



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
Ecological Services



Suite D, 3530 Pan American Highway, NE  
Albuquerque, New Mexico 87107 Cons. #2-22-90-I-040  
February 23, 1990

Captain Wilfred Cassidy  
HQ TAC/DEEV  
Langley AFB, Virginia 23665-5542

Dear Captain Cassidy:

This is in response to your request for review and comments on the Draft Environmental Impact Statement (DEIS) for the Cannon Air Force Base Realignment. The DEIS describes the project as a realignment of Cannon AFB. The realignment will include increasing the base F-III aircraft from 62 to 108, increase military personnel to 5,201, and increase civilian personnel to 522. In addition, the Tactical Fighter Wing will increase the use of military training routes and the Melrose Range, creation of the Mount Dora Military Operations Area (MOA), and base construction activities. The realignment includes the following geographic areas: Colfax, Harding, Mora, Union, Curry and Roosevelt counties in New Mexico, Dallam County in Texas and Las Animas County in Colorado.

We have used the information provided in the DEIS to narrow the list of threatened and endangered species that occur in the project area to those which may be affected by the realignment. The bald eagle, American peregrine falcon, interior least tern and whooping crane may be found in the project area (See enclosure)

We have the following specific comments on the DEIS:

Item No. 1., Section 4.2.6.2, Pages 4-58 Wildlife Resources, third paragraph. It describes the "greatest numbers of migrating geese are from mid-September to the first of November." Service data suggests that the peak fall migration occurs from October through early December and spring migrations occur from mid-February to early April. Canada and snow geese migrate through the northeastern corner of New Mexico, southeast Colorado, and the Texas panhandle as well as large numbers of sandhill cranes, whooping cranes, ducks, shorebirds and songbirds. Sandhill and whooping cranes migrate from September 1 through December 1 and February 1 through April 1. Most of these birds migrate at 1,500 feet AGL or higher.

The golden eagle will probably be found throughout the year on the Mount Dora MOA. Although the golden eagle is not a threatened or endangered species it is still protected under the Bald and Golden Eagle Protection Act. The golden eagle like the bald eagle soars at high altitudes and this may pose a hazard for bird-aircraft collisions. Additionally, the noise levels of low altitude (1,500 ft. AGL) flights may disturb nesting eagles, causing them to abandon their nests. Appropriate aircraft scheduling should be incorporated into flight plans to protect nesting golden eagles.

To date there are 514 bald eagles in New Mexico, 197 in northeastern, New Mexico, 40 in the Panhandle of Texas, and an unknown number in southeastern Colorado. The Service is enclosing an up to date bald eagle census conducted by the New Mexico Department of Game and Fish in January 1990 for planning purposes by the Air Force.

Item No. 2., Section 3.1.3.1, Pages 3-117 and 18, Surface Water. The Cannon Air Force Base should apply for a National Pollution Discharge Elimination System (NPDES) permit from the Environmental Protection Agency (EPA) to continue to discharge from the base wastewater treatment lagoons into the base playa. Playas are a surface water of the United States under the Clean Water Act (CWA) (40 CFR, Sect. 122.2., as amended 1987). The CWA states that waters of the U.S. means "...All other waters such as intra state lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands", sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds..."

The playa lake located at the southwest corner of the base is also a surface water of the United States, under the CWA. Playas (playa lakes) in eastern, New Mexico are important resting, feeding, and grouping areas of migratory waterfowl, shorebirds, raptors, songbirds, upland game birds, and many other species of wildlife. Service data shows that the Base Playa and the lagoon treatment system attracts thousands of migratory birds, especially during winter months.

Item No. 3, Section 1.4.5, Pages 1-13, Biological Environment. The DEIS incorrectly identifies the Migratory Bird Treaty Act (MBTA) as the Migratory Bird Conservation Act. The MBTA is an international treaty between the United States, Great Britain, Japan, Canada, Mexico and the Soviet Union.

