

Appendix D

U.S. Fish and Wildlife Service Correspondence



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001

AUG 03 2004



In Reply Refer To:
ES-61411/W.15/WY8654

Memorandum

To: Pricilla Mecham, Field Manager, Bureau of Land Management, Pinedale Field Office, Pinedale, Wyoming

From: Brian T. Kelly, Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office, Cheyenne, Wyoming

Subject: Scoping Comments for Questar's Proposed Year-Round Drilling in the Pinedale Anticline Natural Gas Project Area

This is regarding your scoping notice, received in this office on July 16, 2004, for Questar's proposed year-round drilling program for their existing leases located in the Pinedale Anticline Project Area (PAPA), Sublette County, Wyoming. Currently there are 52 existing well pads with 76 producing wells pursuant to the July 2000 Record of Decision for the PAPA. According to the notice, Questar has determined that there are significant energy reserves in the PAPA and full field development of 225 to 430 wells on 61 well pads is necessary. Each pad will have 8 to 16 individual wells with a maximum disturbance of 15 acres per pad. The scoping notice indicates that the proposal is for limited year-round drilling and winter drilling will be limited to 3 well pads; however, summer drilling limits, if any, were not indicated. The proposal also includes a 110-mile pipeline and gas gathering system that will reduce tanker truck traffic within the PAPA.

The U.S. Fish and Wildlife Service (Service) is providing the following comments on (1) threatened, endangered and candidate species, (2) migratory birds, (3) wetlands and riparian areas, and (4) sensitive species. The Service provides recommendations for protective measures for threatened and endangered species in accordance with the Endangered Species Act of 1973, as amended (Act), 16 U.S.C. 1531 *et seq.* Protective measures for migratory birds are provided in accordance with the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703 and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668. Wetlands are afforded protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act, 48 Stat. 401, as amended, 16 U.S.C. 661 *et seq.*

The Bureau of Land Management (Bureau), and their non-Federal representatives should work with the Service in developing surveys, impact minimization measures, and conservation measures for all Federally listed species. If this proposal may affect a listed species, consultation with the Service pursuant to section 7(a)(2) of the Act will be required. Section 7 (a)(1) of the

Act directs Federal agencies to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation and recovery of listed species. Therefore we encourage the Bureau and the project proponent to incorporate measures into the project design for the conservation of listed species.

In accordance with section 7 of the Act, we have determined that the following threatened or endangered species may potentially occur within portions of the project area. We would appreciate receiving information as to the status of each of these species.

SPECIES	STATUS	HABITAT
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Threatened	Found throughout project area
Black-footed ferret (<i>Mustela nigripes</i>)	Endangered	Prairie dog towns throughout project area
Gray wolf (<i>Canis lupus</i>)	Experimental	Greater Yellowstone ecosystem
Ute ladies'-tresses (<i>Spiranthes diluvialis</i>)	Threatened	Seasonally moist soils and wet meadows of drainages below 7000 feet throughout project area.

If the proposed action will lead to water depletions (consumption) in the Colorado River and Platte River systems, impacts to threatened and endangered species inhabiting the downstream reaches of these systems should be included in the evaluation.

Platte River species	Endangered	Downstream riverine habitat of the Platte River in Nebraska
Colorado River fish	Endangered	Downstream riverine habitat of the Yampa, Green and Colorado river systems

Bald eagle: While habitat loss still remains a threat to the bald eagle's full recovery, most experts agree that its recovery to date is encouraging. Bald eagles may live up to 30 years in the wild. Adult eagles establish life-long pair bonds and build huge nests in the tops of large trees near rivers, lakes, marshes, or other wetland areas. Bald eagles may use the same nest in consecutive years. Although bald eagles may range over great distances, they usually return to nest within 100 miles of where they were fledged.

