



January 18, 2005

Linda S.C. Rundell
State Director
Bureau of Land Management
1474 Rodeo Road
Santa Fe, NM 87504
(505) 438-7502

HAND DELIVERED

**RE: PROTEST OF BLM'S NOTICE OF COMPETITIVE OIL & GAS
LEASE SALE FOR SELECTED PARCELS IN NEW MEXICO &
OKLAHOMA**

Dear Director Rundell:

Please accept and fully consider this protest filed on behalf of Forest Guardians, Chihuahuan Desert Conservation Alliance, New Mexico Wildlife Federation, New Mexico Wilderness Alliance, and Donna House regarding the proposed lease parcels listed below, in accordance with 43 CFR §§ 4.450-2; 3120.1-3.

Our review of the Bureau of Land Management's ("BLM") list of parcels being offered for oil and gas leasing on January 19, 2005 indicates that many of the parcels possess important biodiversity, ecological, and cultural values which will be compromised by oil and gas leasing. We further note that in offering these parcels for lease, the BLM has failed to adequately comply with the National Environmental Policy Act ("NEPA") requirement to provide an up-to-date, site-specific analysis of the proposed action that takes into account the special qualities of the area and the cumulative impacts of oil and gas development in the region. We are also concerned that the discretionary stipulations attached to the lease offerings fail to adequately protect the rich and unique resources of this special area. Finally, the BLM is in violation of the National Historic Preservation Act ("NHPA") given its lack of compliance with Sections 106 and 110 of that law, in addition to its failure to adequately consult with the tribes prior to leasing.

In accordance with 43 C.F.R. §§ 4.450-2; 3120.1-3, we protest the January 19, 2005 offering in Santa Fe, NM of the following 47 parcels for competitive sale:

New Mexico (43 parcels)
200501-005, 006, 008, 010-021, 026,
028-033, 036, 038, 040-058

Oklahoma (4 parcels)
200501-059, 060, 061, 062

We respectfully request that BLM remove these parcels from the lease sale until these issues have been resolved. It is our position that substantial controversy and significant circumstances exist warranting a thorough analysis prior to leasing this area for industrial use.

The grounds of our Protest are as follows:

I. The Party

Forest Guardians is a non-profit corporation with approximately 1,400 members throughout the United States, including New Mexico and adjacent states. Forest Guardians' mission is to preserve and restore the wildlands and wildlife in the American Southwest through fundamental reform of public policies and practices. We have a special interest in prairie and desert grassland ecosystems in the southern Great Plains and southwest. Our conservation efforts prioritize the recovery of focal species, such as the black-tailed prairie dog (*Cynomys ludovicianus*), Gunnison's prairie dog (*Cynomys gunnisoni*), lesser prairie-chicken (*Tympanuchus pallidicinctus*) and northern aplomado falcon (*Falco femoralis septentrionalis*), whose protection can safeguard whole ecosystems. We also have a strong interest in ensuring that potential wilderness areas be protected from degradation.

The Chihuahuan Desert Conservation Alliance (CDCA) was originally started in 1986 as the Carlsbad Concerned Citizens for Responsible Land Management and the name was changed to CDCA in 1995. CDCA is involved in a wide variety of activities including outdoor and public education, tree-planting and soil conservations projects, construction of nesting platforms for herons, monitoring of wild populations of birds and other animals, bird-banding activities, and other conservation activities. CDCA also takes a stand and gets involved on a wide variety of environmental and environmental justice issues.

New Mexico Wildlife Federation (NMWF) is a statewide non-profit organization of sportsmen, conservationists and other concerned citizens dedicated to the protection of our environment and the wise use of our natural resources. Founded in 1914, NMWF's mission is to preserve and/or restore New Mexico's wildlife and habitat on a landscape scale. NMWF is an affiliate of the National Wildlife Federation (NWF), and the combined membership of NWF and NMWF in New Mexico is 6,000 people. As sportsmen, conservationists, birders and recreationists, NMWF members utilize the public lands in Arizona and New Mexico. The protection and restoration of endangered and threatened species is important to NMWF members. NMWF's members are deeply concerned about the degradation of wildlife habitat that has resulted from public lands uses such as oil and gas leasing and drilling.

The New Mexico Wilderness Alliance (NMWA) is a non-profit corporation with over 2,500 members spread across New Mexico and the US. NMWA is dedicated to the protection, restoration, and continued enjoyment of New Mexico's wild lands and

Wilderness areas. Many of our members reside in and around Carlsbad and have a special interest in the preservation of the Guadalupe Mountains as a place to seek seclusion and explore the earth's natural wonders. Their interests would be significantly harmed by oil and gas development in the Guadalupe Mountains, including in and adjacent to citizen's wilderness proposal areas.

Donna House is an enrolled member of the Navajo Nation and an ethnobotanist with an interest in cultural and ecological preservation on parcels 200501-048 through 058.

II. Background

The disputed parcels total approximately 23,818 acres. The oil and gas resources of these parcels are federally owned and managed by the BLM. The surface estate is of mixed ownership, including BLM, Navajo, private, and state lands. The protested parcels are located in New Mexico and western Oklahoma.

The parcels proposed for leasing occur in areas managed pursuant to the Roswell Resource Area Resource Management Plan (1997) ("Roswell RMP"), the Carlsbad Resource Area Resource Management Plan Amendment (1997) ("Carlsbad RMPA"), the Farmington Resource Area Resource Management Plan ("Farmington RMP") (2003), and the Oklahoma Resource Management Plan ("Oklahoma RMP") (1994), and other federal land management plans.

The disputed parcels lack surface stipulations critical for the protection of native species and ecosystems. For the parcels we are protesting, BLM has not adequately assessed the extent, nature of location of such resources, or whether timing, controlled surface use ("CSO") or no surface occupancy ("NSO") stipulations are necessary and appropriate for these parcels and can provide adequate protection should leasing proceed. Moreover, we contend that many of these parcels have such important cultural, biodiversity and other natural values that they should be closed to leasing altogether. Leasing at the present time is inappropriate because these parcels are located in areas known to contain important wildlife and wildlife habitat and cultural values and have not been adequately surveyed or inventoried by BLM prior to leasing (i.e., making an irretrievable commitment of the agency's resources).

Much of the areas in which the disputed parcels are located are already leased for oil and gas, and the BLM has not sufficiently protected wildlife habitat and cultural values therein. For instance, as we demonstrate below, the lesser prairie-chicken has all but disappeared from the Carlsbad Resource Area, despite the importance of the Carlsbad area as historical habitat for this species. The reason for severe population declines of this native grouse in the Carlsbad Resource Area is oil and gas development and livestock grazing.

Despite the documented harms of oil and gas development on the lesser prairie-chicken, the BLM has adopted a policy of waiving stipulations on applications for

permits to drill relating to the lesser prairie-chicken. It seems that even when BLM has explicit stipulations for native species protection, these stipulations are often not applied, to the detriment of native species and the ecosystems they inhabit.

Our analysis indicates that at least 14 of the parcels proposed for oil and gas leasing overlap with potential habitat for the lesser prairie-chicken and lack sufficient protective stipulations:

200501-026 – 640 acres
200501-030 – 280 acres
200501-031 – 320 acres
200501-032 – 160 acres
200501-033 – 160 acres
200501-036 – 40 acres
200501-038 – 160 acres
200501-043 – 1240 acres
200501-044 – 320 acres
200501-045 – 40 acres
200501-047 – 40 acres
200501-059 – 40 acres
200501-061 – 40 acres
200501-062 – 40 acres
Total LPC acreage: 3520 acres

Some 26 parcels proposed for leasing overlap with potential northern aplomado falcon habitat and lack sufficient protective stipulations:

200501-005 – 80 acres
200501-006 – 440 acres
200501-008 – 1200 acres
200501-010 – 40 acres
200501-011 – 1160 acres
200501-012 – 517.55 acres
200501-013 – 330.5 acres
200501-014 – 634.28 acres
200501-015 – 1942.11 acres
200501-016 – 480 acres
200501-017 – 640 acres
200501-018 – 640 acres
200501-019 – 640 acres
200501-020 – 480 acres
200501-021 – 61.98 acres
200501-028 – 79.21 acres
200501-029 – 40 acres
200501-036 – 40 acres
200501-040 – 160 acres

200501-041 – 440.02 acres
200501-042 – 640 acres
200501-043 – 1240 acres
200501-044 – 320 acres
200501-045 – 40 acres
200501-046 – 557.44 acres
200501-047 – 40 acres
Total Aplomado acreage: 12,883.09 acres

In addition, 2 parcels overlap with sand dune lizard habitat (Sceloporus arenicolus) (200501-033 and 038), and 1 parcel is within Arkansas River Shiner (Notropis girardi) critical habitat (parcel 200501-060).

There are also special areas which will be negatively impacted by the leasing of some of the parcels included in this sale. Parcel 200501-006 is adjacent to Rawhide Canyon, which is another roadless area eligible for designation as wilderness. Parcel 200501-048 intersects with the Torrejon Fossil Fauna Area of Critical Environmental Concern (ACEC) (Exhibit B: Torrejon Fossil Fauna Area of Critical Environmental Concern Map). These are all significant issues that must be addressed in a NEPA analysis prior to leasing.

In addition, parcels 200501-048 to 058 have high potential for coal-bed methane development, which has impacts distinct from conventional oil and gas drilling, impacts which must be addressed in a NEPA analysis prior to leasing.

III. Issues

A. Significant Ecological Values Are at Stake

The proposed lease units in question would occur in areas that are valuable habitat for species listed under the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531, *et seq.* and for species that are candidates for listing under the ESA. On BLM lands, oil and gas leasing may also violate the Federal Lands Policy and Management Act (“FLPMA”), 43 U.S.C. §§701 *et seq.*, and BLM policy with regard to endangered species.

B. Proposed Lease Sale Violates the Endangered Species Act.

The ESA directs federal agencies “to conserve endangered and threatened species and to utilize their authorities in furtherance of the purposes [of the ESA]”. 16 U.S.C. §1531(c). Section 7(a) of the Act requires each federal agency to “insure” that an action by that agency “does not jeopardize the existence of any endangered species or threatened species or result in the destruction or adverse modification” of critical habitat of such species. *Id.* at 1536(a)(2). In order to facilitate compliance with this requirement, the Act imposes on any agency whose actions may affect an endangered or threatened species the duty of “consultation” with the U.S. Fish and Wildlife Service (“USFWS”). *Id.* at 1536(c)(1); 50 C.F.R. §402.04. Section 7(c)(1) provides:

To facilitate compliance with the requirements of subsection (a)(2) of this section, each Federal agency shall ... request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action.

In fulfilling the consultation requirement of Section 7(c), the agency is required to “use the best scientific ... data available”. *Id.* §1536(c). In addition, Section 7(d) forbids “irreversible or irretrievable commitment of resources” during the consultation process. *Id.* §1536(d).

Failure of an agency to prepare a biological assessment for a proposal in an area in which it has been determined that an endangered species may be present violates the ESA. *See e.g., Thomas v. Peterson*, 753 F.2d 754 (1985).

Here, some 26 of the proposed parcels, and possibly more, contain habitat for which scientific data obtained by Forest Guardians from the BLM indicates suitability for and/or occupation by the northern aplomado falcon. In addition, 1 of the parcels overlaps critical habitat of the Arkansas river shiner. Furthermore, these identified parcels lack sufficient stipulations (i.e. timing, CSO or NSO stipulations, additional mitigations) necessary for the conservation and protection of these listed species. Nor does the BLM indicate that the parcels contain such species or their habitat and thereafter, reserve the right to disallow use and occupancy that would be in violation of the ESA.

Because of the presence of this endangered subspecies and/or its habitat on these nineteen parcels, BLM must **withdraw** these parcels from lease sale until such time as the consultation requirements of Section 7 of the ESA have been met. *See, Conner v. Burford*, 848 F.2d 1441, 1452 (9th Cir. 1988)(the ESA consultation process is triggered when the surface agency is notified of a pending lease sale).

Furthermore, for proposed lease parcels where the BLM acknowledges the presence of threatened or endangered species, and in the absence of consultation with USFWS, it is unlawful for the BLM to lease these parcels. *Conner*, 848 F.2d 1441, 1452-1458 (ESA’s consultation requirement is not met by “incremental steps” and by mere notification of the potential presence of endangered species). Again, BLM must withdraw these parcels from lease sale until such time as the consultation requirements of Section 7 of the ESA have been met. Analyzing the impacts to endangered species at the exploration and development stage (after the BLM has already issued a lease allowing oil and gas development) is insufficient for purposes of complying with the ESA and protecting our nations imperiled species.

