



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Las Cruces Field Office
1800 Marquess St.
Las Cruces, New Mexico 88005

IN REPLY REFER TO:
4000 (03000)
Allot. No. 09020, 09021 & 09022
E.A. No. NM-030-99-054

SURNAME	
Initials/Date	2/22/99 j/c
Initials/Date	2/29/99 g/c
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FEB 25 1999

NOTICE OF PROPOSED DECISION

CERTIFIED- RETURN RECEIPT REQUESTED
Z 160 577 173

Dear Mr. [REDACTED]

We have completed the Environmental Assessment (EA) and Finding Of No Significant Impact (FONSI) for the issuance of the grazing permit to you for the [REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020. The attached FONSI and EA will provide you with the rationale for my Proposed Decision, the preferred alternative, which is to authorize the conversion of livestock from sheep to cattle on both allotments. The current grazing qualifications are as follows:

<u>Allotment Name & No.</u>	<u>No. Animal units (AUs)</u>	<u>Percent PL</u>	<u>Federal Animal Unit Months (AUMs)</u>
[REDACTED] 09021	188	35	780
Martine Ridge 09020	159	32	612

The current grazing authorizations are as follows:

<u>Allotment Name & No.</u>	<u>No. of livestock</u>	<u>Kind of livestock</u>
[REDACTED] 09021	390	sheep
	100	cattle
	10	horses
Martine Ridge 09020	545	sheep
	50	cattle

As stated in the EA, a conversion rate of 7:1 (sheep to cows) will be used for the initial conversion and grazing permit authorization. Data collected from monitoring studies will be analyzed to determine if proper utilization levels for both allotments are being attained and current resource conditions are at a minimum, being sustained with the proposed conversion rate. An adjustment of the proposed conversion rate may be required in order to achieve proper use levels and maintain current favorable resource conditions. Monitoring studies will be used to determine the final stocking rate. If a change in livestock numbers is required, a permit will be issued reflecting the change. The new **grazing permit** will authorize the following:

<u>Allotment Name & No.</u>	<u>No. AUs</u>	<u>Kind of livestock</u>	<u>Percent PL</u>	<u>Federal AUMS</u>
[REDACTED] 09021	134	cattle & horses	35	563
Martine Ridge 09020	114	cattle & horses	32	438

Grazing will be allowed from March 1 to February 28, each year. The expiration date of the new grazing permit will be February 28 2009. The remaining AUMS will be put into a non-scheduled status. These AUMs could be activated in the future, following a mutual agreement between the you (or another permittee, if the permit changed hands) and the Bureau of Land Management.

Additionally, the above mentioned Environmental Assessment (EA) and Finding Of No Significant Impact (FONSI) are also for the issuance of a grazing lease for you on the [REDACTED]. Allotment, No. 09022. The grazing lease will authorize the following:

<u>Allotment Name & No.</u>	<u>No. AUs</u>	<u>Percent PL</u>	<u>Federal AUMS</u>
[REDACTED] 09022	9	100	108

Grazing will be allowed from March 1 to February 28, each year. The expiration date of the new grazing lease will be February 28 2009. The 9 animal units will be billed to you at 100 percent public land use and will amount to 108 AUMs.

In accordance with 43 CFR 4160.2, you or any other interested public may protest this Proposed Decision under 43 CFR 4160.1 in person or in writing to the Field Office Manager, Bureau of Land Management, 1800 Marquess, Las Cruces, New Mexico, 88005, within 15 days after receipt of this decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the Proposed Decision is in error. In the absence of a protest, the Proposed Decision will become the Final Decision of the authorized officer without further notice.

Any person whose interest is adversely affected by the Final Decision may file an appeal and petition for stay of the Decision, pending final determination on the appeal. The appeal and petition must be filed with the Field Office Manager, Bureau of Land Management, 1800 Marquess, Las Cruces, New Mexico, 88005, within 30 days of either the date the proposed decision becomes final or from the receipt of a final decision (issued after a formal protest). The appeal shall state the reasons, clearly and concisely why you think the final decision is in error and must comply with the provisions of 43 CFR 4.470 et. seq.

If you have any questions, please feel free to call Phil Smith at 525-4372.

Sincerely,
/s/ Jim C. McCormick

Jim C. McCormick
Acting Assistant Field Manager
Division of Renewable Resources

Enclosure

**GRAZING PERMIT RENEWAL
HUGHES BROS. ALLOTMENT NO. 09021 &
MARTINE RIDGE, ALLOTMENT, NO. 09020**

**GRAZING LEASE RENEWAL
HUGHES BROS. ALLOTMENT, NO. 09022**

FINDING OF NO SIGNIFICANT IMPACT

The proposed action is to issue a grazing permit to [REDACTED] which will authorize 124 cattle and 10 horses on the [REDACTED] Allotment, No. 09021 and 114 cattle on the Martine Ridge Allotment, No. 09020, from March 1 to February 28, each year. The expiration date of the new grazing permit will be February 28 2009. The 134 & 114 animal units (AUs) will be billed at 35 and 32 percent public land use each and will amount to 563 and 438 Animal Unit Months (AUMs) respectively. A condition that will be specified on the permit, will authorize the placement of supplemental feeds, such as salt, minerals, vitamins, and protein, in block or liquid form on public lands.

Additionally, the proposed action is to issue a grazing lease to [REDACTED] which will authorize 9 cattle on the [REDACTED] Allotment, No. 09022, from March 1 to February 28, each year. The expiration date of the new grazing lease will be February 28 2009. The 9 animal units (AUs) will be billed at 100 percent public land use and will amount to 108 Animal Unit Months (AUMs).

The proposed action will assist the BLM in complying with one of the objectives of the grazing regulations (43 CFR 4100.0-2) which is "to provide for sustainability of the western livestock industry and communities that are dependant upon productive, healthy public rangelands." BLM is required by law to manage public lands "on the basis of multiple use and sustained yield . . ." (43 USC 1701, Sec. 102(a)(7)) Since the RMP determined that grazing is an appropriate use for the public lands within this allotment, permit reissuance must be considered.

