



# United States Department of the Interior



U.S. Fish and Wildlife Service, Pacific Region  
Migratory Birds and Habitat Program  
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Portland, Oregon 97232

**FINDING OF NO SIGNIFICANT IMPACT**  
**Decision to Issue an Eagle Take Permit to Puget Sound Energy for the**  
**Lower Snake River and Hopkins Ridge Wind Facilities**  
**U.S. Fish and Wildlife Service**  
**Portland, Oregon**  
**May 2023**

Pursuant to the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.), the United States Fish and Wildlife Service (hereafter, Service) prepared an Environmental Assessment (EA) in May 2023, tiered to the Service's Programmatic Environmental Impact Statement for the Eagle Rule Revision (PEIS) issued in December 2016. This EA was written because the Service needs to make a decision on an eagle incidental take permit application (pursuant to 50 C.F.R. § 22.80), submitted by Puget Sound Energy (PSE), for the take (i.e. incidental killing) of golden eagles (*Aquila chrysaetos*) and bald eagles (*Haliaeetus leucocephalus*) at the Lower Snake River and Hopkins Ridge Wind Facilities (Project) in Garfield and Columbia Counties, Washington. The decision by the Service to issue a permit is a federal action.

Should the Service decide to issue a permit under one of the Action Alternatives, we need to ensure that our decision to issue the permit meets the Service's preservation standard for eagles; is otherwise consistent with the Bald and Golden Eagle Protection Act ("Eagle Act") (16 U.S.C. §§ 668-668d) and its implementing regulations (50 C.F.R. § 22.80); is consistent with general permit issuance criteria (50 C.F.R. § Part 13); is consistent with our legal authorities, and ensures that permit conditions further long-term conservation of bald and golden eagles.

The EA considered three alternatives:

Alternative 1, deny the permit (the No Action Alternative);  
Alternative 2, issue a 15-year eagle take permit based on their permit application and with negotiated conditions (our Preferred Alternative);  
Alternative 3, issue a 15-year eagle take permit to the applicant with conservation measures additional to those listed in Alternative 2.

Other alternatives were considered but rejected as not meeting our purpose and need as described in Section 3.3.4 of the EA.

## **BACKGROUND**

PSE applied for a 15-year eagle take permit for the Lower Snake River (LSR) and Hopkins Ridge Wind Facilities in 2015, requesting authorization of non-purposeful, incidental take of bald and golden eagles under the Eagle Act for operational activities associated with the Project.

### *Lower Snake River Wind Facility*

The LSR Project area encompasses approximately 22,000 acres of leased land, within the broader 255-square mile Lower Snake River Wind Resource Area (LSRWRA). PSE partnered with Renewable Energy Systems (RES) in the acquisition of the LSRWRA as a fifty percent owner, and entered into a Joint Development Agreement with RES in December 2008 to develop the LSR Wind Facility. PSE later acquired RES's share of the larger LSRWRA in August 2009. PSE was responsible for the permitting of the LSR Wind Facility, then construction began in 2010 and was completed when the facility became commercially operational in February 2012.

The LSR Wind Facility comprises 149 wind turbines with a generating capacity of 343 megawatts (MW). In addition to the turbines, project facilities at LSR include: ~42 miles of site access roads, ~146 miles of underground 34.5 kilovolt (kV) electrical distribution and fiber optic lines, ~1,900 feet of overhead 34.5 kV electrical distribution lines, 2 onsite electrical step-up substations, one 17,463 square-foot maintenance facility located offsite, 2 permanent un-guyed meteorological towers, 1 additional Bonneville Power Administration PA substation serving the facility, which is capable of accommodating future power generation facilities that may be constructed in the area.