The agency cannot simply ignore the potential risks posed to federally endangered species at the lease stage. The agency must determine, in consultation with

USFWS, whether the potential exploration/development/production of oil and gas related activities (i.e., all stages of oil and gas activity) would have an effect on and/or jeopardize endangered and threatened species in these parcels **prior** to making an irretrievable commitment of resources by selling non-NSO leases. Failure to do otherwise is arbitrary, capricious, and an abuse of discretion. *See, Conner*, 848 F.2d 1441, 1453 (“we hold that agency action [for purposes of developing a biological opinion]...entails not only leasing but leasing and all post-leasing activities through production and abandonment.”).

In cases where even NSO stipulations will not adequately safeguard the habitat of federally listed species, oil and gas leases must not be offered on those parcels.

1. Northern aplomado falcon.

Twenty-six of the parcels being offered for lease, totaling 12,883.09 acres, contain potential habitat¹ for the northern aplomado falcon (See Exhibit A: Maps showing intersection of lease parcels with potential lesser prairie-chicken and aplomado falcon habitat) and lack sufficient protective stipulations. The northern aplomado falcon is listed as Endangered under the ESA (50 C.F.R. § 17.11). These parcels are located in New Mexico and are enumerated above. They should be **immediately withdrawn** from the proposed lease sale, and BLM should initiate consultation on the impact of oil and gas leasing on northern aplomado falcons and their habitat.

There is extensive existing and potential oil and gas activity within the falcon’s range in New Mexico. BLM indicates that areas of oil and gas extraction and mining activity include the bootheel of NM and Otero Mesa (BLM 2000). As of 2002, based on the potential habitat model outlined by the BLM,² the number of existing oil and gas well pads within potential aplomado habitat is 2,070.³ This includes both active and abandoned well pads. Further oil and gas development is proposed on 521 sections in NM.⁴

If the proposed oil and gas leases are allowed to proceed, they will impede the return of falcons to southern New Mexico and may impact falcons already present. In southeastern New Mexico, Meyer notes that oil and gas developments “have made extensive tracts unsuitable habitat for species that require large areas of habitat or are

¹Habitat modeling was based the BLM’s Guidance Criteria on Grazing Effects in BLM (1999).

²*Ibid.*

³Data on existing oil and gas well pads was obtained through Freedom of Information Act request from BLM.

⁴Sections are 640-acre units. The figure of 521 sections is approximate and not exact because 1) some proposed leases may occupy more than one section; 2) lease proposals are constantly changing, with some areas added and others removed from consideration; and 3) Global Information Systems mapping approximates the number of sections by determining the overlap with the non-regular polygon that defines the potential habitat model, so there may be a few areas where an overlap was indicated but where there was actually only a common edge. Data was obtained from Directorate of Environment and Safety, White Sands Missile Range.

sensitive to human disturbance” (Raymond Meyer, pers. comm.) such as the aplomado falcon.

Federal agencies have recognized this threat. In 1997 biological opinions for the BLM’s Caballo and Socorro Resource Areas in NM, FWS noted oil and gas extraction’s potential to fragment habitat, cause the loss of grassland habitat, and disturb falcons through operation and maintenance activities (USFWS 1997a, b, c). Further, the Service acknowledged that, “All of the potential aplomado falcon habitat is open to oil and gas leasing” (USFWS 1997a: 46). In addition, the BLM’s biological assessment noted unmitigated impacts from oil and gas leasing, including: increased habitat fragmentation and modification; increased proliferation of low seral plants and animals; and increased disturbance of wildlife, including human-caused wildlife mortalities (cited in USFWS 1997a).

The primary effect of oil and gas exploration and extraction on native species is habitat fragmentation. Wildlife migration routes may be disrupted, feeding and nesting sites may be isolated into parcels too small to use, and the general effect of widespread activity creates noise, emits pollutants, and generally disturbs animal behavior. Specifically, mineral extraction development causes habitat fragmentation that perpetuates and exacerbates degradation that drove the aplomado falcon out of the U.S. decades ago. According to a U.S. Forest Service technical report,

The potential effects of petroleum development on wildlife in wildland environments are numerous and varied...The major wildlife groups affected... are ungulates, carnivores, water birds, upland birds and raptors (Bromley 1985: introductory page, emphasis added).

Possible environmental disruption includes, but is not limited to: noise pollution, human intrusion, alteration of vegetation and land and introduction of harmful substances. Habitat alteration, one of the greater threats to aplomado, is caused by seismic trail clearing, clearing and grading of right of ways, site development, excavation of storage and mud pits, borrow pit excavation, construction of process, treatment and storage facilities, installation of flow lines, erection of power lines, communication systems development, trenching and pipe installation, pipe burial and backfill, effluent accidents and development of ancillary industry (i.e., boomtowns associated with labor forces) (Bromley 1985: 2). Bromley (1985: 8) states,

Wildlife habitat alteration or destruction can be considerable due to the increased surface disturbance and vegetation clearing needed for (1) construction activities and (2) placement of permanent operational facilities, well sites, roads, worker accommodations, etc.... The presence of human-associated structures and facilities (buildings, roads, pipelines, transmission lines) will increase.... Effects from secondary activities may be greater in the long term than those from development itself.... It is possible that disrupted ecosystems may never be totally rehabilitated, as human settlement occurring during development and

production may persist. Moreover, impacts will have been cumulative over many years during the life of the oil field.

The affected areas can range from several square feet to multiple acre plots, and road and pipeline construction, while only occupying narrow physical spaces, have farther-reaching adverse effects. Mineral developers often claim that their projects are actually relegated to a minimum acreage. For instance, developing one mineral deposit may only require a one to ten acre drill pad. However, what this use of statistics fails to acknowledge is that the vast network of access roads and pipelines impacts surrounding wildland (Bromley 1985).

In addition to habitat fragmentation, human activity related to oil and gas exploration and extraction can negatively impact raptors (USFWS 1997a, b, c). One study of bald eagles described dispersal resulting from human activity:

Eagles were displaced to areas of lower human activity, preventing effective use of all feeding sites and forcing more birds to use marginal habitat and a smaller area. Feeding birds were disturbed by the mere presence of humans and generally did not return to the site of disturbance for several hours (Bromley 1985: 38).

In reaction to other human activities such as aircraft disturbance, birds (including raptors) in Alaska had less nesting success and decreased production of young, abandoned nests, and lost more eggs. With the addition of on-the-ground disturbance by humans, impacts will likely be more severe (Bromley 1985). In a controlled raptor experiment consisting of frequent walking and driving to nests and placing noisemakers near nests, researchers found that,

Several nests were deserted and not reoccupied during the following year. Little nest failure was evident, but treatment nests fledged significantly fewer young than control nests (Bromley 1985: 42).

Another study reported ground-nesting osprey destroying eggs when they flushed in response to rapid approach by motorized vehicles:

Birds apparently attempt to escape discovery by remaining on the nest as long as possible, then flushing directly from the incubation position, which increases the chance of eggs being crushed or pushed from the nest (Bromley 1985: 25)

In addition to habitat fragmentation caused by human disturbance, the physical materials associated with mineral extraction can be harmful to raptors and other animals. For example, saltwater spills from various pipelines can be more harmful than oil spills, and they are relatively unpublicized (Bromley 1985).

There are also reports from several state governments of avian deaths in extraction pits. These were caused when birds 1) were coated with oil from the pit and

their flight was thereby impeded; 2) ingested toxic substances when drinking in the pits; and 3) drowned in the pits (Bromley 1985).

Avian species are also susceptible to moderate mortality rates from collisions with overhead power lines associated with increased oil and gas and other human activities (Bromley 1985).

On account of these types of concerns in regard to the aplomado falcon, FWS indicated to the BLM that “no further mineral leasing activities” should occur on BLM land in Sierra and Otero Counties (NM) (Fowler-Propst 1999). BLM and FWS have overlooked the impact of oil and gas development to falcons in southeastern New Mexico. With increased sightings of falcons in New Mexico, this oversight must be remedied and consultation should be initiated promptly.

Independent researchers have noted deficiencies in habitat protection by the BLM from oil and gas impacts. Meyer states,

It is the opinion of this author that, based on experience with the Aplomado falcon’s habitat requirements, current BLM regulations and guidelines regarding the density of oil and gas developments are insufficient. Oil and gas developments, as they exist in much of the Carlsbad district, in otherwise suitable habitat would preclude the presence of breeding Aplomado falcons (Raymond Meyer, pers. comm.).

This observation sums up the problem with BLM land management vis-à-vis the aplomado falcon: the falcons generally will not breed in the U.S. because their habitat has been, and continues to be, made inhospitable. The only way to effect long-term recovery and persistence of the falcon is to remove the significant threats against its habitat.

Drawing, in part, from BLM itself, the impacts of oil and gas on wildlife and falcons include:

- Habitat fragmentation due to road construction and improvement, well-pads, and two-track trails from seismic exploration;
- Increased vehicular traffic, which will both harm the Falcon’s habitat and increase the likelihood of direct take of Falcons;
- Increased human disturbance, which will increase wildlife displacement, the likelihood of interrupted breeding and other essential activities of Falcons, the potential for direct take of these species via shooting or other forms of harm and harassment or indirect take, and indirect negative impacts from shooting or other harms against species upon which Aplomado Falcons depend (e.g., black-tailed prairie dogs, grassland birds upon which Falcons prey);
- Displacement of wildlife on surrounding lands as wildlife disturbed by oil and gas activities flee the area;
- Noise disturbance created by construction and operation of oil and gas infrastructure;

- Increased erosion, from both wind and water, caused by soil and plant disturbance;
- Degradation of plant communities and encroachment of shrub;
- Contamination via saltwater and oil spills; and
- Increased power lines associated with oil and gas activities and consequently the increased threat of electrocution.⁵

Numerous sightings of aplomado falcons in New Mexico heighten the gravity of our concerns. The following is a list of confirmed or highly credible sightings since falcons were listed in 1986 (in addition to the observations of falcons southwest of Deming, NM from 2000-2004).

- **March 1987** Luna County sighting of aplomado flying **west of Deming near Separ**. Observed by Noel Snyder, a trained ornithologist and former FWS employee who was experienced with aplomados in Mexico.
- **April 1998**, Eddy County report of two aplomado falcons by Colleen Lenilan **near Eddy, New Mexico**. Observed male for 15 minutes and female for 10 minutes. Lenilan had previously seen aplomados at a facility of The Peregrine Fund.
- **January 26, 1991**, Darryl York and Ann Henry (biologist with falcon expertise) observed aplomado falcons in three different locations on one day in the **Animas Valley**.
- **May/June/July 1991** two sightings of an aplomado falcon **near Tularosa, New Mexico** in Otero County sighting of aplomado confirmed with photographs. This single falcon was later observed for two months in ton White Sands Missile Range.
- **March 6, 1992**, aplomado sighted **near Valentine, Texas** (off Highway 90 inside Presidio County). Observed by Angel Montoya, Ann Henry (both biologists with falcon expertise) and several others. This bird was apparently sighted by many different people in January-March 1992.
- Sighting in **1992** in **Caballo County**, on Hwy 380, 13 miles east of San Antonio, NM, in mosaic of BLM, state, and private land. Observer was C. Rustae. BLM considered sighting to be reliable.
- **April 11, 1992**, aplomado falcon observed by Angel Montoya and Ann Henry (both biologists with falcon expertise) on **White Sands Missile Range** (“about ¼ mile farther south of where the bird was frequently sighted last year by Angel Montoya”).
- Sighting in **1994** on **Gray Ranch, NM**, in Hidalgo County, by F. Gill and H. Tardoff. BLM considers sighting to be reliable.
- Sighting in **1996** in Doña Ana County, **north of Las Cruces, NM**, in mosaic of BLM, state, and private land. Observer was C. Rustae. BLM considered sighting to be reliable.

⁵This list is, in part, adapted from the Bureau of Land Management’s “Biological Assessment of the Effects of Oil and Gas Development on the Northern Aplomado Falcon in the Carlsbad Field Office, Bureau of Land Management.” Dated October 2003. See p. 15. See also Bromley 1985.

- On **May 23, 1997**, Katherine Strickler, who daily observed aplomado falcons in captivity at The Peregrine Fund from 1990-1993, reported observing an aplomado falcon on **McGregor Range, near Otero Mesa Escarpment, south of Martin Canyon** for approximately 22 minutes. She observed the aplomado carrying a lizard and feeding on a yucca stalk. On her report, she indicated that she was positive of this identification.
- Two sightings within **Otero County** on McGregor Range in **1999**.
- On **March 15, 2000**, Hawkwatch International observed an aplomado in the **Sandia Mountains** in New Mexico.
- On **November 14, 2001** on **Otero Mesa** in Otero County, NM a pair of falcons was sighted in Shiloh Draw-Hat Ranch.

