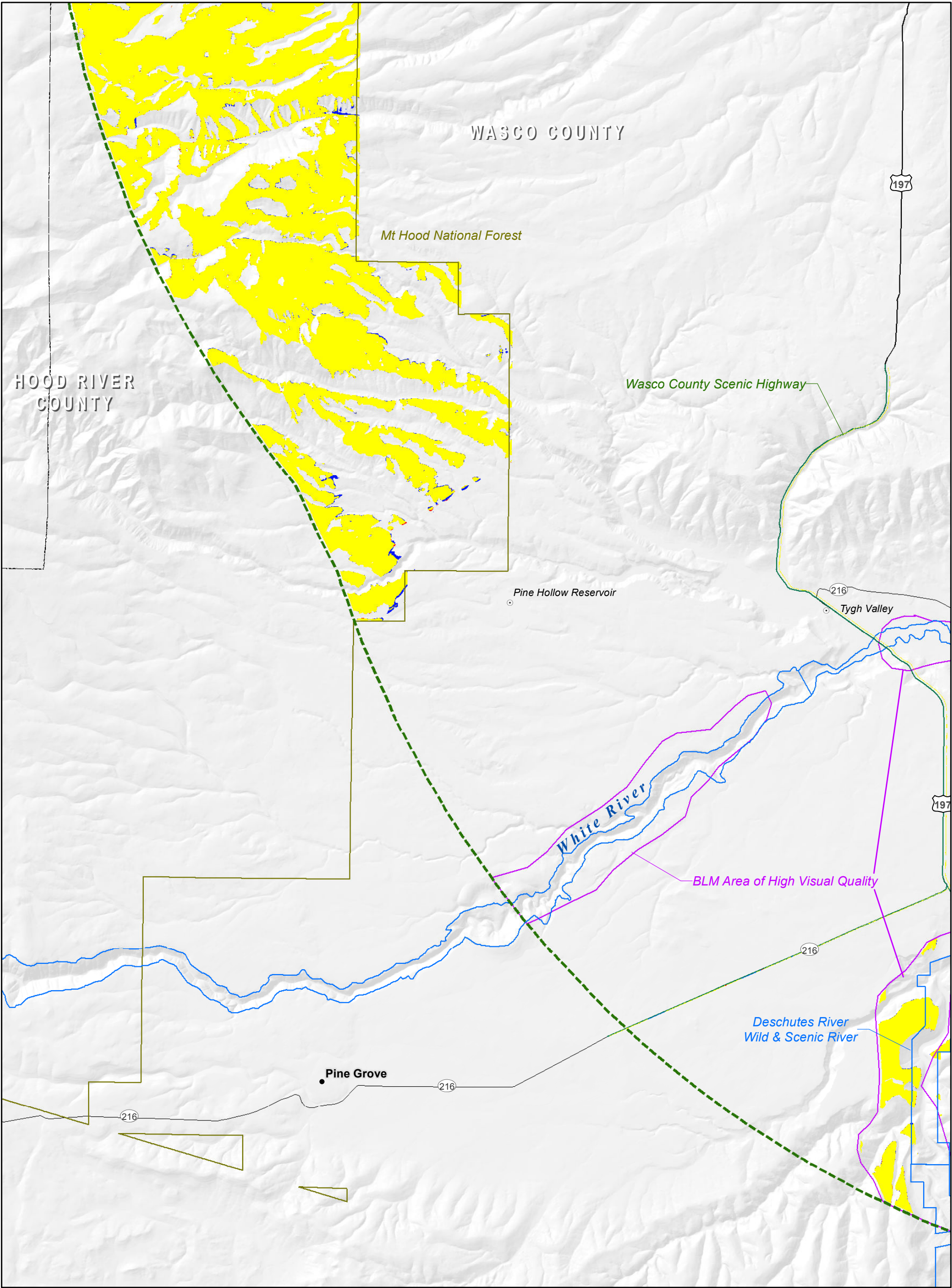





**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service









**Figure 6, Sheet 3 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





-  New Areas Where Proposed Turbines Now Likely Visible
-  Areas Where Proposed Turbines No Longer Visible
-  Areas Where Proposed Turbines Likely Visible for Alternatives B and C

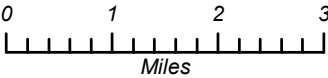
-  Scenic and Aesthetic Values Analysis Area (20 mi)
-  Site Specific Scenic Area
-  Wasco County Scenic Highway

-  Federal Wild and Scenic Rivers
-  BLM Area of High Visual Quality
-  Mt. Hood National Forest

*Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.*

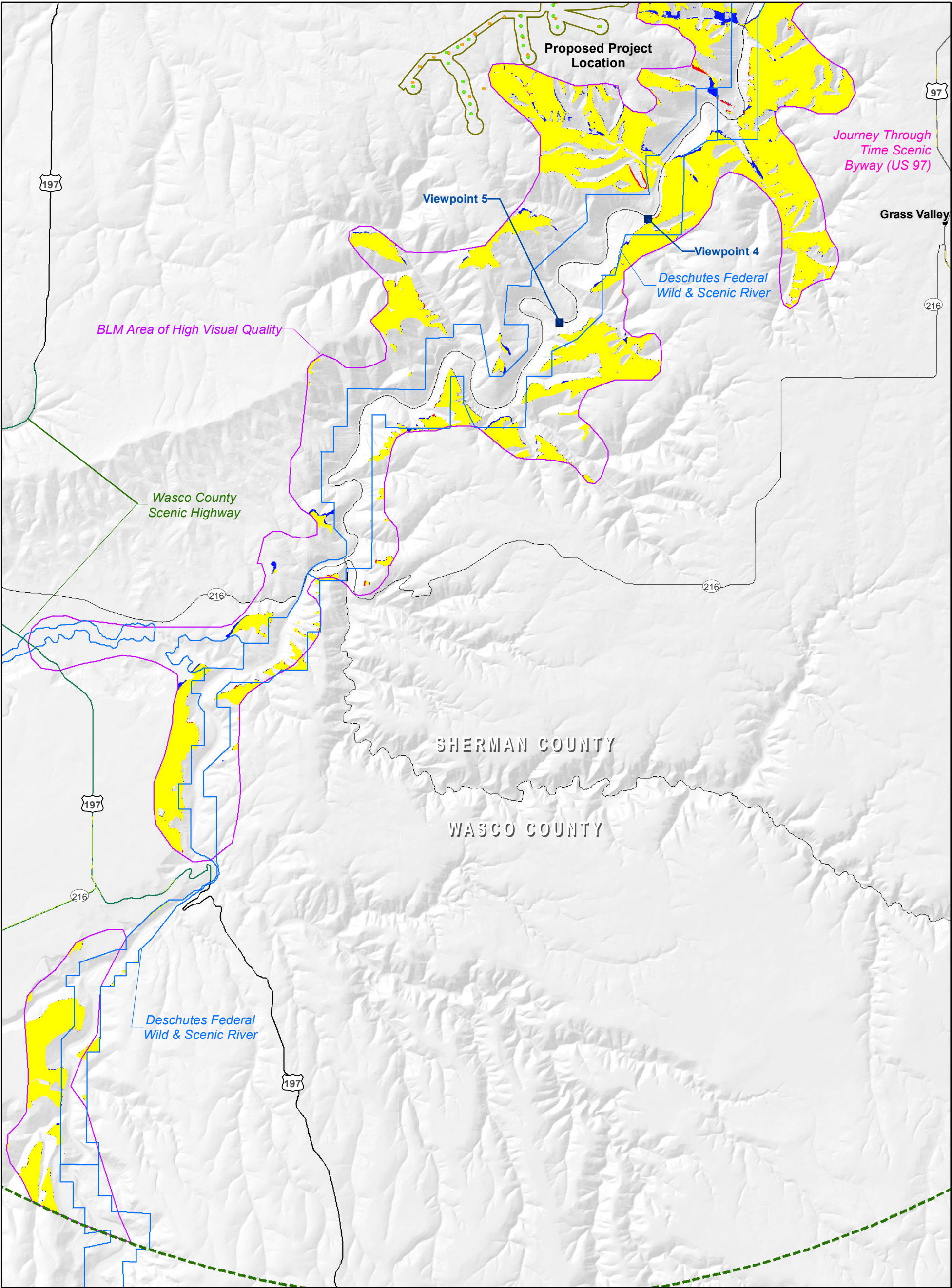


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 4 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





- New Areas Where Proposed Turbines Now Likely Visible

Areas Where Proposed Turbines No Longer Visible

Areas Where Proposed Turbines Likely Visible for Alternatives B and C
- Scenic and Aesthetic Values Analysis Area (20 mi)

Proposed Turbine Location (Alternative B)

Proposed Turbine Location (Alternative C)
- Simulation Viewpoint Location

Wasco County Scenic Highway

Journey Through Time Scenic Byway (US 97)

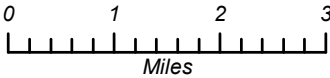
Federal Wild and Scenic Rivers

BLM Area of High Visual Quality

Note: For the purposes of this analysis, proposed turbine visibility was calculated within the scenic and aesthetically valued areas within the analysis area.