### *Hopkins Ridge Wind Facility*

The Hopkins Ridge Project is situated on approximately 11,300 acres of leased lands, primarily comprised of agricultural and rangeland, with some lands currently enrolled in the Conservation Reserve Program (CRP). PSE acquired the Hopkins Ridge wind facility, a 156.6 MW facility with 87 Vestas V-80 1.8-MW wind turbine generators, from RES during the development stage. RES, the project developer, was responsible for obtaining final permits and constructing the project. PSE took over facility management when Hopkins Ridge became commercially operational in November 2005. In addition to the turbines, project facilities at Hopkins Ridge wind facility also include turbine foundations, ~20 miles of new or improved roads, ~34 miles of underground 34.5 kV electrical distribution and fiber optic lines, ~0.25 mile of 34.5 kV overhead electrical distribution line, ~6.9 miles of overhead electrical transmission feeders and optical ground wire, an on-site electrical step-up substation, an off-site BPA electrical interconnection substation, a 5,000-square-foot maintenance facility, and two permanent un-guyed meteorological towers.

These facilities are described in greater detail in the Eagle Conservation Plan (Appendix A in the EA).

## **DESCRIPTION OF PROJECT PRACTICES PROPOSED UNDER THE PREFERRED ALTERNATIVE**

### **Compensatory Mitigation Measures**

Consistent with authorities provided in our regulations implementing the Eagle Act (50 C.F.R. § 22.80(c)(1)(i)), PSE will be required to provide compensatory mitigation as an enforceable provision of the permit to offset predicted take of golden eagles at a ratio of 1.2:1. This offset will be achieved by using a Service-approved method for compensatory mitigation. To meet their compensatory mitigation requirement, PSE may: 1) use a Service-approved in-lieu fee program, 2) apply Service-approved mitigation credits from previous power pole retrofits, 3) select and retrofit power poles determined to be high-risk to eagles, 4) conduct a lead abatement program, and/or 5) select another Service-approved mitigation method.

One method may be retrofitting high-risk electrical distribution poles. If the applicant selects this method, the number of poles that would be retrofitted is derived using our Resource Equivalency Analysis (REA), which is based on the predicted number of annual eagle fatalities (Appendix B in the EA) and published values for how many eagles are killed at high-risk power poles. When running the REAs used to determine

the range of required compensatory mitigation for this Project, we assumed that power pole retrofits would be effective at preventing eagle deaths for either 10 or 30 years, depending on the projected longevity of the retrofit. We further assumed that any retrofit would be completed before Jan 31, 2024. Retrofit commitments setout below are applicable if PSE decides to mitigate in 5-year increments, as expected; however, it remains possible that PSE will elect to provide mitigation for the entire 15-year permit term upfront.

As described in the EA, high risk poles would be identified by selecting circuits for retrofitting based on the presence of golden eagles and golden eagle habitat and by selecting individual poles based on a risk index as described in Dwyer *et al.* (2014), which considers the equipment on, and configuration of the poles in question. To count as compensatory mitigation, the power poles to be retrofitted must be in addition to whatever the power company already had plans to complete; that is, poles retrofitted under this compensatory mitigation plan must be an entirely new set of poles, not already scheduled for retrofitting or replacement by the power company in the foreseeable future. Additionally, the permittee has agreed to prepare and submit a cultural resource survey report for the power poles they select for retrofitting that require pole replacement. The Service will evaluate this information and consult with the interested Tribes, the State Historic Preservation Officer, and others, as appropriate, at that time.

Within 60 days of completion of retrofits, PSE would provide an accounting of the retrofitted poles, including photos to ensure retrofits were completed correctly. Compensatory mitigation outlined in Table 1 will be implemented by January 31, 2024, to offset take over the first five years of the permit tenure.

Alternatively, PSE has the option to conduct lead abatement, either in lieu of or supplementary to power pole retrofits, by reducing the use of lead ammunition and/or removing gut piles in a designated mitigation area (Cochrane *et al.* 2015). The permittee must achieve the mitigation effectiveness over the required number of consecutive years in order to produce a credit of 55.34 PV Bird-Years to offset take for the first 5 years. If the required mitigation effectiveness cannot be achieved, the permittee may need to modify the mitigation area where lead abatement is employed. Such modifications to the mitigation area may alter harvest rates and/or eagle populations used for modelling, and must be approved by the Service.

