

12/20/93

W H O A

WILD HORSE ORGANIZED ASSISTANCE
P.O. BOX 555
RENO, NEVADA 89504



a note from

Dawn Y. Lappin

December 20, 1993

Curtis Tucker, Area Manager
Caliente Resource Area
P.O. Box 237
Caliente, Nevada 89008

Subject: Caliente Resource Area Management Framework Plan (MFP),
Draft Wildlife Amendment and Environmental Assessment (EA)

Dear Mr. Tucker,

Thank you for the opportunity to review and comment on the Caliente Resource Area Management Framework Plan (MFP) Draft Wildlife Amendment and Environmental Assessment (EA).

Although the proposed transplant does not seem to have major adverse impacts to the vegetative resources in all of the mentioned allotments; the bureau is again putting the cart before the horse. The bureau should have allotment evaluations completed on all of these allotments before an MFP amendment is proposed. The allotment evaluation would include an analysis of the impacts that the introduction of turkeys would have. You do not mention anything of a Habitat Management Plan for wildlife, nor do you talk about any schedule or dates for the release. Judging from your past record we might assume that the turkeys are already on public land or in the cages ready for release.

Past experience has shown that if all the ground work is completed prior to the action, the entire process proceeds more smoothly.

Sincerely,

DAWN Y. LAPPIN
Director

W H O A

WILD HORSE ORGANIZED ASSISTANCE
P.O. BOX 555
RENO, NEVADA 89504

6/30/94



... a note from

Dawn Y. Lappin

sent by mail

June 30, 1994

Mr. Curtis G. Tucker
Caliente Area Manager
Bureau of Land Management
P.O. Box 237
Caliente, Nevada 89008

RE: Draft Land Use Plan Amendment/Environmental Assessment

Dear Mr. Tucker:

W H O A appreciates your consultation concerning this wildlife amendment to the Caliente land use plan. Land use plan amendment has not been a common practice by the Nevada Bureau of Land Management. It is important to limit these changes to those issues that are beyond the scope of the original planning processes.

We support the introduction of wildlife species to available habitats that do not displace indigenous wildlife or propose undue limitations to wild horse and burro populations. Wild turkeys will enrich species diversity without conflict to existing resources.

Thank you for consulting W H O A.

Sincerely,

Dawn Y. Lappin
Director

Mr. Bill Baker
June 30, 1994
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The Proposed Decision cannot extend the short term objectives of the land use plan.

Range program summaries are not decisions or management actions of the land use plan. Bureau policy requires monitoring data and evaluations to be completed five years after the completion of the land use plan. Short term objectives of the land use plan were based upon ten year time frames. Extending the accountability of the land use plan to 2005 will require a land use plan amendment.

The Proposed Decision does not comply with the National Environmental Policy Act.

The Strategic Plan for Management of Wild Horses and Burros on Public Lands and the Wild Horse Amendment to the Wells Resource Area Plan did not have NEPA documents that consider the impacts of herd re-structuring of the Maverick-Medicine Wild Horse Herd. The recent gather within the Wells Resource Area took all horses from the checkboard lands and released older age class wild horses to the new herd management area. This action increased horse densities on over grazed lands and re-structured the herd with older age class animals. No data were presented or evaluated to determine the composition and viability of the remaining re-structured herd.

The Proposed Decision is bias against Wild Horses.

The Proposed Decision implements a reduction in wild horse numbers and stipulates limitations horse numbers without addressing the impacts of livestock. Riparian and winter key forage limitations are to be applied to determining an appropriate management level for the Maverick-Medicine Wild Horse Herd in 1997. The Livestock Decision retains active preference for livestock during the "hot season" without any terms or conditions to limit 55% overall utilization. All livestock actions are dependent on future range improvement projects and actions will not provide any relief to riparian habitats.

The Proposed Decision did not address the 10% use limitation by wild horses on winter key species set by the Wells land use plan. This arbitrary limitation to lessen competition with livestock is not based upon plant phenology or range science.

Mr. Bill Baker
June 30, 1994
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Request for Relief

The Wells Resource Area quest to extend and amend the land use plan to seriously deplete the wild horse resources are evident in the multiple use decision making processes. It is our hope that the District make concessions in pending decisions that directly address the concerns of this Commission.

While we heartily support the management of wild horses on public lands to meet a healthy natural ecological balance between all users and resources, we must insist that good resource decisions be based upon monitoring data and fairly applied to all users. If Nevada is to achieve good ecosystem management through grazing reform on public lands, we must mutually agree on the concept, policy and application of regulations that determine these decisions.

Sincerely,

DAWN Y. LAPPIN
Director



NEWS Release

BUREAU OF LAND MANAGEMENT

850 Harvard Way, Reno, Nevada 89520

Release Number: 94-28
For Release: 5/11/94

Contact: Maxine Shane
Phone: (702) 785-6586

OIL AND GAS DOCUMENT AVAILABLE TO PUBLIC

An approved plan amendment and record of decision for the Bureau of Land Management's (BLM's) Egan Resource Area is now available in Ely. The documents describe how oil and gas leasing, exploration and development will be handled in portions of Nye, Lincoln and White Pine Counties.

The Egan Resource Management Plan (RMP) Oil and Gas Leasing Amendment was prepared to bring the original Egan RMP into conformance with the BLM's own program guidance for oil and gas resources, according to Ron Wenker, Acting State Director for the BLM in Nevada.

The plan amendment describes management of oil and gas leasing on about 3.8 million acres of public lands. The decision document states 61 percent of the resource area is open to leasing with standard leasing stipulations. There are timing limitations on about 31 percent of the public lands. About 8 percent of the lands will have either no leasing or no surface occupancy.

The amendment document describes standard practices and procedures for geophysical operations plus the conditions of approval for exploratory and developmental drilling.

- MORE -

OIL AND GAS DOCUMENT - 22222

Copies of the approved plan amendment and record of decision may be obtained by writing the Egan Resource Area Manager, BLM, 702 N. Industrial Way, HC 33, Box 33500, Ely, NV 89301-9408. All individuals, agencies, interest groups and organizations which participated in the planning process will be mailed copies.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Nevada State Office
850 Harvard Way
P.O. Box 12000
Reno, Nevada 89520-0006



IN REPLY REFER TO:

1610 (EGN)
(NV-930.1)
(NV-047)

May 2, 1994

Dear Reader:

Enclosed for your information and use is the Egan Resource Management Plan (RMP) Approved Oil and Gas Leasing Amendment and Record of Decision (ROD). The Approved Plan Amendment (APA) outlines how 3.8 million acres of public lands administered by the BLM's Ely District Egan Resource Area will be managed for oil and gas leasing, exploration and development. The decisions contained in the APA are those developed through the analysis in the "Egan RMP Proposed Oil and Gas Leasing Amendment and Final Supplemental Environmental Impact Statement". This APA and ROD completes the planning and environmental process for development of this plan amendment.

This document is in two parts. Part I: Approved Plan Amendment, contains the resource objectives, leasing decisions and management actions for each resource category where leasing restrictions were developed; implementation of the plan; plan monitoring and evaluation; consistency; and public availability. Part II: Record of Decision, contains the decision to select the proposed amendment; alternatives considered, including the environmentally preferable alternative; management considerations; mitigation and monitoring; public involvement; and approval.

Additional copies of this APA and ROD may be obtained from the BLM Ely District Office, 702 N. Industrial Way, HC 33, Box 33500, Ely, NV 89301-9408.

Sincerely,

Billy R. Templeton
State Director, Nevada

APPROVED

**EGAN RESOURCE MANAGEMENT PLAN
OIL AND GAS LEASING AMENDMENT
AND
RECORD OF DECISION**

**Prepared by the
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ELY DISTRICT**



Billy R. Templeton
State Director, Nevada

May 1994

The Approved Egan Resource Management Plan Oil and Gas Leasing Amendment and Record of Decision outlines leasing and development of oil and gas resources on approximately 3.8 million acres of public lands administered by the Ely District Egan Resource Area in portions of White Pine, Lincoln and Nye counties, Nevada. The Approved Amendment brings the approved Egan Resource Management Plan into conformance with the Supplemental Program Guidance for Oil and Gas Resources (BLM Manual 1624, released November 14, 1986).

For further information contact: Egan Resource Area Manager, Bureau of Land Management, Ely District, 702 N. Industrial Way, HC 33, Box 33500, Ely, NV 89301, or telephone (702) 289-4865.

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APPROVED

EGAN RMP OIL AND GAS LEASING AMENDMENT and RECORD OF DECISION

INTRODUCTION

The Egan Resource Area (RA) administers lands which have potential for oil and gas resources. Several oil companies have entered into development contracts which demonstrates a long-term commitment to explore and develop these resources. Since 1984, the Egan RA has experienced steady geophysical exploration and exploratory well drilling. Oil and gas reserves are located and economically extracted within Railroad Valley which borders the resource area to the south. Oil and gas resources are also economically extracted in Pine Valley, north of the resource area. Current geological models ("plays") indicate oil and gas targets are located within the Egan RA.

The Approved Egan Resource Management Plan (RMP) does not address issues relating to oil and gas exploration and development. Consequently, the Egan RMP, as implemented with the signing of the Record of Decision (ROD) on February 3, 1987, is not in conformance with Bureau Manual 1624 Supplemental Program Guidance (SPG) for Energy and Minerals (released; November 14, 1986) and does not specifically address how oil and gas leasing within the Egan RA will be accomplished now or in the future. The BLM has made a commitment with the final approval of Bureau Manual 1624 in 1986, after extensive public comment, to have all approved RMPs throughout the BLM be in conformance with this manual supplement.

The purpose of this oil and gas leasing amendment is to bring the approved Egan RMP into conformance with Bureau Manual 1624 by developing specific decisions which allow sound multiple-use management of natural resources in light of potential development of oil and gas resources.

The Approved Egan RMP Oil and Gas Leasing Amendment, herein referred to as the Approved Plan Amendment (APA) and ROD incorporates oil and gas management into the Egan Resource Area RMP. The APA encompasses approximately 3.8 million acres of public lands administered by the BLM Ely District Egan RA within White Pine, Lincoln and Nye Counties, Nevada (refer to Map 1, Planning Area). The Egan RMP is amended to conform to the program guidance outlined in Bureau Manual 1624 SPG for oil and gas resources. This program guidance requires the BLM to estimate oil and gas development potential and balance management of oil and gas resources with management of other natural resources.

General decisions contained in this plan amendment are in the form of oil and gas leasing determinations and the appropriate leasing restrictions necessary to protect other resource values. Determinations are in the form of land use designations such as "open" or "closed" to leasing or in the form of special stipulations attached to the lease (e.g. "open" to leasing with timing limitations or No Surface Occupancy). The stipulations which comprise the determinations are considered to be either major or minor restrictions. Major restrictions include "Closed" to leasing designations and No Surface Occupancy. Minor restrictions to leasing consist of timing limitations (seasonal restrictions) and controlled surface use (CSU) stipulations. Timing limitations indicate that an area is generally open to leasing except during a specified period of time to protect identified resource values. Normally, timing limitations are used when the time period to protect the resource values would exceed the 60-day limitation contained in the lease instrument. Controlled surface use stipulations allow use and occupancy of the leaseholding (unless restricted by another stipulation), but identified resource values require special operating constraints that may modify the lease rights.

Specific leasing decisions contained in this amendment in the form of leasing stipulations and conditions to leasing and development, including standard practices and procedures (SPPs) for geophysical exploration and Conditions of Approval (COAs) were developed through the plan amendment process and will apply to all public lands administered by the Egan RA. The leasing decisions will be implemented to achieve resource condition objectives outlined as decisions in the Egan ROD or to protect sensitive or fragile natural resources that may be adversely impaired by management actions resulting from oil and gas leasing.

This APA and ROD is in two parts. **PART I: APPROVED PLAN AMENDMENT**, meets the requirements of the Federal Land Policy and Management Act (FLPMA) of 1976. **PART II: RECORD OF DECISION**, meets the requirements of the National Environmental Policy Act (NEPA) of 1969.