Item No. 4, Section 3.1.6.2, Pages 3-59, Wildlife Resources. The DEIS should identify major reservoirs in the vicinity of Cannon AFB as important wintering and staging areas for migratory birds. Ute, Conchas and Santa Rosa Reservoirs winter bald eagles, geese, and ducks. Portions of Ute Reservoir are used as a migratory bird sanctuary. Low level flights over State Waterfowl Management areas or sanctuaries (Clayton Lake, Wagon Mound, Ute Reservoir) should be avoided especially during the winter months. The Air Force should also avoid flying over Grulla National Wildlife Refuge in Roosevelt County, New Mexico and Muleshoe National Wildlife Refuge in Bailey County in Texas.

The DEIS should evaluate the potential of aircraft - bird strike hazards at the base. The location of the playas on base, the large number of birds known to occur at these playas, coupled with increased air traffic may increase the potential for strike incidents.

The DEIS should provide more detail of the value of playa lakes to wildlife in eastern, New Mexico. In addition to Playa Lakes providing habitat for migratory birds they also provide habitat for endemic mammals, amphibians and reptiles. Substantial data is available on the subject in the literature and at the museum of Southwestern Biology at the University of New Mexico, Albuquerque, New Mexico.

Item No. 5, Section 3.1.8, Pages 3-71, Solid Wastes, Hazardous Wastes and Hazardous Materials, Subsection 3.1.8.1, Pages 3-71.

More detailed discussion is required to determine if contaminant levels within the base playa are within acceptable limits. There appears to be no analysis of sediment concentrations of PCB's, PAH's, TCE, and heavy metals, especially mercury, lead, chromium and cadmium. Detection limits of the constituents tested should also be stated. We are concerned that Federally protected migratory birds may become exposed to organic, inorganic, and pathogenic contaminants present in the sewage lagoons and the playas. If migratory birds become exposed to compounds at or above levels that result in reproductive impairment, trust resources protected by the MBTA would be adversely impacted. Analysis of bottom sediments in the playa lake should be done to determine the potential for exposure to inorganic and organic compounds. Again, an NPDES permit should be required to discharge to the base playa as it is a surface water of the United States under the CWA of 1987 as amended.

Pages 3-80, Section K, Site No. 12 (Storm Water Collection Point). The DEIS mentions that a hydrocarbon film is present on the surface of the playa that serves as a collection point for storm water runoff. Oil residues or hydrocarbons as a surface film are a threat to migratory birds since small amounts cause mortality due to ingestion during preening. Oil residue on bird feathers often produce hypothermia resulting in mortality. An attempt to eliminate the source of hydrocarbon products in surface runoff should be made.

We disagree that 80 ug/l level of lead and 212 ug/l level of chromium are low concentrations in water. Both levels are substantially higher than the chronic toxicity levels for aquatic invertebrates. Lead and chromium at these levels may concentrate potentially toxic levels in sediment.

Visual observations of contamination for the playa and ditch are inadequate. Levels of contamination can only be determined by quantified analysis with EPA established protocols.

The DEIS should address potential adverse impacts to wildlife due to past disposal of hazardous materials by base personnel. Past disposal practices for trichloroethylene (TCE), PD680, fuel tank sludges, pesticides, heavy metals and other compounds in landfills or wastewater treatment systems often result in both surface and groundwater contamination. Quantified data gathering and analysis of sediments and soils for organic and inorganic compounds that have been accidentally spilled, and disposed of in landfills (the twenty sites described in the DEIS), should be conducted.

#### Conclusions:

The DEIS does not provide sufficient information to support the conclusion that there are no significant impacts to the environment by present and increased operations at Cannon Air Force Base. The DEIS should quantitatively address the extent of environmental contamination at the base and determine if it is affecting wildlife resources. This should be conducted as part of the Resource Conservation and Recovery Act review. The DEIS does not go into detail regarding low level flights and increased air traffic and possible affects upon migratory birds within the Pecos River valley. The DEIS should also address Bitter Lake National Wildlife Refuge and the endangered least tern which nests at the Refuge in more detail.