I have reviewed the attached Environmental Assessment (**EA No.-NM-030-99-054**) including the proposed action and alternatives, and the explanation and resolution of any potentially significant environmental impacts.

Based on the analysis of potential environmental impacts contained in the environmental assessment, I have determined that the proposed action with the term and condition described above will not have any significant impacts on the human environment or to minority or low-income populations or communities and that an Environmental Impact Statement is not required.



Jim McCormick
Acting Assistant Field Manager
Division of Renewable Resources

2-25-99

Date

UNITED STATES DEPARTMENT OF INTERIOR
Bureau of Land Management
Las Cruces Field Office
1800 Marquess Street
Las Cruces, NM 88005

ENVIRONMENTAL ASSESSMENT
FINDING OF NO SIGNIFICANT IMPACT
AND DECISION RECORD

EA No.: NM-030-99-054 Lease/Serial/Casefile No.: _____

PROPOSED ACTION TITLE/TYPE: Conversion of Sheep AUMs to Cattle AUMs on the [REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020.

Grazing Lease Renewal for the [REDACTED] Allotment, No. 09022.

LOCATION OF PROPOSED ACTION: [REDACTED] Allotment, No. 09021 (T. 25 S., Rs. 20 E., T. 26 S., Rs. 20 E. and T. 27 S., Rs. 20 E.) & No. 09022 (T. 26 S., R.21 E.) and Martine Ridge Allotment, No. 09020 (T. 25 S., Rs. 20 & 21 E. and T. 26 S., Rs. 20 E.).

This proposed action is tiered to the **White Sands Resource Area/Resource Management Plan, (USDI BLM, October 1986)**. This plan has been reviewed and it has been determined that the proposed action conforms with the land use plan terms and conditions as required by 43 CFR 1610.5.

NEED FOR THE PROPOSED ACTION:

[REDACTED] The [REDACTED] are currently authorized to run sheep, cattle and horses on the [REDACTED] Allotment No. 09021 (**Sec. 3 lands**) and cattle on allotment, No. 09022 (**Sec. 15 lands**).

[REDACTED] is the permittee on the Martine Ridge Allotment, No. 09020 (**Sec. 3 lands**) and is authorized to run sheep and cattle. All parties have determined that it would be more economically feasible to run cows instead of sheep due to recent, current, and projected future market conditions.

The outlook for the lamb and wool market is not likely to improve in the foreseeable future. Livestock loss due to predators (primarily coyotes) has increased steadily over the past several years despite continuous efforts by the permittee and Animal Damage Control (ADC) to control predator numbers. For these reasons the permittees would like to convert from sheep to cattle on allotments No. 09021 and 09020.

The permittee may wish to graze sheep in the future if market conditions improve.

The [REDACTED] own the base properties for the [REDACTED] Allotments. Base properties are water for allotment No. 09021 (**Sec. 3 lands**) and land for allotment No. 09022 (**Sec. 15 lands**). [REDACTED] owns the base property (water) for the Martine Ridge Allotment, No. 09020 (**Sec 3 lands**). [REDACTED] have requested a conversion from sheep to cattle for the respective allotments. The conversion will not affect [REDACTED] Allotment, No. 09022. A conversion of livestock will require a change in the grazing permits. The issuance of a Ten-Year Permit & Lease to the [REDACTED] is required to authorize livestock grazing on [REDACTED] Allotment, No. 09021 & No. 09022 respectively. The issuance of a Ten-Year Permit to the [REDACTED] is also required to authorize livestock grazing on the Martine Ridge Allotment, No. 09020.

The **current grazing qualifications** for the **Hughes Bros. Allotments** are 188 animal units (AU) billed at 35% public lands (PL) for allotment No. 09021 and 9 AU billed at 100% PL on allotment No. 09022.

The **current grazing qualifications** are 159 AU billed at 32% PL for the **Martine Ridge Allotment, No. 09020**.

The [REDACTED] are currently authorized to graze 390 sheep, 105 cows and 10 horses on the allotment No. 09021 and 9 cattle on allotment No. 09022. [REDACTED] is authorized to graze 545 sheep and 50 cows on the Martine Ridge Allotment, No. 09020.

A conversion rate of 7:1 (sheep to cows) will be used for the initial conversion and grazing permit authorization. Data collected from monitoring studies* will be analyzed to determine if proper utilization levels for both allotments are being attained and current resource conditions are at a minimum being sustained with the proposed conversion rate. An adjustment of the proposed conversion rate may be required in order to achieve proper use levels and maintain current resource conditions.

***Monitoring studies will begin when the conversion is implemented.**

With the conversion rate of 7:1, the grazing authorization would be for 134 CYL billed at 35% PL on the [REDACTED] Allotment, No. 9021 and 114 CYL billed at 32% on the Martine Ridge Allotment, No. 09020. The conversion would not affect the grazing authorization on allotment No. 09022 as the current authorization is for cattle.

One of the requirements of the grazing regulations (43 CFR 4180.1) is that the authorized officer shall "...ensure that the following conditions exist. (a)Watersheds are in, or are making significant progress toward, properly functioning physical condition,... (b)Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment,... (c)Water quality complies with State water quality standards ... (d)Habitats are, or are making significant progress toward being restored or maintained for Federal threatened and endangered species...

One of the objectives of the grazing regulations (43 CFR 4100.0-2) is "to provide for sustainability of the western livestock industry and communities that are dependant upon productive, healthy public rangelands." BLM is required by law to manage public lands "on the basis of multiple use and sustained yield . . ." (43 USC 1701, Sec. 102(a)(7)), Since the RMP determined that grazing is an appropriate use for the public lands within this allotment, permit reissuance must be considered.

A 31,606 acre portion of the Brokeoff Mountains was designated as a Wilderness Study Area (WSA) in November, 1980. The WSA is managed to protect wilderness values according to BLM Manual H-8550-01, The Interim Management Policy and Guidelines for Lands Under Wilderness Review, commonly known as the IMP. According to the IMP, livestock grazing at levels existing as of October 21, 1976, are grandfathered, meaning that livestock grazing in the same manner and degree can continue to occur in WSAs, even if it causes impacts to wilderness values. Any proposed change in the manner and degree of livestock grazing, including changes in stocking rates or the kind and class of livestock grazing within a WSA must conform to the IMP. Approximately 488 acres of the Brokeoff Mountains WSA are within the [REDACTED] Allotment, No. 09021.