PART I: APPROVED PLAN AMENDMENT

LEASING DETERMINATIONS

The following tables (Tables 1 through 3) outline the leasing determinations for oil and gas leasing, exploration and development in the resource area for the protection of sensitive natural and cultural resources. Management of oil and gas resources under this plan amendment would allow 61% of the RA (2,343,388 acres) to be open to leasing under standard terms and conditions; 1.7% of the RA (67,500 acres) open to leasing with No Surface Occupancy (NSO) stipulations, 30.9% of the RA (1,186,580 acres) open to leasing with timing limitations; 0.1% of the RA (3,024 acres) closed to leasing for discretionary reasons and 6.3% of the RA (241,171 acres) closed to leasing for nondiscretionary reasons. Major and minor leasing restrictions are displayed in Maps 2 and 3.

TABLE 1 APPROVED AMENDMENT DETERMINATION SUMMARY TABLE		
Determination	Acres	Percent of RA
Open to Leasing with Standard Terms and Conditions	2,343,388	61.0
Open to Leasing with Major Restrictions (No Surface Occupancy)	67,500	1.7
Open to Leasing with Minor Restrictions (Timing Limitations)	1,186,580	30.9
No Leasing (Discretionary)	3,024	0.1
No Leasing - WSA/ISAs (Non-discretionary)	241,171	6.3
Total:	3,841,663	100.0

**TABLE 2
APPROVED AMENDMENT
LEASING DETERMINATIONS - MAJOR RESTRICTIONS**

Resource/Land Use	Determination	Acres
WSAs/ISAs	Closed - Nondiscretionary	241,171
R&PP Leases	Closed - Discretionary	2,264
Recreation Sites	Closed - Discretionary	560
Natural Features	Closed - Discretionary	200
Sunshine Locality National Register District	No Surface Occupancy	18,400
Other Cultural Resources	No Surface Occupancy	11,334
Mount Grafton Scenic Area	No Surface Occupancy	8,080*
Ragged Ridge Scenic Area	No Surface Occupancy (acres outside of WSA)	7,680* (3,840)
Goshute Canyon Natural Area	No Surface Occupancy	7,650*
Recreation Sites	No Surface Occupancy	2,261
Natural Features	No Surface Occupancy	715
Riparian Areas	No Surface Occupancy	320
Threatened and Endangered Species	No Surface Occupancy	1,740
Ferruginous Hawk Nest Sites	No Surface Occupancy	9,280
Bald Eagle Roost Site	No Surface Occupancy	40
Total:		311,695

* Acres are within existing WSAs and are Closed to Leasing. In the absence of wilderness designation by Congress, the lands would be generally available for leasing and the NSO stipulation in this alternative would apply.

**TABLE 3
APPROVED AMENDMENT
LEASING DETERMINATIONS - MINOR RESTRICTIONS**

Resource/Land Use	Determination	Acres
Sage Grouse Leks and Winter Habitat	Timing Limitation	1,069,965
Ferruginous Hawk Nesting Territories	Timing Limitation	116,615
Total:		1,186,580

LEASING DECISIONS

The following resource categories contain specific leasing decisions tied to the leasing determinations outlined above and list management objectives which form the basis for the leasing decisions. Only those resource categories which have specific leasing decisions are described. All other resources are covered by Standard Practices and Procedures (SPPs) and Conditions of Approval (COAs) on a Resource Area-wide basis. Specific decisions in the Egan ROD modified by this plan amendment are also described under the resource category. Specific management actions are also discussed as they relate to the resource category. Site-specific decisions in the form of SPPs for geophysical operations and COAs for oil and gas operations are found in Appendix A of this document.

A primary objective of this plan amendment was to comply with the Conner v. Burford decision (Ninth Circuit Court of Appeals, January 1988) and complete a Section 7 consultation with the U.S. Fish and Wildlife Service (F&WS) which considers Threatened and Endangered (T&E) species at all stages of on-shore oil and gas leasing. The Biological Opinion (April 15, 1993) is found in Appendix B of this document. The Biological Opinion, Incidental Take Statement, Conservation Recommendations and Reinitiation Requirements are incorporated into the Approved Amendment and Record of Decision. Each proposed oil and gas action (geophysical, APDs, etc.) which occurs as the result of leasing will be subject to further statutory compliance and environmental analysis in conformance with NEPA and appropriate mitigating measures will be applied to each action at that time.

A. Wildlife Habitat

Objectives

- Protect Ferruginous Hawk Nesting Territories and Nest Sites.
- Protect Sage Grouse Leks and Winter Habitat.

Leasing Decisions

1. Ferruginous Hawk Nest Sites shall have a 40-acre No Surface Occupancy zone surrounding each known nest site to protect hawk breeding territory (refer to Table 4).
2. Ferruginous Hawk Nesting Territories shall be subject to Timing Limitations for oil and gas activities, including geophysical operations, between March 15 and July 1 to protect hawk nesting territory. The radius of the Timing Limitation shall be 1/2 mile for each known nesting territory (refer to Table 4).
3. Sage Grouse Leks shall be subject to Timing Limitations for oil and gas activities, including geophysical operations, between March 15 to May 1 to protect sage grouse lek(s) during the breeding season. In accordance with the MOU between the BLM and Nevada Division of Wildlife, the Timing Limitation shall be in effect for a 2-mile radius for each known lek (refer to Table 4). This decision modifies the dates of restriction (March 1 to May 15) stated in the Egan ROD, p. 31.
4. Sage Grouse Winter Habitat shall be subject to Timing Limitations for oil and gas activities, including geophysical operations, between November 1 to March 31 to protect winter habitat during the period of stress for the birds. The Timing Limitation shall apply to the areas of known winter habitat (refer to Table 4).

5. The timing restriction for activities within critical mule deer winter range (Egan ROD, p. 32) is modified to allow oil and gas activities, including geophysical operations, between November 1 and March 31.

TABLE 4 APPROVED AMENDMENT WILDLIFE SPECIES (Timing Limitations)	
Resource/Land Use	Acres
Sage Grouse Leks (2-mile radius) (March 15 to May 1)	916,845
Sage Grouse Winter Habitat (November 1 to March 1)	153,120
Ferruginous Hawk Nesting Territories (March 15 to July 1)	116,615
Total:	1,186,580
WILDLIFE SPECIES (No Surface Occupancy)	
Ferruginous Hawk Nest Sites	9,280

B. Threatened and Endangered Species

Objectives

- Protect threatened and endangered animal and plant species and their critical habitat.
- Protect federally listed candidate species and their habitat to prevent possible future listing of species as threatened or endangered.

Leasing Decisions

1. Threatened, Endangered or federally-listed candidate (category) species and their critical habitat will be protected from oil and gas activities through No Surface Occupancy lease stipulations (refer to Table 5 for species list and size of restriction applied to each.).
2. No Surface Occupancy lease stipulations will be in effect within one mile of Goshute Creek to protect habitat for the Bonneville Cutthroat trout (refer to Table 5).
3. No Surface Occupancy lease stipulations will be in effect on 40 acres surrounding the known bald eagle roost site in the vicinity of Cedar Mountain, Newark Valley (refer to Table 5).

Management Actions

1. Site specific inventories for sensitive T&E and candidate species will be undertaken if project activities are determined to have the potential to affect critical habitat or known occurrences of sensitive species.
2. In conformance with the USF&WS approved recovery plan and implementation schedule for the White River Spinedace, develop and implement a habitat management plan for this species.
3. As coordinated with the USF&WS, other agencies and private parties, cooperate with habitat rehabilitation efforts for the White River spinedace.

TABLE 5 APPROVED AMENDMENT T&E SPECIES (No Surface Occupancy)	
Resource/Land Use	Acres
Monte Neva Paint Brush	160
Welsh's Cateye	20
Highway 6 Area T&E Species	720
White River T&E Species	520
Newark Valley Tui Chub	40
Railroad Valley Springfish	280
Bonneville Cutthroat Trout	4,480*
Bald Eagle Roost Site	40
Total:	1,780
* These acres are contained within the Goshute Canyon WSA and are calculated into the acreage for Closed to Leasing (Non-discretionary)	

C. Riparian Habitat

Objective

- Improve and/or maintain the condition of riparian habitat to good or better condition.

Leasing Decision

1. No Surface Occupancy lease stipulations will be in effect on 320 acres within Orchard Canyon to protect valuable riparian wet-meadow habitat (refer to Table 6).

D. Woodland Resources

Objective

- Protect the sensitive Swamp Cedar ecotype in White River Valley.

Leasing Decision

1. No Surface Occupancy lease stipulations will be in effect on 235 acres of sensitive Swamp Cedar habitat in White River Valley to protect and conserve the genetic pool of this species (refer to Table 6).

TABLE 6 APPROVED AMENDMENT RIPARIAN AND WOODLAND RESOURCES (No Surface Occupancy)	
Resource/Land Use	Acres
Orchard Canyon Riparian Area	320
Swamp Cedar Area	235
Total:	555

E. Cultural Resources

Objective

- Protect and conserve fragile and important cultural resources.

Leasing Decisions

1. No Surface Occupancy lease stipulations will be in effect for 18,400 acres of the Sunshine Locality National Register District for the protection of fragile prehistoric resources inclusively listed on the National Register of Historic Places and to provide integrity to the surface and subsurface environmental context in which the resources occur (refer to Table 7).
2. A Lease Notice describing special cultural resource compliance requirements to operate on the remaining 16,160 acres of the Sunshine Locality National Register District shall be issued and in effect.
3. No Surface Occupancy lease stipulations will be in effect for an additional 11,334 acres to protect the integrity and qualities of cultural properties which contribute to the National Register eligibility of the resource (refer to Table 7 for the cultural property list and size of restriction applied to each).

4. Oil and gas exploration and development activities within 1/4-mile of the Pony Express National Historic Trail or its associated features shall undergo a visual assessment in accordance with the visual management objectives outlined in the Egan ROD (P. 40). A Lease Notice describing this process shall be issued and in effect for the Pony Express National Historic Trail Corridor.

TABLE 7 APPROVED AMENDMENT CULTURAL RESOURCES (No Surface Occupancy)	
Resource/Land Use	Acres
Sunshine Locality National Register District	18,400
Little Smoky Valley Antelope Wall	320
Little Smoky Valley PaleoIndian Quarry	3,200
City of the Rocks Archaeological District	6,514
Huntington Valley Village	640
Newark Cave	120
Black Point Complex	540
Total:	29,734

F. Wilderness

Objectives

- Protect Wilderness Values within WSAs/ISAs and designated Wilderness Areas.
- Protect natural resource values within the Goshute Canyon Natural Area.

Leasing Decisions

1. WSAs and ISAs within the Egan RA, totalling 241,171 acres, will be Closed to Leasing unless otherwise released from wilderness consideration by Congress (refer to Table 8).
2. In the event Congress should release the Goshute WSA from wilderness consideration, No Surface Occupancy stipulations for 7,650 acres will be in effect for the Goshute Canyon Natural Area.
3. Lands released by Congress from wilderness consideration shall be open to leasing under standard terms and conditions unless otherwise restricted through lease stipulations developed through this amendment.

**TABLE 8
EGAN RESOURCE AREA
WILDERNESS AND INSTANT STUDY AREAS
(WSAs/ISAs)**

WSA/ISA Name	WSA Number	Total Acres	Acres Egan RA	Suitable Acres Egan RA
Goshute Canyon	NV-040-015	35,594	35,400	22,100
Park Range	NV-040-154	47,268	31,300	31,300
Riordan's Well	NV-040-166	57,002	17,000	0**
South Egan Range	NV-040-168	96,916	78,100	0
Mount Grafton	NV-040-169	73,216	43,500	12,650
Far South Egans	NV-040-172	53,224	18,100	16,600
Blue Eagle	NV-060-158/199	59,560	14,650	0**
Goshute Canyon Natural Area ISA	NV-040-015A	2,641*	2,641	0
Huesser Mountain Bristlecone Pine Natural Area ISA	NV-040-048A	480	480	0
Total Acres:		425,901	241,171	82,650

* Acres outside of Goshute Canyon WSA (NV-040-015)

** Changes from Final Wilderness EISs:

The Riordan's Well WSA (NV-040-166) and the Blue Eagle WSA (NV-060-158/199) original recommendations of 37,542 acres and 58,350 acres, respectively, as suitable for wilderness designation was changed to 0 acres suitable for each WSA in 1989. This change from the Final EISs was the result of an administrative decision by the Nevada State Director after review of data published by the USGS which indicated the WSAs should be classified as high potential for oil and gas resources.