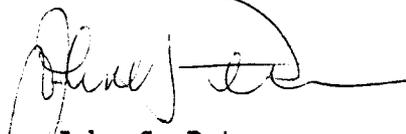
The DEIS gives superficial coverage to wildlife resources that are found in the project areas. The term mitigation is also used frequently but does not appear to fit the definition usually applied. Impacts to wildlife need to be adequately analyzed and alternative methods evaluated to reduce those impacts. If alternative methods are not possible then a mitigation plan should be developed in its place prior to project initiation.

The DEIS also should have a section titled Irreversible and Irretrievable Commitment of Resources. This section is used to evaluate the project to determine if the proposed action causes permanent and irretrievable loss of wildlife habitat or the use of this habitat to wildlife. The DEIS should also focus on determining the cumulative impacts of increased air traffic from Cannon AFB, the new MOA and training routes in addition to other military training routes that exist in Eastern New Mexico. This can only be accomplished through studies initiated by the Air Force, that specifically address the impacts to wildlife and are scientifically defensible.

We appreciate the opportunity to review and comment on the DEIS. The Albuquerque Field Office is willing to assist the Air Force in developing flight routes and schedules that protect wildlife resources, while at the same time meet the Air Force's continued mission.

If we can be of further assistance, please call Richard Roy at (505) 883-7877 or FTS 474-7877.

Sincerely yours,



John C. Peterson  
Field Supervisor

Enclosures (2)

cc: (w/cy encls)

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico  
Director, Environmental Improvement Division, New Mexico Health and  
Environment Department, Attn: Boyd Hamilton, Hazardous Materials  
Division, Santa Fe, New Mexico  
Regional Director, U.S. Fish and Wildlife Service, Fish and Wildlife  
Enhancement, Albuquerque, New Mexico

Cannon Air Force Base Realignment  
Draft Environmental Impact Statement  
Colfax, Harding, Mora, Union, Curry and Roosevelt Counties, New Mexico  
and  
Dallam County, Texas and Las Animas County, Colorado

February 22, 1990

**Bald Eagle (Haliaeetus leucocephalus)** - Occupies New Mexico primarily as a winter resident, but also occurs as a migrant with several nesting in the State. Roosts in large trees which may or may not be close to their feeding areas. Bald eagles are found in riparian areas adjacent to rivers, reservoirs, and ponds. Rabbits, fish and waterfowl are their primary prey items.

Authority: Sandy Williams, New Mexico Department of Game and Fish, State Capitol, Santa Fe, New Mexico 87503, (505) 827-9914.

**American Peregrine Falcon (Falco peregrinus anatum)** - The peregrine falcon prefers areas with steep rocky cliffs in close proximity to water. Preferred habitat contains dense bird populations in conjunction with large gulfs of air such as in canyons.

Authority: Sandy Williams, New Mexico Department of Game and Fish, State Capitol, Santa Fe, New Mexico 87503, (505) 827-9914.

**Interior Least Tern (Sterna antillarum athalassos)** - This species nests on sandy beaches on shorelines of streams, rivers and lakes and is found on Bitter Lake National Wildlife Refuge with some sighting Bosque del Apache National Wildlife Refuge.

Authority: John P. Hubbard, New Mexico Department of Game and Fish, State Capitol, Santa Fe, New Mexico 87503, (505) 827-2438.

**Whooping Crane (Grus americana)** - Occupies the project area October through February. Roosts on gravel bars and islands in the Rio Grande. Feeds in cultivated fields and wetlands within several miles of the Rio Grande.

Authorities: James Lewis, U. S. Fish and Wildlife Service, P. O. Box 1306, Albuquerque, New Mexico 87103, (505) 766-3974 and Roderick Drewien, c/o Bosque del Apache National Wildlife Refuge, P. O. Box 1246, Socorro, New Mexico 87801, (505) 835-1828.