From the early 1990s to the present, various scientists, federal, and state agency officials have described a process of natural recolonization of falcons to New Mexico and the existence of a wild population in the state.⁶ It's time to adequately safeguard the habitat of this rare falcon in the state, to ensure recovery of the subspecies.

2. Arkansas River Shiner

We protest the inclusion of parcel 200501-060 in the January 19, 2005 sale, as it overlaps with, and will adversely modify, critical habitat for the federally threatened Arkansas River shiner. The Arkansas River Basin population of this species was listed under the ESA in 1998 and critical habitat was designated in 2001 (*See* 63 Fed. Reg. 64771 to 64799 (November 23, 1998); 66 Fed. Reg. 18001-18034 (April 4, 2001)). Reduced water quality in the Arkansas River was cited as one of the factors providing the rationale for listing. In the listing rule, FWS wrote:

The Canadian River traverses oil and gas producing areas and receives municipal sewage effluent and manufacturing return flows, all of which degrade existing water quality (Texas Department of Water Resources 1984). Water quality within the Canadian River begins to improve as the river flows through the sparsely populated counties in western Oklahoma (*See* 63 Fed. Reg. 64793).

The leasing of this parcel would lead to the degradation of water quality precisely in those "sparsely populated counties in western Oklahoma" that may currently provide the shiner with some relief from the oil and gas contaminated areas in western Texas! BLM should therefore withdraw these parcels from the sale.

C. Proposed Lease Sale Violates the National Environmental Policy Act

The National Environmental Policy Act ("NEPA") requires that every agency prepare an Environmental Impact Statement ("EIS") on a proposal for every major Federal action that "significantly affects...the quality of the human environment." 42

⁶See Forest Guardians letter to Fish and Wildlife Service, dated December 23, 2004. Available at www.fguardians.org.

U.S.C. §102(2)(C). An EIS must discuss the environmental impact of the proposed action, any adverse environmental effects, alternatives to the proposed action, and related factors. Here, the BLM has not complied with NEPA and prepared an EIS for the proposed lease sale.

Oil and gas leasing, and the resultant exploration and development, constitutes an industrial activity with significant environmental impacts. In areas with substantial ecological values such as New Mexico and western Oklahoma, impacts from exploration and development of oil and gas are significant and likely permanent. Oil and gas exploration and development entails constructing a network of roads, pipelines, compressor stations, pads and associated waste pits across the landscape, which will then require maintenance for as long as they are operational. Construction and maintenance of this network will result in traffic, noise, and air pollution that currently do not exist. The construction and presence of this network of roads and associated development facilities will also fragment wildlife habitat, disturb wildlife, and potentially displace wildlife populations. Road densities may be as high as 4-5 miles of road for each square mile of oil and gas development, depending on the area. Surface and groundwater resources may be affected by the contamination of water supplies with oil and gas drilling mixtures used to facilitate the production of the energy resource. The compressor stations associated with oil and gas production make a tremendous amount of noise, disrupting wildlife and livestock on the public lands. Dust and air pollution associated with the roads, pumpjacks and other activities around the development areas would degrade pristine air quality. All of these facilities are likely to have major impacts on the environment in the protested parcels, resulting in further fragmentation of already imperiled wildlife habitat.

The protested parcels contain potential habitat for numerous sensitive and imperiled species. In addition to providing habitat for the federally protected northern aplomado falcon and Arkansas River shiner (discussed above), this region provides habitat for at-risk species not yet protected under the ESA. Important examples are the lesser prairie-chicken and sand dune lizard, which are both candidates for ESA protection. These taxa will be adversely impacted if leasing proceeds on the protested parcels. The biological and ecological impacts of leasing the parcels in question on all of these species must be fully assessed before they are offered for lease.

Furthermore, the impacts of Coal-Bed Methane (“CBM”) development have not been addressed in the land use plans relevant to this lease sale. Thus, to the extent leasing in these areas is occurring for purposes of developing CBM, such leasing cannot occur unless and until an EIS has been developed to address the unique and significant impacts of CBM. In particular, parcels 200501-048 to 058 have high potential for CBM development given their location within the San Juan Basin. CBM is therefore a real concern for parcels included in this sale.

1. Leasing lands is a significant agency action that requires analysis under NEPA.

Leasing lands for oil and gas development is of itself, a significant action that requires in-depth and site-specific analysis, as required by the NEPA. It is at the time of leasing, not with the issuance of an Application for Permit to Drill (“APD”), that BLM must analyze potential impacts to resources from gas development. The requirement that an agency undertake appropriate environmental analysis prior to the issuance of mineral leases, and not forgo its ability to give due consideration to the “no action alternative,” was addressed comprehensively for the first time in Sierra Club v. Peterson, 717 F.2d 1409 (D.C. Cir. 1983). There, Sierra Club challenged the decision of the Forest Service and the BLM to issue oil and gas leases on lands within the Targhee and Bridger-Teton national forests of Idaho and Wyoming, without requiring preparation of an EIS. The Forest Service had conducted a programmatic NEPA analysis, then recommended granting the lease applications with various stipulations based upon broad characterizations as to whether the land was considered environmentally sensitive. Because the Service determined that issuance of the leases with the recommended stipulations would not result in significant adverse impacts to the environment, it decided that, with respect to the entire area, no EIS was required at the leasing stage. *Id.* at 1410. The D.C. Circuit rejected the Service’s approach as failing to comply with NEPA. The Court held:

Even assuming, arguendo, that all lease stipulations are fully enforceable, once the land is leased the Department no longer has the authority to preclude surface disturbing activities even if the environmental impact of such activity is significant. The Department can only impose “mitigation” measures upon a lessee . . . Thus, with respect to the [leases where surface occupancy is not precluded] the decision to allow surface disturbing activities has been made at the leasing stage and, under NEPA, this is the point at which the environmental impacts of such activities must be evaluated.

Id., at 1414.

The court explained that the appropriate time for preparing an EIS is prior to a decision, “when the decision-maker retains a maximum range of options;” that is, before the agency makes “irreversible and irretrievable commitments of resources’ to an action which will affect the environment...” *Id.*, citing Mobil Oil Corp. v. F.T.C., 562 F.2d 170, 173 (2nd Cir. 1977).

The D.C. Circuit specifically rejected the argument that the act of leasing was a mere paper transaction requiring no NEPA compliance. Rather, it concluded that where the agency could not completely preclude all surface disturbances through the issuance of non-surface occupancy (NSO) leases, the “critical time” before which NEPA analysis must occur is “the point of leasing” *Id.* at 1414. **Clearly, if BLM is intent on leasing the parcels we are protesting, the agency must conduct a NEPA analysis that includes in-depth discussions of site-specific and cumulative impacts, prior to the issuance of leases.** This finding is consistent with BLM’s Handbook H-1624-1:

Compliance with NEPA has been integrated into BLM's resource management planning process. The BLM has a statutory responsibility under NEPA to analyze and document the direct, indirect and cumulative impacts of past, present and reasonably foreseeable future actions resulting from Federally authorized fluid minerals activities. **By law, these impacts must be analyzed before the agency makes an irreversible commitment. In the fluid minerals program, this commitment occurs at the point of lease issuance.** Therefore, the EIS prepared with the RMP is intended to satisfy NEPA requirements for issuing fluid minerals leases.

Id. (emphasis added).

The goal of analysis required by NEPA is to ensure that agency decision-makers identify, evaluate, and take into account the environmental costs and benefits of all reasonable approaches to a particular proposal prior to choosing a course of action, and in this way to foster better decision-making.

Further, federal courts have repeatedly affirmed that NEPA is forward-looking, and that it applies prospectively to ensure that decisions are not made until decision-makers and the public have had a chance to evaluate a proposal's likely site-specific effects. *See e.g., Robertson v. Methow Valley Citizens*, 109 S.Ct. 1835, 1845 (1989) (NEPA's goals achieved during period when agency is "contemplating a major action," rather than "after the resources have been committed or the die otherwise cast."); *Commonwealth of Massachusetts v. Watt*, 716 F.2d 946, 952-53 (1st Cir. 1983) ("Once large bureaucracies are committed to a course of action, it is difficult to change that course -- even if new, or more thorough, NEPA statements are prepared and the agency is told to 'redecide.'") (enjoining agency action for procedural NEPA violation); *Sierra Club v. Peterson*, 717 F.2d 1409, 1414 (D.C. Cir. 1983) (appropriate time for NEPA compliance is "prior to a decision, when the decisionmaker retains a maximum range of options." *Environmental Defense Fund v. Andrus*, 596 F.2d 848, 852-53 (9th Cir. 1979).

Here, unless BLM mandates a No Surface Occupancy stipulation or sufficient mitigations at the time of lease sale, NEPA documentation must **at that time** include a full discussion of alternatives and potential impacts. The Ninth Circuit reiterated this position in *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1227 (9th Cir. 1988), stating that: "It is clear from our decision in *Conner* that sale of the Deep Creek leases required preparation of an EIS unless the lease 'absolutely prohibits surface disturbance in the absence of specific government approval.'"

The IBLA has followed the approach of the Sierra Club line of cases. In *Union Oil Co. of California*, 102 IBLA 187 (1988), the Board stated, "Peterson makes clear that the validity of BLM's decision not to prepare an EIS prior to issuing mineral leases depends upon whether there has been an "irreversible, irretrievable commitment of resources" **If BLM has not retained the authority to preclude all surface disturbance activity, then the decision to lease is itself the point of "irreversible, irretrievable commitment of resources" mandating the preparation of an EIS.** *Id.* at

189. *See also* Sierra Club, The Mono Lake Committee, 79 IBLA 240, 248 (1984) (“precluding surface disturbing activities would allow deferral of environmental review, but ... only reserving the authority to impose reasonable mitigation measures would not”); Union Oil Co. of California, 99 IBLA 95 (1987) (holding that later analysis serves no purpose if by time an EIS is finally prepared, some options are no longer available); Sierra Club, the Mono Lake Committee, 84 IBLA 175 (1984) (same); Sierra Club, Oregon Chapter, 87 IBLA 1 (1985) (same).

In this case, BLM has not performed an EIS to analyze the impacts of leasing these parcels and has not retained authority to preclude all surface disturbing activities on all of these parcels. In particular, BLM has failed to analyze the impacts of leasing the protested parcels on listed and imperiled wildlife populations and their habitat located on these parcels. Furthermore, the impacts of CBM development have not been addressed in the land use plans relevant to this lease sale. As noted above, the BLM’s deferment of site-specific analysis and NEPA compliance at the leasing stage violates NEPA and existing case law. **There can be little doubt as to the required timing of the analysis: BLM must perform such analysis before its range of alternatives is limited, and before it commits resources.** The BLM cannot rely on the argument that it plans to undertake NEPA at the APD stage. Leasing commits resources of the agency; at the APD stage, the BLM may condition the right to lease, but has a restricted ability to preclude development. Given the significant ecological values of the resources at stake, the BLM must include site-specific analysis at the time of leasing. Otherwise the leases cannot be offered for sale.

2. The proposed lease sales are tiered to insufficient Resource Management Plans and Forest Plans.

In offering the lease sales in question, the BLM is relying on past NEPA analysis that is too general and, except for the Farmington RMP, is outdated. Moreover, all of the RMPs (and amendments) fail to analyze the site-specific impacts of oil and gas leasing on listed species such as the northern aplomado falcon and Arkansas River shiner, and candidates for listing such as the lesser prairie-chicken and sand dune lizard. Important areas that are eligible for wilderness protection or which have been set aside to preserve their natural values – Rawhide Canyon and Dunnaway Citizen Wilderness Proposal areas, and the Torrejon Fossil Fauna ACEC – will be harmed by oil and gas activities made possible if parcels 200501-006, 200501-008, and 200501-048 are offered for lease. Important cultural values on parcels 200501-048 through 058 will also be harmed by oil and gas activities if leasing proceeds. Thus, as a matter of law, BLM is required to undertake a site-specific environmental review prior to issuing an oil and gas lease when the RMP/EIS has not previously analyzed the environmental impacts of leasing. Colorado Environmental Coalition, 149 IBLA 154, 159 (1990).

Substantial new information has emerged since consultation conducted in conjunction with the RMPs (and amendments) were finalized. For example, in 2000, breeding of northern aplomado falcons was documented in the wild in New Mexico, and successful breeding was documented in 2002, for the first time since 1952. In 1998, the

lesser prairie-chicken was determined to warrant ESA listing. In 2001, the sand dune lizard was designated as a candidate for ESA listing by FWS. In 2001, the Arkansas River shiner was provided with critical habitat. This list of actions is not comprehensive, but it underscores that the federal land management plans relevant to this lease sale are generally dated. The dated quality of these plans underscores the urgency of site-specific environmental assessments of the impact of oil and gas leasing on imperiled species **before** the parcels are offered for lease.