G. Recreation

Objective

- To provide high quality visitor services and recreational facilities, including developed camping and day-use facilities.

Leasing Decisions

1. The Illipah, Cold Creek Reservoir and Goshute Creek Recreation Sites, totaling 560 acres shall be closed to leasing to protect recreational uses incompatible with oil and gas development (refer to Table 9).
2. The Goshute Cave and Cave Valley Cave Geologic Areas, totalling 200 acres shall be Closed to Leasing to protect the integrity of the geologic formations in which they occur (refer to Table 9).
3. No Surface Occupancy lease stipulations will be in effect for 2,741 acres for the Ward Mountain Winter Sports Area, Garnet Hill Recreation Area, Antelope Summit, Bassett Lake, and Comins Lake Recreation Sites and the Bristlecone Pine Interpretive Area (refer to Table 10).

H. Visual Resources

Objectives

- Manage for scenic values within existing WSAs/ISAs and designated scenic areas.
- Manage for scenic values along the Pony Express National Historic Trail Corridor.

Leasing Decisions

1. No Surface Occupancy stipulations will be in effect for 3,840 acres (non-WSA) of the Ragged Ridge Scenic Area to preserve scenic values (refer to Table 10).
2. In the event Congress should release the Blue Eagle WSA from wilderness consideration, No Surface Occupancy stipulations for 3,840 acres will be in effect for the Ragged Ridge Scenic Area (refer to Table 10).
3. In the event Congress should release the Mount Grafton WSA from wilderness consideration, No Surface Occupancy Stipulations for 8,080 acres will be in effect for the Mount Grafton Scenic Area (refer to Table 10).

**TABLE 9
APPROVED AMENDMENT
RECREATION
(Closed - Discretionary)**

Resource/Land Use	Acres
Illipah Recreation Area	300
Cold Creek Reservoir Recreation Site	220
Goshute Creek Recreation Site	40
Goshute Cave Geologic Area	160
Cave Valley Geologic Area	40
Total:	760

**TABLE 10
APPROVED AMENDMENT
RECREATION, SCENIC AND NATURAL FEATURES
(No Surface Occupancy)**

Resource/Land Use	Acres
Ward Mountain Winter Sports Area	1,600
Garnet Hill Recreation Area	181
Antelope Summit Recreation site	160
Bassett Lake Recreation Site	160
Comins Lake Recreation Site	160
Bristlecone Pine Interpretive Area	480
Mount Grafton Scenic Area	8,080*
Ragged Ridge Scenic Area	7,680 3,840*
Goshute Canyon Natural Area	7,650*
Total:	6,581

* These areas are contained within WSAs and the acres are calculated into the acreage for Closed to Leasing (Non-discretionary).

I. Lands

Objective

- Allow for protection of areas classified for other recreation and public purpose uses.

Leasing Decisions

1. Existing R&PP leases, totalling 2,264 acres, are Closed to Leasing to protect classification determinations incompatible with oil and gas development (refer to Table 11).

Resource/Land Use	Acres
State of Nevada Maximum Security Prison	1,059
State of Nevada Prison Honor Camp	15
State of Nevada Ward Ovens Historical Monument/State Park	520
White Pine County Shooting Range	670
Total:	2,264

IMPLEMENTATION OF THE APPROVED AMENDMENT

1. **Leasing Decisions**

The leasing decisions developed through this amendment process will be implemented upon approval by the State Director. New leasing stipulations developed through the amendment process will be attached to oil and gas leases beginning with the first competitive and non-competitive sales after signing of the ROD. Leasing stipulations will be assigned to new leases by the BLM Nevada State Office.

This plan amendment does not repeal valid existing rights on public lands; i.e. the terms and conditions of existing leases. Leasing stipulations in the Approved Amendment cannot be attached to existing leases without the consent of the lessee. The existing stipulations attached to those leases are retained as long as the lease is valid. If the acreage involved in expired leases is re-offered for leasing, the new stipulations in the Approved Amendment would be attached to the lease.

2. Standard Practices and Procedures

Standard practices and procedures (SPPs) for conducting geophysical operations would be implemented at the District-level. The SPPs would be incorporated into the proposed 3150 Notice of Intent (NOI) to conduct geophysical operations. Additional mitigating measures incorporating appropriate SOPs as outlined in the Egan ROD would be recommended through the appropriate NEPA analysis conducted in response to the geophysical NOI.

3. Conditions of Approval

Conditions of Approval would be implemented at the District-level and attached to the 3160 Application for Permit to Drill (APDs). Additional mitigating measures incorporating appropriate SOPs as outlined in the Egan ROD would be recommended through the appropriate NEPA analysis conducted in response to the APD. As the potential for site-specific impacts are identified through NEPA analysis, other mitigating measures may be developed so long as they conform with the limitations of the granted lease rights.

MONITORING AND EVALUATION OF THE APPROVED AMENDMENT

Implementation of the Approved Amendment will be monitored annually. The Five Year Evaluation of these decisions will be done on the same schedule as the original Egan RMP. Effectiveness of determinations in this amendment for maintaining and enhancing resource conditions while facilitating oil and gas exploration and development will be evaluated to determine if changes are needed.

CONSISTENCY




The Egan RMP Proposed Oil and Gas Leasing Amendment has been coordinated with adjacent Federal, State and local entities. The Proposed Amendment is consistent with the officially approved or adopted resource related plans, policies and programs of other Federal agencies, State and local governments and Indian Tribes. Existing BLM land use plans that cover lands contiguous to the planning area include the Elko RMP, Wells RMP, Shoshone-Eureka RMP, Tonopah MFP, and Schell MFP. The Humboldt National Forest Land Use Plan addresses resource management on lands administered by the U.S. Forest Service. These lands are located both within and adjacent to the planning area.

No inconsistencies with the plans, programs and policies of other Federal, State or Local Governments were identified during the planning process or during the Governor's Consistency Review.

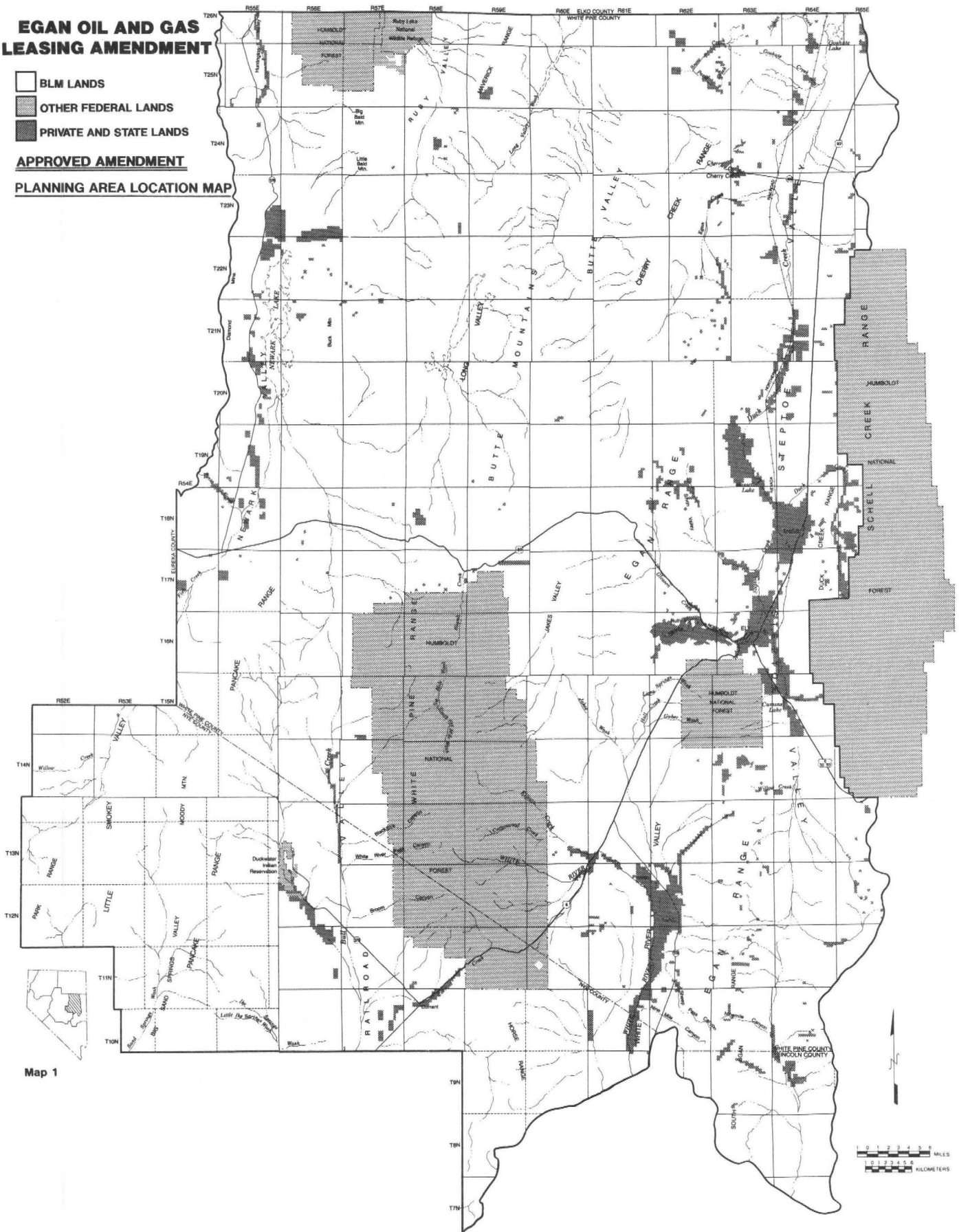
PUBLIC AVAILABILITY

This document has been sent to all persons and agencies participating in this planning effort as identified on the mailing list developed for the Proposed Plan Amendment and FSEIS. Copies of this document may be obtained from the Ely District Office, 702 N. Industrial Way, HC 33, Box 33500, Ely, NV 89301-9408. This Approved Plan Amendment and ROD will be sent to all those who participated in the planning process and to others who may request copies. Public involvement will continue to be requested during implementation of this plan amendment.