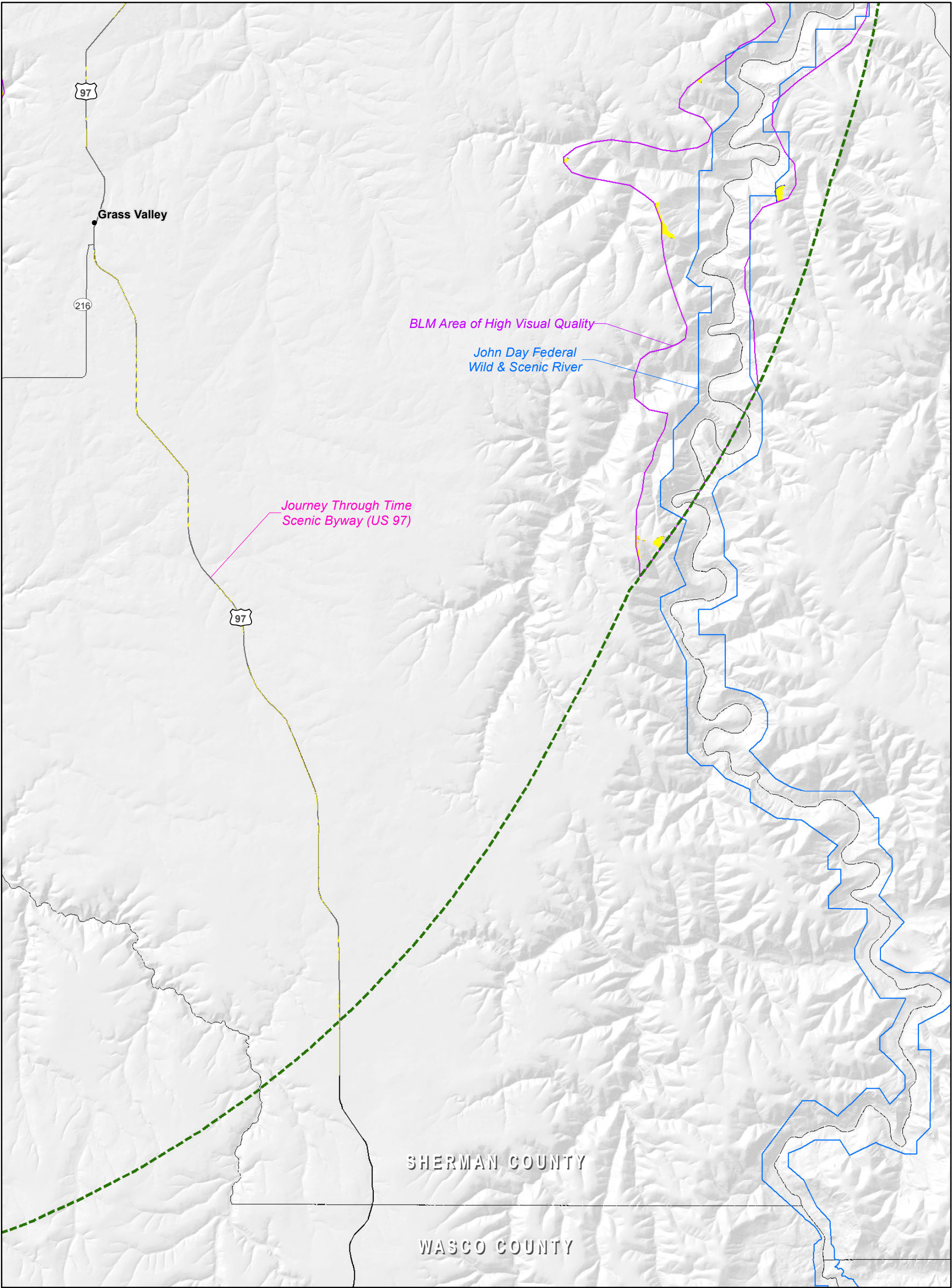


**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
Record of Decision, June 1986  
US Forest Service



**Figure 6, Sheet 5 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*





- New Areas Where Proposed Turbines Now Likely Visible
- Areas Where Proposed Turbines No Longer Visible
- Areas Where Proposed Turbines Likely Visible for Alternatives B and C

- Scenic and Aesthetic Values Analysis Area (20 mi)
- Journey Through Time Scenic Byway (US 97)

- Federal Wild and Scenic Rivers
- BLM Area of High Visual Quality

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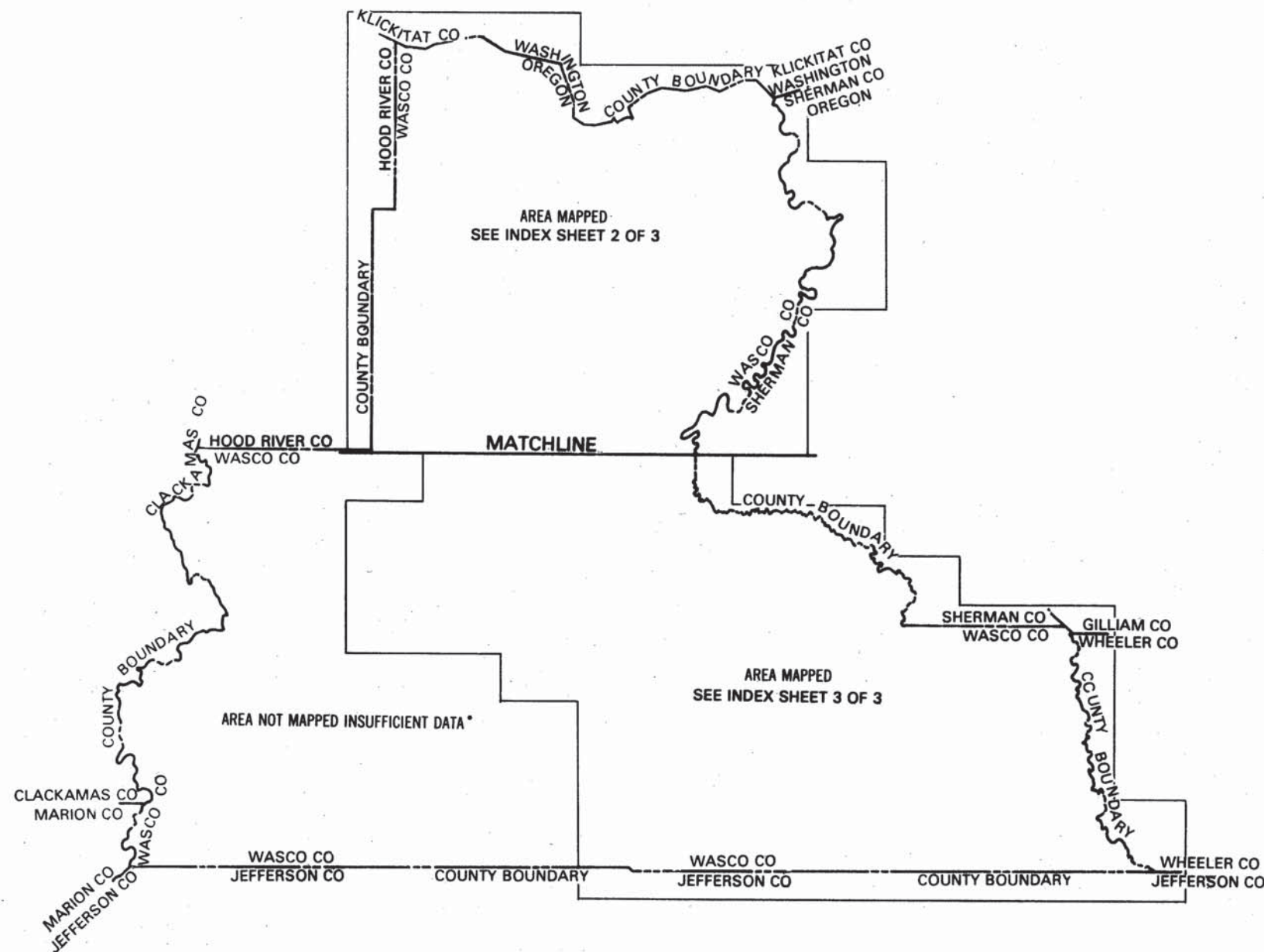
**Data Sources:**  
Bureau of Land Management  
LearningSI, LLC (LSI), 2015.  
LotusWorks, 2009, 2014  
Oregon Geospatial Enterprise Office (GEO)  
Two Rivers Resource Management Plan,  
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US Forest Service



**Figure 6, Sheet 6 of 6**  
*Comparison of Visibility Analyses  
Alternative B and Alternative C  
for Scenic and Aesthetic Values*



## **Attachment 8-1: FIRM Maps**



\*PANELS NOT PRINTED - AREA IN ZONE D



# KEY TO MAP

SPECIAL FLOOD HAZARD AREA



Elevation Reference Mark

RM7X

Zone D Boundary

River Mile

• M .5

## EXPLANATION OF ZONE DESIGNATIONS

| ZONE | EXPLANATION   |
|------|---|
| A    | Areas of 100-year flood base flood elevations and flood hazard factors not determined.  |
| B    | Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. |
| C    | Areas of minimal flooding.  |
| D    | Areas of undetermined, but possible flood hazards.  |
| V    | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.   |