Moreover, BLM has not performed sufficient site-specific analysis of oil and gas leasing and development in the protested areas. The land use plans relevant to this sale do not contain adequate site-specific reviews of the parcels being offered for lease, nor do they provide adequate protection for the imperiled species in question.

Additionally, the BLM is currently in the process of “integrating” Energy Policy and Conservation Act (“EPCA”) inventory results into land use plans in order to, among other things, “enhance [the agencies] ability to protect the environment.” IM No. 2003-137 (July 28, 2003). According to the IM, “the EPCA data can be used alone for display purposes or in combination with other resource data for analysis purposes (such as **overlaying high potential oil and gas areas with important wildlife habitats to identify areas of conflict and/or potential opportunities for resolving specific issues**).” *Id.* (emphasis added). Because the agency is currently in the process of “integrating” its EPCA results and identifying conflict areas, leasing should not occur until, at a minimum, this process is completed and has been subjected to public scrutiny.

a. Carlsbad RMP

The Carlsbad Resource Area of the BLM issued a Resource Management Plan Amendment and Record of Decision which governs oil and gas leasing in October 1997. This plan amendment covers Lea, Eddy, and the bootheel of Chaves County. The plan does not discuss or address the unique and significant impacts of CBM development and fails to adequately consider the adverse impacts of oil and gas leasing more generally on imperiled wildlife.

While the Carlsbad plan amendment provides for seasonal stipulated use of lesser prairie-chicken habitat (Plan amendment at p. API-4), the resource area has generally waived these stipulations, as discussed below. In the biological assessment for this plan amendment, BLM determined the following for the imperiled species on whose behalf we are protesting (Plan amendment at Appendix 4):

- Northern aplomado falcon: not likely to adversely affect. In terms of oil and gas impacts, provisions for netting pits and tanks, raptor proofing powerlines, and covering exhaust stacks adequately protect avian species.

On August 5, 1996, FWS concurred with the determination for the northern aplomado falcon. The Service did not comment on candidate species (See Plan Amendment at AP4-138).

Neither BLM's or FWS's analysis of endangered species policy in conjunction with the Carlsbad Plan Amendment is sufficient to satisfy the concerns raised in this protest. BLM quickly dismisses threats to aplomado falcons without considering the impact of continued degradation of habitat suitable for recolonization by these species. FWS fails to consider impacts to candidate species and too readily accepts BLM's biological assessment. In addition, the lesser prairie-chicken and sand dune lizard became candidates or were proposed for listing *after* the 1997 plan amendment. The impacts of this amendment and its provisions for oil and gas leasing were not adequately considered regarding these species. Indeed, an RMP amendment process is currently underway for the lesser prairie-chicken and sand dune lizard. Until that process has concluded, no leases in the habitat of these species should be issued by the BLM and parcels with suitable habitat should be withdrawn from the January 19, 2005 sale.

The final EIS for the Carlsbad Resource Plan Amendment fails to discuss impacts of oil and gas leasing on imperiled species on a site-specific level. In fact, the entire discussion within the FEIS of impacts of this RMPA and the Roswell proposed RMP is only 14 pages long, despite its coverage of some 3.6 million federal surface and subsurface acres and an additional 10.3 million subsurface acres (See FEIS at cover page). Site-specific analysis of the parcels being offered for lease is therefore imperative *before* they are offered for lease.

In particular, the Carlsbad RMPA does not contain site-specific evaluation of the oil and gas leasing impacts from this sale to the Rawhide Canyon and Dunnaway Citizen Wilderness Proposal area. These areas contain significant roadless values which will be degraded by escalated oil and gas activities. The potential for this degradation must be examined prior to BLM offering these parcels for lease.

While the Carlsbad RMPA provides stipulations to protect lesser prairie-chicken habitat, those stipulations are continually waived to usher in oil and gas development. These stipulations came in the form of Surface Use and Occupancy Restrictions (SUORs), which were a condition for Approvals for Permits to Drill (APD's). These SUORs state that no drilling or 3-d geophysical exploration is allowed during the period of March 15 to June 15, while maintenance that requires human presence such as non 3-d exploration, pipeline, road and well pad construction is not allowed from 3am-9am during that period. However, "normal vehicle use" during these times is allowed. Operators were allowed to request exceptions from the LPCH stipulations on an individual basis, and these exceptions were granted if the CFO did not find any active lek sites within two miles of the area for which the exception was requested.

In 1999, no exceptions to prairie-chicken waivers were granted because of the 1998 WBP determination for the LPCH and because of low rainfall over much of the prairie-chicken's range. However, in 2000, some 88 exceptions were granted, with approximately 7-10 additional exceptions with incomplete information. Of these 88, 71 were exceptions to the drilling requirement for new wells, while 17 were exceptions to the 3am-9am restriction on maintenance for existing wells. Further, in 2001, 237

exceptions were granted, again with a few additional exceptions with incomplete information. Of these 237, 134 were exceptions to the drilling requirements for new wells, while 103 were exceptions to the 3am-9am restriction on maintenance for existing wells.

The protections for LPCH's from oil and gas in the Carlsbad area has further disintegrated as a result of new guidelines issued by the Carlsbad Field Office on March 11, 2002, wherein certain areas were designated "blanket" exception areas. In these areas, companies no longer have to request individual exceptions but can operate at will, with the condition that if active leks were found, a contingency plan that could include shutdown of the well go into effect. This policy has recently been suspended, but there is no guarantee that it has been terminated.

In 2002, 92 exceptions to LPCH stipulations were granted, 91 of which exceptions to the drilling requirement for new wells, while one was an exception to the 3am-9am restriction on maintenance for existing wells. This reduction in the number of exceptions appears to be linked to the introduction of blanket exception areas. As of July 2003, six exceptions had been granted, all of which were exceptions to the drilling requirement for new wells.

For nearly all the exceptions we have reviewed, the LPCH-protective stipulations were suspended for the entire booming period. There are 10 cases in which an extension was granted for a period of two days to a week past the March 15 cutoff date, for drilling that had already been started and was not completed by March 15. In cases where wells were within two miles of a historical lek, no exception was granted until surveys of the historical lek at the beginning of the booming season (March/April) were conducted, and the lek was determined to be inactive.

In addition to our concerns that these stipulations could be waived, there was no analysis of a no oil and gas leasing alternative for lesser prairie-chickens.

b. Roswell RMP

The Roswell Resource Area RMP was approved in 1997. The same concerns about the outdated analysis that we raised for the Carlsbad Resource Area also apply to Roswell. The RMP establishes the general land management and use determinations for public lands in the resource area. "Detailed decisions for the implementation of specific actions will be made through activity planning **and environmental review that will be completed prior to the implementation of the action.**" RMP at 1 (emphasis added).

According to the RMP, the BLM administers approximately 9,740,000 acres of federal oil and gas mineral estate in the Roswell Resource Area. RMP at 4. Of that, approximately 9,316,200 acres (96 percent of the oil and gas mineral estate) are open to leasing and development. Furthermore, according to the RMP, the application of Surface Use and Occupancy Requirements (SUOR) are to be applied to new leases "following

NEPA analysis.” *Id.* In other words, the BLM will determine the application of SUOR during the NEPA process. Here, no NEPA analysis was performed.

Additionally, and noteworthy, the BLM’s Conditions of Approval (COA’s) for leases, Appendix 2 of the RMP, contain no protections or mitigations for BLM special status species, big game or upland game, waterfowl, raptors or species. In other words, there are no COA’s in BLM’s standard lease form for meeting the goals for wildlife species set out in the RMP. *See* RMP at 58-61. Furthermore, the impacts of leasing and oil and gas development on wildlife are nowhere addressed at a site-specific level in the RMP. *Id.* For this reason, the impacts of oil and gas development to wildlife on the protested parcels must be addressed by a site-specific NEPA analysis to determine what, if any, measures (i.e. COAs) are necessary to meet the goals provided in the RMP. Such analysis must be performed **prior** to leasing.

As is the case with the Carlsbad RMP, an amendment of the Roswell RMP is currently underway to address impacts of oil and gas on habitat of the lesser prairie-chicken and sand dune lizard. Until that process has concluded, no leases in the habitat of these species should be issued by the BLM and parcels with suitable habitat should be withdrawn from the January 19, 2005 sale.

c. Farmington RMP

While the Farmington RMP was finalized in 2003, it does not include site-specific impacts of leasing on areas at issue on parcels 200501-048 through 058. Given the lack of site-specific analysis in the Farmington RMP, the BLM therefore cannot rely on this RMP to fulfill its NEPA obligations for this lease sale.

In addition, the Farmington RMP assumes there will be tribal consultation and compliance with the National Historic Preservation Act (NHPA), an assumption which has not been borne out in the BLM’s processing of Applications for Permit to Drill. Full tribal consultation and compliance with the NHPA is therefore especially urgent at the pre-leasing stage.

The Farmington RMP lacks site-specific analysis of the impacts of oil and gas on the Torrejon Fossil Fauna ACEC. Site-specific impacts must be assessed prior to offering parcel 200501-048 for lease. Nor does it consider the cumulative impacts from leasing on this ACEC. For example, two parcels overlapping this ACEC were leased in the July 2004 BLM quarterly lease sale.⁷

d. Oklahoma RMP

This RMP was finalized in 1994. It failed to consider site-specific impacts of oil and gas operations on the endangered species on whose behalf we lodge this protest. In

⁷See Forest Guardians protest of those two and other parcels at: <http://www.fguardians.org/docs/og-blm-protest040720.pdf>.

particular, the lesser prairie-chicken's candidacy for ESA listing, and the Arkansas River Shiner's ESA listing and critical habitat designation post-dated this RMP.

3. BLM is required to take a hard look at new information or circumstances

NEPA requires agencies to take a hard look at new information or circumstances concerning the environmental effects of a federal action even after an EIS has been prepared, and to supplement the existing environmental analyses if the new circumstances "raise[] significant new information relevant to environmental concern." Portland Audubon Soc'y v. Babbitt, 998 F.2d 705, 708-09 (9th Cir. 2000). See Marsh v. Oregon Natural Resource Council, 490 U.S. 360, 371 (1989) ("It would be incongruous . . . with [NEPA's] manifest concern with preventing uninformed action, for the blinders to adverse environmental effects, once unequivocally removed, to be restored prior to the completion of agency action simply because the relevant proposal has received initial approval."). See also I.M. 2001-0062 ("If you determine you can properly rely on existing NEPA documents, you must establish an administrative record that documents clearly that you took a 'hard look' at whether new circumstances, new information, or environmental impact not previously anticipated or analyzed warrant new analysis or supplementation of existing NEPA documents and whether the impact analysis supports the proposed action.").

In this case, and as discussed in detail below, important ecological resources, natural areas, and key wildlife habitat could be irreparably impacted by mineral leasing—effects which have not been addressed by prior EISs. In light of this new information, BLM must address the impacts to these resources prior to leasing the protested parcels.

a. Lesser prairie-chicken

It is well-documented that oil and gas operations can harm lesser prairie-chickens. Once abundant throughout their range in eastern New Mexico, the LPCH has been extirpated from 56% of its former range in the state and persists only as sparse and scattered populations in another 28% of that range. The core of the remaining populations occupies only 16% of its former range.⁸

Survey results from the BLM Caprock Wildlife Area by both BLM and NMNHP biologists have shown that LPCH numbers in this management area have declined from population counts recorded in the 1971-1981 period. Morrissey reported that the estimated population within the Caprock Wildlife Area declined from 2,600 in 1983 to 935 by 1995.⁹ Recent data collected within the Caprock Wildlife Area north of Highway 380 indicate that the populations in this area may have stabilized, with active leks/lek site

⁸Bailey, J.A. and S. Williams III. 2000. "Status of the Lesser Prairie-Chicken in New Mexico, 1999." The Prairie Naturalist 32(3): 157-168; and Bailey, J.A. 2002. "Status of the Lesser Prairie-Chicken in southeast New Mexico and southeast Chaves county, 2001." Unpublished report, Santa Fe, NM. 5 pp.

⁹Morrissey 1995.

visited being 0.18 in 2000, 0.25 in 2001 and 0.26 in 2002.¹⁰ Data from the Roswell Field Office for 2002 also supports this conclusion. BLM personnel surveyed 34 active leks with an estimated 365 birds, with the number of active leks in the period 1999-2002 increasing from 16-34.¹¹ This trend of population stabilization is encouraging, but the numbers are still far below the population levels of the 1970's, a period with comparable moisture.