EGAN OIL AND GAS LEASING AMENDMENT

-  BLM LANDS
-  OTHER FEDERAL LANDS
-  PRIVATE AND STATE LANDS

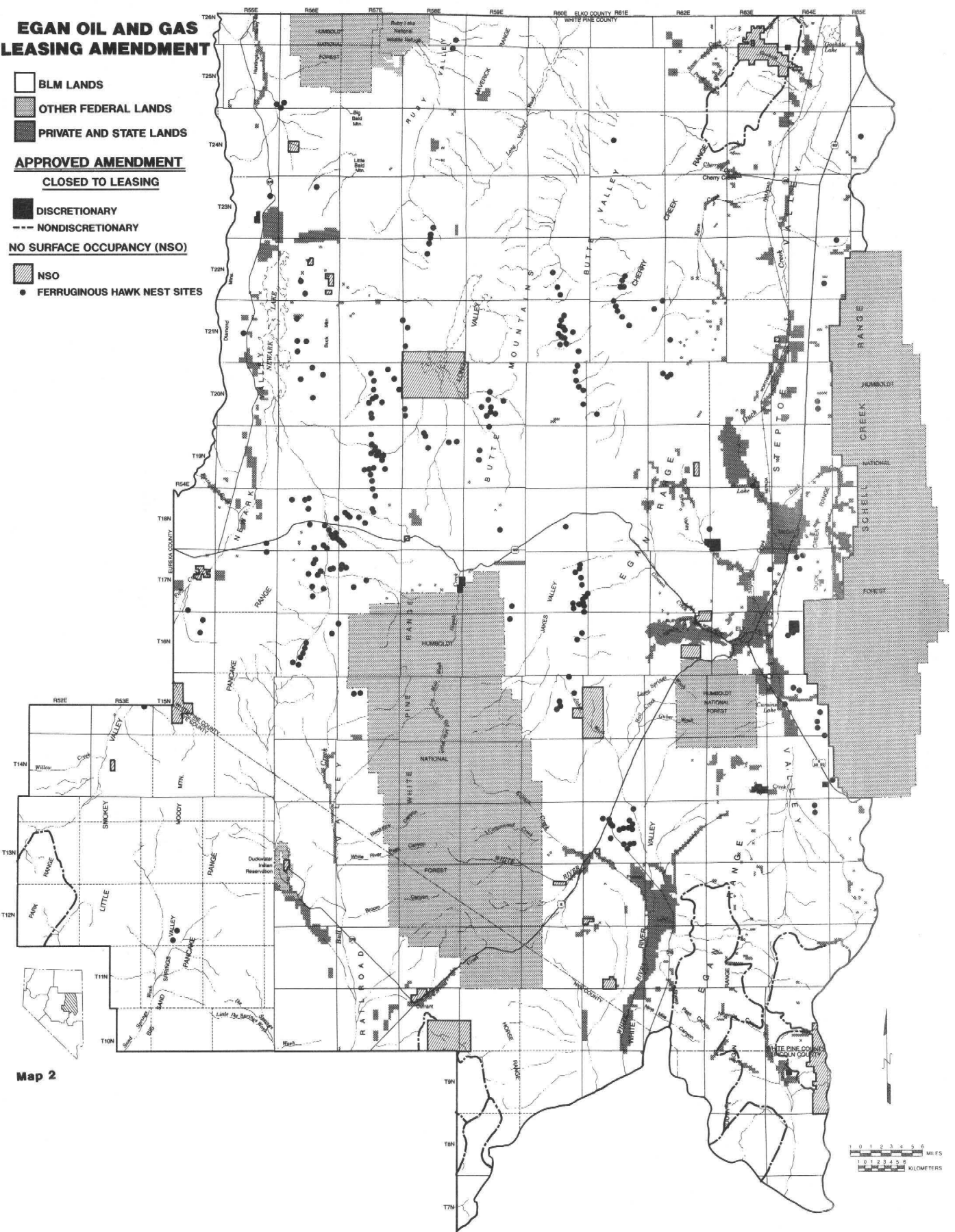
APPROVED AMENDMENT PLANNING AREA LOCATION MAP



Map 1




EGAN OIL AND GAS LEASING AMENDMENT

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- APPROVED AMENDMENT**
- CLOSED TO LEASING**
- DISCRETIONARY
- NONDISCRETIONARY
- NO SURFACE OCCUPANCY (NSO)**
- NSO
- FERRUGINOUS HAWK NEST SITES



Map 2

EGAN OIL AND GAS LEASING AMENDMENT



-  BLM LANDS
-  OTHER FEDERAL LANDS
-  PRIVATE AND STATE LANDS

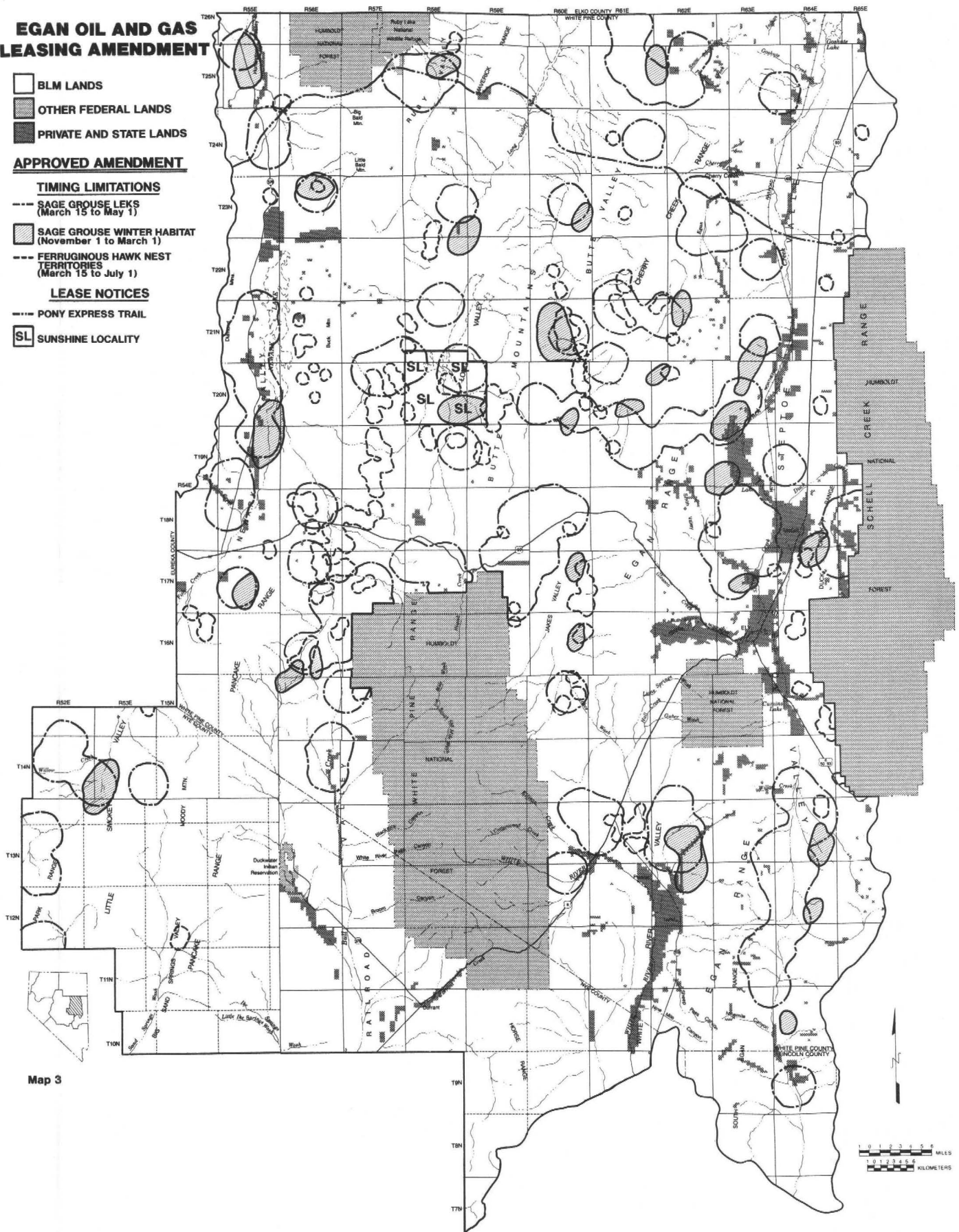
APPROVED AMENDMENT

TIMING LIMITATIONS

-  SAGE GROUSE LEKS (March 15 to May 1)
-  SAGE GROUSE WINTER HABITAT (November 1 to March 1)
-  FERRUGINOUS HAWK NEST TERRITORIES (March 15 to July 1)

LEASE NOTICES

-  PONY EXPRESS TRAIL
-  SUNSHINE LOCALITY



Map 3

PART II
RECORD OF DECISION

DECISION

The decision is made to select the Proposed Amendment as the Egan RMP Approved Oil and Gas Leasing Amendment. The leasing determinations, stipulations, standard practices and procedures and conditions of approval contained in the Proposed Amendment comprise the decisions of the Approved Amendment. These decisions, as presented in Part I: Approved Plan Amendment section of this document, are the same and not repeated here.

ALTERNATIVES INCLUDING THE PROPOSED AMENDMENT

1. Alternatives Analyzed in the Draft Amendment

Alternative A: Continuation of Present Management (No Action) Alternative

The Continuation of Present Management Alternative (No Action) described management for oil and gas resources as summarized in five energy Environmental Assessment Reports (EARs) encompassing the Egan RA. Analysis of the current situation indicated important resource values were not protected through leasing stipulations and other leasing stipulations were applied where resource values did not exist. This alternative was not in conformance with the Bureau Manual 1624 SPG for oil and gas resources.

Alternative B: Preferred Alternative (Proposed Amendment)

The Preferred Alternative described management of oil and gas resources based on updated resource inventories, resource condition objectives outlined in the Approved Egan RMP, application of conditions of approval to mitigate short-term impacts and consideration of cumulative impacts. The Preferred Alternative balances oil and gas exploration and development with protection of natural resources in a manner which provides consideration of the resource in question without being overly or unnecessarily restrictive to the oil and gas industry. The Preferred Alternative is in conformance with the Bureau Manual 1624 SPG for oil and gas resources.

Alternative C: Standard Terms and Conditions Alternative

The Standard Terms and Conditions Alternative described management of oil and gas resources through leasing under the standard terms and conditions of the lease instrument only. This alternative would provide the minimum protection to resource values that the BLM could legally implement. Leases would not have stipulations attached and protection of natural resources would rely upon conditions of approval and existing federal laws. This alternative would be in conformance with the Bureau Manual 1624 SPG for oil and gas resources.

2. Environmentally Preferable Alternative

The Preferred Alternative is the environmentally preferable alternative and is approved as the Egan RMP Oil and Gas Leasing Amendment (see Part 1: Approved Plan Amendment).

MANAGEMENT CONSIDERATIONS

The decision to approve the plan amendment takes into account statutory, legal and national policy considerations. The analysis in the draft and final SEIS was based on evaluation of the Egan RA for oil and gas development potential, identifying sensitive natural and cultural resources, evaluating the effects of surface disturbance on these resources and identifying successful protective measures. The constraints placed on oil and gas leasing and development were reviewed in light of resource protection and where possible, major conflicts resolved to provide a balance between protection of sensitive resources and sound practices for development of oil and gas resources. The decision was also based on input provided by and received from the public, industry, as well as other federal and state agencies. Through this review process, all practicable methods to reduce environmental harm, without being overly restrictive to oil and gas leasing, exploration and development were incorporated into this plan amendment. To this end, Section 7 consultation, per the requirements in the Conner v. Burford decision, was completed and a "non-jeopardy" Biological Opinion was received from the F&WS. This Biological Opinion is incorporated into the Record of Decision and is found in Appendix B. The leasing determinations are consistent with BLM's multiple use mandate under the Federal Land Policy and Management Act of 1976 and with the supplemental program guidance for oil and gas resources.

MITIGATION AND MONITORING

Mitigation measures required for the implementation of the leasing decisions outlined in Part 1 are described in Appendix A: "Standard Practices and Procedures and Conditions of Approval". These mitigation measures will be enforced in all cases. Application of these measures will reduce the impacts to natural and cultural resources as described in the draft and final SEIS. The mitigation measures described in Appendix A will be applied to authorizations on existing leases. Leasing decisions developed through this plan amendment will be applied to all new leases issued after the date of approval of this ROD. Existing leases will continue to be managed under current leasing decisions until expiration of the lease. Upon lease renewal, leasing decisions in this plan amendment will take effect.

Implementation of the Approved Plan Amendment decisions will be monitored annually. The Five Year Evaluation of these decisions will be done on the same schedule as the Egan RMP. Effectiveness of the decisions in the approved amendment for maintaining and enhancing resource conditions while facilitating oil and gas exploration and development will be evaluated to determine if changes are needed.