## NOTES TO USER

INITIAL IDENTIFICATION  
FEBRUARY 21, 1975

FLOOD HAZARD BOUNDARY MAP REVISIONS:  
NOVEMBER 1, 1977

FLOOD INSURANCE RATE MAP EFFECTIVE  
SEPTEMBER 24, 1984

To determine if flood insurance is available in this community contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

## FEDERAL EMERGENCY MANAGEMENT AGENCY



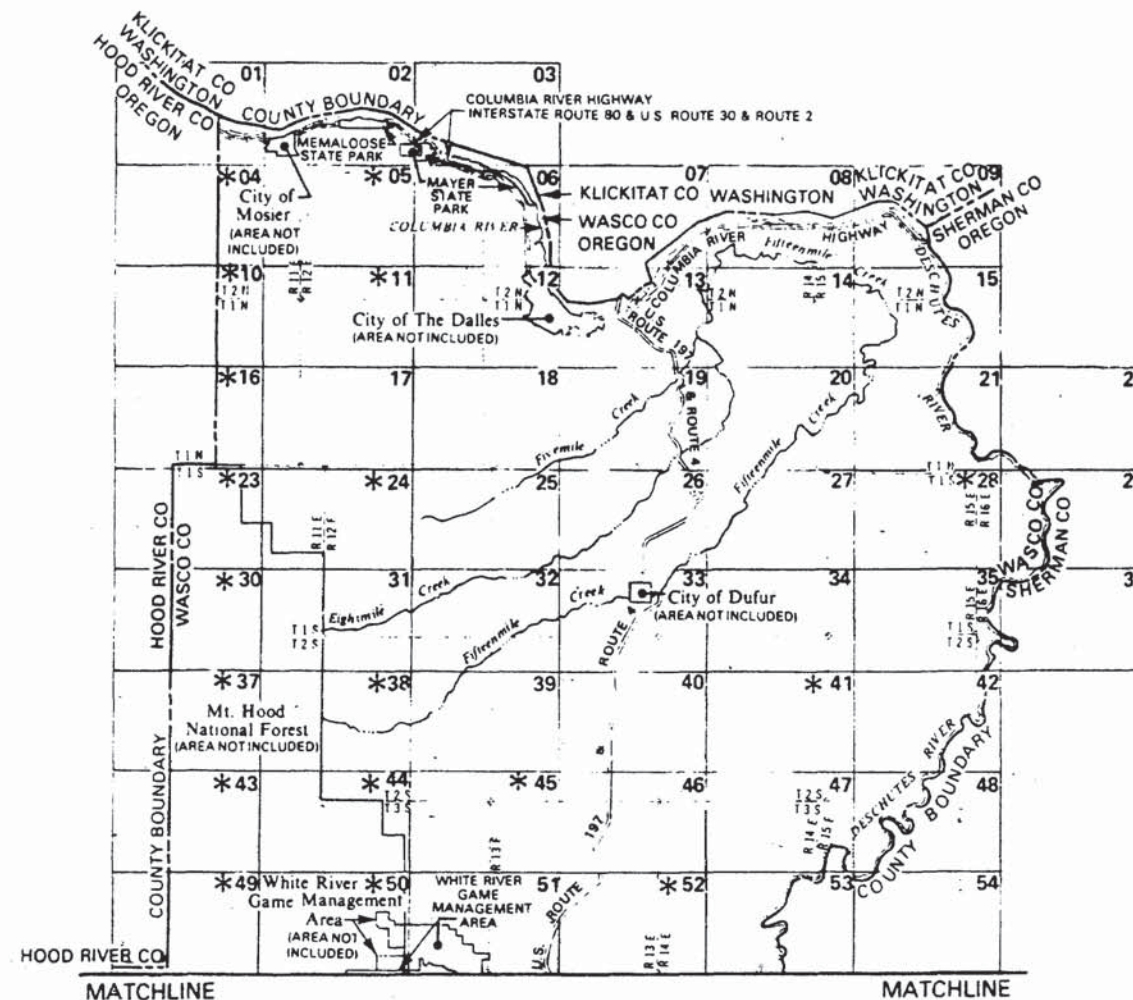
FLOOD INSURANCE RATE MAP  
PANEL(S) 01-121

MAP INDEX  
1 OF 3

WASCO CO., OR  
(UNINC. AREA)

