

Appendix F
Biological Opinion



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
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SEP 05 2012

In Reply Refer To:
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Memorandum

To: Field Manager, Bureau of Land Management, Rawlins Field Office,
Rawlins, Wyoming

From: *For* Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office,
Cheyenne, Wyoming *[Signature]*

Subject: Biological Opinion for the Chokecherry and Sierra Madre Wind Energy Project:
Colorado River Depletions and Platte River Depletions

Thank you for your letter (6840 WYD03) of August 24, 2012, received in our office on August 27, 2012, regarding the proposed Chokecherry and Sierra Madre Wind Energy Project (Project). The Bureau of Land Management requested formal consultation with the U.S. Fish and Wildlife Service (Service) on the Project pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (Act) (50 CFR §402.14).

In accordance with section 7 of Act, and the Interagency Cooperation Regulations (50 CFR 402), this transmits the Service's final biological opinion for downstream impacts from the Project to the endangered bonytail chub (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), humpback chub (*Gila cypha*), razorback sucker (*Xyrauchen texanus*), and whooping crane (*Grus americana*), including their critical habitat, and the endangered least tern (*Sternula [Sterna] antillarum*), pallid sturgeon (*Scaphirhynchus albus*), and Western prairie fringed orchid (*Platanthera praeclara*), and the threatened piping plover (*Charadrius melodius*).

The black-footed ferret (*Mustela nigripes*) was also analyzed within the biological assessment (BA). We concur that this Project may affect but is not likely to adversely affect this species based on the information included in the final BA.

The Project involves the construction, operation and eventual decommission of a 2,000 to 3,000 megawatt wind energy facility consisting of up to 1,000 turbines. The Project is located south of Sinclair, Wyoming in Carbon County, Wyoming. The action includes the consumptive use of up to 600 acre-feet of water during the 5-year construction period of the wind facility, but no more than 200 acre-feet will be used in any given year. The Project proponent may withdraw water from either the Colorado River or Platte River Basins. Depletions from the Colorado River Basin will not exceed 1.99 acre-feet annually during the 5-year construction period. Depletions from the Platte River will not exceed 200 acre-feet within a given year during the five-year construction period.

During the anticipated 30-year life of the Project (BLM 2012), average annual depletions associated with construction of the wind facility will not exceed 0.33 acre-feet per year in the Colorado River Basin or 20 acre-feet per year in the Platte River Basin.

During operation of the wind facility, a minimal amount of water will be needed for potable and sanitary services at the operations and maintenance buildings, as well as limited industrial uses including dust suppression and equipment washing. The water use associated with the operation of the wind facility will come from a water and sewer connection made to the Town of Sinclair water system (BLM 2012, p. 4.13-10); therefore, the water use associated with operation of the wind facility is not included in this consultation.

Colorado River Basin water will be extracted from East Grove Creek #1701, which is located in Township 18 North, Range 88 West, Section 17 SE1/4 SW1/4. Platte River Basin water will be extracted from Savage No 2 Ditch (T20N, R84W, Section 19 SW1/4 SW1/4), Savage No 1 Ditch (T20N, R84W, Section 31 SE1/4 NW1/4), Kindt Reservoir (T19N, R86W, Section 28 SE1/4 SW1/4) and Sage Creek Reservoir (T18N, R86W, Section 2 SE1/4, NE1/4). The BA describes the potential effects of the Project on federally listed species and designated critical habitat. The Bureau of Land Management determined that Project-related water depletions to the Colorado River system are "likely to adversely affect" Colorado River fish species and that Project-related water depletions to the Platte River system are "likely to adversely affect" Platte River species.

Colorado River Depletions

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) was initiated on January 22, 1988. The Recovery Program was intended to be the reasonable and prudent alternative to avoid jeopardy to the endangered fish by depletions from the Upper Colorado River.

In order to further define and clarify the process in the Recovery Program, a section 7 agreement was implemented on October 15, 1993, by the Recovery Program participants. Incorporated into this agreement is a Recovery Implementation Program Recovery Action Plan (Plan), which identifies actions currently believed to be required to recover the endangered fish in the most expeditious manner in the Upper Colorado River Basin.

A part of the Recovery Program was the requirement that if a project was going to result in a depletion, a depletion fee would be paid to help support the Recovery Program. On July 5, 1994,

the Service issued a biological opinion determining that the fee for depletions of 100 acre-feet or less would no longer be required. This was based on the premise that the Recovery Program has made sufficient progress to be considered the reasonable and prudent alternative avoiding the likelihood of jeopardy to the endangered fishes and avoiding destruction or adverse modification of their critical habitat by depletions of 100 acre-feet or less. Therefore, **the depletion fee for this Project is waived.**

We concur that the proposed project may affect and is likely to adversely affect the four federally endangered fishes of the Upper Colorado River Basin and their designated critical habitat due solely to the associated 0.33 acre-feet average annual water depletion over the 30-year life of the Project. However, we conclude that the Recovery Program adequately addresses effects to the species. No additional conservation measures are needed to reduce impacts from the proposed action.