PUBLIC INVOLVEMENT

Public participation for this planning effort began with the publication of the Federal Register Notice of Intent (FR Vol. 54, No. 192, Thursday, October 5, 1989) to prepare an energy and minerals amendment to the resource management plan. With this notification, a scoping document was sent to approximately 760 individuals, State and Federal agencies, units of local Government, organizations and members of private industry. The public was asked to evaluate the issues, planning criteria and management concerns and to identify any additional issues, management concerns, and planning criteria that should be addressed in the resource management plan amendment.

The Ely District held two public meetings on the issues, planning criteria and management concerns. The first meeting was held in Ely, Nevada on October 26, 1989 and a second meeting in Reno, Nevada on October 27, 1989. There were 15 participants at the Ely meeting and three participated at the Reno meeting.

A total of 54 written responses were received in response to the 30-day comment period. The letters and comments received are on file at the Ely District Office and are available for public review.

After review of the public comments received during the initial scoping period, the complexity of issues related to locatable and other mineral commodities, indicated the need to treat these mineral resources in a later separate amendment. Based on the public response, the scope of this amendment would focus only on oil and gas leasing issues.

A Federal Register "Notice" was published on Friday, August 17, 1990, changing the scope of the amendment from addressing all mineral issues to only addressing the oil and gas issues in the Resource Area.

The Egan Resource Management Plan Draft Oil and Gas Leasing Amendment and Supplemental EIS was published and made available to the public and the Environmental Protection Agency (EPA) on February 21, 1992 for a 90-day comment period which ended June 6, 1992. The Notice of Availability was published in the Federal Register on Tuesday, March 3, 1992 (FR Vol. 57, No. 42). Two public meetings were held to solicit public comment in Ely, Nevada on April 21, 1992 and in Reno, Nevada on April 22, 1992. There was one participant at the Ely meeting and one participant at the Reno meeting.

A total of seven comment letters were received during the 90-day public comment period for the Draft Amendment and DSEIS. Each letter was reviewed and all substantive comments which questioned facts or analysis or commented on issues discussed in the Draft Amendment have been evaluated and responded to in the Proposed Amendment and FSEIS and will not be repeated here. Based on public and agency review, the FSEIS analysis for air and water quality were supplemented. In addition, the Proposed Amendment was subject to consultation with the U.S. Fish & Wildlife Service (USF&WS) under Section 7 of the Endangered Species Act. The USF&WS issued a "non-jeopardy" Biological Opinion which is reprinted in its entirety in Appendix G of the FSEIS and Appendix B of this document.

The Proposed Amendment was published and made available to the public and EPA on August 18, 1993. A Notice of Availability was published in the Federal Register on Friday, August 27, 1993 (FR Vol. 58, No. 165) beginning the 30-day public protest period which ended September 30, 1993. The document was also made available to the State of Nevada for the Governor's 60-day Consistency Review which ended October 30, 1993. No protests were received.

APPROVAL

The approval of this Record of Decision for the Egan RMP Oil and Gas Leasing Amendment completes the EIS process for this plan amendment.



Billy R. Templeton
State Director, Nevada

May 2, 1994

Date

**STANDARD PRACTICES AND PROCEDURES
FOR
GEOPHYSICAL OPERATIONS
AND
CONDITIONS OF APPROVAL (COAs)**

APPENDIX A

APPROVED AMENDMENT

STANDARD PRACTICES AND PROCEDURES FOR GEOPHYSICAL OPERATIONS AND CONDITIONS OF APPROVAL (COAs)

STANDARD PRACTICES AND PROCEDURES

Geophysical Operations

1. The operator shall furnish a project map(s) at a minimum scale of 1:100,000 with the Notice of Intent (NOI) depicting the approximate line route to be used. A map shall also be filed with the Notice of Completion (NOC) depicting the actual location of the complete line.
2. Any changes in location of geophysical lines or test arrays will be brought to the attention of the authorized officer prior to the change being made on the ground.
3. No blading or other dirt work will be allowed without prior approval of the authorized officer.
4. All disturbed areas will be reclaimed as directed by the authorized officer. Bond liability will not be released until this reclamation is completed to the satisfaction of the authorized officer.
5. Reclamation required by the authorized officer will be done concurrently with the geophysical operations insofar as possible or within 30 days of the authorized officer's receipt of the NOC. Reseeding will be undertaken by the operator between the dates of October 1 and March 15.
6. No blasting will be permitted within 1/4-mile of historic trails, natural areas, identified archaeological sites, recreation areas, known caves, water wells or springs.
7. During periods of adverse conditions affecting soil moisture caused by climatic factors such as thawing, heavy rains, snow, flooding or drought, all activities off existing maintained roads that create excessive surface rutting may be suspended. When adverse conditions exist, the operator will contact the authorized officer for an evaluation and decision based on soil types, soil moisture, slope, vegetation, and cover.
8. Off-road vehicular travel shall be held to an absolute minimum necessary to complete operations.
9. Powder magazines shall be located at least 1/4-mile from travelled roads. Loaded shot holes and charges shall be attended at all times.
10. All trash, flagging, lath, etc. will be removed and hauled to an authorized disposal site. No oil or lubricants shall be drained into the ground surface.
11. The operator shall notify the authorized officer the date rehabilitation operations commence and are completed.
12. A portable mud pit is recommended when drilling with fluids and will be required by the authorized officer as needed to protect natural resources.

13. A copy of these recommended operating procedures shall be kept by the party chief of each geophysical crew.
14. The operator may be required to have fire fighting equipment available on-site while operations are in progress, depending on hazards inherent in the type of operation and fire hazard levels. The quantity and type of equipment will be specified by the authorized officer. All uncontrolled fires will be reported immediately to the authorized officer (702-289-2064: Ely District Fire Control Center or 1-800-633-6092).
15. The use of specialized low surface impact equipment (wide or balloon tired vehicles, ATVs) and/or helicopters may be required for any activities in off-road areas where it is deemed necessary by the authorized officer to protect the fragile soils and/or other resource values.
16. Activities of the geophysical operations shall not prevent, obstruct, or unduly interfere with any activities of other authorized users of the public lands.
17. Removal or alteration of existing improvements (fences, cattle guards, etc.) is not allowed without prior approval of the authorized officer. Existing improvements will be maintained in a serviceable and safe condition.
18. Fences shall not be cut without prior approval of the authorized officer. Before cutting through any fences, the operator shall firmly brace the fence on both sides of the cut; a temporary gate will be installed for use during the course of operations unless the fence is immediately repaired. Upon completion of operations, fences shall be restored to at least their original condition.
19. Drill hole cuttings will be returned to the hole if possible, or at a minimum, raked and spread out so as not to impede regrowth of vegetation or to create erosion problems.
20. Any identified bald eagle roost sites, peregrine falcon hawk sites and occupied raptor aeries (nests) will be avoided during geophysical operations. A 1/2-mile buffer zone will be imposed on all activities in these areas.
21. Consultation with the U.S. Fish and Wildlife Service is required per section 7 of the Endangered Species Act if any proposed listed or listed threatened or endangered species or its critical habitat is likely to be affected by project activities. If, through consultation, there is deemed to be an adverse impact to a T&E species or its habitat, the proposal must be modified or denied.
22. Actions which would adversely impact a federally listed candidate threatened or endangered plant or animal species or its habitat will be modified in order to prevent possible future listing of these species as threatened or endangered.
23. Cultural resource inventories, if required, will be conducted on all proposed project routes or areas of potential surface disturbing impacts prior to authorization of the geophysical operations. Inventories will be completed by BLM or BLM-approved cultural resource permit holders.
24. All identified cultural resources will be avoided by project-related activities per the Nevada BLM Programmatic Agreement for Cultural Resources. If avoidance is not feasible, geophysical activities must cease until mitigating measures are developed and implemented and Section 106 consultation is completed. Archaeological monitors may be required in special cases.

25. The operator is responsible for informing all persons associated with the project that knowingly disturbing cultural properties (historic or archaeological) or collecting artifacts is illegal.
26. During winter geophysical operations, requirements for cultural resource inventories may be waived by the authorized officer if the unsurveyed lines are located on bare and frozen ground or are completely covered (100%) by snow and the snow is sufficiently deep (approximately 4-6") to prevent ground disturbing ruts. Should conditions change while operations are in progress, the Operator must contact the authorized officer to determine if an archaeological monitor or a Class III survey is required prior to continuance of geophysical activities.
27. For any geophysical operations occurring within listed National Register Districts or National Register-eligible properties and districts, a Section 106 consultation for a Determination of Effect must be completed and mitigation measures developed and implemented prior to authorization.
28. All geophysical and leasing activities proposed in Wilderness Study Areas (WSAs) will follow the guidance set forth under H-8550-1 Interim Management Policy and Guidelines for Lands Under Wilderness Review.
29. All geophysical or oil and gas activities proposed in designated wilderness areas will follow the guidance set forth under 43 CFR 8560 Management of Designated Wilderness Areas, the Wilderness Management Plan and any special provisions contained in the specific legislation designating the Wilderness Area.

CONDITIONS OF APPROVAL (COAs)

Application for Permit to Drill (APD) and Sundry Notices

The regulations governing drilling operations on public lands are stated in 43 CFR 3160. With submittal of an APD or Sundry Notice by the operator or lessee, the following conditions of approval may be required for the operation as applicable.

Pre-Construction

1. Existing roads should be used to the extent possible. Additional roads, if needed, shall be kept to an absolute minimum and the location of routes must be approved by the authorized officer prior to construction.
2. Upon determination of an impending field development, a transportation plan will be requested to reduce unnecessary access roads.
3. All access roads will be constructed and maintained to BLM road standards (BLM Manual Section 9113).
4. Off road travel will be restricted to terrain with less than 30 percent slopes unless approved by the authorized officer.
5. Proposed surface disturbance and vehicular travel will be limited to the approved well location and access route.
6. Any changes in well location, facility location, access or site expansion must be approved by the authorized officer in advance.
7. Prior to approval of an APD or other lease operations, a Section 106 consultation must be completed by the authorized officer as provided for under the Nevada BLM Programmatic Agreement for Cultural Resources.

8. Any activity planned within a 1/4-mile on either side of the Pony Express National Historic Trail must undergo a visual assessment. Appropriate mitigation of visual impacts will be implemented as necessary to keep the management corridor in as natural a condition as possible.

Well Pad and Facility Construction

1. Every pad, access road or facility site must have an approved surface drainage plan.
2. A site diagram depicting the location of production facilities, recontoured slopes and stabilization measures shall be approved by the authorized officer prior to installation of production facilities.
3. Drainage from disturbed areas will be confined or directed so that erosion of undisturbed areas is not increased. In addition, no runoff water (including that from roads) will be allowed to flow into intermittent or perennial waterways without first passing through a sediment-trapping mechanism. Erosion control structures may include: waterbars, berms, drainage ditches, sediment ponds, or other devices.
4. Access road construction for exploratory wells should be planned such that a permanent road can later be constructed in the event of field development.
5. Construction of access roads on steep hillsides and near watercourses will be avoided where alternate routes provide adequate access.
6. Access roads requiring construction with cut and fill will be designed to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material will be deposited, resource concerns and visual contrast.
7. Fill material will not be cast over hilltops or into drainages. Cut slopes should normally be no steeper than 3:1 and fill slopes no steeper than 2:1.
8. Low water crossings should be used whenever possible. Installation of culverts, if necessary, will be designed to maintain the original stream gradient and will be of adequate size to accommodate a 24-hour 100-year event. Fill material will be properly compacted in layers not exceeding 6 inches in thickness to insure stability and to prevent washing out or dislocation of the culvert. The road surface should not be less than 12 inches above the culvert to prevent crushing from weight loads.
9. As required, fill slopes surrounding culverts will be rip-rapped with a well graded mixture of rock sizes containing no material greater than two feet or smaller than three inches. The ratio of maximum to minimum dimension of any rock shall not exceed 6:1.
10. Water turnouts needed to provide additional drainage will be constructed not to exceed two percent slope to minimize soil erosion.
11. Well site layout should take into account the character of the topography and landform. Deep vertical cuts and steep long fill slopes should be avoided. All cut and fill slopes should be constructed to the least percent slope practical.
12. Trash will be retained in portable trash cages and hauled to an authorized disposal site for disposal. Burning will not be allowed on the well site.
13. No drilling or storage facilities will be allowed within 500 feet of any pond, reservoir, canal, spring or stream. Other protective areas near water may be required to protect riparian habitat and T&E species.