Additional survey data from BLM biologists collected in west-central Lea County on lands managed by the Carlsbad Field Office (CFO) during the period 1985-1998 have shown even more dramatic declines in LPCH populations. These surveys reported a high of 160 birds on 20 leks in 1987, a figure which by 1998 had declined to only six birds on one active lek and by 2001 had declined to only two birds on one active lek. CFO personnel reported one active lek in 2002 with seven males, northeast of Eunice.¹² The CFO personnel also audibly detected LPCH's near an historic lek site in 2002.¹³

Data reporting reproductive success supports the conclusions of survey data suggesting that prairie-chicken population trends are declining. Age ratios (juveniles/hen) for the period 1958-1968 averaged 3.7 juveniles/hen, but had declined to an average of 0.65 juveniles/hen in 1989 and 0.59 juveniles/hen in 1995.¹⁴

Based on these data, it is evident that the LPCH has been extirpated from its historic range in northern New Mexico and nearly extirpated from its historic range south of 33° N. Prairie-chickens persist in sparse and isolated populations in Curry and north Roosevelt County and in southeast Chaves County. Thus the remaining "core" populations of Lesser Prairie-Chickens in New Mexico occupy only 16% of the species' historic range, and are found within south Roosevelt and north Lea counties as well as east-central Chaves County, on private lands, BLM lands including part of the Caprock Wildlife Area, and NMDGF PCAs.¹⁵

The decline of LPCH's in southeastern New Mexico can be traced to compromised habitat, especially from oil and gas development on BLM lands.

We listed the parcels with potential lesser prairie-chicken habitat that lack sufficient protective stipulations above. They total 14 parcels, containing 3,520 acres. See Exhibit A: Maps showing intersection of lease parcels with lesser prairie-chicken and aplomado falcon habitat. We have identified some parcels as containing lesser prairie-chicken habitat because the BLM attached the lesser prairie-chicken stipulation (SENM-S-22) to those parcels. We protest the inclusion of all parcels identified as containing lesser prairie-chicken habitat in the January 19, 2005 sale.

¹⁰J. Bailey, personal communication.

¹¹Davis, D. 2002. "Survey for Active Lesser Prairie-Chicken Leks: Spring 2002." Federal Aid Report W-104-R-42. New Mexico Department of Game and Fish, Santa Fe, New Mexico, USA.

¹²Davis 2002.

¹³Davis 2002.

¹⁴Bailey 1999.

¹⁵Bailey, J.A. 2002. "Status of the Lesser Prairie-Chicken in southeast New Mexico and southeast Chaves county, 2001." Unpublished report, Santa Fe, NM. 5 pp.

In addition, we are gravely concerned that, even when BLM adopts stipulations to protect imperiled species – as it has in the case of the lesser prairie-chicken, discussed above – it liberally waives those stipulations. This policy provides a compelling reason to withdraw all parcels where there are compelling imperiled species concerns from the lease sale.

b. Sand dune lizard.

FWS designated the sand dune lizard a candidate for ESA listing in 2001.¹⁶ The sand dune lizard is the second most geographically restricted lizard species in the U.S. and it faces imminent extinction. Oil and gas development and shinnery oak removal are the primary causes of its critically imperiled state.¹⁷ Parcels 200501-033 and 038 overlap with sand dune lizard habitat (see Lease Sale Notice), lack sufficient protective stipulations, and we protest the inclusion of these parcels in the January 19, 2005 sale.

4. BLM fails to adequately address the cumulative impacts of oil and gas development in the area.

Oil and gas leasing and development are increasingly covering western and eastern New Mexico and western Oklahoma. Impacts from such widespread development include loss of wildlife habitat, impacts to endangered and sensitive species, impacts to water quality, impacts to air quality, and a host of other concerns.

NEPA requires that where several actions have a cumulative effect or synergistic environmental effect, this consequence must be considered in an EIS. See Sierra Club v. Penfold, 857 F.2d 1307, 1320-21 (9th Cir. 1988). Cumulative impacts occur where the proposed action is in a geographic area where several (or in this case, many) similar actions are occurring. This requirement is different from a programmatic EIS, which is broader and required when federal agencies implement programs and region-wide policy. A cumulative impacts study within an EIS must be extensive. In Fritiofson v. Alexander, 772 F.2d 1225 (5th Cir. 1985) the court states that:

[C]umulative impact analysis should consider 1) past and present actions without regard to whether they themselves triggered NEPA responsibilities and 2) future actions that are reasonably foreseeable even if they are not yet proposals and may never trigger NEPA review requirements (40 C.F.R. 1508.7) . . . Given the CEQ regulations it seems to us that a meaningful cumulative-effects study must identify: 1) the area in which effects of the proposed project will be felt; 2) the impacts that are expected in that area from the proposed project; 3) other actions--past, proposed, and reasonably foreseeable--that have had or are expected to have impacts in the same area; 4) the impacts or expected impacts from

¹⁶See FWS, “Candidate and Listing Priority Assignment Form, Sand Dune Lizard.” Signed 2001.

¹⁷Ibid.

these other actions; and 5) the overall impacts that can be expected if the individual impacts are allowed to accumulate (Fritiofson, at 1244-45).

In addition, if cumulative effects, in combination, would result in significant impacts to the human environment, the agency must prepare a full environmental impact statement. *See Inland Empire Public Lands Council v. Schultz*, 992 F.2d 977, 981 (9th Cir. 1993); *Resources Limited, Inc. v. Robertson*, 8 F.3d 1394, 1400 (9th Cir. 1993). The BLM has failed to analyze the cumulative impacts of oil and gas leasing and development in this region, and the additional impacts of leasing these two specific units.

In this case, oil and gas development in the resource areas proposed for leasing is having a significant cumulative impact to wildlife populations. Furthermore, **no** agency document or impact statement assesses such impacts. As we documented above, lesser prairie-chicken populations have plummeted in the Carlsbad Resource Area because of the intense oil and gas activities and the cumulative effects of oil and gas and livestock grazing.

BLM must also consider other authorized land uses in determining cumulative impacts to natural resources (including wildlife). The agency fails to do so. For instance, in the case of northern aplomado falcons, BLM fails to consider cumulative impacts on the falcon and its habitat from land uses such as livestock grazing and oil and gas exploration and extraction, despite harms to the falcon from both land uses. In its 2000 analysis of the renewal of 19 grazing permits comprising 185,235 acres in the Las Cruces Field Office (NM), BLM identified other potential impacts to the falcon – including urban sprawl, land conversion to crops, water diversion and pumping, and oil and gas extraction – yet the grazing permits were renewed (BLM 2000). Additional sources of habitat degradation were also identified in biological evaluations for oil and gas development (Howard 2000). Despite these cumulative impacts, the oil and gas activities were allowed to proceed.

In sum, the BLM must perform an EIS that addresses the current and projected cumulative impacts to wildlife in these resource areas from oil and gas development (as well as other authorized land uses) **prior** to leasing. Such analysis, to date, has not been performed.

5. BLM must consider reasonable alternatives, including no leasing and NSO stipulations

The requirement that agencies consider alternatives to a proposed action further reinforces the conclusion that an agency must not prejudge whether it will take a certain course of action prior to completing the NEPA process. 42 U.S.C. §4332(C). CEQ regulations implementing NEPA and the courts make clear that the discussion of alternatives is “the heart” of the NEPA process. 40 C.F.R. §1502.14. Environmental analysis must “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. §1502.14(a).

Here, the BLM has generally not analyzed NSO and no-leasing alternatives for the protested parcels in question. 42 U.S.C. § 4332(2)(C)(iii). Federal agencies must, to the fullest extent possible, use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment. 40 C.F.R. § 1500.2(e). “For all alternatives which were eliminated from detailed study,” the agencies must “briefly discuss the reasons for their having been eliminated.” 40 C.F.R. § 1502.14(a).

Wyoming Outdoor Council held that the challenged oil and gas leases were void or voidable because BLM did not consider reasonable alternatives prior to leasing, including whether specific parcels should be leased, appropriate lease stipulations, and NSO stipulations. 156 IBLA 347, 359 (2002) *rev'd on other grounds by Pennaco*, 2003 WL 2127752 at 6-7 (holding that when combined NEPA documents analyze the specific impacts of a project and provide alternatives, they satisfy NEPA). The reasonable alternatives requirement applies to the preparation of an EA even if an EIS is ultimately unnecessary.

We have dropped several parcels from our protest because they contain unwaivable NSO stipulation, e.g., 200501-025, 027, 035. We encourage BLM to apply such stipulations in order to safeguard important cultural and natural values.

6. The proposed action is likely to impact air quality.

The BLM must also analyze the cumulative impacts that additional leasing, and the resulting oil and gas development, would have on air quality and visibility. Western and eastern New Mexico and western Oklahoma are being increasingly covered by oil and gas leasing and development. Oil and gas exploration and development can create significant dust and air pollution from roads, pumpjacks, and other activities that affect visibility and air quality. *See e.g., Katzenstein, et al., “Extensive Regional Hydrocarbon Pollution In the Southwestern United States (August 15, 2003)(finding that oil and gas drilling across much of the Southwest produces far more emissions linked to global warming than previously realized).* The BLM has failed to conduct this analysis of the cumulative impacts of this growing oil and gas development on air quality, or reveal this information to the public. To date, such analysis has not been performed.

More specifically, the BLM needs to comply with the Clean Air Act, in particular, the Act’s Prevention of Significant Deterioration (PSD) provisions pursuant to 42 U.S.C. 7470-7479. Before authorizing any additional leasing, the BLM must demonstrate compliance with PSD provisions and demonstrate that increment consumption of concentrations of criteria pollutants over baseline concentrations has not been exceeded for Class II areas and/or Class I areas. This analysis and documentation of compliance must be completed prior to additional leasing. This analysis is particularly vital because the PSD permitting program itself is not likely to apply to individual oil and gas operations.

7. The proposed mitigation measures are insufficient to protect resources.

The stipulations attached to the lease sale offerings in question are insufficient to protect the native species and ecosystems within this area. In the lease sale documents for the January 19, 2005 sale, the following stipulations are provided:

- **NM-11-LN: Special Cultural Resource Stipulation.** While this stipulation provides protection for cultural resources, it neither considers nor provides adequate protection for the endangered species and natural areas about which we are concerned on parcels 200501-005, 006, 008, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 027, 028, 029, 033, 034, 035, 036, 037, 038, 040, 041, 042, 043, 044, 045, 046, and 047.

Moreover, we question whether this stipulation's language on the need for consultation with Native American Nations and compliance with the National Historic Preservation Act will actually be enforced, given our experience with the Farmington Field Office routinely ignoring cultural issues and tribal consultation requirements when processing applications for permits to drill. We therefore dispute that this stipulation will adequately protect the cultural values of concern on parcels 200501-048, 049, 050, 051, 052, 053, 054, 055, 056, 057, and 058.

- **SENM-LN-1: Cave and Karst Occurrence Area Stipulation.** While this stipulation provides discussion of some potential measures to mitigate harms to cave and karst features, it does not provide any protection for the endangered wildlife about whom we are concerned on parcels 200501-005, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 021, 028, and 046.
- **SENM-S-1: Potash Stipulation.** This stipulation provides for non-interference by oil and gas activities with potash mining. It does not provide any protection for the endangered wildlife about whom we are concerned on parcels 200501-027, 028, 035, 036, and 038.
- **SENM-S-4: Laguna Plata Archaeological District Stipulation.** This is an NSO stipulation which can be waived and pertains exclusively to protecting significant cultural resource values, not endangered fauna. It therefore fails to provide adequate protection for the endangered species about whom we are concerned on parcel 200501-034
- **SENM-S-5: Threatened Plant Species (Gypsum Wild-Buckwheat) Stipulation.** This is an NSO stipulation which can be waived and pertains exclusively to the Gypsum Wild-Buckwheat, not endangered fauna. It therefore fails to provide adequate protection for the endangered species about whom we are concerned on parcel 200501-016.
- **SENM-S-8: Yeso Hills Stipulation.** This is an NSO stipulation which can be waived and pertains exclusively to the Yeso Hills Research Natural Area and applies only to a small portion of that parcel. It therefore does

not provide adequate protection to the endangered species about whom we are concerned on parcel 200501-015.