Table 1. PSE’s compensatory mitigation commitment under the Preferred Alternative.

Compensatory mitigation commitment	Bald Eagle	Golden Eagle
Predicted take for 15-year Permit Term (Annual)	1 (0.02 per year)	39 (2.6 per year)
Take required to be offset during a 15-yr Permit Term <sup>1</sup> (Annual rate)	0	28.5 (1.9 per year)

<sup>1</sup>Compensatory mitigation is only required for Golden Eagle take estimated at the Lower Snake River Wind Facility.

**Fatality Monitoring**

Under the Proposed 15-Year Alternative, post-construction fatality monitoring will be conducted by a qualified, independent third party, approved by the Service for at least one year within each 5-year period of the permit term. Monitors must report directly to the Service and provide a copy of the report and materials to the permittee.

Under the Proposed 15-Year Alternative, PSE would be required to conduct an operational fatality monitoring program that includes eagle remains searches, searcher efficiency trials and carcass persistence trials. For every 5-year review period, all searcher efficiency trials, all carcass persistence trials, and at least one year of eagle remains searches must be conducted and summarized by a qualified independent third-party, as described and analyzed under Alternative 2.

Eagle remains searches would be conducted as described and analyzed under Alternative 2, with a method that achieves, as determined by the Migratory Bird Permit Office, a 5-year average site-wide probability of detection

of 0.35. If an average site-wide probability of detection of 35% is not achieved over a 5-year period (Dwyer *et al.* 2014) or site-wide probability of detection is less than 8% in any year of the permit term, adaptive management measures are triggered.

Searcher efficiency trials would be conducted as described and analyzed under Alternative 2, for one year per method per 5-year period, stratified by each of the four seasons in each year totaling four trials per year. These trials would be conducted for every unique carcass search method used, even if no formal monitoring is performed. This includes opportunistic finds during normal Project operations and maintenance. Searcher efficiency trials would use 20 surrogate carcasses per season placed at randomly selected turbines and at random locations within each search plot.

Carcass persistence trials would also be conducted as described and analyzed under Alternative 2, at minimum, over the course of one year during every 5-year period, stratified by each of four seasons. We would require that PSE place 10 surrogate carcasses per season at randomly selected turbines and at random locations within the project footprint or similar nearby habitat. Raptor carcasses would be used as surrogates when possible. Trials would be required to last a minimum of 90 days per season when raptor carcasses are used.

### **Adaptive Management**

PSE would be required to implement an adaptive management plan as described and analyzed in Alternative 2 of the EA. This plan, coupled with post-construction fatality monitoring, will help ensure that expected take is not exceeded during the 15-year permit term. If observed take at the project reaches predetermined levels, as outlined in the EA, that would cause the Service to be concerned, an additional conservation measure will be implemented at the project with the goal of reducing take rates.

### **5-Year Permit Reviews**

PSE would be required to participate in permit reviews every 5 years during the permit term, as described and analyzed under Alternative 2. PSE would be required to compile and submit all project-specific data at least 90 days prior to each 5-Year Permit Review to inform a review of the permit and its conditions. The Service would require that the first Permit Review occur no longer than 5 years from the date the initial authorization was approved.

### **Reporting**

#### *Take Reports*

PSE would report all eagle fatalities to the Migratory Bird Permit Office via email, within 48 hours of discovery, whether observed during post-construction fatality monitoring or incidentally by Project personnel. Reports of eagle fatalities would be documented using a standardized form and include the date of discovery, the species and estimated age of the eagle, the location, the suspected cause, date and time of death or injury, and any other pertinent details (e.g., turbine location, wind conditions, etc.).

#### *Annual Reports*

PSE would submit written reports each year during the 15-year permit term. Reports will be submitted to us by January 31 of each year. Key components of each annual report shall include, among other information:

- Observed incidents of eagle take and how each was discovered.
- Disposition of eagle remains (alive/dead), location, species, sex, age, and dates of each observed fatality.
- Maps or graphical representations illustrating the geographic distribution and location of all observed fatalities (relative to turbine locations).