DESCRIPTION OF THE PROPOSED ACTION

The **grazing permit** would authorize 134 cattle yearlong (CYL)* to graze on the [REDACTED] Allotment, No. 09021 and 114 CYL* to graze on the Martine Ridge Allotment, No. 09020. Grazing would be allowed from March 1, through February 28 each year until 2/28/2009.

The **grazing lease** would authorize 9 cattle yearlong (CYL) to graze on the [REDACTED] Allotment No. 09022. Grazing would be allowed from March 1, through

February 28 each year until 2/28/2009.

*These figures are based on a 7:1 conversion rate.

REASONABLE ALTERNATIVES

ALTERNATIVE: 1 (NO ACTION):

Under this alternative, the BLM would deny the application for the conversion of kind of livestock from sheep to cattle for the [REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020. Under the No Action Alternative, sheep, cattle and horses would continue to graze on the [REDACTED] Allotment, No. 09021. Additionally, sheep and cattle would continue to graze on the Martine Ridge Allotment, No. 09020.

Additionally, under the No Action Alternative, a Proposed Decision would be issued, denying the applicant's request for a Grazing Lease. This would result in no livestock grazing on the [REDACTED] Allotment, No. 09022. Issuing a grazing permit to another applicant is a possibility. An analysis would have to be completed.

ALTERNATIVE: 2 (SOUTHWEST CENTER FOR BIOLOGICAL DIVERSITY)

Under this alternative, the BLM would exclude cattle grazing on the WSA portion of the [REDACTED] Allotment, No. 09021. The BLM would authorize conversion of sheep to cattle on the remainder of the allotment.

AFFECTED ENVIRONMENT: [REDACTED] ALLOTMENT, NO. 09021, 09022 AND MARTINE RIDGE ALLOTMENT, NO. 09020.

GENERAL INFORMATION

The [REDACTED] Allotment, No. 09021 is comprised of 3,238 acres of public land, 6,010 of private and 502 of State Trust acres for a total of 9,750 acres. [REDACTED] Allotment, No. 09022 is comprised of 400 acres of public land.

[REDACTED] run sheep, cattle and horses on the allotment No., 09021. The allotment is divided into 8 pastures. The permittee has a grazing management system which provides some deferment from grazing on all pastures. Each pasture will get anywhere from 60 to 90 days of rest during the year. Depending on precipitation, he tries to provide each pasture with some deferment from grazing during the growing season every two to three years.

Sheep are usually placed in the pastures that have rough terrain. He does however run cattle in these same pastures at various times of the year.

██████████ run cattle on allotment, No. 09022

Martine Ridge Allotment, No. 09020: The pastures within the Martine Ridge Allotment were part of the HFR Allotment prior to 1995. Historically, sheep and cattle grazed on the HFR Allotment. Martine Ridge Allotment, No. 09020 is comprised of 3,404 acres of public land, 2,772 of private and 2,461 of State Trust acres for a total of 8,637 acres. The Hughes have been running both sheep and cattle on the allotment since they acquired it.

RANGE SITES

Limestone hills make up the Hughes Bros. Allotment, No. 9021 and 09022, while limestone hills and gravelly soils make up the Martine Ridge Allotment, No. 09020, all within the Canadian-Pecos Plains Major Land Resource Area. Slopes, 40% or better occur on approximately 10%, 35% and 8% of the Hughes Bros. Allotment, No. 09021 and No. 09022 and Martine Ridge Allotment respectively.

SOILS

The ██████████ Allotments, No. 09021 and 09022 and Martine Ridge Allotment, No. 09020 are made of following soils;

Rock outcrop-Lozier complex, 20 to 65 percent slopes. This complex consists of areas of Rock outcrop and shallow, well drained Lozier soil. This complex is on steep sides of limestone-controlled hills. Rock outcrop makes up 50 percent of the complex. The outcrop is limestone bedrock in the form of cat-step escarpments or shelves. Runoff is rapid on Rock outcrop. Lozier very gravelly loam makes up 35 percent. This soil is severely eroded in some areas and is only a thin mantle over limestone bedrock. Permeability is moderate, and available water capacity is very low.

Ector-Rock outcrop complex, 20 to 50 percent slopes. This complex consists of relatively small areas of shallow, well drained Ector soil and Rock outcrop. The landscape is mainly steep limestone hills, side slopes, mesas, and plateaus dissected by many narrow, rock-controlled drainages. Permeability is moderate, and water available water capacity is very low. Ector gravelly loam makes up about 60% of the mapped area. Limestone bedrock is at an average depth of 17 inches. Rock outcrop makes up about 25 percent of the area.

The following soils are also found on the Martine Ridge Allotment;

Reakor-Tome-Tencee association, gently sloping. Soils in these areas are deep, shallow and well drained. Permeability is moderate and available water capacity is high for the Reakor soils. The Tome soils are deep with moderately slow permeability and high available water capacity. Tencee soils are shallow. Permeability is moderate, and available water capacity is very low.

Tome silt loam, 0 to 5 percent slopes. Deep, well drained nearly level to gently sloping soil on flood plains and lower parts of pediment side slopes of major streams and basins. Permeability is moderately slow, and available water capacity is high.

Nickel-Tencee association, strongly sloping. This association consists of areas of deep and shallow, well drained soils. Nickel soils are on alluvial fans and are adjacent to the drainages. Tencee soils are on side slopes of pediments and the upper parts of the older alluvial fans. These soils are strongly calcareous throughout and moderately alkaline. Permeability is moderately slow, and available water capacity is low.

