

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

OFFICE OF  
ECOSYSTEMS, TRIBAL AND  
PUBLIC AFFAIRS

July 11, 2011

Scott Barker, Project Manager  
Bureau of Land Management  
Jarbidge Field Office  
2536 Kimberly Road  
Twin Falls, Idaho 83301

Re: U.S. Environmental Protection Agency (EPA) Comments on the Proposed China Mountain Wind Project (Project) and Resource Management Plan Amendment Draft Environmental Impact Statement (DEIS). (CEQ# 20110100; EPA Project Number 08-027-BLM)

Dear Mr. Barker:

The EPA has reviewed the Bureau of Land Management's (BLM) DEIS for the China Mountain Wind Project and Resource Management Plan Amendment in Twin Falls County, Idaho, and Elko County, Nevada. Our review has been conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

We thank you for taking the time to discuss the proposed project with us, and appreciate your efforts to prepare a helpful and informative NEPA document. We recognize the management challenge that the China Mountain Wind Project presents. Wind energy development will indeed help to meet the nation's energy demand, while reducing the relative amount of greenhouse gas emissions necessary to do so. Wind energy development located in areas with high levels of conflict and sensitive resources, however, present the public and land management agencies with a corresponding risk of adverse consequences. Where possible, it is preferable to direct development away from areas of high conflict and sensitive resources and towards areas of low conflict, such as previously disturbed sites, areas adjacent to previously disturbed sites, and locations that minimize construction of new roads and transmission lines.

Broad EPA and BLM policies express a preference for directing renewable energy development towards low conflict areas. From the EPA, consider the RE-Powering America's Land Initiative, which promotes renewable energy development on disturbed or degraded lands.<sup>1</sup> From the BLM, consider BLM Instructional Memorandum (IM) No. 2011-061, which establishes a screening and prioritization process designed to direct development away from lands with high conflict or sensitive resource values and towards low conflict areas.

Based on our review of the DEIS we have rated the document as Environmental Objections – Insufficient Information (EO-2).<sup>2</sup> Overall, our rating is based on our belief that the China Mountain

---

<sup>1</sup> <http://www.epa.gov/oswercpa/>

<sup>2</sup> See Chapter 4 "Review of Draft Environmental Impact Statements" from EPA's *Policy and Procedures for the Review of*

Wind Project area is one with high conflict and sensitive resources. The DEIS usefully discloses impacts which support this conclusion. We agree with the DEIS statements that the project, as proposed, would likely result in adverse impacts to water quality and hydrology; sage-grouse; golden eagles; trout habitat; soils; upland vegetation composition and structure; Special Status Plants; mule deer, elk and pronghorn; archaeological sites; lands with wilderness character; visual resources; and, a river segment with potential to be classified as a wild river. The project would also increase the risk of fire and the spread of noxious weeds. Approval of a right of way for this project as proposed, with such a serious combination of adverse impacts to biological, physical and social resources, would set an unwise precedent for renewable energy development.

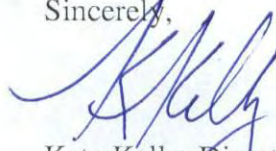
More specifically, an "EO-2" rating signifies that the EPA's review of the DEIS has identified potential significant environmental impacts that should be avoided in order to provide adequate protection of the environment. Our environmental concerns center on the potential for significant adverse impacts to the sagebrush ecosystem, especially to sage-grouse, and potential impacts to water resources. With regard to the sagebrush ecosystem, we are concerned that impacts from the proposed action alternatives would likely impede the recovery of declining sage-grouse populations. Such an adverse impact appears to be inconsistent with the BLM's Special Status Species Management Manual, management considerations from the Jarbidge Draft Resource Management Plan and EIS, and, the July 2006 Idaho Sage-Grouse Conservation Plan. In addition, the DEIS does not sufficiently disclose how the proposed action and design features are fully responsive to the U.S. Fish and Wildlife Service's October 27, 2010 "Idaho Fish and Wildlife Office Recommendations for the China Mountain Wind Project"