In order to reduce potential adverse effects to the bald eagle, a disturbance-free buffer zone of 1-mile should be maintained around eagle nests and winter roost sites. Activity within 1 mile of an eagle nest or roost may disturb the eagles and result in "take." If a disturbance-free buffer zone of 1-mile is not practicable, then the activity should be conducted outside of February 15 – August 15 to protect nesting birds and November 1 through April 15 to protect roosting birds. The two primary causes of raptor (including bald eagles) mortality are electrocutions and collisions with power lines. If any part of this project will involve construction of new power lines or modification of existing lines, the Service recommends that the project proponent take

strong precautionary measures to protect bald eagles and other raptors by raptor-proofing power lines. Power lines should be built to meet all the requirements of the National Electrical Safety Code and the standards identified in the *Suggested Practices for Raptor Protection on Power Line: The State of the Art, Avian Power Line Interaction Committee* (APLIC 1996), to minimize electrocution potential.

Black-footed ferret: Black-footed ferrets may be affected if prairie dog towns are impacted. In Wyoming, black-footed ferret surveys are no longer recommended in black-tailed prairie dog towns or in white-tailed prairie dog towns except those noted in our enclosed February 2, 2004, letter. We encourage the Bureau to protect all prairie dog towns for their value to the prairie ecosystem and the myriad of species that rely on them. We further encourage you to analyze potentially disturbed prairie dog towns for their value to future black-footed ferret reintroduction.

In Wyoming, if white-tailed prairie dog towns or complexes greater than 200 acres will be disturbed, surveys for ferrets may be recommended in order to determine if the action will result in an adverse effect to the species. Surveys may be recommended even if only a portion of the white-tailed prairie dog town or complex, as identified in our enclosed letter, will be disturbed. According to the *Black-Footed Ferret Survey Guidelines* (USFWS 1989), a prairie dog complex consists of two or more neighboring prairie dog towns less than 7 km (4.3 miles) from each other. If a field check indicates that prairie dog towns may be affected, you should contact this office for guidance on ferret surveys and the protection of prairie dog ecosystems.

Gray wolf: All wolves within Wyoming are now considered part of the nonessential experimental population. Although such wolves remain listed and protected under the Act, flexibility is provided for their management under the provisions of the final rule and special regulations promulgated for the nonessential experimental population on November 22, 1994 (59 FR 60252). Requirements for interagency consultation under section 7 of the Act differ based on the land ownership and/or management responsibility where wolves occur. Management flexibility is provided for managing wolves existing outside of the National Park or National Wildlife Refuge System (e.g., Bureau of Land Management lands). Wolves designated as nonessential experimental in these areas are treated as proposed rather than listed. Two provisions of section 7 apply to Federal actions outside National Parks or National Wildlife Refuges: (1) section 7 (a)(1), which states all Federal agencies shall utilize their authorities to carry out programs for the conservation of listed species; and, (2) section 7 (a)(4), which requires Federal agencies to confer with the Service on actions that are likely to jeopardize the continued existence of the species.

Wolves are dependant on movements of big game populations and may occur in large ungulate migration, wintering, or parturition areas. During project activities wolves may change their use of certain areas based upon changes in big game population numbers and movement of herds. Project planning should consider impacts to big game populations, including wintering grounds and migration corridors.

Ute ladies'-tresses: Ute ladies'-tresses (*Spiranthes diluvialis*) is a perennial, terrestrial orchid, 8 to 20 inches tall, with white or ivory flowers clustered into a spike arrangement at the top of the stem. *Spiranthes* typically blooms from late July through August; however, depending on location and climatic conditions, it may bloom in early July or still be in flower as late as early October. *Spiranthes* is endemic to moist soils near wetland meadows, springs, lakes, and perennial streams where it colonizes early successional point bars or sandy edges. The elevation

range of known occurrences is 4,200 to 7,000 feet in alluvial substrates along riparian edges, gravel bars, old oxbows, and moist to wet meadows. Soils where *Spiranthes* have been found typically range from fine silt/sand, to gravels and cobbles, as well as to highly organic and peaty soil types. *Spiranthes* is not found in heavy or tight clay soils or in extremely saline or alkaline soils. *Spiranthes* seems intolerant of shade and small scattered groups are found primarily in areas where vegetation is relatively open. Surveys should be conducted by knowledgeable botanists trained in conducting rare plant surveys. *Spiranthes* is difficult to survey for primarily due to its unpredictability of emergence of flowering parts and subsequent rapid desiccation of specimens. The Service does not maintain a list of "qualified" surveyors but can refer those wishing to become familiar with the orchid to experts who can provide training or services.