14. Springs and water developments on public lands may be used only with the prior written approval of the authorized officer or the water rights holder.
15. To maintain esthetics values, all semi-permanent and permanent facilities will be painted to blend with the natural surroundings. The Standard Environmental Colors will be used for color selection.
16. Fences shall not be cut without prior approval of the authorized officer. Before cutting any fences, the operator shall firmly brace the fence on both sides of the cut; a temporary gate will be installed for use during the course of operations unless the fence is immediately repaired. Upon completion of operations, fences shall be restored to at least their original condition.
17. As directed by the authorized officer, cattle guards will be installed whenever access roads are through pasture gates or fences. These cattle guards shall be maintained. This includes cleaning out under cattle guard bases when needed.
18. The depth of surface soil material to be removed and stockpiled will be specified by the authorized officer. If topsoil is stockpiled for more than one year, the stockpile shall be seeded or otherwise protected from wind and water erosion. The stockpile shall be marked or segregated to avoid loss or mixing with other subsurface materials. Any trees removed will be separated from soils and stockpiled separately.
19. Mud, separation pits and other containments used during the exploration or operation of the lease for the storage of oil and other hazardous materials shall be adequately fenced, posted or covered.
20. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer. Within five working days the authorized officer will inform the operator as to:
 - whether the materials appear eligible for the National Register of Historic Places;
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming *in situ* preservation is not necessary); and,
 - a timeframe for the authorized officer to complete an expedited review under 36 CFR 800.11 or other applicable Programmatic Agreement, to confirm, through the State Historic Preservation Officer, that the findings of the authorized officer are correct and that mitigation is appropriate.
21. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with the process described in item 20 above for inadvertent discovery of cultural resources, the authorized officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The authorized officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the authorized officer that the required mitigation has been completed, the operator will then be allowed to resume construction.
22. Bald eagle roosts, peregrine falcon hawk sites and known occupied raptor aeries (nests) will be avoided during the nesting and fledging period.
23. Field development construction activities within 1/2-mile of a sage grouse lek will require motorized equipment to have noise abatement devices to preclude excessive noise during the sage grouse strutting period.

24. The cutting of rare, unique or unusual trees will not be permitted. In particular cutting of Bristlecone pine, Swamp Cedar, Ponderosa pine and White Fir will be avoided.
25. Consultation with the U.S. Fish and Wildlife Service (USFWS) is required per section 7 of the Endangered Species Act prior to approval of an APD or other lease operations if any proposed listed or listed threatened or endangered species or its critical habitat is likely to be affected by project activities. If there is deemed to be any adverse impact the proposal would be modified or the request denied.
26. Actions which would adversely impact a federally listed candidate threatened or endangered plant or animal species will be modified in order to prevent possible future listing of these species as threatened or endangered.
27. Fences shall be flagged with bright colored flagging at least every rod for visibility to wild horses. All fences should be constructed using green steel posts with white or silver tops to increase visibility. Fences should also avoid obvious horse migration routes (deep trails, stud piles) if at all possible.
28. No access roads, drill pads, mud pits or storage facilities will be allowed within 200 meters of cave entrances, drainage areas and subsurface passages. No waste material or chemicals will be placed, or disposed of, in sinkholes or cave entrances. If during construction activities any sinkholes or cave openings are discovered, construction activities will cease and the Authorized Officer will be notified.
29. The discharge of dredged or fill material into surface waters such as navigable and interstate waters and their tributaries, wetlands adjacent to those waters and all impoundments of those waters may require an individual permit or notification under Section 404 of the

Clean Water Act (CWA) issued by the District Engineer (DE) of the Corps of Engineers (COE). Criteria applied under Section 404 is established in regulation and will used to determine the type of permit or notification required.

Field Operation

1. Operations shall be done in a manner which prevents damage, interference, or disruption of water flows and improvements associated with all springs, wells, or impoundments. It is the operator's responsibility to enact the precautions necessary to prevent damage, interference, or disruptions.
2. Companies controlling roads which provide access into crucial wildlife areas may be required to close the road with a lockable gate to prevent general use of the road during critical periods of the year when resource problems are experienced (during hunting seasons, winter, etc.). This restrictive measure would be applied where needed to protect wildlife resources or to minimize environmental degradation.
3. The use of closed road segments will be restricted to legitimate, authorized agents of the lessee and/or their subcontractor(s), the land managing agency and other agencies with a legitimate need (NDOW, other law enforcement agencies, etc.).
4. Unauthorized use or failure to lock gates during specified time frames by the lessee or its subcontractors would be considered a violation of the terms of the APD or associated grants.
5. The operator shall regularly maintain all roads used for access to the lease operation. A maintenance plan may be required. A regular maintenance program may include, but not be limited to, upgrading of existing roads, blading, ditching, culvert and drainage installation, and graveling or capping of the roadbed.

6. Noxious weeds which may be introduced due to soil disturbance and reclamation will be treated by methods to be approved by the authorized officer. These methods may include biological, mechanical, or chemical. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the authorized officer 60 days prior to the planned application date.

Reclamation and abandonment

1. A water well may be accepted by the Ely District upon completion of operations. Please submit the following information to the Ely District Office, Bureau of Land Management, HC 33, Box 33500, Ely, NV 89301-9408.
 - A. Water Analysis;
 - B. Type of inside diameter of casing used in well;
 - C. Total depth of well;
 - D. Depth of concrete seal;
 - E. Depth of static water level;
 - F. Water bearing formation or description of aquifer.
2. The operator or contractor will contact the authorized officer 48 hours prior to reclamation work.
3. Restoration work may not begin on the well site until the reserve pits are completely dry.
4. Disturbed areas will be recontoured to blend as nearly as possible with the natural topography prior to revegetation. This includes removing all berms and refilling all cuts. Compacted portions of the pad will be ripped to a depth of 12 inches unless in solid rock.
5. Site preparation for reclamation may include contour furrowing, terracing, reduction of steep cut and fill slopes and the installation of water bars, etc.

6. All portions of the access roads not needed for other uses as determined by the authorized officer will be reclaimed.
7. The stockpiled topsoil will be spread evenly over the disturbed area.
8. The operator will be required to construct waterbars and re-open drainages on abandoned access roads and pipeline routes to minimize erosion as required. Water bars will be spaced appropriately dependant upon topography and slope. Pipeline routes shall be water-barred perpendicular to the fall-line of the slope.
9. The area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion stabilized and an acceptable vegetative cover has been established.
10. Rehabilitation shall be planned on the sites of both producing and abandoned wells. The entire site or portion thereof, not required for the continued operation of the well, should be restored as nearly as practical to its original condition. Final grading of back-filled and cut slopes will be done to prevent erosion and encourage establishment of vegetation.
11. Petroleum products such as gasoline, diesel fuel, helicopter fuel, crankcase oil, lubricants, and cleaning solvents used to fuel, lubricate, and clean vehicles and equipment will be containerized in approved containers.
12. Hazardous materials shall be properly stored in separate containers to prevent mixing, drainage or accidents. Hazardous materials shall not be drained onto the ground or into streams or drainage areas.

13. Totally enclosed containment shall be provided for all solid construction waste including trash, garbage, petroleum products and related litter will be removed to an authorized sanitary landfill approved for the disposal of these classes of waste.
14. All construction, operation, and maintenance activities shall comply with all applicable federal, state, and local laws and regulations regarding the use of hazardous substances and the protection of air and water quality.
15. In construction areas where recontouring is not required, vegetation will be left in place wherever possible and the original contour will be maintained to avoid excessive root damage and allow for resprouting.
16. Watering facilities (e.g., tanks, developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction activities to its predisturbed condition as required by the authorized officer.
17. Mulching of the seed-bed following seeding may be required under certain conditions (i.e., expected severe erosion), as determined by the authorized officer.
18. Seed will be broadcast between October 1 and March 15 using a site-specific seed mixture and depth of planting as determined by the authorized officer. Seed may be applied with a rangeland drill at half the rate of broadcast seeding. All seeding application rates will be in pounds of pure live seed per acre. Seed should be adapted varieties.

**ENDANGERED SPECIES ACT
SECTION 7 CONSULTATION**

**U. S. FISH AND WILDLIFE SERVICE
BIOLOGICAL OPINION**

APPENDIX B



United States Department of the Interior



FISH AND WILDLIFE SERVICE
NEVADA ECOLOGICAL SERVICES FIELD OFFICE
4600 Kietzke Lane, Building C-125
Reno, Nevada 89502-5093

April 15, 1993
File No. 1-5-93-F-25

Memorandum

To: District Manager, Ely District, Bureau of Land Management, Ely, Nevada

From: Field Supervisor, Ecological Services, Reno, Nevada

Subject: Biological Opinion on Implementation of the Draft Oil and Gas Leasing Amendment to the Egan Resource Management Plan

This Biological Opinion responds to your October 21, 1992, request for formal consultation with the Fish and Wildlife Service (Service) pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act). The Service has analyzed possible impacts to three threatened or endangered species and their critical habitats that may result from the Bureau of Land Management's (Bureau) implementation of the draft oil and gas leasing amendment to the Egan Resource Area (RA) Resource Management Plan (RMP). Endangered bald eagles (Haliaeetus leucocephalus), endangered White River spinedace (Lepidomeda albivallis), and threatened Railroad Valley springfish (Crenichthys nevadae) are found within the Egan RA. This formal consultation was conducted pursuant to the regulations governing interagency cooperation under the Act (50 CFR Part 402). Your request was received in this office on October 21, 1992, and formal consultation was initiated on February 16, 1993, following receipt of additional information.

In January 1988, the Ninth Circuit Court of Appeals decided in Connor v. Burford (Nos. 85-3929 to 85-3937) that the Service must analyze all stages of any Bureau on-shore oil and gas leasing program in comprehensive biological opinions to satisfy the requirements of section 7 of the Act. An incremental-step consultation approach cannot be used. This Biological Opinion analyzes all stages of the Egan RA oil and gas leasing program, but addresses only the potential general impacts of the entire program, not specific impacts of individual leases. Additional consultation may be required for each operational stage of the oil and gas program to analyze specific impacts.

This Biological Opinion was prepared using information contained in the Bureau's Egan Resource Management Plan Draft Oil and Gas Leasing Amendment and Supplemental Environmental Impact Statement dated February 1992; Bureau memoranda dated October 21, 1992, and

February 10, 1993; a meeting attended by our respective staff members on January 6, 1993; telephone conversations with Bureau staff; and Nevada Ecological Services Field Office files.

Description of the Proposed Action




The Bureau's existing Egan RMP does not conform to Bureau program guidance on management of oil and gas resources because it does not address issues relating to oil and gas exploration and development. The program guidance requires that the Bureau estimate oil and gas development potential within the Egan RA and develop a leasing strategy based on this potential that allows for balanced management of all natural resources. To correct this deficiency, the Bureau prepared the draft oil and gas leasing amendment to the Egan RMP.

Since 1984, the Egan RA has experienced steady geophysical exploration and exploratory well drilling (Figure 1). Approximately 58 percent of the Egan RA has been classified as having a high oil and gas potential. Oil and gas reserves within the Egan RA are estimated at 97 million barrels of oil and 60 billion cubic feet of gas. Currently, there are 1,126 active oil and gas leases covering 22 percent of the Egan RA. Although no oil and gas fields have been established in the Egan RA, oil and gas reserves are currently being extracted from areas to the north (Pine Valley) and south (Railroad Valley), and may extend into the Egan RA. The Railroad Valley oil field is the largest in Nevada.





