

PDR

40-8745

OGLE PETROLEUM INC.

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559 SAN YSIDRO ROAD
SANTA BARBARA, CALIFORNIA 93108

March 6, 1980



PLEASE DIRECT REPLY TO:

150 North Nichols Avenue
Casper, Wyoming 82601
(307) 266-6456

Mr. Ronald S. Kaufmann, Project Manager
Uranium Recovery Licensing Branch
U.S. Nuclear Regulatory Commission
Mail Stop 905-SS
Washington, D.C. 20555

RE: Production Scale Source
Material License Application
Docket No. 40-8745

SUBJECT: Biological Assessment

Dear Mr. Kaufmann:

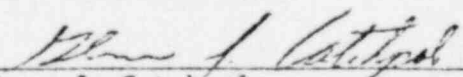
In your letter of February 15, 1980, Ogle Petroleum Inc. (OPI) is requested to perform a biological assessment to determine the impact of OPI's proposed Bison Basin project on the Bald Eagle and Black-Footed Ferret. Due to winter weather conditions at Bison Basin at this time, an additional biological assessment is not possible; however, the endangered species question was addressed in response to NRC questions 21 and 22 dated November 26, 1979. A copy of these questions with OPI's responses is enclosed.

It is suggested that the NRC contact Mr. Harry Harju of the Wyoming Game and Fish Department (telephone 307-777-7728) directly to obtain his opinion on the possible impact of OPI's uranium solution mining operation on the Bald Eagle and Black-Footed Ferret. Mr. Harju has indicated to me that the location and nature of OPI's operation will not have any significant impact on these two species. A copy of a letter from Mr. Harju to Mr. Gary Beach of the DEQ discussing OPI's Bison Basin project is enclosed.

The third paragraph in the letter from the acting Associate Director of the U.S. Fish and Wildlife Service pertains to the possibility of waterfowl using the evaporation ponds. In response to this question, OPI will monitor the situation; and if necessary, measures will be taken to keep the birds off the water surface.

Please contact me at OPI's Casper office if additional information pertaining to this matter is desired.

Sincerely,
OGLE PETROLEUM INC.


Glenn J. Catchpole
Project Manager

GJC:jm
Enclosures
CC: Dr. Minton Kelly, ORNL w/Enclosures
Mr. Harry Harju w/out Enclosures

FEE EXEMPT 15792

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DENVER

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RESPONSE:

The survey of plant communities and species was conducted in two steps. First, a series of clear, colored aerial photographs was obtained. On Tuesday, November 29, 1977, a member of the wildlife and ecology section of Ecology Consultants Inc. (ECI) of Fort Collins, Colorado spent the day identifying plant communities both on the ground and on the aerial photographs. The vegetation map (Figure 2.8-1 of the ER) together with the text for Section 2.8.1 were then prepared in the ECI office in Fort Collins.

During the field examination on November 29, 1979, no rare species of plants were found in the project area. Additionally, Dr. Robert D. Dorn, Principal Environmental Analyst with the Wyoming Department of Environmental Quality, made an independent survey of the project area on June 15, 1978 and reported that no rare plant species were found on the project area.

21. QUESTION:

There appears to have been no direct field survey of animal species or populations. If this is not correct, provide the specific dates at which field surveys took place, the number of person-hours involved, and the efforts directed at finding rare species.

RESPONSE:

The project area was surveyed for wildlife on the same day (November 29, 1977) as the plant survey discussed in the response to question number 20. During that field examination, local wildlife habitat conditions were evaluated and efforts were made to detect such sensitive areas related to possible big game wintering areas, sage grouse breeding grounds, raptor nesting sites, and prairie dog towns. Although an actual inventory of wildlife using the area was not conducted, on-site observations, review of data from other projects in the vicinity, plus information available from the Wyoming Game and Fish Department were used in making the wildlife evaluation.

As discussed in the response to question number 22, formal and informal field examinations together with recent conversations with members of the staff of the Wyoming Game and Fish Department indicate that the chances of finding rare, threatened, or endangered species in the project area are exceedingly small.

22. QUESTION:

Provide a table of federally listed and proposed endangered and threatened species which occur in the State. What are their habitat preferences? What are their known geographic distributions within the State and within Fremont and Sweetwater Counties? What is the basis for assuming they do not occur as residents (excepting animal transients) on or near the project site?