## **EFFECTS AND FINDINGS**

The three alternatives considered in the EA provide a reasonable range to assess differing potential environmental effects associated with issuance of an Eagle Permit. Alternative 1 does not achieve a net

conservation benefit to eagles whereas the other alternatives do. Alternatives 2 and 3 have similar but distinguishable environmental effects. Both Alternatives 2 and 3 require fatality monitoring, adaptive management, and compensatory mitigation that meet our population management objective. However, Alternative 2 is our Preferred Alternative because it meets our regulatory requirements, including minimum compensatory mitigation requirements, and is economically feasible for the applicant. Alternative 3 provides increased benefits to eagles by requiring turbine curtailment to reduce estimated fatalities by 10% and offsetting take at an elevated ratio of 2:1. While increased compensatory mitigation beyond meeting the preservation standard may be consistent with the goals of maintaining or improving eagle populations, it may not be practicable for the applicant, and is not required under the Eagle Act (USFWS 2016b). As evaluated in the PEIS, the 1.2:1 mitigation ratio is thought to appropriately balance what is reasonable and practicable for permittees with the biological needs of the species, consistent with the Eagle Act.

Rigorous analyses of eagle population data and models in the PEIS allowed the Service to determine allowable take thresholds for both eagle species. We have determined that implementing the Preferred Alternative will not result in the exceedance of those take thresholds for either eagle species. Additionally, we have determined that direct, indirect, or cumulative permitted take will not exceed the 5-percent thresholds of the LAP, described in the EA and PEIS for golden eagles. Further, we do not have evidence to suggest that unauthorized take is presently exceeding 10 percent of the LAP for golden eagles. For bald eagles, the Preferred Alternative will not result in direct or cumulative permitted take that exceeds the 5-percent thresholds of the LAP. In addition, we do not have evidence to suggest that unauthorized take is presently exceeding 10 percent of the LAP for bald eagles. Authorizing take at this facility is, therefore, compatible with the preservation of bald eagles and golden eagles.

Direct and indirect effects to other species of birds are similar under all alternatives because the project is operational now and will continue so regardless of this permit decision. However, the intensity of mortality and injury impacts will likely be reduced under Alternatives 2 and 3 due to the implementation of avoidance/minimization measures, monitoring, and compensatory mitigation for eagles. Adverse impacts to migratory birds could be further reduced under both action Alternatives if conservation measures were implemented under the required adaptive management framework. Specifically, if adaptive management triggered the application of a monitoring and curtailment program for eagles, this action could also potentially reduce the potential for migratory bird fatalities and injuries associated with collisions with turbine blades. Additionally, compensatory mitigation required under both action Alternatives to offset eagle take could benefit raptors and other birds with large wingspans by reducing the risk of electrocution elsewhere.

The Service must also find that, upon receipt of a complete application, the criteria in 50 C.F.R. § 13.21 "Issuance of Permits" are met, the issuance criteria are met under 50 C.F.R. § 22.80, and required determination are made in 50 C.F.R. § 22.80 (prior to 2016 revision). Based on the EA, the Service finds that the issuance of this permit under the Preferred Alternative meets all of the criteria required and required determinations of 50 C.F.R. § 22.80 and 50 C.F.R. § 13.21.

## **FINDINGS RELATED TO OTHER RESOURCES**

No known historic properties have been identified in the area where the activity will be taking place, nor are the offsite pole retrofits required for mitigation expected to have the potential to affect cultural resources. Nonetheless, the permittee has agreed to prepare a cultural resources assessment for any future poles selected that require pole replacement, and if pole replacements are necessary, the Service will consult with interested tribes, the relevant State Historic Preservation Officer, and others, as appropriate. The proposed action will not significantly impact structures or properties, and does not conflict with proposed or adopted local, regional, State, interstate, or Federal land use plans or policies. The proposed action will not authorize the take of species listed or proposed under the Endangered Species Act. No designated Critical Habitat will be affected by the proposed action as it does not authorize a change in the habitat conditions for which such areas would be designated.