**NORTHEAST AREA (UPPER CANADIAN PORTION).**

Date: 15 January 1990. Times: 0832-1014.

Observers: Sandy Williams and Greg Schmitt. Pilot: Tom

Sansom. Aircraft: Skymaster. Weather Conditions: overcast;

light winds from NW; excellent visibility; good flying

conditions; little snow on ground; outside temperature ca.

40. Ice conditions: McAllister = 70% open; Storrie = 95%

ice; York = 50/50; La Cueva = 70% ice; Mora River = generally

open; Cherry = open; Wagon Mound = 80% ice; Charette = 95%

open; Miami = 90% open; Springer = 80% ice; French = 1 lake

dry and 1 lake 100% ice; Stubblefield = 100% ice, level low;

Maxwell = 2 lakes with 30% open, rest frozen.

<u>Upper Canadian Areas</u>	<u>Adult</u>	<u>Immature</u>	<u>Total</u>
McAllister Lakes	5	15	20
Storrie Lake	1	0	1
York Lakes	3	4	7
La Cueva Lakes	3	3	6
Mora R.: La Cueva to I-25	4	3	7
Mora R.: I-25 to Cherry L.	2	1	3
Cherry Lake	1	0	1
Mora R.: Beyond Cherry L.	3	2	5
Wagon Mound area	0	0	0
Charette Lakes	2	0	2
Miami Lake	2	0	2
Cim. R.:Miami - Springer L.	0	0	0
Springer Lake	0	0	0
French Lake	1	0	1
Stubblefield Lakes	0	0	0
Maxwell Lakes	<u>22</u>	<u>27</u>	<u>49</u>
<b>UPPER CANADIAN TOTAL</b>	<b>49</b>	<b>55</b>	<b>104</b>

**NORTHEAST AREA (LOWER CANADIAN PORTION).** Date: 15 January 1990. Times: 1056-1243. Observers: Sandy Williams and Greg Schmitt. Pilot: Tom Sansom. Aircraft: Skymaster. Weather conditions: partly-cloudy; no snow on ground; some wind; visibility excellent. Ice conditions: all open and ice free except part of Canadian River Canyon, which was 50/50.

<u>Lower Canadian Areas</u>	<u>Adult</u>	<u>Immature</u>	<u>Total</u>
Canadian R.,:Can.-Mora R. Jct	2	4	6
Canadian R.:Mora R. Jct- Conchas Res.	3	0	3
Conchas Res.:Conchas Arm	4	10	14
Conchas Res.:Canadian Arm	16	42	58
Ute Res.:Canadian Arm	3	9	12
Ute Res.:Ute Arm	0	0	0
Tucumcari Lake	<u>0</u>	<u>0</u>	<u>0</u>
<b>LOWER CANADIAN TOTAL</b>	<b>28</b>	<b>65</b>	<b>93</b>

**SOUTHEAST AREA (UPPER PECOS PORTION).** Date: 15 January 1990. Times: 1304-1344. Observers: Sandy Williams and Greg Schmitt. Pilot: Tom Sansom. Aircraft: Skymaster. Weather conditions: partly cloudy; outside temperature ca. 50; no snow; visibility excellent; fairly strong winds at Santa Rosa Res. Ice conditions: all open; river about dry from town of Santa Rosa up to Santa Rosa Res., otherwise good flows.

<u>Upper Pecos Areas</u>	<u>Adult</u>	<u>Immature</u>	<u>Total</u>
Sumner Res.	5	3	8
Pecos R.:Sumner R. - P.de L.	3	0	3
Pecos R.:P.de L.- Santa Rosa	2	0	2
Pecos R.:Santa Rosa-S.R. Res.	2	2	4
Santa Rosa Res.	13	27	40
Pecos R.:Res. to dry	<u>3</u>	<u>0</u>	<u>3</u>
<b>UPPER PECOS TOTALS</b>	<b>28</b>	<b>32</b>	<b>60</b>