COMMUNITY NO. 410229 B





\*PANEL NOT PRINTED - AREA IN ZONE C

#### KEY TO MAP

SPECIAL FLOOD HAZARD  
AREA



Elevation Reference Mark

RM7<sub>x</sub>

Zone D Boundary

River Mile

•M1.5

#### EXPLANATION OF ZONE DESIGNATIONS

| ZONE | EXPLANATION   |
|------|---|
| A    | Areas of 100-year flood; base flood elevations and flood hazard factors not determined.   |
| B    | Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. |
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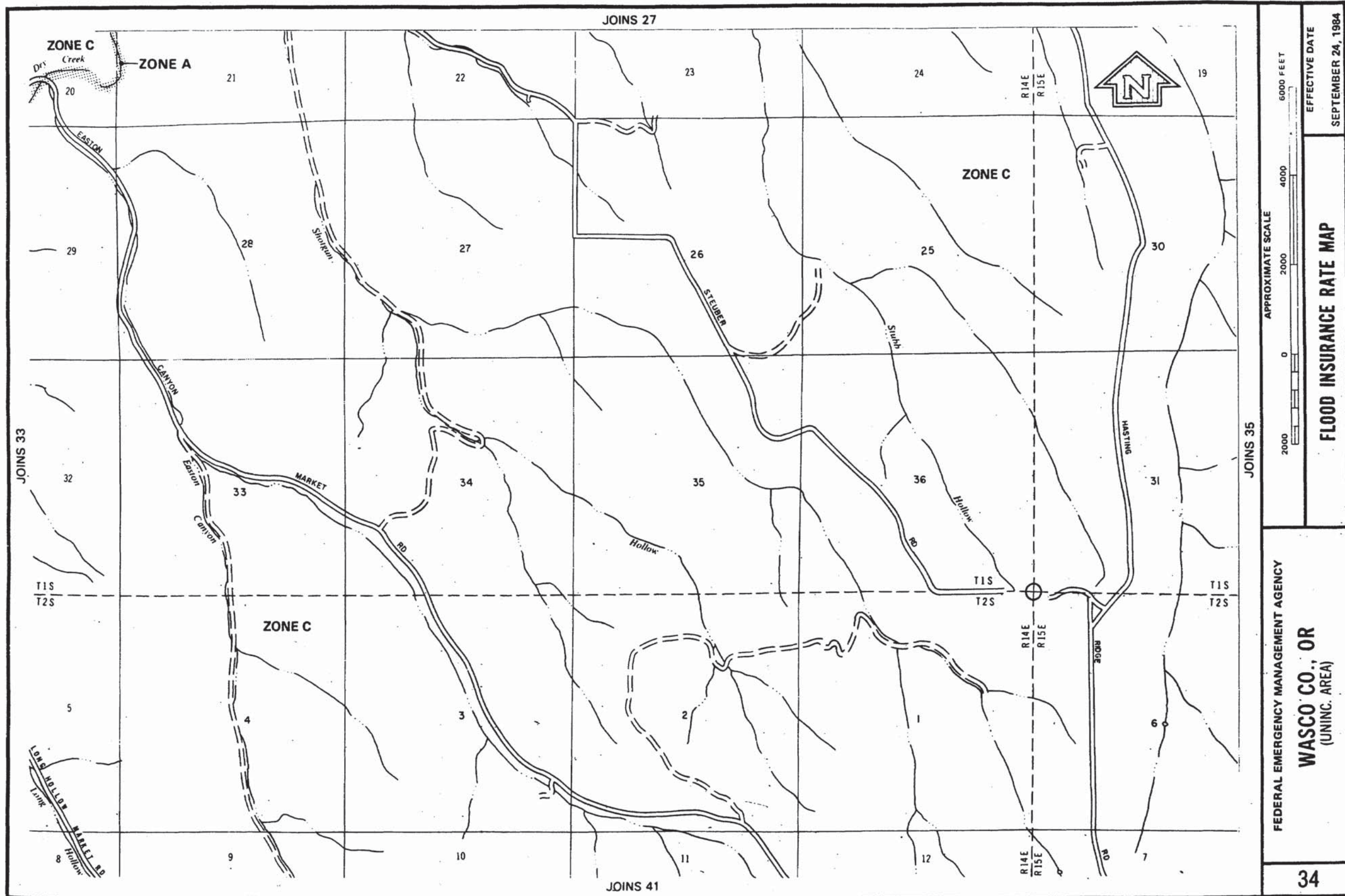


FLOOD INSURANCE RATE MAP  
PANEL(S) 01-121

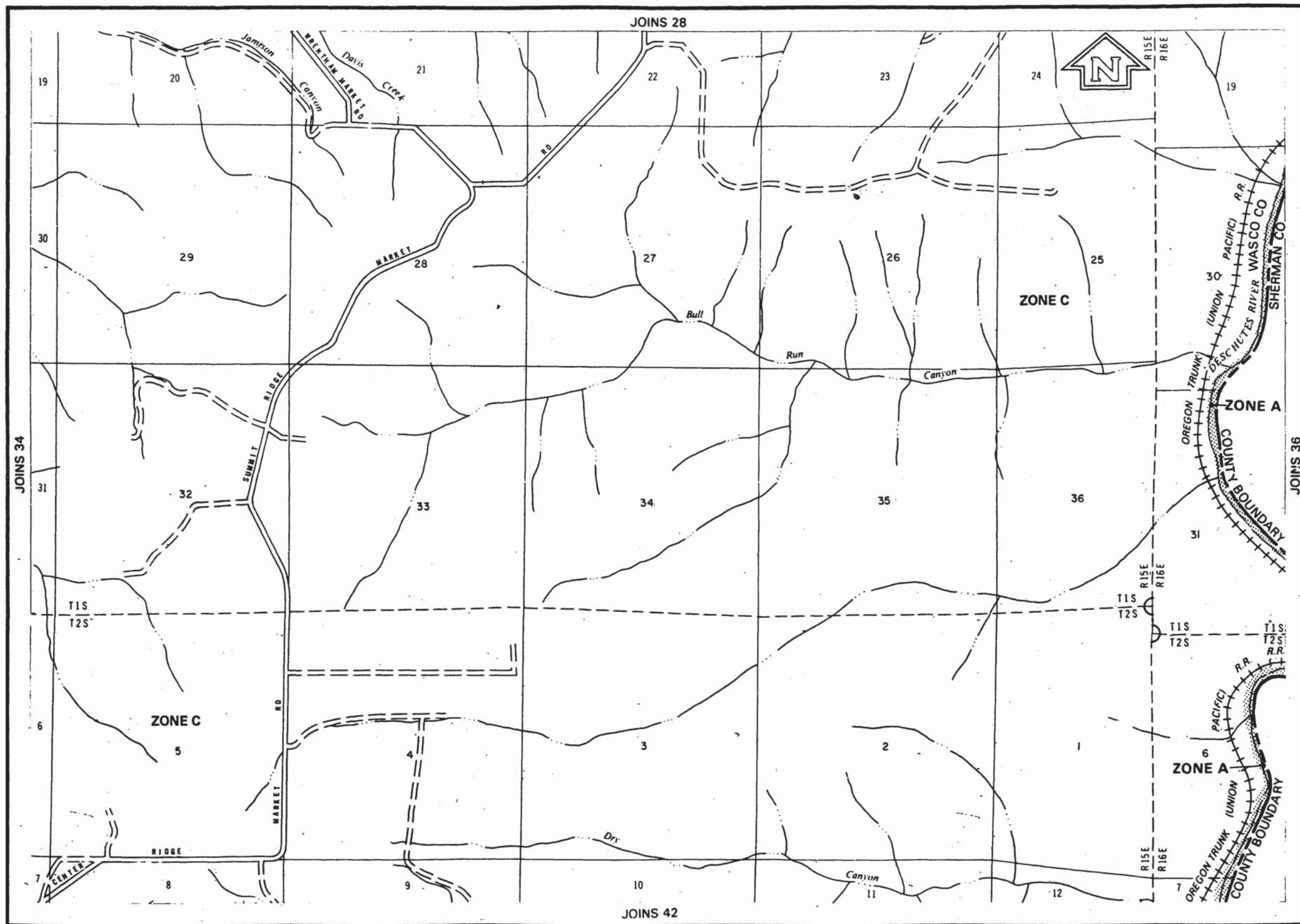
MAP INDEX  
2 OF 3

WASCO CO., OR  
(UNINC. AREA)