The proposed action is unlikely to result in significant cumulative effects, as they are defined in our eagle regulations, given current knowledge. If future actions arise that might result in significant cumulative effects, they will be considered and taken into account for future eagle take permit analyses and during each 5-year review of the permit. Precedent already exists for permits of this nature, so this action does not represent a new precedent or decision in principle. The proposed action will not have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.

## **PUBLIC SCOPING AND TRIBAL CONSULTATION**

Sixteen federally recognized Indian Tribes (as described in the EA) could have special interests that may be affected in the area surrounding the Project based on their proximity to the Project and previous communication. We sent letters to 13 of these tribes on January 18, 2017, to inform them about the eagle take permit application, and to provide them the opportunity to review the application and consult on the potential issuance of an eagle take permit. We received no responses from these letters, and no tribes requested formal government-to-government consultation. We sent emails updating sixteen tribes of the status of the permit review on January 17, 2023. To ensure that all interested tribes were informed, we expanded our original outreach efforts from 200 miles to 218 miles from the Project (twice the most recent estimate of Golden Eagle natal dispersal distance) to three more tribes: Puyallup Tribe, Sauk-Suiattle Tribe, and Snoqualmie Tribe. We received no responses from these letters, and no tribes requested formal government-to-government consultation. We also invited all sixteen of these tribes to review and comment on the Draft EA on March 22, 2023. No responses were received.

The Draft EA (USFWS 2023) was made available to the public on 21 March 2023 for a 30-day comment period, allowing the public opportunity to provide comments on the content and scope of the document. An email was sent to Tribes and other potentially interested parties on 22 March 2023 to inform them of the availability of this EA. We received no comments during this 30-day comment period.

## **DETERMINATION**

The Service has selected the Preferred Alternative (Alternative 2) as described in the EA and will issue a 15-year Eagle Incidental Take permit (50 C.F.R. § 22.80) for the incidental take of bald eagles and golden eagles associated with the operation of the Project. We have found the application submitted for the permit under 50 C.F.R. § 22.80, and the conditions negotiated with the applicant, meet the issuance criteria.

We considered impacts to eagles and other resources from the issuance of this permit at the eagle management unit and local area scales in this EA, incorporating the PEIS by reference. The eagle take that we predict will occur at this facility is conservative, within allowable thresholds, and for golden eagles, will be offset by PSE through mitigation approved by the Service. Additionally, under this alternative, PSE will be required to perform fatality monitoring and implement adaptive management that reduces eagle mortalities further if take rates appear to be higher than expected, and to continue operational measures that avoid and minimize eagle mortality. Because of this, and considering the population analysis in the PEIS for both species, we conclude that any effects of the action under the Preferred Alternative are not significant.

The Service has determined that issuance of a permit under 50 C.F.R. § 22.80 for the take of 39 golden eagles and 1 bald eagle over the 15-year duration of the permit does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an EIS is not required.

## **PUBLIC NOTICE**

An electronic copy of this FONSI has been posted on the Service's website:  
<https://www.fws.gov/library/collections/pacific-region-nepa-documents-eagle-permits>

## REFERENCES

Dwyer, J.F., R.E. Harness, K. Donohue. 2014. Predictive Model of Avian Electrocutation Risk on Overhead Power Lines. *Conservation Biology* 28(1): 159-168.

USFWS 2016. Programmatic Environmental Impact Statement for the Eagle Rule Revision. United States Department of the Interior, Fish and Wildlife Service. 272pp.  
<https://www.fws.gov/sites/default/files/documents/programmatic-environmental-impact-statement-permits-to-incidentally-take-eagles.pdf>

USFWS 2023. Final Environmental Assessment for the Lower Snake River and Hopkins Ridge Eagle Incidental Take Permit. U.S. Fish and Wildlife Service, Migratory Birds and Habitat Program, Portland, Oregon.  
<https://www.fws.gov/library/collections/pacific-region-nepa-documents-eagle-permits>

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