RESPONSE:

Federally listed endangered and threatened species that occur in Wyoming are (as listed in 50 CFR 17:11, revised as of October 1, 1978 plus amendments to November 1, 1979):

Plants: None

Animals:

Mammals: Black-Footed Ferret - *Mustela nigripes*
Grizzly Bear (Brown) - *Ursus arctos horribilis*
Northern Rocky Mountain Wolf - *Canis lupus irremotus*

Birds: Bald Eagle - *Haliaeetus leucocephalus*
American Peregrine Falcon - *Falco peregrinus anatum*
Whooping Crane - *Grus americana*
Eskimo Curlew - *Numenius borealis*

Fish: Humpback Chub - *Cila cypha*
Kendall Warm Springs Dace - *Rhinichthys osculus thermalis*
Colorado River Squawfish - *Ptychocheilus lucius*

Information on habitat preferences, known geographic distributions, and basis for assuming not residents at or near the site follows:

Black-Footed Ferret: The black-footed ferret is found exclusively in association with prairie dogs, upon which they prey. Very little is known about this rare ferret, due partly to the fact that it has been scarce since it was first described by Audobon and Bachman in 1851. However, it is reasonable to assume that its decline from scarce to rare is due largely to the extensive poisoning of prairie dogs by farmers, ranchers, and governmental agencies.

There are two species of prairie dogs in Wyoming: blacktail prairie dog, *Cynomys ludovicianus*, and whitetail prairie dog, *Cynomys gunnisoni*. The blacktail species is by far the more communal and is the one commonly found in "prairie dog towns." The whitetail species can form towns but is less inclined to do so. While the black-footed ferret probably has no preference, one over the other, it is more likely to be found in blacktail towns simply because of the denser concentration of prey.

The whitetail species is found in the Bison Basin project general area so one can postulate the theoretical possibility of black-footed ferrets there. However, observations by Ogle Petroleum personnel over a period of 2½ years have failed to produce a sighting, nor (as stated on page 153 of the ER) has the Wyoming Game and Fish Department any record of a sighting within the project area. We know of no prairie dog towns of the blacktail species in the general area.

The status situation of the black-footed ferret in Wyoming is discussed in Wyoming Game and Fish Department (1977) that follows this page.

Grizzly Bear: Grizzlies were once widely distributed throughout the western United States, and their habitat preferences could be described as covering a wide range of topography and climate. However, at the present time, their range in Wyoming is confined to the northern part of Yellowstone National Park in the northwest corner of the State. The number of individuals there is given in Wyoming Game and Fish Department (1977) as "uncommon." The chance of finding a Grizzly on or near the Bison Basin project area is very remote.

Northern Rocky Mountain Wolf: If not already extinct, this animal would be found only in the Yellowstone National Park area in the northwest corner of the State. The chances of finding one in the Bison Basin project area are exceedingly remote (see Wyoming Game and Fish Department (1977)).

Bald Eagle: The Bald Eagle is found in small numbers throughout Wyoming. While it may be encountered almost anywhere, its preferred nesting sites are confined to elevated topographic features and on cliffs. As shown on a map, "Wild Birds - Critical Habitat", included in Fremont County Planning Commission (1978) - following page 18 thereof (copy attached hereto), the Bison Basin project area is a minimum of five miles from any raptor nest sites or raptor critical nesting areas in Fremont County. While not shown on this map, such nesting areas in Sweetwater County to the south are equally remote from the project area.

American Peregrine Falcon: Nests of this bird have very rarely been seen in Wyoming and sightings have been in the extreme western part of the State. Those individuals seen from time to time in the State are believed to be migrant from other areas (see Wyoming Game and Fish Department (1973) and (1977)).

Whooping Crane: As discussed on pages 109-110 of Wyoming Game and Fish Department (1977), the Whooping Crane is considered rare in Wyoming. They have been sighted periodically migrating through the State but there is no record of nesting activity. Such few sightings as have been made are normally along the extreme eastern and western parts of the State, however, one bird did summer near

BLACK-FOOTED FERRET

Status:

The black-footed ferret (*Mustela nigripes*) is considered rare in Wyoming. This species is also included as an endangered species on the U.S.D.I. Endangered Species List. Indications are that the ferret population in Wyoming is declining throughout its range.