Permits or other documents authorizing specific projects, which result in depletions, should state that the Bureau of Land Management retains discretionary authority over each project for the purpose of endangered species consultation. If the Recovery Program is unable to implement the Plan in a timely manner, reinitiation of section 7 consultation may be required so that a new reasonable and prudent alternative can be developed by the Service.

Platte River Depletions

In accordance with the streamlined section 7 consultation process under the Platte River Recovery Implementation Program (PRRIP), the completion of a Platte River Recovery Agreement (Agreement) with the State of Wyoming may be necessary for this Project prior to preparing a biological opinion. The BA included a letter dated April 27, 2012, from the Wyoming State Engineer's Office, indicating the Project is an existing depletion and the Project does not require an Agreement to be covered under the PRRIP. Therefore, we are able to proceed with the review of the BA and complete this portion of the biological opinion associated with Platte River depletions.

I. Background

On June 16, 2006, the Service issued a programmatic biological opinion (PBO) for the PRRIP and water-related activities¹ affecting flow volume and timing in the central and lower reaches of the Platte River in Nebraska. The action area for the PBO included the Platte River basin upstream of the confluence with the Loup River in Nebraska and the mainstem of the Platte River downstream of the Loup River confluence. The Federal action addressed by the PBO included the following:

¹ The term "water-related activities" means activities and aspects of activities that (1) occur in the Platte River basin upstream of the confluence of the Loup River with the Platte River; and (2) may affect Platte River flow quantity or timing, including, but not limited to, water diversion, storage and use activities, and land use activities. Changes in temperature and sediment transport will be considered impacts of a "water related activity" to the extent that such changes are caused by activities affecting flow quantity or timing. Impacts of "water related activities" do not include those components of land use activities or discharges of pollutants that do not affect flow quantity or timing.

- 1) Funding and implementation of the PRRIP for 13 years, the anticipated first stage of the PRRIP; and
- 2) Continued operation of existing and certain new water-related activities² including, but not limited to, Reclamation and Service projects that are (or may become) dependent on the PRRIP for compliance with the Act during the first 13-year stage of the PRRIP for their effects on the target species³, whooping crane critical habitat, and other federally listed species⁴ that rely on central and lower Platte River habitats.

The PBO established a two-tiered consultation process for future Federal actions on existing and new water-related activities subject to section 7(a)(2) of the Act, with issuance of the PBO being Tier 1 and all subsequent site-specific project analyses constituting Tier 2 consultations covered by the PBO. Under this tiered consultation process, the Service will produce tiered biological opinions when it is determined that future Federal actions are “likely to adversely affect” federally listed species and/or designated critical habitat in the PRRIP action area and the project is covered by the PBO. If necessary, the biological opinions will also consider potential effects to other listed species and critical habitat affected by the Federal action that were not within the scope of the Tier 1 PBO (e.g., direct or indirect effects to listed species occurring outside of the PRRIP action area).

Although the water depletive effects of this Federal action to central and lower Platte River species have been addressed in the PBO, when “no effect”, or “may affect, but is not likely to adversely affect” determinations are made on a site-specific basis for the target species in Nebraska, the Service will review these determinations and provide written concurrence where appropriate. Upon receipt of written concurrence, section 7(a)(2) consultation will be considered completed for those Federal actions.

Water-related activities requiring Federal approval will be reviewed by the Service to determine if (1) those activities comply with the definition of existing water-related activities and/or (2) proposed new water-related activities are covered by the applicable State or the Federal depletions plan. The Service has determined that the Project meets the above criteria and, therefore, this Tier 2 biological opinion regarding the effects of the Project on the target species, whooping crane critical habitat, or western prairie fringed orchid in the central and lower Platte River can tier from the PBO.

² “Existing water related activities” include surface water or hydrologically connected groundwater activities implemented on or before July 1, 1997. “New water-related activities” include new surface water or hydrologically connected groundwater activities including both new projects and expansion of existing projects, both those subject to and not subject to section 7(a)(2) of the ESA, which may affect the quantity or timing of water reaching the associated habitats and which are implemented after July 1, 1997.

³ The “target species” are the endangered whooping crane (*Grus americana*), the endangered interior least tern (*Sternula antillarum*), the endangered pallid sturgeon (*Scaphirynchus albus*), and the threatened northern Great Plains population of the piping plover (*Charadrius melodus*).