Platte River water depletions: Water depletions to the Platte River system may affect the federally listed whooping crane (*Grus americana*), interior least tern (*Sterna antillarum*), piping plover (*Charadrius melodus*), pallid sturgeon (*Scaphirhynchus albus*), bald eagle (*Haliaeetus leucocephalus*), Eskimo curlew (*Numenius borealis*), and western prairie fringed orchid (*Platanthera praeclara*). In addition, depletions may contribute to the destruction or adverse modification of designated critical habitat for the whooping crane, and proposed critical habitat for the northern Great Plains breeding population of the piping plover. Depletions include evaporative losses and/or consumptive use, often characterized as diversions from the Platte River or its tributaries less return flows. Project elements that could be associated with depletions to the Platte River system include, but are not limited to, ponds (detention/irrigation storage/stock watering), created or enhanced wetlands, hydrostatic testing of pipelines, dust abatement, and water treatment facilities. Any actions that may result in a water depletion to the Platte River system should be identified. The document should also include an estimate of the amount and timing of average annual water depletion (both existing and new depletions), describe methods of arriving at such estimates, describe location of where depletion occurs as specifically as possible, if and when it will be returned to the system and what the depletion is being used for. Note that if the project has peculiarities or oddities, the Service may have more specific questions regarding these particular water depletions.

Colorado River water depletions: Formal consultation is required for projects that may lead to depletions of water to the Colorado River system. Federal agency actions resulting in water depletions to the Colorado River system may affect the endangered Bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), Humpback chub (*Gila cypha*), and Razorback sucker (*Xyrauchen texanus*) downstream in the Green and Colorado river systems. In general, depletions include evaporative losses and/or consumptive use of surface or groundwater within the affected basin, often characterized as diversions less return flows. Project elements that could be associated with depletions include, but are not limited to, ponds (detention/recreation/irrigation storage/stock watering), lakes (recreation/irrigation storage/power generation), reservoirs (recreation/irrigation storage/municipal storage/power generation), hydrostatic testing of pipelines, wells, dust abatement, diversion structures, and water treatment facilities. Any actions that may result in a water depletion should be identified. The document should also include an estimate of the amount and timing of average annual water depletion (both existing and new depletions), describe methods of arriving at such estimates, describe location of where depletion occurs as specifically as possible, if and when it will be returned to the system and what the depletion is being used for. Note that if the project has peculiarities or oddities, the Service may have more specific questions regarding these particular water depletions.

Candidate Species

The yellow-billed cuckoo (*Coccyzus americanus*), is candidate species for listing as threatened or endangered and may occur in portions of the project area. Many Federal agencies have policies to protect candidate species from further population declines. We would appreciate receiving information on the status of the yellow-billed cuckoo in or near the project area. In addition, if the cuckoo is listed prior to completion of the project, unnecessary delays may be avoided by considering project impacts to candidates now.

Migratory Birds

Please recognize that consultation on listed species may not remove your obligation to protect the many species of migratory birds, including eagles and other raptors protected under the MBTA BGEPA. The MBTA, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs except as permitted by regulations and does not require intent to be proven.

Section 703 of the MBTA states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird..." The BGEPA, prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

In order to promote the conservation of migratory bird populations and their habitats, the Service recommends the Bureau implement those strategies outlined within the Memorandum of Understanding directed by the President of the U.S. under the Executive Order 13186, where possible.

Sensitive Species

Federal agencies are also encouraged to consider sensitive species or species at risk in project review. Your consideration of these species is important in preventing their inclusion on the Endangered Species List. The Wyoming Natural Diversity Database maintains the most current information on sensitive plants in Wyoming. The database must charge for data retrieval to financially support the database and staff. The staff can be contacted at (307) 766-5026.