Distribution:

The black-footed ferret, a member of the family Mustelidae, was first described by Audubon and Bachman in 1851. The ferret has never been considered a common species. Its lack of abundance may be partly an adaptation against over-exploitation of its food supply (Allen 1942). Since it was described, the range of the ferret has decreased considerably. The decline appears to have been a result of changing land use and man's poisoning of prairie dogs (Henderson et. al. 1969). Ferret distribution in Wyoming appears to be essentially the same now as it was in historical times, though there may be fewer ferrets over the same range. The current range exceeds the area covered by distribution maps in Hall and Wilson (1959) and Long (1965), which show the black-footed ferret occurring only in eastern Wyoming, in conjunction with the black-tailed prairie dog (*Cynomys ludovicianus*). Because of the limited information available, both of these maps were based on ferrets in museum collections and sightings before 1950. Recent reports from Colorado (Torres 1973) and Utah (Sparks 1973) show the ferrets are found further west, in the range of the white-tailed

Black-footed ferret Cont'd.

prairie dog (*Cynomys leucurus*). Clark's (1975) survey of the status of the black-footed ferret in Wyoming indicates that there have been 51 probable or positive sightings in the state since 1970. During this period there have been only ten sightings in eastern and northeastern Wyoming, the traditionally accepted range of ferrets in the state. Part of the reason for this may be that poisoning programs have been directed at the more visible black-tailed prairie dog, which occurs in the northeastern and eastern parts of Wyoming. Since little poisoning was done in the range of the white-tailed prairie dog, ferrets there were probably little affected, and are probably more abundant. It appears likely that ferrets have always been present throughout Wyoming, but have been overlooked because of their habits and the greater amount of research and mammal collection conducted in eastern Wyoming.

Habitat:

The black-footed ferret is found in association with prairie dogs and prairie dog towns. Any areas that are good prairie dog habitat and have prairie dogs in them are good ferret habitat (Hillman 1968). Clark (1975) found that 97% of 105 Wyoming ferret observations occurred in sagebrush-grassland vegetation. In South Dakota, ferrets were found in prairie dog towns in rolling grassland or on low terraces near a creek (Hillman 1968). The vegetation present in spring and summer probably makes little difference as long as there are prairie dogs for food and burrows available for food, shelter and denning habitat.

Critical habitat for the black-footed ferret includes a prairie dog town large enough to provide a year-round food supply or several

Black-footed ferret Cont'd.

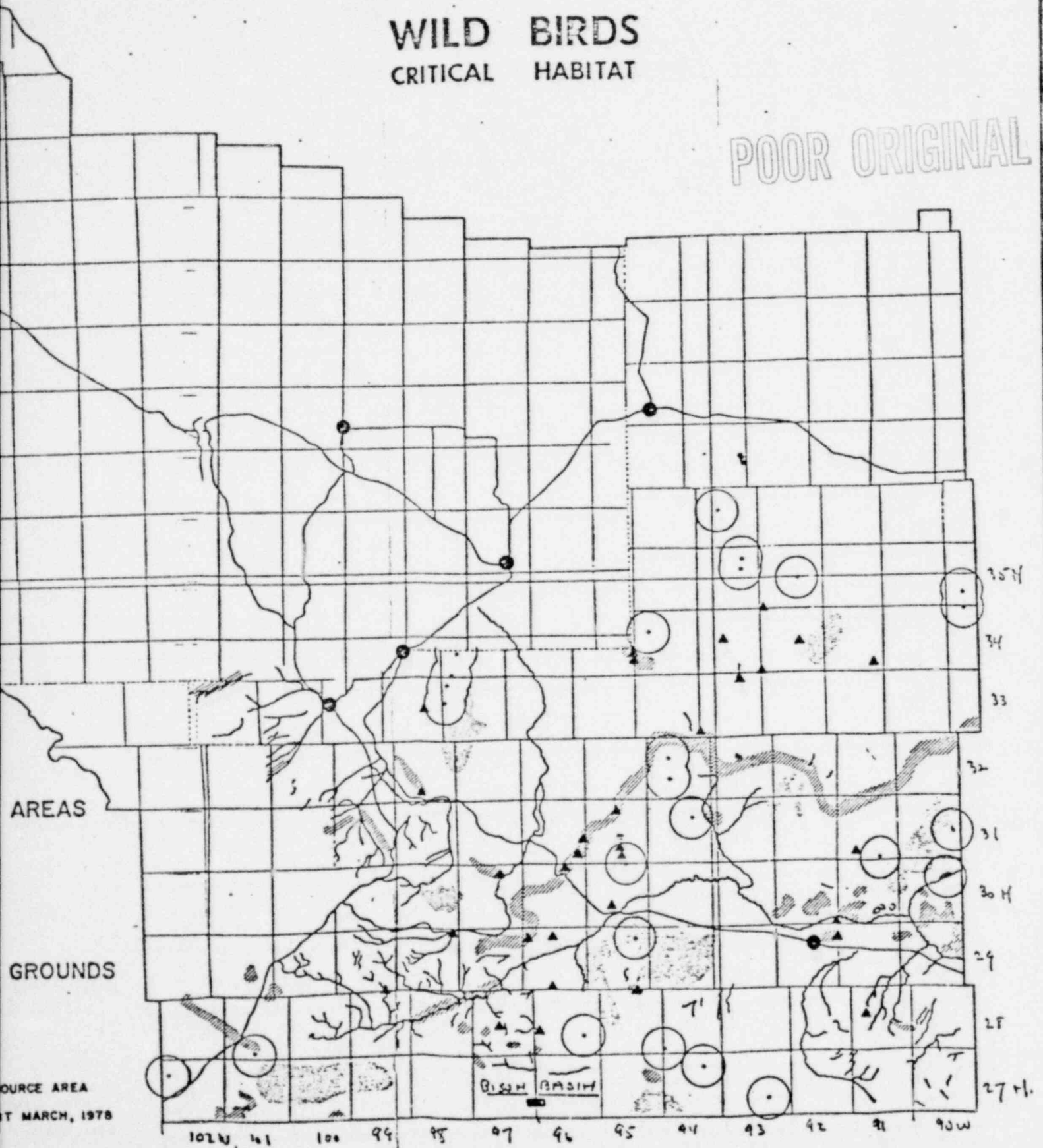
smaller towns close enough to each other that a ferret has a year-round food supply simply by moving from one town to another.