With regard to water resources, we are concerned about the potential to exacerbate the exceedance of water quality standards through construction surface disturbance, and operation and maintenance activities at or near the headwaters of four streams which are Clean Water Act Section 303(d) impaired water bodies for sediment/siltation. Also of concern is the potential for downstream impacts to result in additional streams being 303(d) listed due to elevated sediment. We do not believe the proposed action alternatives and design features, as disclosed in the DEIS, would adequately prevent these impacts. In addition, the DEIS does not contain sufficient information to determine if any action alternative could be the Least Environmentally Damaging Practicable Alternative (LEDPA) to be permitted under Section 404 of the Clean Water Act.

In the enclosed detailed comments, we explain our concerns and provide specific recommendations aimed at achieving adequate protection of the environment. In our view, full responsiveness to our recommendations would result in substantial changes to the FEIS's sections on design features (DEIS Appendices 2A and 2B) and/or to one or more of the proposed action alternatives. If changes to achieve adequate protection of the environment are not feasible, we recommend selection of the no-action alternative.

Thank you for this opportunity to comment. If you have any questions regarding the EPA's comments, please contact me at (206) 553-1271 or by electronic mail at [kelly.kate@epa.gov](mailto:kelly.kate@epa.gov) , or Erik Peterson, the lead reviewer for this project. Erik can be reached at (206) 553-6382 or [peterson.erik@epa.gov](mailto:peterson.erik@epa.gov) .

Sincerely,

A handwritten signature in blue ink, appearing to read "K Kelly", written over a faint circular stamp.

Kate Kelly, Director  
Office of Ecosystems, Tribal, and Public Affairs

## DETAILED EPA COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED CHINA MOUNTAIN WIND PROJECT AND RESOURCE MANAGEMENT PLAN AMENDMENT

### Water Resources

We are concerned about adverse impacts to water resources, several of which are usefully described and disclosed in the DEIS's following summary of construction impacts.

"Construction impacts on water quality are closely linked to vegetation removal and soil disturbance. Surface disturbing activities including removal of vegetation, change in vegetation composition, and soil disturbance indirectly impacting water quality, air quality (Section 4.1.1), fish and wildlife habitat and forage (Section 4.2.2), and forage available to livestock (Section 4.4.2). Hydrology and water quality would be indirectly impacted from project disturbances to riparian and wetland vegetation through mortality, injury, or removal of vegetation. Indirect impacts from project disturbances on riparian and wetland vegetation could occur through the introduction and establishment of noxious weeds and invasive plants (BLM, 2005). The project would also cause direct impacts on water resources by localized alteration of hydrology and indirect impacts on water quality through increased potential for nutrient and sediment delivery to water bodies." (p. 4-69)

To address the above and other impacts to water resources, the DEIS proposes design features – primarily throughout Appendix 2A – which we agree would "...reduce impacts on riparian and wetland vegetation and water resources" (p.4-70). We remain concerned, however, that the proposed design features may not adequately protect water resources because they are not presented in a way that demonstrates how specific water quality targets would be met.

An adequate and more analytical presentation of water resources design features would discuss specific performance goals (likely tied to water quality standards), physical site constraints, and evaluate the effectiveness of proposed Best Management Practices relative to target pollutants. These important concepts are usefully described in Idaho Department of Environmental Quality's (IDEQ) *Catalog of Stormwater BMPs for Idaho Cities and Counties*.<sup>3</sup>

We note that, as stated in DEIS Table 1-1, the proposed project will require a NPDES General Permit for Stormwater Discharges From Construction Activities (Construction General Permit or CGP) from the EPA. Because the project area contains 303(d)-listed Water Bodies with an approved TMDL<sup>4</sup> and according to Part 10 of the Final 2008 CGP, the State of Idaho requires that, "Discharges of storm water will be consistent with load allocations established by the applicable TMDL." Both the applicable TMDL and the Final 2008 CGP recommend following IDEQ's *Catalog of Stormwater BMPs for Idaho Cities and Counties*.<sup>5</sup>