Pygmy Rabbit

The Service has received a petition (April 21, 2003), to list the pygmy rabbit (*Brachylagus idahoensis*) under the Act. This smallest of the Leporidae family occurs in portions of many western states including southwestern Wyoming where they occur in a few isolated populations in Lincoln, Uinta, Sweetwater, Sublette and Fremont counties. Pygmy rabbits are sage-brush obligate species, primarily found in dense western big sagebrush (*Artemisia tridentata*) communities preferably where at least two other species of sagebrush and forbs occur as well. Conversion of sagebrush grasslands, habitat fragmentation and overgrazing are considered potential threats to pygmy rabbits. Project planning measures that retain large tracts of suitable habitat and corridors to adjacent habitat will aid in the conservation of this species.

Sage-Grouse

The Service has received several petitions to list the greater sage-grouse (*Centrocercus urophasianus*) under the Act. The causes for the greater sage-grouse rangewide decline are not completely understood and may be influenced by local conditions. However, habitat loss and degradation, as well as loss of population connectivity are important factors (Braun 1998, Wisdom et al. 2002). Greater sage-grouse are dependent on sagebrush habitats year-round.

Therefore, any activities that result in loss or degradation of sagebrush habitats that are important to this species should be closely evaluated for their impacts to sage grouse. If important breeding habitat (leks, nesting or brood rearing habitat) is present in the project area, the Service recommends no project-related disturbance between March 1 and June 30, annually. Minimization of disturbance during lek activity, nesting, and brood rearing is critical to sage grouse survival.

We recommend you contact the Wyoming Game and Fish Department to identify important greater sage-grouse habitats within the project area, and appropriate mitigative measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these surveys should be used in project planning, to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats.

Information suggests that greater sage-grouse populations are negatively affected by construction activities, especially those that degrade important sagebrush habitat, even when mitigative measures are implemented (Braun 1998, Lyon 2000). Greater sage-grouse populations can repopulate areas developed for resource extraction after habitat reclamation for the species (Braun 1987). However, there is no evidence that populations attain their previous levels and reestablishment of sage grouse in a reclaimed area may take 20-30 years, or longer (Braun 1998). Therefore, this project should be carefully evaluated for long-term and cumulative effects on the greater sage-grouse, since reclamation may not restore populations to pre-activity levels. The Bureau should ensure this activity does not exacerbate greater sage-grouse declines on either a local or range-wide level. Unless site-specific information is available, greater sage-grouse habitat should be managed following the guidelines by Connelly *et al.* 2000.

Wetlands/Riparian Areas

Wetlands perform significant ecological functions which include: (1) providing habitat for numerous aquatic and terrestrial wildlife species, (2) aiding in the dispersal of floods, (3) improving water quality through retention and assimilation of pollutants from storm water runoff, and (4) recharging the aquifer. Wetlands also possess aesthetic and recreational values. The Service recommends measures be taken to avoid and minimize wetland losses in accordance with Section 404 of the Clean Water Act and Executive Order 11988 (floodplain management) as well as the goal of "no net loss of wetlands." If wetlands may be destroyed or degraded by proposed actions, those wetlands should be inventoried and fully described in terms of their functions and values. Acreage of wetlands, by type, should be disclosed and specific actions should be outlined to avoid, minimize, and compensate for all unavoidable wetland impacts.

Riparian or streamside areas are a valuable natural resource and impacts to these areas should be avoided whenever possible. Riparian areas are the single most productive wildlife habitat type in North America. They support a greater variety of wildlife than any other habitat. Riparian vegetation plays an important role in protecting streams, reducing erosion and sedimentation as well as improving water quality, maintaining the water table, controlling flooding, and providing shade and cover. In view of their importance and relative scarcity, impacts to riparian areas should be avoided. Any potential, unavoidable encroachment into these areas should be further avoided and minimized. Unavoidable impacts to streams should be assessed in terms of their functions and values, linear feet and vegetation type lost, potential effects on wildlife, and

potential effects on bank stability and water quality. Measures to compensate for unavoidable losses of riparian areas should be developed and implemented as part of the project.