VEGETATION

Grass species found in the Limestone Hills include: black/blue/hairy/sideoats grama (BOER-BOGR-BOHI-BOCU), wolftail (*Lycurus phleoides*), dropseeds (SPOROBOLUS SPP.), tridens (TRIDENS SPP.), muhlys (MUHLENBERGIA SPP.), and three-awns (ARISTIDA SPP.). Shrub species include buckbrush (CEANOTHUS), (MORTONIA SPP.), junipers (JUNIPERUS SPP.), beargrass (NOLINA SPP.), pricklypear & cholla (OPUNTIA SPP.), littleleaf sumac (*Rhus microphylla*), and mountain mahogany (*Cercocarpus montanus*).

The gravelly soils contain the following grass species; black/blue/hairy/sideoats grama (BOUPELOUA SPP.), dropseed (SPOROBOLUS SPP.), muhly (MUHLENBERGIA SPP.), tobosa (*Hilaria Mutica*) and three-awn (ARISTIDA SPP.). Shrub species include broom snake weed (GUTIERREZIA SPP.), pricklypear & cholla (OPUNTIA SPP.), mesquite (*Prosopis glandulosa*), creosote (*Larrea divaricata*), tarbush (*Flourensia cernua*), and little leaf sumac (*Rhus microphylla*).

Base line data regarding ecological condition (Site Vegetation Inventory Method-SVIM) showed approximately 86 percent of the public lands within the [REDACTED] Allotment, No. 09021 to be in fair (Mid/Seral) ecological condition while the remaining 14% in poor (Early/Seral) condition. Baseline data for the Dog Canyon Allotment* showed less than 1 percent of the public lands to be in good condition while 3 and 96 percent were in fair (Mid/Seral) and poor (Early/Seral) condition respectively. Monitoring data collected at two sites in 1993 showed an ecological condition of good

(Late-Seral) for the limestone hills range sites on the [REDACTED] Allotment**. There is no current data available to determine the ecological condition of the gravelly and limestone hills range sites within the Martine Ridge Allotment, No. 09020 and [REDACTED] Allotment, No. 09022. Ecological conditions are estimated to be good on both allotments.***

***(five (5) pastures located on the southeastern portion of the Dog Canyon Allotment make up what is now the Martine Ridge Allotment)**

****Study plots are located on a pasture (This pasture is now the Deadman Allotment) that was part of the [REDACTED] Allotment, No. 09021 prior to 1996. These two plots were placed at sites that were representative of the limestone hills range site within the [REDACTED] Allotment, No. 09021. New study plots will have to be established on the [REDACTED] Allotment, No. 09021.**

*****Monitoring studies will be established for [REDACTED] Allotment, No. 09021, 09022 and Martine Ridge Allotment, No. 09020. Data gathered will include utilization and ecological condition. Data gathered will be analyzed and used in determining livestock stocking rates (conversion rate).**

Sheep have had a noticeable impact on the vegetation within the limestone hills of the Brokeoff Mountains. Many shrub species do not reach their natural height because of use by sheep, such as ocotillo, which in places can be browsed to near ground level. Shrubs regularly show signs of hedging where sheep have traditionally grazed.

WILDLIFE & HABITAT

The Guadalupe Deer Herd Unit is located throughout all three allotments. Deer observations occur predominantly in the shrubby vegetation types. Deer occur in small numbers through most habitats. Deer observation records were highest in habitat sites where production of preferred browse species was highest.

Standard Habitat Sites (SHS) found in the allotment include: Grass Mountain, Mixed-Shrub Mountain and Arroyo. A description of these SHS' is found in the WSR/Resource Management Plan, and species lists are available from the LCFO Integrated Habitat Inventory Classification System (IHICS) Database.

Special Status Species

Livestock conversion (Allotment #09021 & 09020) and grazing lease renewal (Allotment # 09022) were analyzed for effects on the following four species: **Sophora gypsophila** var. **guadalupensis**-Guadalupe Mountain Mescal Bean, **Chrysothamnus nauseosus** subsp. **texensis**-Guadalupe rabbitbrush, **Sibara grisea**-Gray sibara, and **Toumeya papyracantha**-Grama grass cactus.

There are 68 special status animal species (Endangered, threatened, or species of concern) that are present within Otero County in which these allotments are located. Of the 68 animal species, 13 may occur within the habitat sites present in the allotment. These are: American Peregrine Falcon, Mexican Spotted Owl, Ferruginous Hawk, Baird's Sparrow, Loggerhead Shrike, Gray Vireo, Elegant Trogon, Mottled Rock Rattlesnake, Texas Horned Lizard, Fringed Myotis, Western Small-Footed Myotis, Pale Townsends's Big-eared Bat, and Guadalupe Pocket Gopher.

VISUAL RESOURCE MANAGEMENT

The Visual Resource Management Classification for the allotment are : **Class II**-Changes in any of the basic elements (form, line, color and texture) caused by a management activity should not be evident in the characteristic landscape and **Class IV**-Changes may subordinate the original composition and character but must reflect what could be a natural occurrence within the characteristic landscape.

WILDERNESS STUDY AREA (WSA)

There are approximately 488 acres (5% of the total acreage of the [REDACTED] Allotment, No. 09021) within the Brokeoff Mountain Wilderness Study Area (WSA). There are no WSA lands within the [REDACTED] Allotment, No. 09022 and Martine Ridge Allotment, No. 09020.

RIPARIAN & WATER QUALITY

There are no Riparian Areas or water quality concerns within the three allotments.

RECREATION

Public lands are scattered throughout the allotments. Access is available. Recreational use in these areas is available. The most popular type of recreational use is hunting (big and small game).

FUNDAMENTALS OF RANGELAND HEALTH

These fundamentals include watershed functionality, Ecological processes, Water quality standards, and Habitats for Federal threatened and endangered species and other special status species.