⁴ Other listed species present in the central and lower Platte River include the western prairie fringed orchid (*Platanthera praeclara*), the American burying beetle (*Nicrophorus americanus*), and the Eskimo curlew (*Numenius borealis*). The bald eagle (*Haliaeetus leucocephalus*) was listed as threatened when the PBO was written.

II. Consultation History

Table II-1 of the PBO (pages 21-23) contains a list of species and critical habitat in the action area, their status, and the Service's determination of the effects of the Federal action analyzed in the PBO.

The Service determined in the Tier 1 PBO that the Federal action, including the continued operation of existing and certain new water-related activities, may adversely affect, but would not likely jeopardize the continued existence of the federally endangered interior population of the least tern, whooping crane, and pallid sturgeon, or the federally threatened northern Great Plains population of the piping plover, western prairie fringed orchid, and bald eagle in the central and lower Platte River. Furthermore, the Service determined that the Federal action, including the continued operation of existing and certain new water-related activities, was not likely to destroy or adversely modify designated critical habitat for the whooping crane.

The Service also determined that the PBO Federal action would have no effect to the endangered Eskimo curlew. There has not been a confirmed sighting since 1926 and this species is believed to be extirpated in Nebraska. Lastly, the Service determined that the PBO Federal action, including the continued operation of existing and certain new water-related activities, was not likely to adversely affect the endangered American burying beetle.

The effects of the continued operation of existing and certain new water-related activities on the remaining species and critical habitats listed in Table II-1 of the PBO were beyond the scope of the PBO and were not considered.

The Service has reviewed the information contained in the Biological Assessment submitted by your office on August 24, 2012 as well as the information received from the Wyoming State Engineer's Office on April 27, 2012.

We concur with your determinations of "likely to adversely affect" for the endangered whooping crane, interior least tern, and pallid sturgeon, and the threatened northern Great Plains population of the piping plover, and the western prairie fringed orchid in the central and lower Platte River. We also concur with your determination of "likely to adversely affect" for designated whooping crane critical habitat.

III. Scope of the Tier 2 Biological Opinion

The Project is a component of "the continued operation of existing and certain new water-related activities" needing a Federal action evaluated in the Tier 1 PBO. Flow-related effects of the Federal action are consistent with the scope and the determination of effects in the PBO. Because the applicants have elected to participate in the PRRIP, compliance with the Act for flow-related effects to federally listed endangered and threatened species and designated critical habitat from the Project is provided to the extent described in the Tier 1 PBO.

This biological opinion applies to the Project effects to listed endangered and threatened species and designated critical habitat as described in the PBO for the first 13 years of the PRRIP (*i.e.*, the anticipated duration of the first PRRIP increment).

IV. Description of the Federal Action

The Project is expected to occur south of Sinclair, Wyoming. The applicant has stated that they will require approximately 600 acre-feet of water during construction of the wind facility. The water sources identified are Savage No 2 Ditch (T20N, R84W, Section 19 SW1/4 SW1/4), Savage No 1 Ditch (T20N, R84W, Section 31 SE1/4 NW1/4), Kindt Reservoir (T19N, R86W, Section 28 SE1/4 SW1/4) and Sage Creek Reservoir (T18N, R86W, Section 2 SE1/4, NE1/4).

V. Status of the Species/Critical Habitat

Species descriptions, life histories, population dynamics, status and distributions, are fully described in the PBO on pages 76-156 for the whooping crane, interior least tern, piping plover, pallid sturgeon, and western prairie fringed orchid, as well as whooping crane critical habitat and are hereby incorporated by reference. On August 8, 2007, the bald eagle was removed from the Federal endangered species list.

VI. Environmental Baseline

The Environmental Baseline sections for the Platte River and for the whooping crane, interior least tern, piping plover, pallid sturgeon, and western prairie fringed orchid, as well as whooping crane critical habitat are described on pages 157 to 219 of the Tier 1 PBO, and are hereby incorporated by reference. Since issuance of the Tier 1 PBO, there have been no substantial changes in the status of the target species or designated critical habitat.

VII. Effects of the Action

Based on analysis of the information provided in your Biological Assessment for the Project, the Service and the Wyoming State Engineer's Office concluded that the proposed Federal action will result in an existing depletion to the Platte River system above the Loup River confluence. These depletions are associated with the Project.

As an existing water-related activity, we have determined that the flow-related adverse effects of the Project are consistent with those evaluated in the Tier 1 PBO for the whooping crane, interior least tern, piping plover, pallid sturgeon, western prairie fringed orchid, and whooping crane critical habitat.