The chief habitat conflict for the black-footed ferret occurs between prairie dogs and man. Livestock and prairie dogs are believed to compete for forage, so extensive poisoning programs have been undertaken by both state and federal government agencies. These programs, which reduced prairie dog populations by as much as 97% in some states (Gates 1973), have probably also reduced ferret numbers. Poisoning programs are quite probably the major limiting factor for ferrets, since most historical and recent sightings have been made in active prairie dog towns. Currently there are no habitat protection programs for the black-footed ferret, aside from a ban on poisoning prairie dog towns where ferrets are known to be present. The U.S. Fish and Wildlife Service (USFWS) has also been paying \$600 per year to ranchers who own land with prairie dog towns containing ferrets, as payment for forage lost to the prairie dogs (Snow 1972).

Prairie dogs were probably most abundant in Wyoming in the early 20th century, as a result of extensive overgrazing in the late 19th and early 20th centuries (Clark 1973). A U.S.F.W.S. survey in 1971 estimated that there were 132,000 acres of black-tailed prairie dogs and 46,000 acres of white-tailed prairie dogs in Wyoming.

WILD BIRDS CRITICAL HABITAT

POOR ORIGINAL



AREAS

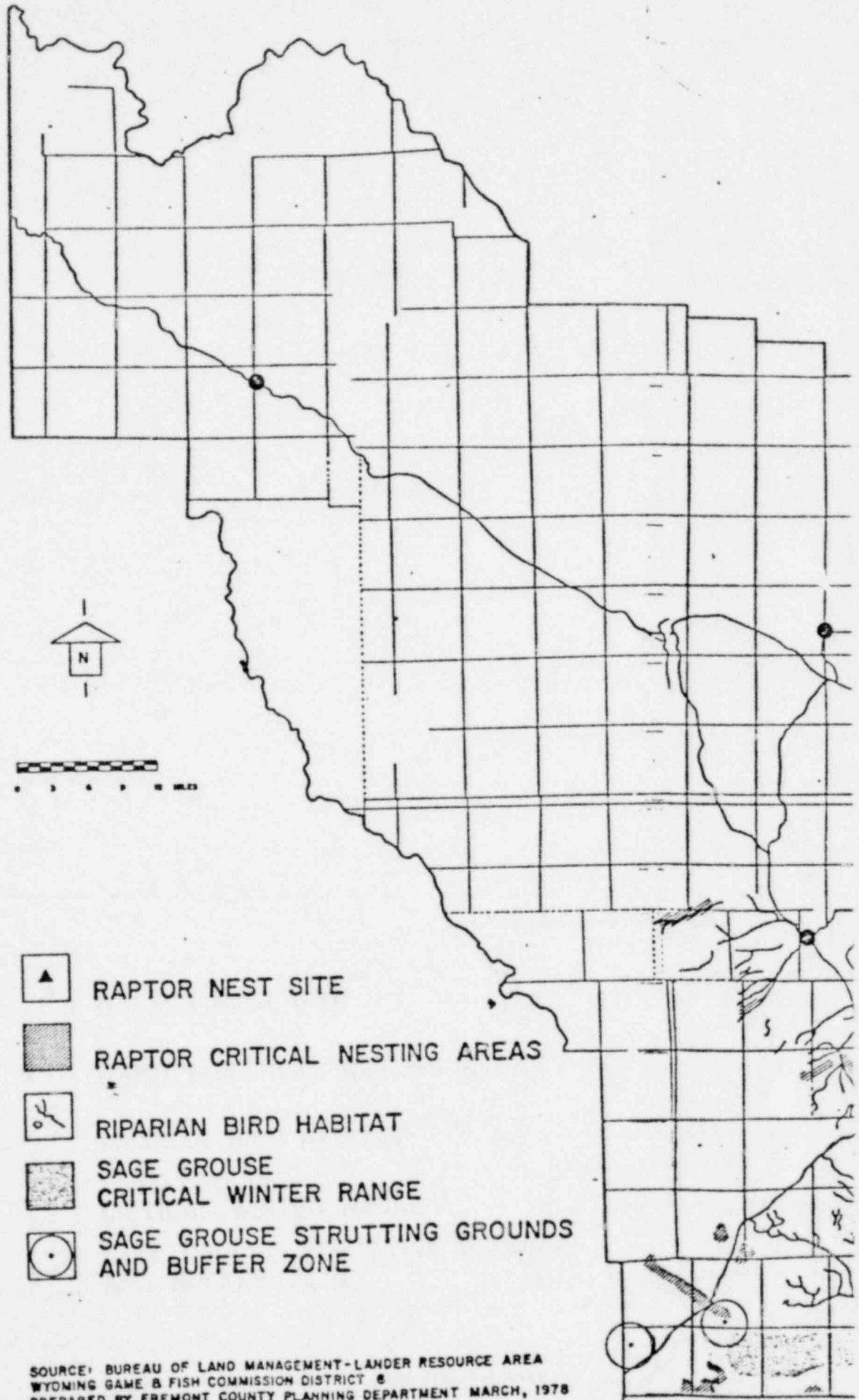
GROUNDS

SOURCE AREA
AT MARCH, 1978

BISH BASIN

102W 101 100 99 98 97 96 95 94 93 92 91 90W