D. ENVIRONMENTAL IMPACTS:

<u>Critical Elements</u>	<u>Affected</u>		<u>Critical Elements</u>	<u>Affected</u>	
	Yes	No		Yes	No
Air Quality	_____	<u>X</u>	T&E Species	_____	<u>X</u>
ACEC's	_____	<u>X</u>	Wastes, Hazardous/Solid	_____	<u>X</u>
Cultural Resources	_____	<u>X</u>	Water Quality	_____	<u>X</u>
Farmlands, Prime/Unique	_____	<u>X</u>	Wetlands/Riparian Zones	_____	<u>X</u>
Floodplains	_____	<u>X</u>	Wild & Scenic Rivers	_____	<u>X</u>
Nat. Amer. Rel. Concerns	_____	<u>X</u>	Wilderness	<u>X</u>	_____
Min./Low Income Pop./Com.	_____	<u>X</u>			

DESCRIPTION OF IMPACTS: ALLOTMENT NO. 09021, 09020 & 09022

The **proposed action** is to authorize a livestock conversion from sheep to cattle on both **[REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020**. The conversion is expected to have net benefits to natural resource values within the two allotment boundaries.

The **proposed action** will also authorize a lease for livestock grazing on **[REDACTED] Allotment, No. 09022**. Continued grazing on both allotments is not expected to alter existing resource conditions within the allotment boundary.

Implementation of the proposed action is anticipated to have beneficial effects on livestock grazing and grazing allottees on public land. The allottees should be able to produce a more marketable product by producing beef cattle as opposed to sheep. Conversion of vegetative resources to a product is the reason for issuance of grazing permits and leases on public land.

RANGE SITES: The **[REDACTED] Allotments** are made of limestone hills. Martine Ridge Allotment is made up limestone hills and gravelly soils. The proposed action will not have any affect on these range sites.

SOILS: The kind of livestock grazing on the allotment will not have significant impact on soils. Soil movement occurs in the canyon bottoms during the monsoon season, because of steep slopes and heavy runoff in the canyon bottoms. Some soil movement will continue in these areas with or without livestock grazing. Soil erosion and runoff will be limited to geologic affects.

Many of the livestock trails created by sheep traveling to and from water are expected to recover after cessation of sheep grazing.

VEGETATION: Percent slope and it's relation to livestock utilization is an issue on [REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020. The following studies provide information on factors that influence use in mountainous terrain by sheep and cattle.

According the a study by Kirk C. McDaniel and James A. Tideman, it was determined that (1981)¹:

Sheep use on mountain slopes is affected by several factors related to mountainous terrain. Slope steepness, percent bare ground, and position on slopes are most important in influencing distribution and utilization of sheep on mountain pastures. In this study sheep favored the tops of mountain slopes and utilization was relatively uniform on all slopes less than 45%.

In another study by C. Wayne Cook (1966) ²:

Cattle normally graze heavily on valley bottoms and more level land near water before moving onto rougher country. They tend to use some slopes extensively and others only slightly or not at all. Distance from water affects utilization. The greater the distance from water the less the area was utilized generally, **No one factor could be used as a reliable index to predicting use. Actual use obtained is the most accurate method of determining the utilization obtainable on a particular mountain slope. Grazing capacity of a mountain range can be determined only on the basis of actual use obtained on sloping topography under good management practice.**

¹ Sheep use on Mountain Winter Range in New Mexico

² Factors Affecting Utilization of Mountain Slopes By Cattle

The following is a break down of percent slope for both allotments:

<u>Allotment Name</u>	<u>Percent Slope</u>	<u>Acres</u>	<u>Percent of allotment</u>
[REDACTED] (Allot. No. 09021)	0 - 20%	2,010	57%
	21 - 40%	11,456	32%
	41 - 60%	6,432	10%
	>60%	201	1%
[REDACTED] (Allot. No. 09022)	0 - 20%	95	24%
	21 - 40%	165	41%
	41 - 60%	65	16%
	>60%	75	19%
Martine Ridge (Allot. No. 09020)	0 - 20%	2,743	38%
	21 - 40%	2,671	37%
	41 - 60%	1,444	20%
	>60%	361	5%

Cattle have a higher preference for grasses than do sheep, which consume greater proportions of forbs and browse. The change in kind of livestock is expected to alter grazing utilization patterns on these allotments. As mentioned above, cattle normally graze heavily on valley bottoms and more level land near water before moving onto rougher country. Cattle tend to prefer the bunch grasses. It is expected that they will spend more time grazing in the hills.

Vegetative conditions in these areas are expected to continue to improve with livestock management. Cattle would help to achieve the desired utilization levels in the hills, where the use has been mostly light to slight. The permittee will drive livestock away from watering facilities, especially those located in canyon bottoms, in order to get them located into areas where use is light to slight. This action would also reduce heavy grazing that might occur in the canyon bottoms. In areas where watering facilities are located in canyon bottoms and ridge tops, average utilization is generally heavy up and down the bottoms and tops for approximately .25 to .5 mile. Utilization ranges from moderate to light in areas .5 to 1 mile from watering facilities. Use is generally slight in areas more than 1 mile from water. Monitoring studies will be used to avoid over utilization in canyon bottoms. Utilization levels are restricted to moderate or less in the canyon bottoms and hills portions of the allotments. Rotating and driving livestock and periodically deferring pastures during the growing season should help to resolve any utilization problems identified through monitoring. Browse species conditions are expected to improve overall. Forb species are expected to benefit from the conversion to cattle, which is anticipated to reduce utilization on forbs and shrubs, particularly on steep slopes.

Monitoring studies will also be used to determine whether ample forage will be available for livestock and wildlife. Stocking rate adjustments will be implemented if overuse of forage resources occurs as a result of cattle grazing.

WILDLIFE & HABITAT

Impacts to wildlife and wildlife habitat due to the change in kind of livestock are primarily related to reduction of available herbaceous and browse vegetation for use by wildlife species. Removal of herbaceous vegetation by livestock likely reduces habitat suitability for some resident and migratory species to some degree. The affects will be especially pronounced around water sources, which are primarily located on ridge tops and canyon bottoms. Concentration areas in canyon bottoms may also reduce the suitability of habitat for grass dependent avian and mammalian species, by reducing cover of herbaceous as well as woody plant species. Maintaining the current quality of juniper-grassland habitat is essential for special status species that could occur in the area. Periodic deferment of each pasture from grazing should reduce the impacts of the removal of herbaceous vegetation. The increase in forb and shrub vegetation is expected to benefit a wide diversity of native wildlife, from seed-eating birds to mule deer. Hummingbirds, bats, and nectar-feeding insects are expected to have more forage available as a result of the elimination of sheep from these allotments.