- **SENM-S-15:** Wildlife Habitat Projects Stipulation. This waivable stipulation restricts surface disturbance within up to 200 meters of existing or planned wildlife habitat improvement projects. It is very general and does not specify the nature of these habitat improvement projects, whether they are for game or non-game (e.g., endangered) species. It fails to provide adequate protection for the endangered species about whom we are concerned on parcel 200501-020.
- **SENM-S-17:** Slopes or Fragile Soils Stipulation. This waivable stipulation provides some protection for slopes and fragile soils. It neither considers nor provides adequate protection to the endangered species about whom we are concerned on parcels 200501-012, 013, 015, 016, 017, 018, 019, and 020.
- **SENM-S-17R:** Slopes or Fragile Soils within Roswell Field Office Stipulation. This waivable stipulation provides some protection for slopes and fragile soils. It neither considers nor provides adequate protection to the endangered species about whom we are concerned on parcels 200501-026 and 030.
- **SENM-S-18:** Streams, Rivers, and Floodplains. While ostensibly providing protection to 100-year floodplains, exceptions to this stipulation are offered. It fails to provide adequate protection to the endangered species – either listed or candidates for listing – and their habitat, about whom we are concerned on parcels 200501-005, 006, 011, 014, 015, 019, and 020.
- **SENM-S-19:** Playas and Alkali Lakes. While ostensibly providing protection for playas and alkali lakes, this is a waivable stipulation. It fails to consider impacts of oil and gas on endangered species. It fails to provide adequate protection to the endangered species about whom we are concerned on parcels 200501-028, 031, 042, 045, and 046.
- **SENM-S-20:** Springs, Seeps and Tanks. This waivable stipulation limits surface disturbance within 200 meters of a source of a spring or seep and downstream riparian areas. This stipulation fails to provide adequate protection to the endangered species about whom we are concerned on parcels 200501-019, 026, and 030.
- **SENM-S-21:** Caves and Karst Stipulation. While ostensibly providing protection for caves and karst, this is a waivable stipulation. It fails to consider impacts of oil and gas on endangered species. It fails to provide adequate protection to the endangered species about whom we are concerned on parcels 200501-010, 011, 012, 013, 014, 015, 017, 018, 019, 021, and 028.
- **SENM-S-22:** Prairie-Chickens Stipulation. This is precisely the type of waivable stipulation that has led to rampant oil and gas development in lesser prairie-chicken in the Carlsbad Field Office (as we discussed earlier in this protest). It fails to provide adequate protection to the endangered species (the northern aplomado falcon, sand dune lizard, and even the

lesser prairie-chicken itself) about whom we are concerned on parcels 200501-033, 034, 036, 037, 038, 043, 044, 045, and 047. Moreover, some parcels whose leasing will deleteriously impact prairie-chickens and their habitat do not have either this or stipulations SENM-S-33 or SENM-S-34 attached – 200501-030, 031, 032, 059, 061, 062, and 063.

- **SENM-S-23:** Sand Dune Lizard Stipulation. Given that this stipulation is waivable, based on the BLM’s history of waiving important stipulations for endangered wildlife, this stipulation fails to provide adequate protection for the endangered species about whom we are concerned on parcels 200501-029, 033, 034, and 038.
- **SENM-S-25:** Visual Resource Management Stipulation. This is a stipulation requiring painting of oil field equipment. It fails to provide adequate protection to the endangered species about whom we are concerned on parcels 200501-005, 010, 011, 012, 015, and 027.
- **SENM-S-30:** NSO-Potash Area Stipulation. This is an NSO stipulation which requires directional drilling. Because it appears to be a non-waivable stipulation, and on the assumption that it is applied to all of parcel 200501-027, we are not including this parcel in our protest.
- **SENM-S-31:** Northern Aplomado Falcon Suitable Habitat Stipulation. We are pleased to see this new stipulation, however, this is a waivable, non-NSO stipulation with dubious reclamation potential. Therefore, this stipulation does not adequately safeguard falcon habitat on parcels 200501-005 and 010, the only aplomado parcels (of 26) to which it is applied.¹⁸ In the next lease sale notice, we’d like to see SENM-S-31 be a non-waivable, NSO stipulation and be applied to all suitable habitat for aplomado falcons.
- **SENM-S-33:** No Surface Occupancy – Lesser Prairie-Chicken and Sand Dune Lizard Core Areas. *We applaud the BLM!* Because of this stipulation, which hopefully will not become waivable after the amendment of the Roswell and Carlsbad RMPs, we have deleted from our protest the following parcels, to which this stipulation is attached: 200501-025 and 035. We are assuming, based on the Lease Sale Notice, that this stipulation applies to the entire parcels.
- **SENM-S-34:** Zone 3-POD Stipulation. This stipulation requires a plan of development prior to applications for permits to drill and sundry notices. However, it does not seem likely that NSO stipulations could be attached after lease issuance. The language of the stipulation is too vague and discretionary, for example, “To the extent possible, buffer zones around active LPC leks will be utilized to provide resource protection” (Lease Sale Notice at p. 57, emphasis added). This stipulation therefore does not adequately safeguard the endangered species about which we are concerned on parcel 200501-026. In addition, although they are located

¹⁸In addition, given that 200501-050 and 010 measures only 80 and 40 acres, respectively, BLM has attached this stipulation to some of the smallest aplomado parcels in the lease sale. Nearby parcels with aplomado habitat - 200501-011, which contains 1160 acres, and 012, which contains 517.55 acres - do not have SENM-S-31 attached.

within Zone 3, parcels 200501-033, 034, 036, and 038 do not have this stipulation attached.

- **F-9-CSU:** Controlled Surface Use Paleontology Stipulation. This is a waivable stipulation pertaining to paleontological resources, not the other natural or cultural values about which we have raised concerns on parcel 200501-058.
- **F-24-VRM:** Visual Resource Management Stipulation. This provides for low profile tanks and tank painting. This does not adequately safeguard the natural and cultural values about which we have raised concerns on parcel 200501-058.
- **F-31-NSO:** Dunes Vehicle Recreation Area Stipulation. While this is an NSO stipulation, it does not pertain to endangered species or cultural values and can be waived. It therefore fails to adequately address the concerns we have raised for parcel 200501-057.
- **F-33-LN:** Mountain Plover. With the withdrawal of a listing rule for the mountain plover,¹⁹ we doubt that this stipulation will provide protection to the mountain plover. This stipulation will therefore likely not protect the natural or cultural values about which we are concerned on parcels 200501-048, 049, 050, and 054.
- **ORA-1:** Floodplain Protection. This stipulation provides for controlled surface use. Surface occupancy is allowed through permission from the BLM. This stipulation fails to consider or provide adequate protection for the endangered species about whom we are concerned on parcel 200501-060.
- **ORA-2:** Wetland/Riparian. This stipulation provides for controlled surface use. Surface occupancy is allowed through permission from the BLM. This stipulation fails to consider or provide adequate protection for the endangered species about whom we are concerned on parcel 200501-060.
- **ORA-3:** Season of Use Stipulation. This stipulation restricts surface occupancy from February 15-May 15 and other hunting seasons. This stipulation fails to consider or provide adequate protection for the endangered species about whom we are concerned on parcels 200501-062 and 063.
- **ORA (LN-1):** Threatened & Endangered Species. This stipulation provides notice that endangered species consultation may be required. This stipulation applies to parcel 200501-060, which should be withdrawn from the lease sale. As we have discussed in this protest, consultation – in this case, within critical habitat of the Arkansas River Shiner – must occur prior to the leasing stage.

These stipulations, considered singly and collectively, are not adequate to safeguard the endangered species habitats and other natural values on whose behalf we lodge this protest.

¹⁹See 68 Fed. Reg. 53083-53101 (September 9, 2003).

For the parcels within or adjacent to special natural areas of Rawhide Canyon, Dunnaway Citizens Wilderness Proposal area, BLM does not even recognize that the values of these areas – particularly their roadless status – and therefore fails to protect those values. Nor does BLM mention impacts of oil and gas development on the Torrejon Fossil Fauna ACEC, despite explicitly setting this area aside to protect paleontological resources. These are important environmental concerns that must be considered by BLM in an environmental assessment or environmental impact statement prior to offering these areas for lease.

An especially important oversight is that two parcels identified as containing potential lesser prairie-chicken habitat – 200501-032, 059, and 061 – contain no stipulations whatsoever. In addition, out of 26 parcels, totaling 12,883.09 acres, which contain aplomado habitat, only 2 parcels, totaling 120 acres, have a specific stipulation for the northern aplomado falcon.

BLM must withdraw the protested parcels until it has conducted site-specific analysis of impacts of oil and gas leasing on all of the imperiled species we have discussed.

In order to comply with NEPA, the BLM must analyze how specific mitigation measures will reduce likely impacts from the Proposed Action (i.e., leasing for oil and gas development). As the court stated in National Audubon Society v. Hoffman, 132 F.2d 7, 17 (2nd Cir. 1997), mitigation measures relied upon to conclude that impacts would be reduced below levels of significance must be supported by “substantial evidence.” There, the court set aside a Forest Service FONSI determination because the agency provided no assurance that the mitigation measures would be effective. Federal Courts have upheld these requirements. *See Robertson v. Methow Valley*, 490 U.S. at 352 (“[M]itigation [must] be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated...”); Communities, Inc. v. Busey, 956 F.2d 619, 626 (6th Cir. 1992) (same). “[M]ere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA” Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1151 9th Cir. 1998 (emphasis added) (remanding analysis to agency for failure to undertake EIS). *See also Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1381 (9th Cir. 1998) (setting aside EIS on grounds that the US Forest Service’s mitigation analysis contained only “broad generalizations and vague references”).

When the adequacy of proposed mitigation is supported by evidence, the agency may use those measures to reduce environmental impacts below the level of significance that would require an EIS. The BLM, however, has done no additional analysis for this proposed action beyond the analysis performed for its land use documents. No site-specific analysis has been done to determine if the ecological value and imperiled species in this area will be adequately protected by these stipulations. Nor has BLM provided data demonstrating that their listing of mitigations will be effective.

Based on our experience, the effectiveness of discretionary stipulations is certainly questionable because such stipulations are often waived or not implemented.

For example, in some areas stipulated reclamation remains long overdue. We are also particularly concerned given the frequency with which such discretionary stipulations apparently end up being waived by the BLM at the APD stage. If this data is at all representative of typical BLM behavior, then we have great cause for concern that discretionary stipulations may confer very little protection to the landscape or environmental resources.

Clearly, where year-round, non-waivable NSO stipulations are attached to the lease, surface resources can be adequately protected. Otherwise BLM cannot rely on these measures to assume that oil and gas impacts in these specific areas will be insignificant and, thus, must perform site-specific NEPA in order to determine appropriate protection and mitigation measures in **advance** of leasing. Furthermore, the BLM should document in this EIS the agency's current implementation of stipulations (i.e., that such stipulations are not typically waived), industry compliance with such stipulations, and the resultant protection of resources, in order to substantiate the agency's assertion that proposed stipulations will be sufficient to protect the specific resources within the lease areas under protest.

D. Proposed Lease Sale Violates National Historic Preservation Act

1. Leasing, Absent Compliance with Section 106, would violate the NHPA

Leasing parcels 200501-048 to 058 would violate the NHPA by failing to comply with the requirements of Section 106. Section 106 of the NHPA requires BLM to take into account the effects of its actions on all affected historic resources eligible for or on the National Register of Historic Places, and to provide the federal Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment, prior to making its decisions. BLM's proposed issuance of an APD requires compliance with Section 106, because an undertaking funded or licensed by a Federal agency triggers Section 106. 16 U.S.C. § 470f.

Congress enacted the NHPA for the explicit purpose of preserving, in the public's interest, "historic properties significant to the Nation's heritage [which] are being lost or substantially altered, often inadvertently." 16 U.S.C. § 470. The Section 106 process carries out Congress' purpose for the NHPA by requiring Federal agencies to seek ways to avoid, minimize, or mitigate adverse effects on historic resources. 36 C.F.R. § 800.1(a).

BLM's lease sale requires compliance with Section 106, because an undertaking funded or licensed by a Federal agency triggers Section 106. 16 U.S.C. § 470f. The Advisory Council's regulations define undertaking to include "project activit[ies] pr program[s] funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including...those requiring a Federal permit, license, or approval..." 36 C.F.R. §

800.16(y), emphasis added); see also 16 U.S.C. § (7)(B).²⁰ BLM's issuance of Federal oil land gas leases requires "approval," and therefore requires a Section 106 review of the proposed lease area prior to granting this approval. Further, BLM's Manual on Cultural Resource Management defines "proposed land use" of lands or resources requiring BLM's formal approval as synonymous with "undertaking" when such use has the potential to affect historic properties eligible for or on the National Register. See Bureau of Land Management, Manual 8100 – Cultural Resource Management. Therefore, BLM's approval of a lease sale is within the definition of undertaking requiring Section 106 review – especially when, as here, the record establishes the presence of significant cultural resource values and sites on proposed lease parcels.

The Section 106 regulations also confirm that the "[t]ransfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance" results in an "adverse effect" on historic properties. 36 C.F.R. § 800.5(a)(2)(vii) (emphasis added). Not only are the disputed parcels likely to have significant cultural values for many tribes, they all lack NSO stipulations, which could mitigate adverse effects. See *Conner v. Burford*, 848 F.2d 1441 (9th Cir. 1988) (discussing the implications and distinctions between NSO oil and gas leases and non-NSO oil and gas leases). Inadequate stipulations undermine BLM's ability to control surface use and protect non-mineral resources. Therefore, a thorough review of the impacts on historic and cultural resources must be done prior to leasing. Leasing the disputed lands could permanently compromise cultural and historic resources.