<sup>3</sup> <http://www.deq.idaho.gov/media/622263-Stormwater.pdf>

<sup>4</sup> See the "Salmon Falls Creek Subbasin Assessment and Total Maximum Daily Loads" at [http://www.deq.idaho.gov/media/463815-salmon\\_falls\\_creek\\_entire.pdf](http://www.deq.idaho.gov/media/463815-salmon_falls_creek_entire.pdf)

<sup>5</sup> See especially Section 4, Steps 2 and 5 of IDEQ's *Catalog of Stormwater BMPs for Idaho Cities and Counties* (pps. 17-20) at <http://www.deq.idaho.gov/media/622263-Stormwater.pdf>

We believe that systematically identifying steps to adequately protect water resources and clearly disclosing those steps in the NEPA analysis would help to demonstrate whether the project is able to meet various Clean Water Act requirements, such as: developing an appropriate Storm Water Pollution Prevention Plan and obtaining a NPDES General Permit for Stormwater Discharges from Construction Activities; assuring consistency with the applicable Total Maximum Daily Load implementation strategy; and, meeting certain requirements associated with Section 404 of the Clean Water Act.

**Recommendations:**

- To facilitate the development of an appropriate Storm Water Pollution Prevention Plan, assure consistency with the applicable Total Maximum Daily Load implementation strategy and meet certain requirements associated with Section 404 of the Clean Water Act – include in the FEIS additional information on performance goals, relevant site constraints, and an effectiveness evaluation of the proposed design features relative to target pollutants. To accomplish this recommendation, consider systematically reorganizing Appendix 2A according to target pollutants/ impacts and presenting performance goals and effectiveness estimates in an analytical manner. Specific performance goals for the China Mountain Wind Project should include: (i) preventing increased pollutant loading to Clean Water Act 303(d) listed water bodies such as Cottonwood Creek, and (ii) preventing downstream impacts that could change the proper functioning condition rating of a stream, or result in a stream being 303(d) listed due to elevated sediment.
- Water resources related design features presented in the FEIS should only be listed if they are relevant and applicable to the performance goals of this project and are presented in an analytical manner. Therefore, list, rather than incorporate by reference, relevant BMPs from the following.
  - *Programmatic Biological Assessment for Stream Crossing Construction, Replacement, and or Removal* (United States Fish and Wildlife Service [USFWS], 2005)
  - *Stream Crossing Structure Replacement and Removal Program – Idaho and Nevada – Biological Opinion and Concurrence* (USFWS, 2006)
  - *Biological Opinion for the Bureau of Land Management’s Ongoing Activities in the Jarbidge River Watershed in Owyhee County, Idaho and Elko County, Nevada* (USFWS, 2004)

**Clean Water Act Section 404**

A Clean Water Act Section 404 permit would be required for this project. EPA has review responsibilities for compliance with the Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA (Guidelines). We note that, pursuant to the Guidelines, any permitted discharge into waters of the U.S. (WOUS) must be the Least Environmentally Damaging Practicable Alternative (LEDPA) available to achieve the project purpose. Also, no discharge can be permitted if it will cause or contribute to significant degradation of WOUS.

In order to comply with the Guidelines, the applicant must determine the extent of jurisdictional waters and comprehensively evaluate a range of alternatives to ensure that the “preferred” alternative is the LEDPA. Identification of the LEDPA is achieved by performing an alternatives analysis that estimates

the direct, indirect, and cumulative impacts to jurisdictional waters resulting from a set of on- and off-site project alternatives. Projects must be designed first to avoid impacts to WOUS. If avoidance is not entirely possible, then impacts must be minimized. Finally, once impacts are minimized, mitigation of the remaining impacts must be provided.

The alternatives analysis that is required for a Section 404 permit differs from the alternatives analysis required under NEPA. The Section 404 alternatives analysis must include on-site and off-site alternatives, which may include private land, BLM-administered land, and/or disturbed sites. Project alternatives that are not practicable and do not meet the project purpose are eliminated. The LEDPA is the remaining alternative with the fewest impacts to aquatic resources, as long as it does not have other significant adverse environmental consequences.