Net wire will remain on the boundary and pastures fences located on the [REDACTED] [REDACTED] And Martine Ridge Allotments, No. 09021 and 09020 respectively. The permittees may wish to run sheep in the future. There will continue to be some restricted deer movement in these areas, particularly fawns. Predator (coyote, bob cat and mountain lions) loss (mainly deer) may increase as a result of the lack of predator control by the permittee and Animal Damage Control (ADC). Big game mortality will be a result of natural selection.

Though some wildlife species benefit from water sources within the allotment that do not have wildlife escape ramps, there will continue to be some wildlife mortality.

Special Status Species

Sophora gypsophila var. **guadalupensis**-Guadalupe Mountain Mescal Bean, **Chrysothamnus nauseosus** subsp. **texensis**-Guadalupe rabbitbrush, **Sibara grisea**-Gray sibara, and **Toumeyia papyracantha**-Grama grass cactus were analyzed for effects.

Sophora has been documented in Allotment #09021 in T. 26 S., R. 20 E., Sec. 26 SW and Sec. 27 SE. It has also been documented in Allotment #09020 T. 25 S., R. 20 E., Sec. 13 NESE.

Chrysothamnus has also been documented on Allotment #09021 in T. 25 S., R. 20 E., Sec. 13 NESE.

Potential habitat exists for all four species mentioned above. The habitat of **Sophora** would receive less grazing use with cattle. Increased growth of other plants could provide beneficial changes in microhabitat for existing plants and for reproduction by seed. Increased competition, on the other hand, could adversely affect populations. If **Sophora** has previously been benefiting from artificial grazing pressure, then most changes to populations would reflect a more natural environmental setting. Since **Chrysothamnus** is browsed by sheep, potential populations would benefit from reduced grazing pressure, since cattle are less likely to utilize the plant or the habitat where it occurs. **Sibara** habitats are generally inaccessible to livestock, and potential populations would be unaffected. **Toumeya** habitats on the hills would be enhanced by reduced grazing pressure, and potential populations would benefit. **Toumeya** habitats in the bottomlands would be degraded by increased cattle use, and potential populations would be reduced. Overall affects to **Toumeya** would be neutral to slightly positive.

The conversion of livestock from sheep to cattle will have no affect on 13 special status species. These are: American Peregrine Falcon, Mexican Spotted Owl, Ferruginous Hawk, Baird's Sparrow, Loggerhead Shrike, Gray Vireo, Elegant Trogon, Mottled Rock Rattlesnake, Texas Horned Lizard, Fringed Myotis, Western Small-Footed Myotis, Pale Townsends's Big-eared Bat, and Guadalupe Pocket Gopher. Additionally, impacts to wildlife and wildlife habitat due to issuance of the grazing lease are primarily related to reduction of available herbaceous vegetation for use by wildlife species.

Of the 13 species listed above, two are of medium priority concern.

*Medium Priority Species: Species where legal status, population trend, rarity, and expected population viability suggest an intermediate level of management concern.

American Peregrine Falcon--Federally Endangered--Prefer cliffs which generally exceed 200 ft. in height with a southern exposure. Nest sites are normally water courses and impoundments because of abundance of avian prey which frequent such areas. Their main pray base are small avian species captured in the air. The main threat is pesticides causing egg shell thinning and nest disturbance. Maintaining healthy grasslands and riparian areas will benefit the peregrine falcon.

Only one area within the allotment could possibly be considered potential peregrine nesting habitat. It is located on the northern part of the allotment on El Paso Gap. The change of livestock preference (sheep to cattle), is considered to be a No Effect on the peregrine falcon due to the fact that a major county road passes thru the Gap, making it unlikely that peregrines will nest in this location due to vehicle traffic disturbances.

Mexican Spotted Owl--Federally Threatened--The habitat utilized by Mexican spotted owl is mainly multi-storied stands of mixed conifer consisting of Douglas fir/white fir, or Ponderosa pine. The pinon/juniper areas within this allotment are not of sufficient height and/or multi-storied to serve as suitable habitat for Mexican spotted owls. This is a No Effect to the Mexican spotted owl.

*Low Priority Species: Species where legal status, population trend, rarity, and expected population viability suggest a lower level of management concern.

Of the remaining 11 species that could occur within the allotment, 5 species are considered not to be impacted by grazing practices because the habitat preferred by the species is not present within the allotment. These are:

Ferruginous hawk--U.S. Fish and Wildlife Service Species Of Concern (SOC); BLM Sensitive (BLMS)--This species is a rare winter resident and is more of a northern New Mexico hawk. It breeds in grasslands, open country, plains, and badlands and feeds on ground squirrels, prairie dogs, rabbits, and a few birds. It nests in tree, cliffs, rocks, hillsides, sometimes reusing nests and building them bigger and bigger. Threats are prairie dog control, road construction, and human disturbances near nests.

Baird's Sparrow--SOC; New Mexico Endangered (NME); BLMS--This is a grassland species. It is a migrant in New Mexico and mainly occurs in the eastern plains. Main threats are decline of native grasslands due to drought, agriculture, and grazing. Migrational and winter impacts are due to loss of cover and seed crops. Range improvement practices that improve cover and provides greater production of grass seeds is beneficial for the recovery.

Elegant Trogon--NME--Considered rare in Otero Co.. It is largely confined to broadleaf woodlands in montane canyons. There it nests in holes in trees. Loss of limited habitat and disturbance of nesting birds by humans (including bird watchers) are the principal threats to the trogon.

Mottled Rock Rattlesnake--New Mexico Threatened (NMT)--Prefers areas of boulders, rocks, and talus slopes. Main impacts are loss and destruction of habitat mainly due to mining where activities alter rocky environments. Livestock grazing usually has no effects due to steepness and accessibility. Main habitat is in Carlsbad Caverns.