The Advisory Council's regulations regarding timing of the Section 106 process require BLM to complete its obligations before issuing the leases at issue. The regulations, with respect to timing of Section 106, state:

[Completion of a Section 106 review] does not prohibit agency officials from conducting or authorizing nondestructive project planning activities before completing compliance with section 106, provided that such actions do not restrict the subsequent consideration of alternatives to avoid, minimize or mitigate the undertaking's adverse effects on historic properties.

36 C.F.R. § 800.1(c)(emphasis added). Further, the regulations instruct Federal agencies to initiate Section 106 early in an undertaking's planning to ensure that "a broad range of alternatives may be considered during the planning process for the undertaking." *Id.* (emphasis added).

These regulations apply to these lease sale parcels. Leasing the disputed parcels conveys the right to develop the leasehold. BLM's discretion may be insufficient to fully protect special resource values if site-specific analysis is deferred to the post-leasing stage of development (APD proposals). Because of the known presence of cultural

²⁰The 1992 Congressional amendments make clear that an undertaking can be an approval, clarifying a controversial distinction between license and approval.

resources on these lands, BLM must conduct a Section 106 review prior to leasing. In essence, the lease is an irreversible and irretrievable commitment of resources. Allowing leasing to proceed for the disputed lands without first conducting a Section 106 review would foreclose BLM's ability to preserve cultural and historic values in violation of the mandates of the NHPA.

2. Leasing the parcels would violate BLM's stewardship responsibilities under Section 110 of the NHPA.

Federal agencies have special stewardship responsibilities with respect to historic resources on land that is under the agency's "jurisdiction or control." Section 110(a) of the NHPA requires that federal agencies "shall assume responsibility for the preservation of historic properties which are owned or controlled by such agency." 16 U.S.C. § 470h-2(a)(1). All historic properties under federal jurisdiction or control must be "managed and maintained in a way that considers the preservation of their historic, archaeological, . . . and cultural values . . ." 16 U.S.C. § 470h-2(a)(2)(B), and those properties must be "identified, evaluated, and nominated to the National Register." *Id.* 16 U.S.C. § 470h-2(a)(2)(A); see *id.* 16 U.S.C. § 470h-2(a)(2)(E)(ii).

The issuance of leases for the parcels 200501-048 to 058 violates BLM's stewardship responsibilities under Section 110 of the NHPA because the leases do not adequately protect identified cultural and historic properties, and traditional religious and cultural properties. In 1992, Congress specifically amended Section 110 to increase Federal agencies' proactive, ongoing responsibility to locate, inventory, and nominate properties to the National Register, as well as assume the responsibilities for preserving historic properties. See 16 U.S.C. § 470h-2(a)(as amended 1992). Section 110 requires Federal agencies to adopt and utilize cultural resource management programs. *Id.* BLM adopted an agency-wide Cultural Resource Management Program (CRMP). The CRMP has three main components – identification, protection, and utilization. See BLM Manuals 8100 – Cultural Resource Management Plan; 8110 – Identifying Cultural Resources; 8120 – Protecting Cultural Resources; and 8120 – Utilizing Cultural Resources for Public Benefit. Four manuals direct BLM field offices to carry out their responsibilities under Section 110 of the NHPA.

Here, BLM's attempt to lease the parcels contravenes its stewardship responsibilities found in Section 110 and BLM's national directives. Given the known significance of the entire area to many Native American tribes, BLM has an increased obligation to inventory the area and protect cultural and historic resources. The parcels have identified cultural resources, but BLM has not adequately surveyed the parcels resources for their eligibility on the National Register. Leasing will foreclose BLM's ability to provide for stewardship protection, especially with respect to historic resources and traditional religious and cultural properties.

3. BLM violated NHPA by failing to adequately consult with Native American tribes prior to leasing

BLM's failure to consult with Indian tribes prior to auctioning the disputed parcels violates the consultation mandates required under the NHPA. The NHPA requires BLM, when conducting a Section 106 review, to "consult with any Indian tribe...that attaches religious and cultural significance to properties." 16 U.S.C. § 470a(d)(6)(B). Federal agencies have an affirmative duty to seek information regarding potential areas of traditional religious and cultural value to Indian tribes. See 36 C.F.R. § 800.2(c)(ii). In exercising its consultation duties, BLM must ensure that it makes a "reasonable and good faith effort" to identify tribes that shall be consulted. *Id.*; see also Pueblo of Sandia v. United States, 50 F.3d 856 (10th Cir. 1995). Consulting tribes may then have an opportunity to advise BLM on identifying and evaluating historic properties.

Native American consultation is critical at the leasing stage, because protection of traditional cultural properties (TCPs) and sacred sites might directly conflict with a lessee's right to develop. Leasing may render the preservation of TCPs or sacred sites difficult or impossible. TCPs and sacred sites are not just irreplaceable resources; they are a living entity critical to a part of the Native American way of life. Providing for consultation after granting a lease sets a potentially irreversible course for properties, in spite of increased protection by Congress and the Executive branch. BLM should withdraw parcels 200501-048 to 058 until they have an adequate opportunity to identify traditional religious and cultural properties and discuss preservation.

E. Proposed Lease Sale Violates BLM Manual Guidance

Protestors are very concerned with the extent to which the BLM may be violating protections of candidate and non-listed imperiled species. Instruction Memorandum (IM) 97-118, issued by the national BLM office, governs BLM Special Status Species management and requires that actions authorized, funded, or carried out by BLM do not contribute to the need for any species to become listed as a candidate, or for any candidate species to become listed as threatened or endangered. It recognizes that early identification of BLM sensitive species is advised in efforts to prevent species endangerment, and directs BLM state directors to collect information on species of concern to determine if BLM sensitive species designation and special management are needed.

Additionally, if Sensitive Species are designated by a State Director, the protection provided by the policy for candidate species shall be used as the minimum level of protection. BLM Manual 6840.06. The policy for candidate species states that the "BLM shall carry out management, consistent with the principles of multiple use, for the conservation of candidate species and their habitats and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened/endangered." BLM Manual 6840.06. Specifically, BLM shall:

- (1) Determine the distribution, abundance, reasons for the current status, and habitat needs for candidate species occurring on lands administered by BLM, and evaluate the significance of lands administered by BLM or actions in maintaining those species.

- (2) For those species where lands administered by BLM or actions have a significant affect on their status, manage the habitat to conserve the species by:
 - a. Including candidate species as priority species in land use plans.
 - b. Developing and implementing rangewide and/or site-specific management plans for candidate species that include specific habitat and population management objectives designed for recovery, as well as the management strategies necessary to meet those objectives.
 - c. Ensuring that BLM activities affecting the habitat of candidate species are carried out in a manner that is consistent with the objectives for those species.
 - d. Monitoring populations and habitats of candidate species to determine whether management objectives are being met.
- (3) Request any technical assistance from FWS/NMFS, and any other qualified source, on any planned action that may contribute to the need to list a candidate species as threatened/endangered.

BLM Manual 6840.06.

Despite this clear guidance, and the likely presence of numerous Sensitive Species on the parcels protested, there is little evidence that BLM is fulfilling these obligations. Specifically, BLM failed to 1) conduct surveys and/or inventories necessary to determine the distribution and abundance of Sensitive Species, 2) assess the reasons for the current status of Sensitive Species, 3) evaluate the potential impacts of leasing and subsequent oil and gas activities on Sensitive Species, 4) develop conservation strategies for Sensitive Species and ensure that the activities in question are consistent with those strategies, 5) monitor populations and habitats of Sensitive Species, and, potentially 6) request appropriate technical assistance from all other qualified sources. The BLM needs to demonstrate compliance with this policy on the protested parcels **prior** to leasing and an irretrievable commitment by the agency to oil and gas development on the public's land.

F. Federal Lands Policy and Management Act (“FLPMA”)

FLPMA 43 U.S.C. § 1732(a) unequivocally states that “the Secretary shall manage the public lands . . . in accordance with the land use plans that he developed [.]” FLPMA’s implementing regulations echo this mandatory language declaring “all future resource management authorizations and actions . . . shall conform to the approved plan.” 43 C.F.R. § 1610.5-3(a) (emphasis added). Moreover, Federal courts and the Interior Board of Land Appeals (“IBLA”) have strong precedent upholding the above language. *See e.g. Southern Utah Wilderness Alliance v. Norton*, 301 F.3d 1217, 1234-1235 (10th

Cir. 2002) (*affirming Southern Utah Wilderness Alliance*, 111 IBLA 207, 210-211 (1989) (vacating a decision to issue a recreation permit because it was contrary to the existing land management plan.)) *Uintah Mountain Club*, 112 IBLA 287, 291 (1990) (striking down BLM off-road vehicle route designation which did not conform to the applicable RMP). Additionally, courts hold that when an RMP decides an issue that issue remains decided until the plan is legally amended or updated. *Natural Resources Defense Council v. Hodel*, 618 F. Supp. 848, 876 (E.D. Cal 1985).

Here, the BLM has not demonstrated conformance of its leasing decision with the applicable RMPs and LRMP. *See*, discussion *supra* at Section C(2). In particular, at least where the governing land use documents contain no discussion of CBM development, to the extent BLM is issuing leases for the purpose of allowing development of CBM, such action is unlawful and violates FLPMA.

G. BLM has discretion not to lease the protested parcels

BLM has broad discretion in leasing federal lands. The Mineral Leasing Act (“MLA”) provides that “[a]ll lands subject to disposition under this chapter which are known or believed to contain oil or gas deposits may be leased by the Secretary.” 30 U.S.C. § 226(a). In 1931, the Supreme Court found that the MLA “goes no further than to empower the Secretary to lease [lands with oil and gas potential] which, exercising a reasonable discretion, he may think would promote the public welfare.” *U.S. ex rel. McLennan v. Wilbur*, 283 U.S. 414, 419 (1931). A 1965 case stated that the Mineral Leasing Act “left the Secretary discretion to refuse to issue any lease at all on a given tract.” *Udall v. Tallman*, 85 S.Ct. 792, 795 (1965) *reh. den.* 85 S.Ct. 1325. Thus, BLM has discretionary authority to approve or disapprove mineral leasing of public lands.

When a leasing application is submitted to the federal government and before the actual lease sale, no right has vested for the applicant or potential bidders, and BLM retains the authority not to lease. “The filing of an application which has been accepted does not give any right to lease, or generate a legal interest which reduces or restricts the discretion vested in the Secretary whether or not to issue leases for the lands involved.” *Duesing v. Udall*, 350 F.2d 748, 750-51 (D.C. Cir. 1965), *cert. den.* 383 U.S. 912 (1966). *See also Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1230 (9th Cir. 1988) (“[R]efusing to issue [certain petroleum] leases ... would constitute a legitimate exercise of the discretion granted to the Secretary of the Interior”); *McDonald v. Clark*, 771 F.2d 460, 463 (10th Cir. 1985) (“While the [MLA] gives the Secretary the authority to lease government lands under oil and gas leases, this power is discretionary rather than mandatory”); *Burglin v. Morton*, 527 F.2d 486, 488 (9th Cir. 1975) (“[T]he Secretary has discretion to refuse to issue any lease at all on a given tract”); *Pease v. Udall*, 332 F.2d 62 (C.A. Alaska) (Secretary of Interior has discretion to refuse to make any oil and gas leases of land); *Geosearch, Inc. v. Andrus*, 508 F. Supp. 839 (D.C. Wyo. 1981) (leasing of land under MLA is left to discretion of the Secretary of Interior). Similarly, IBLA decisions consistently recognize that BLM has “plenary authority over oil and gas leasing” and broad discretion with respect to decisions to lease. *See Penroc Oil Corp., et al.*, 84 IBLA 36, 39, GFS (O&G) 8 (1985), and cases cited therein.

Withdrawing the protested parcels from lease sale until proper pre-leasing analysis has been performed is a proper exercise of BLM's discretion under the MLA. BLM has no legal obligation to lease the disputed parcels.

III. Request for Relief

The parcels listed in this protest should be withdrawn until BLM can address the issues raised in this protest. Until BLM has addressed these issues, it is our position that this lease sale violates BLM policy and numerous federal statutes and should not be allowed.

Thank you for your consideration of our concerns. Please call me at 505-988-9126 x156, if you wish to discuss this issue.

Respectfully submitted,

Nicole J. Rosmarino, Ph.D., Conservation Director
Forest Guardians
312 Montezuma Ave. Suite A
Santa Fe, NM 87501

On behalf of:

Steve West
Chihuahuan Desert Conservation Alliance
1105 Ocotillo Canyon
Carlsbad, NM 88220

Michael Scialdone, Inventory Coordinator
New Mexico Wilderness Alliance
202 Central SE Suite 101
Albuquerque, NM 87102

Oscar Simpson, President
New Mexico Wildlife Federation
2921 Carlisle Blvd. Suite 200j
Albuquerque, NM 87110

Donna House
P.O. Box 19
San Juan Pueblo, NM 87566

Attachments

Exhibit A: Maps showing intersection of lease parcels with lesser prairie-chicken and aplomado falcon habitat.