The "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule"<sup>6</sup> establishes standards and criteria for the use of all types of compensatory mitigation to offset unavoidable impacts to waters of the United States authorized through issuance of permits by the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the CWA. Compensatory mitigation may be performed using the methods of restoration, enhancement, establishment, and, in certain circumstances, preservation. If an individual permit is required by the Corps, a final approved mitigation plan is required prior to permit issuance. If the Project would be covered by a Nationwide Permit (NWP) and the Corps determines the applicant needs mitigation, the Corps can issue an NWP based on a conceptual mitigation plan; but the applicant cannot commence work without a final Corps approved plan (230.94 (c)(1)(ii)).

Based on our review of the DEIS, we are unsure whether the potential impacts to jurisdictional waters would fall within the limits imposed by the Nationwide Permits Program. Disclosures such as, "The project area contains 16 acres of potential wetlands" (p. 3-11) and inclusion of information such as that found in Table 4.1.4-1<sup>7</sup> help estimate the extent of impacts to water resources. The information in the DEIS, however, does not sufficiently support the conclusion that the project would fall within the limits of a nationwide permit. For example, consider that Nationwide Permit 14 has the following limitation, "For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States"<sup>8</sup>

**Recommendations:**

- Conduct and disclose the results of a wetland delineation study for all - or a preferred -haul route(s) and the project area.
- Consider including a table which lists all the jurisdictional aquatic resources (and areas of water) that will be impacted. Such a table should disclose impacts by categories: direct, indirect, and cumulative.

<sup>6</sup> [http://www.epa.gov/owow/wetlands/pdf/wetlands\\_mitigation\\_final\\_rule\\_4\\_10\\_08.pdf](http://www.epa.gov/owow/wetlands/pdf/wetlands_mitigation_final_rule_4_10_08.pdf)

<sup>7</sup> "Summary of Project Area Surface Disturbance (in acres) from Construction Including the Northern Inbound Haul Route and Both Options of the Southern Inbound Haul Route by Primary Indicators for Riparian and Wetland Vegetation, Water Quality, and Hydrology."

<sup>8</sup> See 2007 Nationwide Permit Authorizations and its associated General, Regional and Water Quality Certification requirements at:

[http://www.nww.usace.army.mil/html/offices/op/rf/2007%20NWP\\_General%20%20Regional%20Conditions%20and%20Water%20Quality%20Certification.pdf](http://www.nww.usace.army.mil/html/offices/op/rf/2007%20NWP_General%20%20Regional%20Conditions%20and%20Water%20Quality%20Certification.pdf)

- Based on the results of a wetland delineation study, other appropriate evidence, and discussions with the Corps, disclose whether a nationwide or individual Clean Water Act Section 404 permit would be required. If a nationwide permit is required, disclose which one.
- Include, in the DEIS, a draft or up-to-date summary of the Clean Water Act Section 404 mitigation plan. Information on the mitigation plan should address the following points.
  - Describe the aquatic resource types that would be provided as compensation at different sites and how this combination of resource type and mitigation site would likely offset the aquatic resource impacts of the project.
  - Discuss relevant mitigation strategies: preservation, rehabilitation, restoration, or, enhancement by aquatic ecosystem/resource type.
- Identify the LEDPA, if applicable, and demonstrate how the project alternatives comply with the 404(b)(1) Guidelines.

### **Fish and Wildlife**

#### **Greater Sage-Grouse**

The DEIS states that the Jarbidge foothills and Browns Bench (which include the project area) appear to provide important connectivity with sage-grouse populations in Shoshone Basin to the east, northern Nevada to the south, and Owyhee Plateau to the west, making sage-grouse habitat in this area vulnerable to fragmentation (p. 3-60). The majority of the project area and larger analysis areas are comprised of the key habitat type, indicating the quality of sagebrush habitat and importance of this area to sage-grouse (p. 3-62). The DEIS also states that 586 acres of key or R1 habitat would be removed, and that 125,056 acres would be avoided by the sage-grouse (p. 4-191). The acres of key habitat avoided or no longer utilized represent approximately 26 percent of that available in the mid-scale analysis area and 9 percent of the habitat available at the regional analysis area.