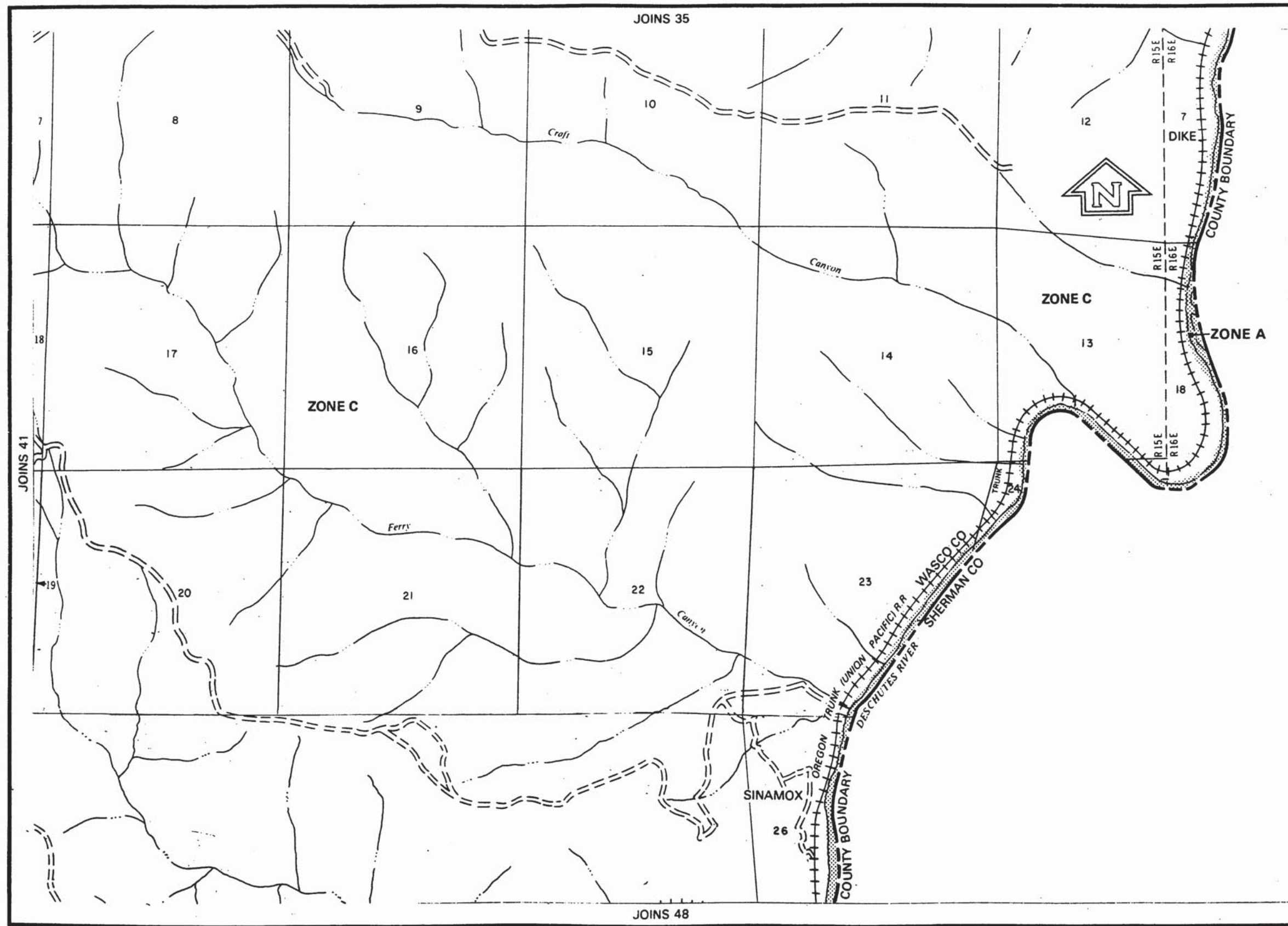
COMMUNITY NO. 410229 B





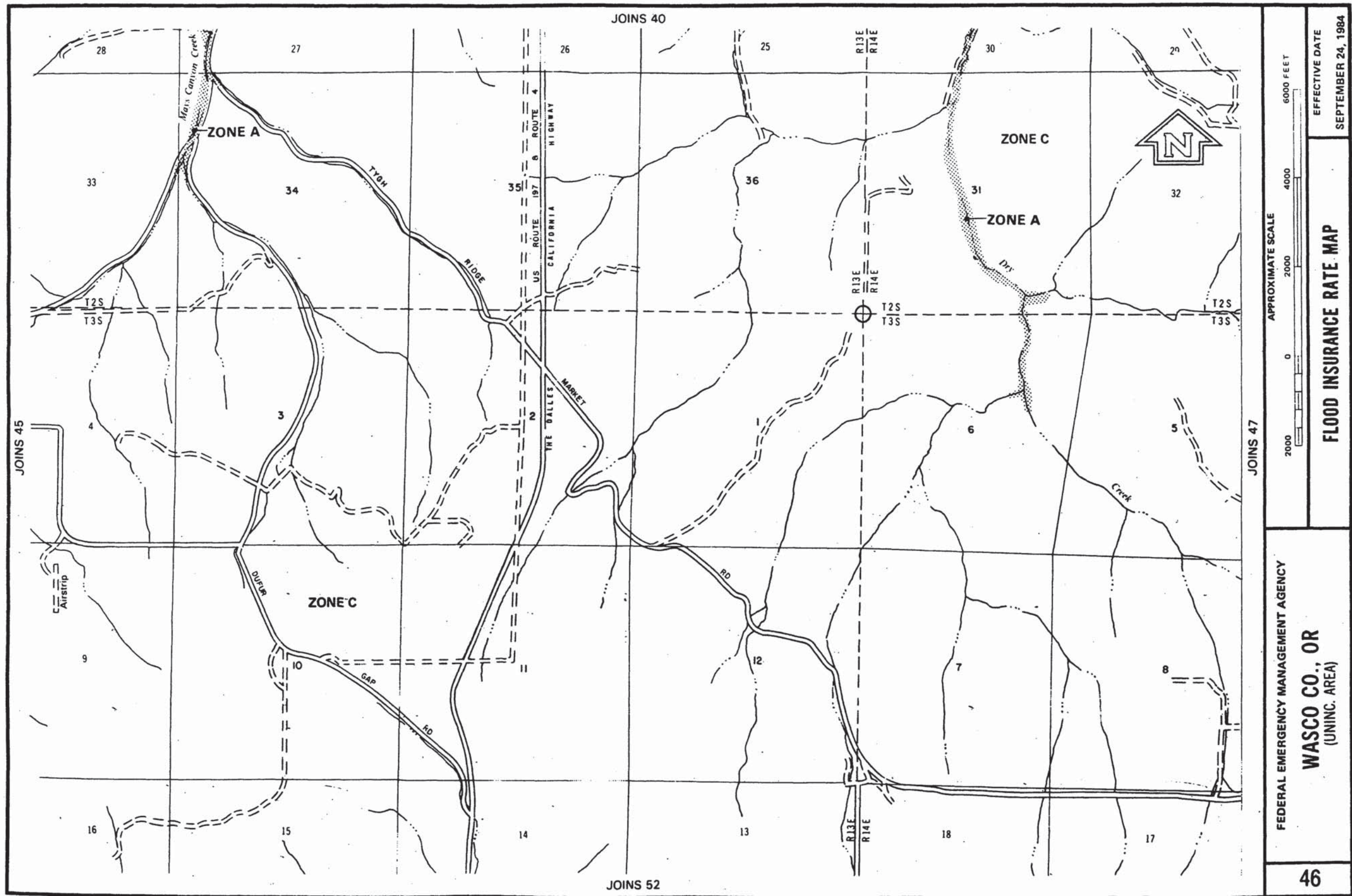


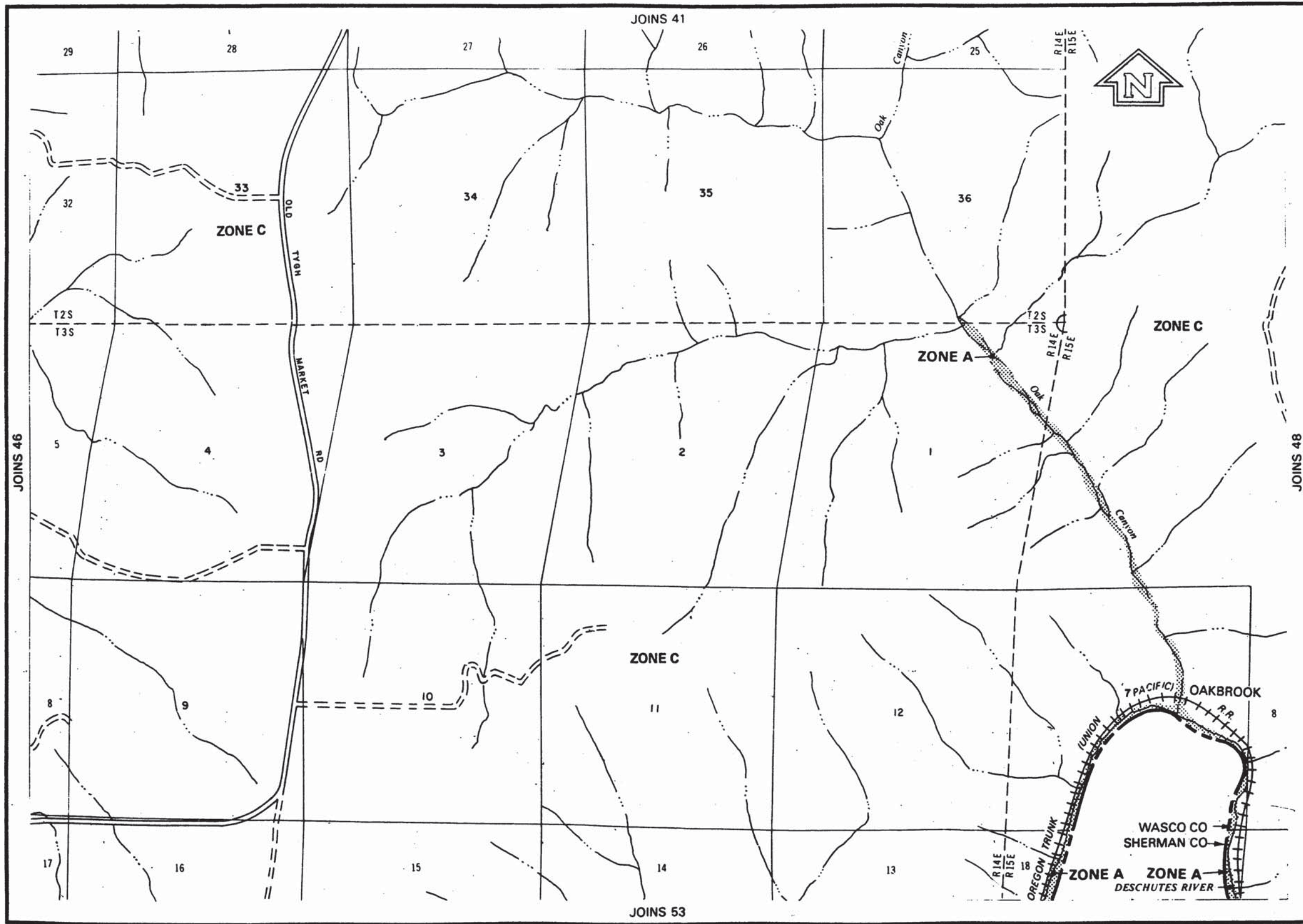
|                                     |                                |  |                                      |
|-------------------------------------|--------------------------------|--|--------------------------------------|
| FEDERAL EMERGENCY MANAGEMENT AGENCY | FLOOD INSURANCE RATE MAP       |  | EFFECTIVE DATE<br>SEPTEMBER 24, 1984 |
|                                     | WASCO CO., OR<br>(UNINC. AREA) |  |                                      |
| 35                                  |                                |  |                                      |