Exhibit B: Torrejon Fossil Fauna Area of Critical Environmental Concern Map

References Cited

- Bailey, James A. 1998. "New Mexico Department of Game and Fish review of a Peregrine Fund proposal to reintroduce aplomado falcons." October 19, 1998.
- Belnap, J. 2002. Letter from Jayne Belnap, Field Station Leader, U.S. Department of the Interior, U.S. Geological Survey, Biological Resources Division, Forest and Rangeland Ecosystem Science Center, Canyonlands Field Station to Maggie Wyatt and Bill Stringer, Moab BLM Field Office. 17 January 2002. U.S. Department of the Interior, U.S. Geological Survey, Biological Resources Division, Forest and Rangeland Ecosystem Science Center, Canyonlands Field Station, Moab. 4 pp.
- Biggins, Dean E., Brian J. Miller, Louis R. Hanebury, Bob Oakleaf, Adrian H. Farmer, Ron Crete, and Arnold Dood. 1993. "A technique for evaluating black-footed ferret habitat." In Proceedings of the Symposium on the Management of Prairie Dog Complexes for the Reintroduction of the Black-footed Ferret. Eds. John L. Oldemeyer, Dean E. Biggins, and Brian J. Miller. Washington, DC: USFWS. Pp. 73-88.
- Bondello, M.C. 1976. The effects of high intensity motorcycle sounds on the acoustical sensitivity of the desert iguana, *Dipsosaurus dorsalis*. Master's thesis. California State University, Fullerton.
- Bowles, A.E., M. Smultea, B. Wursig, D.P. Demaster, and D. Palka. 1994. Relative abundance and behaviour of marine mammals exposed to transmission from the Heard Island feasibility test. The Journal of the Acoustical Society of America 96:2469-2484.
- Boyle, S., and L. Connaughton. 2002. Yellow Cat Swath 2-D Geophysical Project: current and potential ecological impacts. 10 April 2002. Bio-Logic Environmental, Montrose. 38 pp.
- Brattstrom, B.H., and M.C. Bondello. 1979. The effects of dune buggy sounds on the telencephalic auditory evoked response in the Mojave fringe-toed lizard, *Uma scoparia*. Unpublished report to U.S. Bureau of Land Management, California Desert Program. Contract CA-060-CT7-2737. U.S. Bureau of Land Management, California Desert Program, Riverside. 31 pp.
- Brattstrom, B.H., and M.C. Bondello. 1983. Effects of off-road vehicle noise on desert vertebrates. Pp. 167-206 in R.H. Webb and H.G. Wilshire, eds. Environmental effects of off-road vehicles. Springer-Verlag, New York. 534 pp.
- Bromley, Marianne. 1985. "Wildlife management implications of petroleum exploration and development in wildland environments." U.S. Forest Service Technical Report INT-191.

Center for Native Ecosystems. Petition to list the white-tailed prairie dog under the Endangered Species Act. Submitted to the U.S. Fish and Wildlife Service July 2002.

Clarren, R. 1999. "Oil wells in my backyard?" High Country News. 15 March 1999.

Clifford, H. 2001. "Wyoming's powder keg." High Country News. 5 November 2001.

Crawford, B. 2001. Coalbed methane: one way road to environmental degradation. A study of road-related impacts during development. Unpublished report prepared for Wildlands Center for Preventing Roads. 19 December 2001.

Dinsmore, Stephen J. 2001. "Population Biology of Mountain Plovers in Southern Phillips County, Montana." Ph.D. Dissertation, Colorado State University, Fall 2001.

Dinsmore, Stephen J. 2003. "Rawlins RMP scoping comments for the Mountain Plover." Submitted to the U.S. Bureau of Land Management, February 3, 2003.

Dolman, S., and M.P. Simmonds. The threat posed by noise to cetaceans: preliminary considerations with particular reference to antipredator devices. International Whaling Commission Scientific Committee 50(E8):1-12.

Environmental Protection Agency. 1971. Effects of noise on wildlife and other animals. Prepared by Memphis State University under Contract 68-04-0024. 31 December 1971. Environmental Protection Agency, Washington, D.C.

Evans, B.J. 1997. A handbook for seismic data acquisition in exploration. Geophysical Monograph Series Number 7. W.H. Dragoset, Jr., Vol. ed. D.V. Fitterman, Series ed. Society of Exploration Geophysicists, Tulsa. 305 pp.

Fowler-Propst, Jennifer. 1999. Pers. comm. from Jennifer Fowler-Propst, USFWS, to Mike Howard, BLM, dated October 27, 1999.

Good, R.E., D.P. Young Jr., and J. Eddy. 2001. "Distribution of mountain plovers in the Powder River Basin, Wyoming." Report by WEST, Inc. Unpublished Report Prepared for the Bureau of Land Management, 11 pp.

Hawks Aloft, Inc. 2001. "Annual Report, Mountain Plover Surveys for the Albuquerque Field Office of the Bureau of Land Management 2001." Unpublished Report prepared for U.S. Bureau of Land Management, 18 December 2001.

Heffner, R.S., H.E. Heffner, C. Contos, and D. Kearns. 1994. Hearing in prairie dogs: transition between surface and subterranean rodents. Hearing Research 73:185-189.

- Henry, Ann. 1995. "Inventory of a northern Jornada del Muerto grassland for the aplomado falcon Falco femoralis septentrionalis." Report submitted by Ann L. Henry, New Mexico Heritage Program, to the Turner Foundation. April 30, 1995.
- Howard, Mike. 2000. "Biological evaluation Bennett Ranch Well 25-1 Otero County, New Mexico." Bureau of Land Management, Las Cruces Field Office. Dated September 20, 2000.
- Hubbard and Schmitt. 1984. "The black-footed ferret in New Mexico." Report prepared for New Mexico Dept. of Game and Fish, April 30, 1984. 118 pp.
- Johnson, Kristine, Teri Neville, and Leland Pierce. 2003. "Remote sensing survey of black-tailed prairie dog towns in the historical New Mexico range." NMNHP Publication No. 03-GTR-248. 28 pp.
- Ketten, D.R. 1995. Estimates of blast injury and acoustic trauma zones for marine mammals from underwater explosions. Pp. 391-407 in R.A. Kastelein, J.A. Thomas, and P.E. Nachtigall, eds. Sensory systems of aquatic mammals. De Spil Publishers, Woerden, Netherlands. 588 pp.
- Ketten, D.R., J. Lien, and S. Todd. 1993. Blast injury in humpback whale ears: evidence and implications. 126th Meeting, Acoustical Society of America. The Journal of the Acoustical Society of America 94(3):1849-1850.
- Kingery, Hugh E. 1998. "Mountain Plover (Charadrius montanus)." Colorado Breeding Bird Atlas. Colorado Bird Atlas Partnership. Denver, Colorado. 636 pp.
- Knowles, Craig J., and Pamela R. Knowles. 2001. "The 2000 Montana Mountain Plover Survey Results." Unpublished Report Prepared for the U.S. Bureau of Land Management, 19 February 2001.
- Long, M. 2001. "Conference opinion for the Seminoe Road Coalbed Methane Pilot Project, Carbon County, Wyoming." U.S. Fish and Wildlife Service Memorandum of May 8, 2001.
- Mate, B.R., K. Stafford, and D.K. Ljungblad. 1994. A change in sperm whale (Physeter macrocephalus) distribution correlated to seismic surveys in the Gulf of Mexico. In Proceedings of the 128th meeting of the Acoustical Society of America, Texas.
- McCauley, R.D., M.N. Jenner, C. Jenner, K.A. McCabe, and J. Murdoch. 1998. The response of humpback whales (Megaptera novaeangliae) to offshore seismic survey: preliminary results of observations about a working seismic vessel and experimental exposures. Australian Petroleum Production and Exploration Association Journal 38:692-706.
- McLellan, B.N., and D.M. Shackleton. 1989. Grizzly bears and resource-extraction

industries: habitat displacement in response to seismic exploration, timber harvesting and road maintenance. *Journal of Applied Ecology* 26:371-380.

Meyer, Raymond. 1999. "Survey for northern aplomado falcon (*Falco femoralis septentrionalis*) on Fort Bliss Military Reservation, 1999." Report submitted to Conservation Division, Directorate of the Environment, Fort Bliss.

Miller, Brian, Reading, Richard P., and Steve Forrest. 1996. *Prairie Night: Black-Footed Ferrets and the Recovery of Endangered Species*. Washington: Smithsonian Institution Press.

Nevo, E. 1995. Mammalian evolution underground. The ecological-genetic-phenetic interfaces. *Acta Theriologica*, Supplement 3:9-31.

Patton, Gary, and Bob Leachman. 1991. "Black-footed ferret habitat evaluation and search project in northeast Colorado." Report prepared for the U.S. Fish and Wildlife Service. December 27, 1991.

Randall, J.A. 2001. Evolution and function of drumming as communication in mammals. *American Zoologist* 41:1143-1156.

Richardson, W.J., C.R. Greene, Jr., C.I. Malme, and D.H. Thomson. 1995. *Marine mammals and noise*. Academic Press, San Diego. 576 pp.

Richardson, W.J., and B.Würsig. 1997. Influences of man-made noise and other human actions on cetacean behaviour. *Marine and Freshwater Behaviour and Physiology* 29:183-209.

Sandoval, Andrew. 1998. Pers. comm. from Andrew Sandoval, NMDGF, to Sheryl Parker, U.S. Air Force, dated May 29, 1998.

Schmitt, C. Gregory. 1995. "Swift fox investigations in New Mexico, 1995." In "Report of the swift fox conservation team." Eds. Stephen H. Allen et al. Pp. 27-31.

Simmonds, M.P., and S. Dolman. 1999. A note on the vulnerability of cetaceans to acoustic disturbance. *International Whaling Commission Scientific Committee* 51(E15):1-4.

Stone, C.J. 1997. Cetacean observations during seismic surveys in 1996. *Joint Nature Conservation Committee Reports* 228. Joint Nature Conservation Committee, Aberdeen.

Stone, C.J. 1998. Cetacean observations during seismic surveys in 1997. *Joint Nature Conservation Committee Reports* 278. Joint Nature Conservation Committee, Aberdeen.

- Swift, R. 1998. "The effects of array noise on cetacean distribution and behaviour." Poster. Seismic and Marine Mammal Workshop, London.
- U.S. Bureau of Land Management. 2000. "Biological evaluation: Las Cruces Field Office grazing permit renewals Batch 2 Allotments." June 2000.
- U.S. Bureau of Land Management. 1999. "Guidance criteria for determinations of effects of proposed grazing permit authorizations or renewals on threatened or endangered species." Dated February 2, 1999.
- U.S. Fish and Wildlife Service. 1997a. "Biological opinion on the Caballo Resource Area Resource Management Plans." Dated April 28, 1997.
- U.S. Fish and Wildlife Service. 1997b. "Biological opinion on the Safford/Tucson Field Offices' livestock grazing program, southeastern Arizona." Issued September 26, 1997.
- U.S. Fish and Wildlife Service. 1997c. "Biological opinion on the Socorro Resource Area Resource Management Plans." Dated March 24, 1997.
- U.S. Fish and Wildlife Service. 1998. "Proposed releases of endangered aplomado falcons under section 10(j) (experimental, non-essential) in New Mexico." Briefing statement from New Mexico Ecological Services to USFWS Region 2 Director. November 17, 1998.
- Ward, A.L., J.J. Cupal, A.L. Lea, C.A. Oakley, and R.W. Weeks. 1973. Elk behavior in relation to cattle grazing, forest recreation, and traffic. *Transactions of the North American Wildlife and Natural Resources Conference* 38:327-337.
- Williams, Sartor O. 1997. "Recent occurrences of aplomado falcons in New Mexico: is natural recolonization of historic range underway?" Paper presented at 35th Annual Meeting of the New Mexico Ornithological Society, New Mexico State University, Las Cruces, NM, 5 April 1997.
- Würsig, B., and P.G.H. Evans. 1998. "Cetaceans and humans: influences of noise." Second European seminar on marine mammals: biology and conservation. Valencia, Spain.
- Yukon Fish and Wildlife Management Board. 2002. "The Effects of Oil and Gas Activity on Fish and Wildlife: a Review of Selected Literature." Whitehorse, Yukon Territory, Y1A 2H5. 87 pp.
- Zimmermann, E. 2001. Ecological effects of seismic testing. Unpublished report for Wildlands Center for Preventing Roads. 18 December 2001.