VIII. Cumulative Effects

Cumulative effects include the effects of future State, local, or private (non-Federal) actions that are reasonably certain to occur in the action area considered in this biological opinion. A non-Federal action is "reasonably certain" to occur if the action requires the approval of a State or local resource or land-control agency, such agencies have approved the action, and the project

is ready to proceed. Other indicators which may also support such a “reasonably certain to occur” determination include whether: (a) the project sponsors provide assurance that the action will proceed; (b) contracting has been initiated; (c) State or local planning agencies indicate that grant of authority for the action is imminent; or (d) where historic data have demonstrated an established trend, that trend may be forecast into the future as reasonably certain to occur. These indicators must show more than the possibility that the non-Federal project will occur; they must demonstrate with reasonable certainty that it will occur. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA and would be consulted on at a later time.

Cumulative effects are described on pages 194 to 300 of the Tier 1 PBO, and are hereby incorporated by reference. There have been no substantial changes in cumulative effects since the issuance of the PBO.

IX. Conclusions

The Service concludes that the Project is consistent with the Tier 1 PBO for effects to listed species and critical habitat addressed in the Tier 1 PBO. After reviewing site-specific information, including: (1) the scope of the Federal action, (2) the environmental baseline, (3) the status of the whooping crane, interior least tern, piping plover, pallid sturgeon, and western prairie fringed orchid in the central and lower Platte River and their potential occurrence within the Project area, as well as whooping crane critical habitat, (4) the effects of the Project, and (5) any cumulative effects, it is the Service’s biological opinion that the Project, as described, is not likely to jeopardize the continued existence of the federally endangered whooping crane, interior least tern, and pallid sturgeon, or the federally threatened northern Great Plains population of the piping plover, or western prairie fringed orchid, in the central and lower Platte River. The Federal action is also not likely to destroy or adversely modify designated critical habitat for the whooping crane.

X. Incidental Take Statement

Section 9 of the ESA and federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct, and applies to individual members of a listed species. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

Sections 7(b)(4) and 7(o)(2) of the Act do not apply to the incidental take of federally listed plant species (e.g., Colorado butterfly plant, Ute ladies' tresses orchid, and western prairie fringed orchid). However, limited protection of listed plants from take is provided to the extent that the Act prohibits the removal and reduction to possession of federally listed endangered plants or the malicious damage of such plants on non-federal areas in violation of State law or regulation or in the course of any violation of a State criminal trespass law. Such laws vary from state to state.

The Department of the Interior, acting through the Service and Bureau of Reclamation, is implementing all pertinent Reasonable and Prudent Measures and implementing Terms and Conditions stipulated in the Tier 1 PBO Incidental Take Statement (pages 309-326 of the PBO), which will minimize the anticipated incidental take of federally listed species. In instances where the amount or extent of incidental take outlined in the Tier 1 PBO is exceeded or the amount or extent of incidental take for other listed species is exceeded, the specific PRRIP action(s) causing such take shall be subject to reinitiation expeditiously.

XI. Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of an action on listed species or critical habitat, to help implement recovery plans, or to develop information. Conservation recommendations are provided in the PBO (pages 328-329) and are hereby incorporated by reference.

XII. Closing Statement

Any person or entity undertaking a water-related activity that receives Federal funding or a Federal authorization and which relies on the PRRIP as a component of its compliance with the Act in section 7 consultation must agree: (1) to the inclusion in its Federal funding or authorization documents of reopening authority, including reopening authority to accommodate reinitiation upon the circumstances described in section IV.E. of the Program document, which addresses Program termination; and (2) to request appropriate amendments from the Federal action agency as needed to conform its funding or authorization to any PRRIP adjustments negotiated among the three states and the Department of the Interior, including specifically new requirements, if any, at the end of the first PRRIP increment and any subsequent PRRIP increments. The Service believes that the PRRIP should not provide compliance with the Act for any water-related activity for which the funding or authorization document does not conform to any PRRIP adjustments (Program Document, section VI).

Reinitiation of consultation over the Project will not be required at the end of the first 13 years of the PRRIP provided a subsequent Program increment or first increment Program extension is adopted pursuant to appropriate the Act and National Environmental Policy Act (NEPA) compliance procedures, and, for a subsequent increment, the effects of the Project are covered under a Tier 1 PBO for that increment addressing continued operation of previously consulted-on water-related activities. Requests for reinitiation or questions regarding reinitiation should be directed to the Service's Wyoming Field Office at the letterhead address above.

This concludes formal consultation on the actions outlined in the August 24, 2012, request for the Project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the specific action(s) causing such take shall be subject to reinitiation expeditiously.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have further questions regarding this biological opinion or your responsibilities under the Act, please contact Nathan Darnall of my staff at the letterhead address or phone (307) 772-2374, extension 246.

cc: BLM, Project Manager, Cheyenne, WY (Pamela Murdock) (e-mail)
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WY State Engineer's Office, N Platte River Coordinator, Cheyenne, WY (M. Hoobler)

Literature Cited

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