35N
34
33
32
31
30N
29
28
27N



- ▲ RAPTOR NEST SITE
- RAPTOR CRITICAL NESTING AREAS
- ☞ RIPARIAN BIRD HABITAT
- ▨ SAGE GROUSE CRITICAL WINTER RANGE
- SAGE GROUSE STRUTTING GROUNDS AND BUFFER ZONE

SOURCE: BUREAU OF LAND MANAGEMENT-LANDER RESOURCE AREA
 WYOMING GAME & FISH COMMISSION DISTRICT 8
 PREPARED BY FREMONT COUNTY PLANNING DEPARTMENT MARCH, 1978

POOR ORIGINAL

Sweetwater Station in 1979 according to the Wyoming Game and Fish Department. None are expected to be seen in the project area due to the lack of wetland-type habitat.

Eskimo Curlew: In the early days of the west, this bird was almost as common as the Passenger Pigeon. Today, it is almost extinct. Its migratory route was from the Arctic to the southern tip of Argentina. It was hunted to near extinction in New England, Argentina, and the western plains. Single birds are occasionally seen on an island off Galveston, Texas, but there have been no sightings in Wyoming for many years.

Humpback Chub: This endangered fish is found only in the Green and Colorado Rivers from the Grand Canyon northward to the vicinity of Flaming Gorge Dam on the Utah-Wyoming border. Because of the lack of streams with year-round water in the project area, no fish are to be expected and certainly not this rare species.

Kendall Warm Springs Dace: This is a sub-species of the Speckled Dace (Rhinichthys osculus) and is found only at Kendall Hot Springs, tributary to the Green River in Wyoming.