Oil and gas exploration and development activities generally progress through the following sequential, but often overlapping, phases: 1) Preliminary exploration, 2) exploratory drilling, 3) field development and production, and 4) field abandonment. The Bureau has specific permitting requirements for each of these phases, and will initiate section 7 consultation under the Act for any specific activity which may affect listed species.

Preliminary exploration determines where oil and gas resources are likely to occur, how deep they are located, and how much may be present by measuring surface and subsurface geological characteristics. Seismic surveys are the most popular geophysical method employed. Truck-mounted vibrators and surface and subsurface explosions are used to generate the shock-waves, the characteristics of which are then recorded and interpreted. A given area may be explored several times by the same or different companies over a long period of time. Multiple exploration programs may be undertaken if first attempts were unsuccessful, another company wants its own information, or new techniques or equipment are available.

EGAN OIL AND GAS LEASING AMENDMENT

-  BLM LANDS
-  OTHER FEDERAL LANDS
-  PRIVATE AND STATE LANDS

OIL AND GAS POTENTIAL

-  HIGH POTENTIAL
-  MODERATE POTENTIAL
-  LOW POTENTIAL
-  LOCATION OF WELLS DRILLED IN RESOURCE AREA

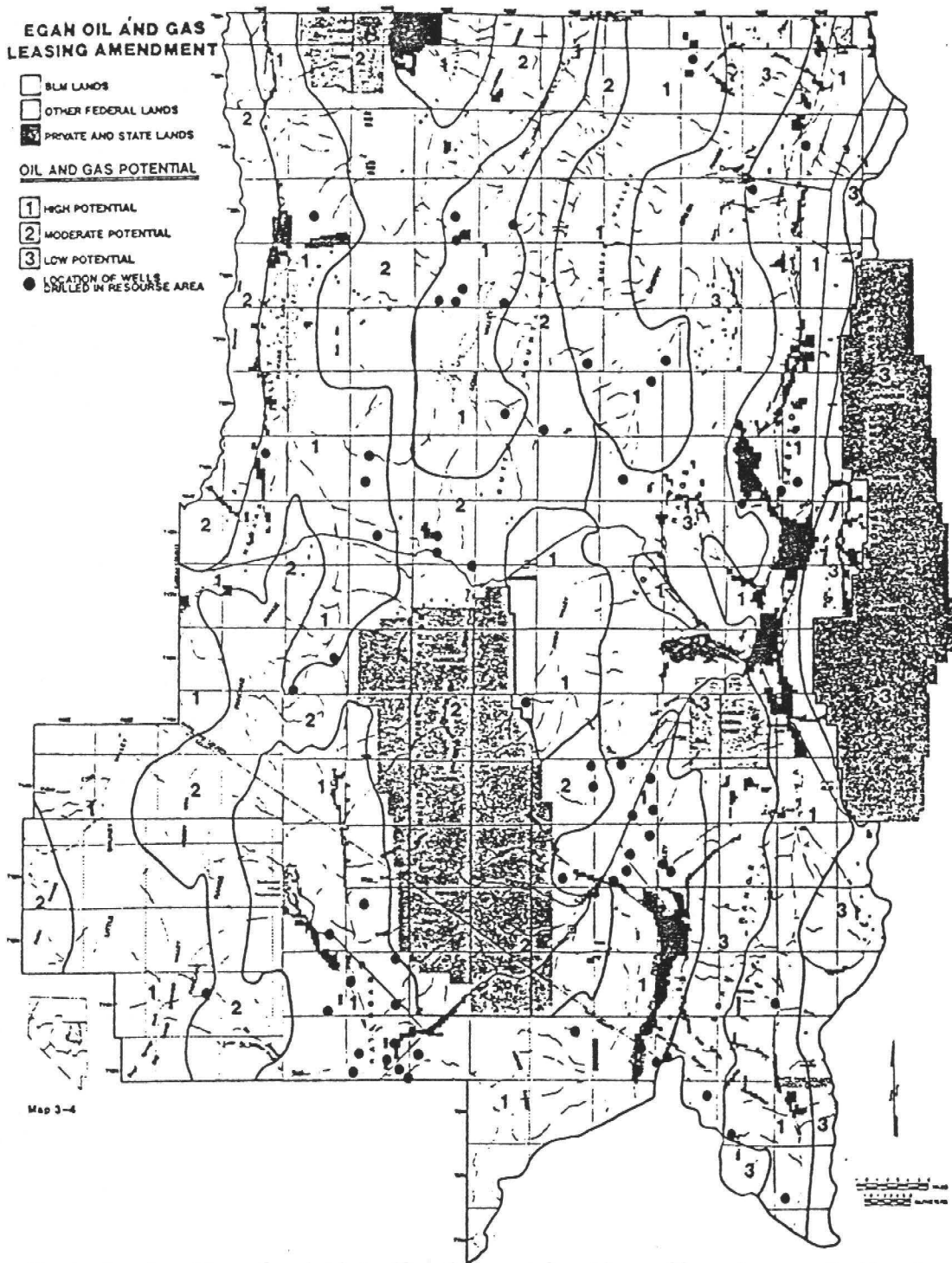


Figure 1: Location of existing oil and gas exploration wells and areas of oil and gas development potential within the Egan Resource Area (taken from Bureau 1992).

When preliminary exploration identifies a favorable site, exploratory drilling may be justified. An oil and gas lease must be obtained from the Bureau before any exploratory drilling. Stratigraphic tests supplement seismic data and aid in revealing subsurface structural features. Holes are drilled from 100 to several thousand feet deep and the resulting rock chips are analyzed. Truck-mounted drilling equipment is fairly mobile, and surface disturbance is temporary and generally limited to a 12-14 foot access road and a one-half acre drill site.

The final phase of exploration is establishment of a wildcat well to determine if the prospect actually contains oil or gas. In Nevada, one in ten wildcat wells produce commercial amounts of oil and gas, while the national success ratios average is one in sixteen. The lessee and/or operator must file an Application for Permit to Drill (APD) with the Bureau prior to any activity related to establishment of a wildcat well. The Bureau reviews the APD for technical adequacy and protection of subsurface and surface resources, and prepares an environmental assessment. An approved APD incorporates all drilling, surface use, and reclamation requirements identified during the Bureau's onsite and technical review.

Construction of the wildcat well site includes development of a 12- to 14-foot wide access road and a 1- to 3-acre drill pad. The drill pad is cleared of all vegetation and leveled for the drilling equipment, mud pumps, mud (reserve) pits, generators, pipe racks, and a tool house. A surface pipeline may be laid from a stream or water well, water may be trucked into the site, or more commonly, a water well is developed onsite. Drilling operations generally require between 5,000 and 15,000 gallons of water a day.

During drilling, a surface casing is cemented into place to protect fresh-water aquifers from drilling fluid contamination. To prevent well blow-out during drilling, large metal rams are attached to the surface casing to confine the pressure if the drill hits a high-pressure zone. Drilling mud is pumped down the drill pipe to clean and cool the bit, carry cuttings to the surface, and seal the sides of the hole to control pressure of any water, gas or oil encountered by the drill.

If the well does not encounter oil or gas, it is plugged with cement and abandoned. The well pad and access road are recontoured and revegetated. If a water well has been developed onsite, the well may be turned over to the Bureau for resource enhancement purposes such as wildlife or livestock water. If the well will produce oil or gas, a casing is cemented in place to the producing zone, and the drill rig is replaced with a smaller rig to complete the well.

If a wildcat well becomes a discovery well, additional wells will be drilled to confirm the discovery, establish the extent of the field, and to efficiently drain the reservoir. The procedures for drilling development wells are generally the same as for wildcat wells. Any production activity that results in new or additional surface disturbance and/or is not approved under the APD, requires the approval of the Bureau.

Wildcat well and field development wells are cadastrally surveyed to establish legal location, and to ensure compliance with State of Nevada regulations regarding the location and spacing of oil and gas wells. The Bureau has the authority to waive State spacing regulations in the interest of conservation, but normally abides by the State's spacing regulations. Oil well spacing for production from Federal leases in Nevada is a minimum of 40 acres for wells with depths of 5,000 feet or less, and 160 acres for wells greater than 5,000 feet deep. Gas wells are spaced at 160- and 640-acre intervals.

During oil and gas field development, wells are fitted with pumps or control valves if the well is free-flowing. Pipelines, separating facilities, storage tank batteries, and refineries are constructed and the road system is upgraded. The crude oil is transferred from the well to a separating facility where any gas and water is removed from the oil. The oil is then stored in tank batteries before being transported to the refinery. Crude oil is transported to the refinery in pipelines or by truck if the size of the field or other factors make it uneconomical to construct a pipeline.

Some oil and gas wells produce water that must be disposed of during operation of the well. This water is generally re-injected in a water well created for this purpose or in nonproducing oil and gas wells. The water must meet quality standards established by the State of Nevada and must be introduced into the formation from which it came or one containing water of equal or poorer quality. Water re-injection wells are constructed with protective measures to prevent injected water from migrating up or down from the injection zone to other formations.

The life-span of an oil and gas field varies due to unique characteristics found at each field. A typical field exists for 15 to 25 years, although abandonment of individual wells may start early and reach a maximum when the field is depleted. Generally, wells which never produced are plugged with cement at the base of the casing, the casing is filled with drilling mud, and a cement cap is installed on the top of the casing. A pipe monument giving information about the well may be required. If not, the casing is cut off and capped below ground level. Protection of aquifers and known oil and gas producing formations may require placement of additional cement plugs within the well.

Some production wells are plugged immediately following depletion, but others are allowed to stand idle for future secondary recovery programs. In addition to the measures required for a dry well, depleted production wells are plugged with cement in the producing zone.

After the well is plugged, all equipment is removed and the well pad and access roads are restored as required in the APD. Generally, the area is graded to restore original contours, minimize erosion, and allow for revegetation. Stockpiled topsoil is redistributed and the site is reseeded. A fence may be constructed to protect the site until revegetation is completed. The water well may be turned over to the Bureau for resource enhancement.

The Bureau's reasonable development scenario for oil and gas leasing in the Egan RA is based on the development observed in Railroad Valley. Based on certain assumptions, the Bureau estimates that 175 oil and gas exploration wells and 248 development wells may be drilled within the Egan RA during the land use planning period. Oil and gas exploration and development activities may result in 3,486 acres of surface disturbance. By the end of the planning period, approximately 2,212 acres associated with exploration wells would be reclaimed, but no reclamation of developed oil fields is expected (Bureau 1992).

Under the Bureau's preferred oil and gas leasing alternative, 61 percent of the Egan RA's 3.8 million acres would be designated as open to leasing with standard terms and conditions; 30.9 percent would be open to leasing with minor restrictions (e.g. timing limitations); 6.4 percent would be closed to leasing for discretionary or nondiscretionary reasons; and 1.7 percent would be open to leasing with major restrictions (e.g. no surface occupancy). No surface occupancy or closed-to-leasing restrictions would be placed on 15,540 acres to protect species federally listed as threatened or endangered and their critical habitats, and species considered as candidates for listing under the Act (Bureau 1992).

Additional protective measures would be included as standard practices and procedures for exploration, pre-construction, well pad and facility construction, field operation, reclamation, and abandonment activities. These measures include, but are not limited to: 1) Prohibitions on a) exploratory blasting within $\frac{1}{4}$ mile of springs, b) establishment of drilling or storage facilities within 500 feet of any open water, and c) discharge of oil or lubricants onto the ground surface; 2) avoidance of raptor nests and roost sites; 3) consultation with the Service on all proposed activities which may affect threatened or endangered species or their critical habitats; 4) modification of proposed activities which may adversely impact species recognized as

candidates for listing under the Act; 5) adequate fencing or covering of mud and separation pits used for the storage of oil and other hazardous materials; 6) adequate casing of all wells to prevent aquifer contamination; and 7) compliance with all Nevada Division of Environmental Protection water quality requirements for reinjection of produced waters (Bureau 1992).