We agree with and are concerned about the DEIS's conclusion that,

“Given the importance and quality of the habitat in and in the vicinity of the project area to sage-grouse, particularly winter and breeding habitat, avoidance of habitat would have a major long-term adverse effect on the sage-grouse population, contributing to further population declines, with implications beyond the regional analysis area.” (p. 4-192)

To address this impact, the DEIS includes several measures from the applicants' *November 2010 Draft Sage-Grouse Conservation Plan for the China Mountain Wind Project* (Tetra Tech, 2010).

“...the purpose of the plan is to ensure that impacts to sage-grouse and their habitat are addressed through measures built into the project design, including avoidance and minimization, onsite restoration and offsite mitigation. Onsite restoration would include the reclamation and revegetation of areas temporarily disturbed during construction. Offsite mitigation would include actions designed to offset impacts by protecting or improving habitat quality outside of the project footprint area and would include the enhancement, restoration, and (possibly in the case of wet meadow habitat) creation of sage-grouse habitat. Each of these mitigation actions could be implemented on lands which are acquired outright, secured under a conservation easement, or subject to some other legal agreement allowing modifications to be made to existing land uses to achieve the desired improvements to sage-grouse habitat.” (p. 2-43).



We recognize the substantial efforts of the applicants, the BLM, and other agencies to determine measures to avoid, minimize, and mitigate adverse impacts to sage-grouse. We believe the success of these efforts – and adequacy of environmental protection - will depend on whether the predicted effectiveness of the FEIS's action alternative(s) and mitigation plans is supported by science. We note that, according to the DEIS, the effectiveness of offsite compensatory mitigation – which likely would be necessary to avoid significant adverse impacts – is not known or supported in the literature (p. 4-196). Scientific and expert support would be necessary to ensure consistency with various key policy and management considerations and conservation plans.

**Recommendations:**

*1. Consistency with Science, Key Policy, Management Considerations and Conservation Plans for Greater-Sage Grouse*

To ensure that sage-grouse and the sagebrush ecosystem is adequately protected we believe the FEIS should describe how the proposed action would be consistent with the following science; BLM management considerations including aspects of the Jarbidge Resource Management Plan DEIS's 'preferred alternative'; and, the Idaho Sage-Grouse Conservation Plan.

- Science
  - Manville, A.M., II. 2004. Prairie grouse leks and wind turbines: U.S. Fish and Wildlife Service justification for a 5-mile buffer from leks; additional grassland songbird recommendations. Division of Migratory Bird Management, USFWS, Arlington, VA, peer-reviewed briefing paper. 17 pp.
  - Connelly, J. W., M. A. Schroder, A. R. Sands, and C. E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4): 967-985.
- Selected BLM management considerations
  - Manual 6840, the Special Status Species Management Manual for the Bureau of Land Management.
    - “To initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA.”
  - Jarbidge Resource Management Plan DEIS, preferred Alternative IV.<sup>9</sup>
    - “Locate new transmission and phone lines, communications towers, meteorological towers, and wind turbines >5 miles from active sage-grouse leks.”
    - “Restrict wind energy site testing and monitoring and wind energy development from occupied and suitable habitat for special status species, wildlife habitat, and cultural resources where their direct and indirect adverse effects cannot be mitigated.”
    - “Manage vegetation to restore the resiliency of ecosystem structure and function and reduce fragmentation of habitat for sage-grouse and

---

<sup>9</sup> See ES-8, 21, 22-24 at: [http://www.blm.gov/pgdata/etc/medialib/blm/id/plans/jarbidge\\_rmp/draft\\_rmp\\_eis\\_-\\_volume.Par.14001.File.dat/File\\_1.4-Executive\\_Summary.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/id/plans/jarbidge_rmp/draft_rmp_eis_-_volume.Par.14001.File.dat/File_1.4-Executive_Summary.pdf)