Pale Townsends's Big-eared Bat--SOC; BLMS--This bat is primarily a cave dwelling species, which also roosts in old mine shafts. Because of its extreme sensitivity to human disturbances, populations of this species are threatened by habitat loss, vandalism, disturbance by cave explorers at maternity and hibernation roosts, and loss of riparian habitat.

Of the remaining 6 species, two are considered not to be negatively impacted because data available for the species is very limited and does not indicated any positive or negative affects due to grazing.

Loggerhead Shrike--SOC; BLMS--Utilize expansive open grasslands, desert scrub (dominated by mesquite, yucca, and cactus), riparian, and lowland wooded areas. Main threat is consumption of contaminated prey (large insects and small mammals). Data does not indicate any positive or negative affects from grazing.

Texas Horned Lizard--SOC; BLMS--Occurs in sandy areas and also occur in grazed and ungrazed areas. Main diet is ants. Pesticide application may result in accumulation of residue in body tissues. No data is available indicating positive or negative affects due to grazing.

Of the remaining four species, the following two species will not be affected by grazing because the habitat required by the species will not be altered and the condition of the allotment is considered to be in good ecological condition.

Gray Vireo--NME; BLMS--Considered a regular transient in Otero Co. In New Mexico, prefers arid juniper woodlands on foothills and mesas, these most often associated with oaks and usually in habitat with a well-developed grass component. Main threats are loss or alteration of quality juniper-grassland habitat and an increase in nest parasitism by cowbirds. Opening small blocks of dense juniper stands is beneficial. Large scale conversions of pinon/juniper to grassland is adverse effect. The gray vireo is considered not to be negatively impacted by the proposed action because the vireo is a transient in the area and also because there will be no loss or alteration of the juniper-grassland habitats within the allotment.

Guadalupe Pocket Gopher--SOC; BLMS--The trend of the species' population is listed as "Unknown". From the western edge of the eastern plains westward this gopher occupies almost every habitat where suitable soil conditions exist. The exceptions are the higher elevations of the northern mountains, and the top of the Animas Mountains. Feeds entirely on plants, mainly grasses and forbs. Do not need free standing water. There is no information available determining affects by grazing, however it is assumed that lack of vegetation, mainly grasses and forbs would be detrimental to the species.

The remaining two species are considered not to be affected because there is no riparian or large bodies of water near or around the area and roosting habitat is limited.

Fringed Myotis--SOC; BLMS--This bats roosts have been located in ponderosa pine and mixed conifer habitat types. It also occurs in mid-elevation grasslands, deserts, oak and pinyon woodlands, and riparian areas. For bats in the southwestern U.S., accessible surface water, suitable roost sites, and food are necessary components of viable habitat. The main impacts to bats are disturbance to nursery and roosting sites, pesticides, and livestock grazing in riparian zones.

W. Small-Footed Myotis--SOC; BLMS--This bat is most common in coniferous and mixed woodland and montane coniferous forest. In New Mexico the center of distribution seems to be in the ponderosa pine zone. It is primarily a cave or rock-crevice inhabiting species. Water is very important to insectivorous bats because of the high proportion of protein in their diet, and because of their high rates of evaporative water loss. For bats in the southwestern U.S., accessible surface water, suitable roost sites, and food are necessary components of viable habitat.

The main impacts to bats are disturbance to nursery and roosting sites, pesticides, and livestock grazing in riparian zones.

*Management priority does not remove any requirements for compliance with Section 7 of Endangered Species Act. It merely presents a management perspective on where to focus effort.

VISUAL RESOURCE MANAGEMENT: Visual resources would not be impacted by the proposed action.

WILDERNESS STUDY AREA (WSA): The conversion from sheep to cattle on [REDACTED] Allotments, No. 09021, is anticipated to benefit wilderness values in the Brokeoff mountain WSA. The goals of the wilderness management program are to maintain the natural abundance and distribution of plants and animals in the WSA, and to achieve good or excellent range condition with moderate or less utilization. Utilization levels will decrease on limestone ridges and slopes. Utilization of shrub species such as ocotillo, mountain mahogany and sumac would decrease, which should improve the natural conditions in the WSA, particularly on steep slopes. Decreased animal units would mean that less forage is being consumed in the WSA, and the shift away from forb and shrub use will allow those species to better grow, reproduce, and maintain their natural functions in the ecosystem. Native wildlife are expected to benefit as described above, which will enhance wilderness values. The initiation of monitoring studies will provide a tool to avoid detrimental impacts to wilderness values if the initial stocking rate proves to be too high, and cattle numbers would then be reduced accordingly.

Opportunities for primitive and unconfined recreation, particularly big game hunting, may improve if the deer herd responds to the increase in available browse after elimination of sheep.

RIPARIAN & WATER QUALITY: There are no riparian areas within the three allotments. Water quality is not expected to be impacted by the proposed action. By maintaining the current vegetative conditions, soil erosion and runoff will be limited to geologic affects.

RECREATION: Recreational use will not be impacted by the proposed action except possibly quality of deer hunting opportunities as described under Wilderness above.

FUNDAMENTALS OF RANGELAND HEALTH

The analysis above is supportive of the following statements regarding the Fundamentals of Rangeland Health:

Watersheds are functioning properly in relation to their upland, riparian-wetland, aquatic, water infiltration and water storage capabilities. Issuance of the permit/lease will have no significant negative impacts to these components.

Ecological processes are maintained within the allotments capabilities in order to support healthy biotic populations and communities. Issuance of the permit/lease will have no significant negative impacts to these processes.

Water quality complies with New Mexico/Arizona State Water Quality Standards and achieves established BLM management objectives. Issuance of the permit/lease will have no significant negative impacts to these standards or objectives.

Habitats are restored or maintained, within the allotments capabilities, for Federal threatened and endangered species, Federal proposed, Federal Species of Concern, and other special status species. Issuance of the permit/lease will have no significant negative impacts to these habitats.