Colorado River Squawfish: This endangered fish is found only in the Colorado River and its large tributaries (see Wyoming Game and Fish Department (1970), page 73). It is probably extinct in Wyoming because there is no longer any habitat suitable for this torrential-river species in the State.

References Cited:

1. Fremont County Planning Commission (1978), Fremont County Land Use Plan, November 9, 1978.
2. Wyoming Game and Fish Department (1970), Bulletin 4, Wyoming Fishes, by George T. Baxter and James R. Simon, Revised Edition, 1970.
3. Wyoming Game and Fish Department (1973), Bulletin 5, Wyoming Hawks, by Ralph B. Williams and Clyde P. Matteson, Jr., Original Edition, 1948; Revised in 1973.
4. Wyoming Game and Fish Department (1977), Current Status and Inventory of Wildlife in Wyoming.

23. QUESTION:

Provide baseline data on the biota of West Alkali Creek and Grassy Lake. If baseline data on the biota of Alkali Creek or the Sweetwater River are available, provide it. In order to adequately determine natural variability in water chemistry of West Alkali Creek, at least two additional spring samples and 1-2 samples following flow-producing thunderstorms in summer or fall are needed. Samples should be analyzed for the full suite of parameters done on the 18 May 1979 sample. Provide this additional baseline water chemistry data for Grassy Lake. If baseline chemistry data are available for Alkali Creek or the Sweetwater River, provide this also.



THE STATE OF WYOMING

OPI-WESTERN JOINT VENTURE

MAR - 6 1980

ED HERSCHLER
GOVERNOR

Game and Fish Department

CHEYENNE, WYOMING 82002

EARL M. THOMAS
DIRECTOR

February 11, 1980

Ed Francis

TO: Gary Beach

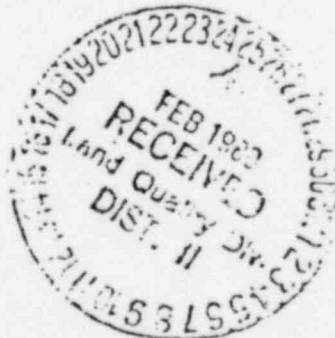
FROM: Harry Harju

COPIES TO: File

SUBJECT: Ogle Petroleum In-situ Uranium Mine - TFN 1 1/149

We have no further problem with the Ogle Petroleum In-situ uranium project. After talking to Glen Catchpole, our problems have been resolved.

HH:rv



40-8745



United States Department of the Interior
FISH AND WILDLIFE SERVICE

MAILING ADDRESS:
Post Office Box 25488
Denver Federal Center
Denver, Colorado 80228

STREET LOCATION:
134 Union Blvd.
Lakewood, Colorado 80228

IN REPLY REFER TO:
FA/SE/NRC—Ogle Petroleum Inc.,
Fremont County, WY (6-1-80-I-45)

NOV 23 1979



Hubert J. Miller, Section Leader
Uranium Recovery Licensing Branch
Division of Waste Management
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Miller:

This responds to your letter of November 7, 1979, in regard to the extraction of uranium from an ore body in Fremont County, Wyoming, by Ogle Petroleum, Inc.

In accordance with Section 7(c) of the Endangered Species Act Amendments, we have reviewed your information and determined that the following species may be present in the project area.

Listed Species

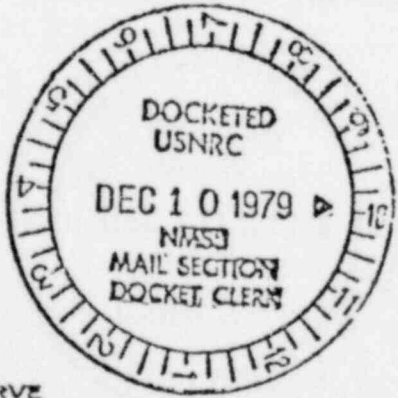
- Bald eagle
- Black-footed ferret

Section 7(c) of the Act Amendments requires that you prepare a biological assessment to determine if the proposed project will affect the above species. If you determine that the project will affect these species, you should initiate formal consultation.

Thank you for your interest and cooperation in conserving endangered species. If we can be of further assistance, please contact us.

Sincerely yours,

Harry E. Stiles
Harry E. Stiles
Acting Regional Director



DUPLICATE

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Save Energy and You Serve America!

FEE EXEMPT

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add'l info