- other native species.”
      - “Manage the lands within the Jarbidge Foothills ACEC (Alt IV-A: 136,000 acres) to protect their cultural, fish, wildlife, and botanical values. Objective ACEC-IV-O- 4. Manage the lands within the Jarbidge Foothills ACEC (Alternative IV-B: 66,000 acres) to protect their cultural, wildlife, and botanical values.”
    - July 2006 Idaho Sage-Grouse Conservation Plan.
      - “Avoid fragmenting large, contiguous tracts of sage-grouse habitat. Where practical, focus wind energy development on lands already altered or cultivated and away from areas of intact and healthy native habitats. If this is not practical, select fragmented or degraded habitats for development, rather than relatively intact areas.”
2. *Other Recommendations to ensure adequate protection of sage-grouse and the sagebrush ecosystem.*
- In the FEIS include either an action alternative that minimizes predicted impacts to sage-grouse below a threshold that would have ‘implications beyond the regional analysis area’, or, describe and commit to adequate compensatory mitigation to ensure that this BLM action would not impede the recovery of declining sage-grouse populations. Adequate protection from an action alternative or compensatory mitigation would need to be supported by current science and this support should be described in the FEIS. Research, while beneficial, should not count towards mitigation for project impacts.
  - Discuss, in the FEIS, the availability and adequacy of specific on-site and off-site mitigation opportunities for this project and other reasonably foreseeable projects in the area.
  - The FEIS and ROD should discuss mechanisms to ensure habitat selected for compensatory mitigation will be protected in perpetuity.
  - Adopt a long-term monitoring study and formal adaptive management plan to ensure the successful implementation and effectiveness of mitigation measures.
    - Adequate adaptive management for all phased alternatives would include, but not necessarily be limited to, the monitoring proposed in DEIS section 2.5.5.1: fatality monitoring; sage-grouse lek monitoring; sage-grouse habitat use and movement monitoring; golden eagle and other raptor nest monitoring; and, sensitive bird species point count transects.
    - Adequate adaptive management for the phased alternatives would include a process for decommissioning PHASE I if unacceptable impacts are discovered.

### **Raptors, Migratory and Passerine Birds and Bats**

EPA is aware of and appreciates the coordination of the BLM and the project proponent with the U.S. Fish and Wildlife Service on this project. We recognize the substantial effort in the process and in particular the efforts of the Wildlife Working Group. The U.S. Fish and Wildlife Service’s October 27, 2010 “Idaho Fish and Wildlife Office Recommendations for the China Mountain Wind Project” appear to be particularly relevant for ensuring adequate environmental protection. We concerned that the DEIS,

published in March 2011, does not address several specific recommendations from this important document.

For example, the USFWS's October 27, 2010 recommendations for the China Mountain Wind Project included the following as a necessary part of ensuring that golden eagles are addressed in an Avian and Bat Protection Plan – "Site wind turbines and associated electrical facilities a minimum of 4 miles from golden eagle use areas or documented local area population home ranges and foraging distances." According to the DEIS five active golden eagle nests were documented within 6 miles of the project area during surveys in 2008 and 2010 and golden eagles were the most abundant raptor species observed in migration surveys and the only species observed during all seasons. (p. 3-88). As a result of these and other circumstances of the project's affected environment and the nature of the proposed action, the DEIS concludes that "Collisions with wind turbines could have adverse impacts on locally sensitive raptor populations and regionally declining populations of golden eagles" (DEIS, p. 2-94). Because of this predicted potential impact, we are unsure how the proposed action and design features have been fully responsive to the FWS's recommendations. We are also concerned that there appear to be several other specific recommendations from the FWS's October 2010 document which are not accounted for in the DEIS.