Plans for mitigating unavoidable impacts to wetland and riparian areas should include mitigation goals and objectives, methodologies, time frames for implementation, success criteria, and monitoring to determine if the mitigation is successful. The mitigation plan should also include a contingency plan to be implemented should the mitigation not be successful. In addition, wetland restoration, creation, enhancement, and/or preservation does not compensate for loss of stream habitat; streams and wetlands have different functions and provide different habitat values for fish and wildlife resources.

Best Management Practices (BMPs) should be implemented within the project area wherever possible. BMPs include, but are not limited to, the following: installation of sediment and erosion control devices (e.g., silt fences, hay bales, temporary sediment control basins, erosion control matting); adequate and continued maintenance of sediment and erosion control devices to insure their effectiveness; minimization of the construction disturbance area to further avoid streams, wetlands, and riparian areas; location of equipment staging, fueling, and maintenance areas outside of wetlands, streams, riparian areas, and floodplains; and re-seeding and re-planting of riparian vegetation native to Wyoming in order to stabilize shorelines and streambanks.

Recommendations

Natural gas development poses a serious threat to wildlife habitat. Habitat fragmentation, disruption of seasonal migration routes, disruption of breeding activity, and increased predation may be caused by well pads, access roads, pipelines, power lines, transmission stations, compressors and increased traffic that accompany natural gas development. Therefore, the Service encourages the Bureau to consider the following recommendations during the preparation of the environmental assessment for the proposed project. For all natural gas development, we highly encourage the Bureau to insist that project proponents implement directional drilling practices wherever it is possible to minimize threats to wildlife. We believe wildlife conservation should be an integral part of the decision for this proposal.

The Service supports the proposed directional drilling proposal based on (1) the commitment to site well pads and facilities as recommended by the Bureau and the Wyoming Game and Fish Department to reduce impact to big game species and sage grouse, (2) the proposed off-site habitat enhancement projects, (3) the reduction in year-round tanker truck traffic, roads, production facilities, and human presence, and (4) the overall reduced life of the project.

The Service reminds the Bureau that habitat enhancement projects should consider potential effects (beneficial or negative) to listed and proposed species, migratory birds, and petitioned species as indicated above. The Service further encourages continued research regarding the impacts of natural gas development to wildlife within the PAPA and we would appreciate receiving data regarding listed and sensitive species.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If the scope of the project is changed, or the project is modified, in a manner that you determine may affect a listed species, this office should be contacted to discuss consultation requirements pursuant to section 7(a)(2) of the Act. If you have further questions regarding our comments or your responsibilities under the Act, please contact Kathleen Erwin of my staff at the letterhead address or phone (307)772-2374, extension 28.

References

- Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1996. Edison Electric Institute and the Raptor Research Foundation. Washington, D.C.
- Braun, C.E. 1998. Sage grouse declines in western North America: What are the problems? Proceedings of the Western Association of Fish and Wildlife Agencies 78:139-156
- _____. 1987. Current issues in sage grouse management. Proc. West. Assoc. Fish and Wildlife Agencies 67:134-144
- Connelly J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4): 967 - 985.
- Lyon, A.G. 2000. The potential effects of natural gas development on sage grouse (*Centrocercus urophasianus*) near Pinedale, Wyoming. Thesis, University of Wyoming, Laramie, USA.
- Wisdom, M.J., B.C. Wales, M.M. Rowland, M.G. Raphael, R.S. Holthausen, T.D. Rich, and V.A. Saab. 2002. Performance of Greater Sage-Grouse models for conservation assessment in the Interior Columbia Basin, USA. Conservation Biology 16: 1232-1242.

Enclosures (1)

- cc: FWS, Region 6, Federal Activities Coordinator, Denver (B. Dach)
WGFD, Non-Game Coordinator, Lander (B. Oakleaf)
WGFD, Statewide Habitat Protection Coordinator, Cheyenne (V. Stelter)