Status of the Species/Environmental Baseline

Bald Eagle

In 1978, the bald eagle was listed as an endangered species in all of the conterminous United States, except for Michigan, Minnesota, Oregon, Washington, and Wisconsin, where it is classified as threatened (43 Federal Register 6233). Critical habitat has not been designated. The Recovery Plan for the Pacific Bald Eagle identifies reasonable actions needed to improve the status of bald eagles in California, Idaho, Montana, Nevada, Oregon, Washington, and Wyoming (Service 1986).

Habitat loss is the most significant, long-term threat to all bald eagle populations (Service 1986). While individual local or small-scale actions may not appear to be significant, the cumulative effect of human activities which adversely affect the suitability of traditional bald eagle breeding, wintering, and foraging areas throughout the United States poses an important threat to the recovery of the species. Shooting continues to be the most frequently recorded single cause of bald eagle mortality, although the rate may be declining (Service 1986). Bald eagle's are susceptible to debilitating effects of many environmental contaminants, including pesticides and lead shot, due to secondary ingestion of poisons contained in their prey. Reproduction throughout the species' range has improved since the use of organochlorine pesticides was restricted in the 1970's. However, residual concentrations of pesticides are still present in some birds and continue to affect reproductive success.

Bald eagle nesting has been uncommon in Nevada. Nesting activity was documented on Anaho Island in Pyramid Lake, Washoe County in 1866, and along Salmon Falls Creek, Elko County in 1985. The Salmon Falls Creek pair did not produce young, but the nest site offers the best potential in Nevada (Service 1986). Recently, adult bald eagles have been present in western Nevada during the spring and summer months, but no nesting activity has been observed (Herron, et al. 1985). Approximately 125 bald eagles spend the winter (November through March) in Nevada, occupying traditional areas which are closely associated with open water, such as wetland, lake, and riverine habitats, or which support large populations of jackrabbits (Lepus sp.). Approximately 60 percent of the State's wintering bald eagles occur in western Nevada, 35 percent in eastern Nevada, and 5 percent in southern Nevada (Herron, et al. 1985). The Bureau (1992) has identified

bald eagle winter roost sites within the Egan RA on private land in Railroad Valley and on Bureau land in Newark Valley. Bald eagles migrate into the area in November and depart as late as May.

Nevada's wintering bald eagles require adequate food supplies and night roosts within a reasonable distance of the feeding area. Fish, waterfowl, jackrabbits, and various types of carrion are the most common food sources for bald eagles (Service 1986). Communal roost trees generally provide a more favorable microclimate than surrounding areas and thereby facilitate energy conservation during inclement weather (Service 1986). Bald eagles tend to return to the same roost tree year after year. Isolation is an important factor of bald eagle wintering habitat. Excessive human activity may result in suitable winter habitats not being used by bald eagles (Service 1986).

White River Spinedace

The White River spinedace was listed as an endangered species and its critical habitat designated in 1985 because five populations had been extirpated and the remaining two had declined due to habitat destruction and nonnative species introductions (50 Federal Register 37194). Critical habitat includes Preston Big Spring, Lund Spring, Flag Springs, and their associated outflows. This species historically occupied seven habitats in northern White River Valley, Nye and White Pine Counties, Nevada: 1) Upper White River near its confluence with Ellison Creek, 2) Preston Big Spring, 3) Cold Spring, 4) Nicholas Spring, 5) Arnoldson Spring, 6) Lund Spring, and 7) Flag Springs. The Service (1992) identified all seven historically occupied habitats as essential for recovery of the White River spinedace, and determined that they should be rehabilitated to allow reestablishment of White River spinedace populations. All historically occupied habitats, except for Flag Springs, are within the Egan RA. The upper White River flows through Bureau, Forest Service, and private lands, and five of the springs are on private land. Flag Springs are on the State of Nevada's Wayne E. Kirch Wildlife Management Area.

In 1985, only the Lund Spring and Flag Springs White River spinedace populations persisted, but the Lund Spring population was extirpated shortly thereafter (Scoppettone, et al. 1992). The Flag Springs population persists at a precariously low level, estimated at less than 100 individuals in 1991 (Scoppettone, et al. 1992). Very little is known about the species' life history and habitat requirements. White River spinedace collected during the 1930's occupied cool, clear, spring habitats with moderate to swift currents and gravel and sand substrates (Miller and Hubbs 1960). White River spinedace food preferences and feeding habits are unknown.

Railroad Valley Springfish

In 1986, the Railroad Valley springfish was federally listed as a threatened species and its critical habitat designated pursuant to the Act because suitable habitat had decreased since the species' description in 1932 (51 Federal Register 10857). Critical habitat includes six spring systems in Railroad Valley: Big Warm Spring, Little Warm Spring, North Spring, Hay Corral Spring, Reynolds Springs, and Big Spring. Railroad Valley springfish populations have also been established at Sodaville Spring, Mineral County; Chimney Spring, Railroad Valley, Nye County; Dugan Ranch Spring, Hot Creek Canyon, Nye County; and Warm (Nanny Goat) Spring, Nye County. Big Warm Spring and Little Warm Spring are on the Duckwater Indian Reservation, although portions of each spring's outflow cross Bureau land. North Spring, Reynolds Springs, and Chimney Spring are on Bureau land. The remainder of the habitats are on private property.

Railroad Valley springfish currently occupy all 10 historic and introduction sites. Some populations have been severely impacted by habitat modification and nonnative species introductions. The historic populations are susceptible to loss of spring flow which may result from any event, natural or human-induced, which alters the hydrology of the Railroad Valley ground water basin. The Chimney Spring population was extirpated in 1981 following a significant, but unexplained, decrease in spring flow which lasted for 6 months (Williams 1986).

Known constituent elements of Railroad Valley springfish critical habitats include clear, unpolluted, thermal (29° to 36° Centigrade) spring pools, flowing channels, and marshy areas with aquatic plants, insects, and mollusks (51 Federal Register 10857). Railroad Valley springfish spawning activity is restricted to areas with water temperatures between 28° and 35° Centigrade, although the species can tolerate temperature extremes of 14° to 40° for short periods of time (Williams 1986). Spawning occurs from early spring through late autumn. Railroad Valley springfish are indiscriminant and opportunistic feeders, ingesting a wide variety of foods. The species is primarily herbivorous during the spring, consuming primarily filamentous algae, but shifts to carnivory by summer, when animal foods are more common (Williams 1986).

Effects of the Proposed Action on the Listed Species

Implementation of the Bureau's oil and gas leasing program within the Egan RA may indirectly impact bald eagles, White River spinedace, and Railroad Valley springfish. Any human activity conducted during the winter within close proximity to bald eagle roost trees or foraging areas may result in abandonment of those sites and resultant stress to the birds as they relocate. Any activity which disturbs vegetation may also disrupt populations

of vertebrates used as a forage base by wintering bald eagles.

Heavy wildlife mortality has been documented at open pits used for storage of oil and other hazardous materials during oil and gas exploration or production, for disposal of oil-sludge from refineries, and to capture spillage from crude oil storage tanks (Flickinger 1981). Certain species of wildlife may be attracted to the open pits, mistaking them for water, while other species may scavenge carcasses in the pits and then themselves become victims. Raptors, including a bald eagle, have either perished or been rescued from oil pits after apparently attempting to forage on carcasses of other birds (Flickinger 1981; Flickinger and Bunck 1987).

The various habitats either currently or historically occupied by Railroad Valley springfish or White River spinedace may be degraded by various oil and gas activities which impact the ground water basin supporting each habitat. The use of subsurface explosions during geophysical exploration, creation of artesian wells during exploratory drilling, and development of water wells to support oil field development may affect discharge of springs in the vicinity. Any of these activities may decrease spring flows and/or alter water chemistry and temperature such that the aquatic habitat is no longer suitable for the species of concern.

Contamination of aquifers is possible if casings inside well shafts fail. Reinjection of water produced from oil wells may indirectly affect spring habitats if the criteria used to determine quality of reinjected water do not consider elements critical to fish health, such as temperature. Oil accidentally spilled from pipelines or transport trucks which enters any water currently or historically occupied by Railroad Valley springfish or White River spinedace may result in fish mortality and adversely affect overall aquatic habitat conditions such that recovery efforts are hampered.

Potential impacts to bald eagles should be minimized by the Bureau's prohibition of oil and gas activities near raptor nests and roost sites, and by requirements for all storage pits containing hazardous materials to be covered. Given the scarcity of bald eagle roost sites within the Egan RA, the disturbance of approximately 3,500 acres of the 3.8 million acre Egan RA due to oil and gas leasing activities should not appreciably reduce the bald eagle's prey base. Potential impacts to White River spinedace and Railroad Valley springfish should be minimized by the Bureau's requirements preventing contamination of aquifers and prohibiting exploratory blasting near springs, establishment of drilling or storage facilities near any open water, and discharge of oil or other toxicants onto the ground.

The Service, therefore, has determined that the impacts described herein will not appreciably reduce the likelihood of survival and recovery of bald eagles, White River spinedace, or Railroad Valley springfish, or destroy or adversely modify their critical habitats. The Bureau will incorporate protective measures into all phases of the oil and gas leasing program, and additional section 7 consultation will be conducted for each specific phase should the Bureau determine that a listed species may be affected.

Cumulative Effects

Cumulative effects are those effects of future non-Federal (State, local government, or private) activities on endangered and threatened species or critical habitat that are reasonably certain to occur during the course of the Federal activity subject to consultation. Future Federal actions are subject to the consultation requirements established in section 7 of the Act and, therefore, are not considered cumulative to the proposed action.

Approximately 4.3 million acres (85 percent) of the Egan RA are managed by Federal agencies, and 180,000 acres are private property. The Service is aware of no future private activities which may affect the three listed species. However, a bald eagle roost tree and five historically occupied White River spinedace habitats exist on private property. Any landowner activity which degrades these habitats may adversely impact their suitability for continued or future use by the species of concern.

Biological Opinion

It is our Biological Opinion that the Bureau's implementation of the Egan RA oil and gas leasing program is not likely to jeopardize the continued existence of three threatened or endangered species, or result in the destruction or adverse modification of critical habitat.

Incidental Take

Sections 4(d) and 9 of the Act prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in such conduct) of listed species of fish and wildlife without a special exemption. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 CFR § 17.3). "Harass" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering

(50 CFR § 17.3). Under the terms of sections 7(b)(4) and 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered prohibited taking provided that such taking is in compliance with this Biological Opinion. The Bureau has a continuing duty to regulate the activity that is covered by this incidental take statement.

The Service does not anticipate that the proposed implementation of the Egan RMP oil and gas leasing program will result in any incidental take of bald eagles, White River spinedace, or Railroad Valley springfish, therefore none is authorized by this incidental take statement.

Conservation Recommendations

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. The term "conservation recommendations" has been defined as Service suggestions regarding discretionary Federal agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, or regarding the development of information.

1. The Bureau should coordinate all oil and gas leasing activities within Railroad Valley between the Egan District and the Battle Mountain District.
2. The Bureau should monitor the discharge of Railroad Valley springs on public lands and take appropriate actions to correct any declines.
3. The Bureau should restrict oil and gas field development within areas used by bald eagles to minimize the indirect loss of bald eagle prey base.
4. The Bureau should restrict the construction of oil and gas field access roads or pipeline near open water to avoid accidental contamination due to spillage.

In order for the Service to be kept informed of actions that either minimize or avoid adverse effects, or that benefit listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

Reinitiation Requirement

This concludes formal consultation on the proposed action outlined in your memorandum dated October 21, 1992. As required by 50 CFR § 402.16, reinitiation of formal consultation is required if: (1) The amount or extent of incidental take is exceeded; (2) new information reveals effects of the Federal

agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this Biological Opinion; (3) the Federal agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this Biological Opinion; (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations that are causing such take must be stopped in the interim period between the reinitiation and completion of the new consultation if any additional taking is likely to occur.

We appreciate the assistance and cooperation of your staff throughout this consultation process. If we can be of any further assistance, please contact me or Donna Withers at (702) 784-5227.



David L. Harlow

cc:

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