Accounting for the USFWS's specific recommendations for the China Mountain Wind Project appears to be an important part of: (i) ensuring adequate protection for golden eagles, ferruginous hawks, sage-grouse, migratory and passerine birds, and bats and, (ii) meeting BLM IM 2010-0156's purposes and NEPA related directives.<sup>10</sup>

***Recommendations:***

- Describe in the FEIS how the proposed action is appropriately responsive to the U.S. Fish and Wildlife Service's October 27, 2010 "Idaho Fish and Wildlife Office Recommendations for the China Mountain Wind Project".
  - Discuss, in particular, how the proposal has accounted for the U.S. Fish and Wildlife Service's recommendations to,
    - "Site wind turbines and associated electrical facilities a minimum of 4 miles from golden eagle use areas or documented local area population home ranges and foraging distances.", and,
    - "Wind turbines and associated electrical facilities should be placed a minimum of 2 miles from ferruginous hawk home ranges and foraging distances (Wakeley 1978 and McAnnis (1990) as cited in Plumpton and Andersen 1997)".
- Address, in the FEIS, the following recommendations to assure adequate protection of wildlife resources.

---

<sup>10</sup> Coordination with the FWS should occur early and throughout the project planning process regarding golden eagles and their habitat. All projects must document and include as part of the administrative record any and all written correspondence from the FWS indicating whether or not the project, as proposed, is or is not likely to take golden eagles. Correspondence must also address whether or not the FWS considers the development of an APP an option for the project as proposed, or if an alternative project proposal should be considered. This coordination must be completed as early in the process as possible and incorporated into the NEPA document for the project.

- Identify and discuss the effectiveness of specific measures to reduce impacts to eagles.
- Elaborate on methods that would be used to quantify compliance with a no net loss standard.<sup>11</sup>
- Discuss the applicability of the recently finalized FWS permit regulations (50 CFR Parts 13 and 22) to the proposed project.<sup>12</sup> Elaborate on the process and likelihood of obtaining a permit via these regulations.
- Discuss the applicability of the recent Eagle Conservation Plan Guidelines<sup>13</sup> to the proposed project and, as necessary, describe compensatory mitigation to reduce the effect of permitted mortality to a no-net-loss standard.
- Include a draft of the Avian and Bat Protection Plan in the FEIS and ROD.
- If alternatives cannot be developed that avoid the take of eagles, develop and disclose in the FEIS design features – including compensatory mitigation - consistent with FWS recommendations.

### **Wildlife and Habitat – Additional Considerations**

The FWS recently published a set of guidelines and recommendations<sup>14</sup> on how to avoid and minimize impacts of land-based wind farms on wildlife and habitat (March 2010). Further revisions and clarifications were published in February 2011 in the Draft Voluntary Land-Based Wind Energy Guidelines. The Guidelines provide a consistent methodology for conducting pre-construction risk assessments and post-construction impact assessments to guide siting decisions by developers and agencies. Furthermore, the Guidelines address all elements of a wind energy facility, including the turbine string or array, access roads, ancillary buildings, and the above-and below-ground electrical lines that connect a project to the transmission system.

#### ***Recommendations:***

To help the BLM to relocate, reduce, or eliminate portions of the project footprint that, based on pre-construction monitoring, would likely adversely affect threatened, endangered, or sensitive species or their potential habitat, we are providing the following general recommendations.

- Mitigation and monitoring measures that result from consultation with FWS to protect sensitive biological resources, including the greater sage-grouse and golden eagles, should be included in the FEIS and, ultimately, the ROD.
- Criteria needed to monitor conservation effectiveness should be included for each species or habitat.
- The FEIS should discuss the extent to which the recently released Draft Voluntary Land-Based Wind Energy Guidelines were followed.

---

<sup>11</sup> See Eagle Permits, 50 CFR parts 13 and 22, issued Sept. 11, 2009 at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/Final%20Disturbance%20Rule%209%20Sept%202009.pdf>

<sup>12</sup> See Eagle Permits, 50 CFR parts 13 and 22, issued Sept. 11, 2009 at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/Final%20Disturbance%20Rule%209%20Sept%202009.pdf>

<sup>13</sup> See Draft Eagle Conservation Plan Guidelines, February 2011 at: [http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)