|  |                                      |
|--|--------------------------------------|
| APPROXIMATE SCALE<br>2000 4000 6000 FEET                                     | EFFECTIVE DATE<br>SEPTEMBER 24, 1984 |
| FEDERAL EMERGENCY MANAGEMENT AGENCY<br><b>WASCO CO., OR</b><br>(UNINC. AREA) |                                      |

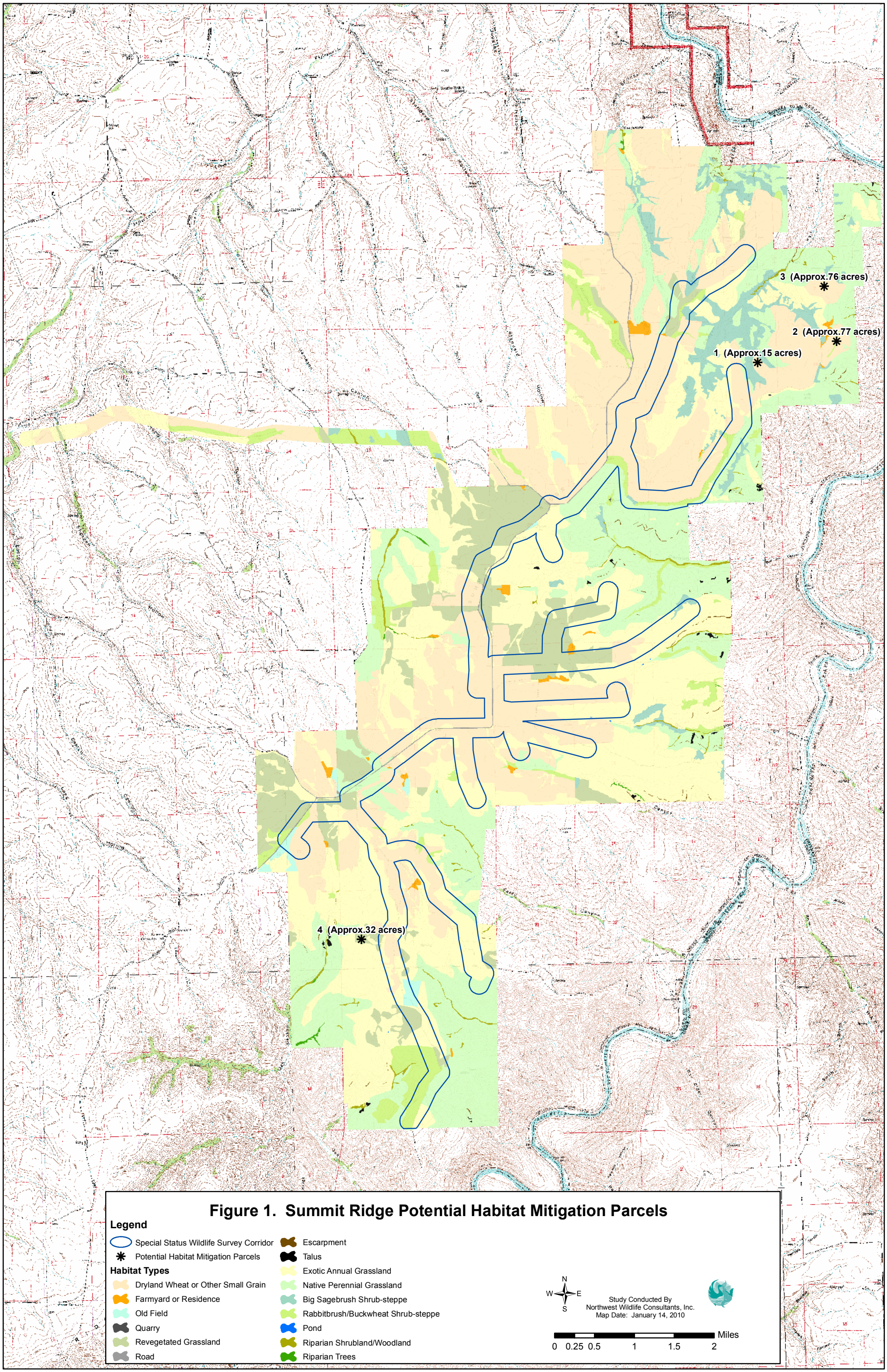






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|--|--|--|--------------------------------------|
| FEDERAL EMERGENCY MANAGEMENT AGENCY<br><br><b>WASCO CO., OR</b><br>(UNINC. AREA) | APPROXIMATE SCALE<br>0 2000 4000 6000 FEET |  | EFFECTIVE DATE<br>SEPTEMBER 24, 1984 |
|  | <b>FLOOD INSURANCE RATE MAP</b>            |  |                                      |
| 47   |  |  |                                      |





**Figure 1. Summit Ridge Potential Habitat Mitigation Parcels**

**Legend**

- Special Status Wildlife Survey Corridor
- Potential Habitat Mitigation Parcels
- Habitat Types**
- Dryland Wheat or Other Small Grain
- Farmyard or Residence
- Old Field
- Quarry
- Revegetated Grassland
- Road

- Escarpment
- Talus
- Exotic Annual Grassland
- Native Perennial Grassland
- Big Sagebrush Shrub-steppe
- Rabbitbrush/Buckwheat Shrub-steppe
- Pond
- Riparian Shrubland/Woodland
- Riparian Trees



Study Conducted By  
Northwest Wildlife Consultants, Inc.  
Map Date: January 14, 2010



0 0.25 0.5 1 1.5 2 Miles