<sup>14</sup> U.S. Fish and Wildlife Service Wind Turbine Guidelines Advisory Committee Recommendations, submitted to the Secretary of the Interior by the U.S. Fish and Wildlife Service, March 4, 2010. See Internet address:

[http://www.fws.gov/habitatconservation/windpower/Wind\\_Turbine\\_Guidelines\\_Advisory\\_Committee\\_Recommendations\\_Secretary.pdf](http://www.fws.gov/habitatconservation/windpower/Wind_Turbine_Guidelines_Advisory_Committee_Recommendations_Secretary.pdf)

- Include, in the FEIS, design practices to be followed as described in the Avian Power Line Interaction Committee document, *Mitigating Bird Collisions with Power Lines: The State of the Art* in 1994.
- Add the 2005 Avian Power Line Interaction Committee guidelines for transmission lines as a design feature.
- Minimize placement of wind turbines near areas of prey concentrations within the proposed project area.
- Consider incorporating a tactical shut down requirement during critical hours of species activity, as appropriate, to minimize adverse impacts on such species.
- Consider blade feathering/idling (including on-the-spot and seasonal shutdowns), reducing cut-in speeds, and adjusting turbine speeds during strategic intervals to reduce take and to prevent avian and bat mortality
- Implement and use design models that present the least threat to all wildlife for all transmission and distribution lines, as well as associated infrastructure at substations/switchyards.
- Consider the use of a statistical model in post construction surveys to account for difficulty and variation in locating carcasses.

### **Water Supply**

The DEIS concludes, "Since the water source (*for project construction*) would come from an existing water right within the Salmon Falls Subbasin, the water quantity balance within the subbasin would not be appreciably impacted and are not discussed further." (p. 4-73). We are concerned this water quantity balance conclusion is not supported with evidence or discussion.

#### ***Recommendation:***

- In the FEIS, include information substantiating the conclusion that the use of 20 to 40 million gallons of water for project construction would not appreciably impact the water quantity balance in the Salmon Falls Subbasin. Consider, for example, that project activities are not limited to the Salmon Falls Subbasin, and, that environmental impacts of concern from project water use are likely to be more local in nature – as opposed to the water quantity balance of the entire subbasin. This additional information should aim to confirm that an adequate water supply is available and would not result in major adverse environmental impacts.

### **Vegetation**

#### **Noxious Weeds and Invasive Plants**

We agree that the proposed design features for noxious weeds, such as, "All trucks and other vehicles entering the project area will be thoroughly washed clean of dirt, debris, and vegetation", would reduce the risk of spread of noxious weeds. We also appreciate and believe it is appropriate that, "The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way." We do not believe, however, that design features which are limited to the reduction of risk of noxious weed spread would provide full protection of the environment. Limiting the goals of noxious weeds design features to 'reducing risk' does not fully protect the environment because the proposed project would still increase the opportunity for the spread of noxious weeds.

***Recommendation***

- To ensure that project construction, operation, maintenance and decommissioning does not increase the spread of noxious weeds; include in the FEIS a performance-based design feature for noxious weeds and invasive plants that is based on pre-construction plant surveys. Consider a performance-based noxious weeds design feature that would commit the ROW permit holder to ensuring that the current size and extent of noxious weed and invasive plant infestations does not increase.

**Visual Resources**

We understand that, in general, Visual Resource Management (VRM) classes are not intended to be used to exclude or preclude land uses. Yet, we also believe that strong visual contrast is consistent with “high conflict” and should be avoided. Every action alternative, except Alternative D, would require an RMP amendment to reclassify VRM Class II lands. Avoiding the need to reclassify VRM Class II lands would be consistent with a proposal with less or low conflict.

***Recommendation:***

- We believe the environmentally preferable action alternative would avoid the need to reclassify VRM Class II lands.

**Special Designations**

We believe that impacts on the eligibility of a river segment for inclusion in the wild and scenic river system is consistent with “high conflict” and should be avoided.

***Recommendation:***

- We believe the environmentally preferable action alternative would avoid potential impacts to the eligibility of Rocky Canyon Creek for inclusion in the wild and scenic river system.

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\***

**Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.