IMPACTS OF THE ALTERNATIVES:

Implementation of the **No Action** alternative would not change existing conditions. There would be no anticipated environmental consequences, either positive or negative, on any natural resource values as compared with existing conditions. A combination of sheep, cattle and horses would continue to be permitted on the [REDACTED] **Allotment, No. 09021**. Sheep and cattle would also be authorized to graze on the **Martine Ridge Allotment, No. 09020**.

With the wool incentive gone from the market, the prices for the wool paid to ranchers has been reduced. In addition the price paid for live lamb has declined. This along with predation losses has it's biggest impact on sheep-only operations. This alternative would place the permittee at a continued economic disadvantage.

It would also not be feasible for the permittee to fence out state and private lands for the purpose of running cattle due to the fact that, these lands are not continuous nor large enough to fence. This would be a tremendous financial hardship on the permittee.

Additionally, the impacts from the **No Action Alternative** would be that the Hughes Bros. would not be permitted to run livestock on the public lands portion of the [REDACTED] **Allotment No. 09022**. Issuing a grazing permit to another applicant is a possibility. An analysis would have to be completed.

Only unauthorized livestock would be on these lands which would be in trespass. These livestock would be discovered by BLM personnel during Use Supervision visits or the base property owner reported the unauthorized use.

With regards to grazing It would be feasible for the owner of the base property on the allotment to fence out private lands for the purpose of running livestock due to the fact that, these lands are contiguous and large enough to fence.

There would be a conflict with Code of Federal Regulation (43 CFR) Grazing Regulations 4110.3 "Changes in permitted use", if an adjustment in livestock numbers were made without monitoring data to support any change.

RANGE SITES: Range sites would not be impacted by the No Action alternative.

SOILS: Soils will not change with the No Action alternative.

VEGETATION: By continuing with an sheep and cattle grazing program, the current forage conditions will not likely change on the [REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020. The lower areas adjacent to water will continue to have a mat of grama grass growing, with low productivity and the hills will continue to have higher production and light/slight or no grazing taking place. There would be a continued decrease in herbaceous cover on portions of the allotment as a result of the No Action alternative. Herbaceous cover in the upland sites that are dominated by creosote would not improve significantly as a result of the No Action alternative. These areas would improve with the chemical treatment of creosote.

No grazing would not have a significant affect on the ecological condition on the [REDACTED] Allotment No. 09022.

WILDLIFE & HABITAT

Wildlife - The No Action alternative on [REDACTED] Allotment, No. 09021 and Martine Ridge Allotment, No. 09020 would continue to have some adverse impacts to wildlife species or wildlife habitats due to sheep grazing on the allotments. Competition for forbs and browse between sheep and deer would continue to occur. Continued competition for browse species could result in a degradation of some canyon bottoms and ridge tops.

As a result of the No Action alternative on the [REDACTED] Allotment, No. 09022, there would be few adverse impacts to wildlife species or wildlife habitats due to lack of grazing. While some trespass grazing may occur, there would be significantly less competition for herbaceous forage. Wildlife cover and food sources, would increase to the potential of the various range sites.

Special Status Species

There would be no change in current affects to special status species that could occur on the allotments. No adverse impacts to listed and sensitive species due to continued grazing patterns is anticipated.

Sensitive and state listed species dependent on grassland or juniper-grassland habitat may benefit due to the increase of available ground cover and lack of competition for herbaceous food and cover.

VISUAL RESOURCE MANAGEMENT: No affect as a result of the No Action alternative.

WILDERNESS STUDY AREA (WSA): Wilderness values would remain the same. There would be continued competition for browse species between sheep and big game species on the [REDACTED] Allotment, No. 09021. Existing impacts to natural abundance and distribution of plants and animals within the WSA, caused by sheep grazing and browsing, would continue at existing levels. Hedging of ocotillo, buckbrush, and mountain mahogany plus use of forbs would continue to impact habitat for certain wildlife species.

RIPARIAN & WATER QUALITY: No riparian areas occur within the three allotments. Water quality is not expected to be impacted by the No Action alternative.

RECREATION: Recreational use would not change as a result of the proposed alternative.

FUNDAMENTALS OF RANGELAND HEALTH: Impacts would be the same as the Proposed Decision.

Cumulative Impacts: The cumulative impacts from the no action alternative are addressed the White Sands Resource Area/Resource Management Plan (October, 1986) and the Southern Rio Grande Grazing EIS (May 1981).

ALTERNATIVE: (SOUTHWEST CENTER FOR BIOLOGICAL DIVERSITY):

Under this alternative, the BLM would exclude cattle grazing on the WSA portion of the [REDACTED] Allotment, No. 09021. The BLM would authorize conversion of sheep to cattle on the remainder of the allotment.

Impacts of this alternative would be expected to be identical to those of the proposed action with the following exceptions:

LIVESTOCK GRAZING

Impacts to livestock grazing under this alternative would differ from those of the proposed action by excluding 488 acres, or 5% of the [REDACTED] allotment, to livestock grazing. Grazing exclusion from this area would not be in conformance with the Livestock Grazing decisions from the White Sands Resource Management Plan, and would require the preparation of a land use plan amendment.

Approximately 1 mile of fence would have to be implemented in order to keep livestock off WSA lands. Cost to construct the fence would be approximately \$4,670.00.

WILDLIFE & HABITAT

Wildlife habitat might benefit from implementation of this alternative. Approximately 488 acres of the [REDACTED] allotment would have no forage competition between wildlife and livestock. However, this benefit might be offset by heavier competition between livestock and wildlife on the remainder of the allotment, since livestock numbers on the allotment would not automatically be reduced, which would concentrate livestock, increasing utilization of forage by livestock by approximately 5% over the remainder of the allotment. This concentration of livestock would likely not be evenly distributed over the allotment, but would concentrate on areas that are near water or easily accessible to cattle from water sources. Livestock numbers are only adjusted as a result of monitoring studies, so there is potential for degradation of wildlife habitat in the 95% of the [REDACTED] allotment if this alternative were selected, before rangeland monitoring studies could provide data to support a reduction in livestock numbers.

WILDERNESS STUDY AREA (WSA)

Under this alternative, approximately 488 acres of the WSA would be removed from livestock grazing. Natural processes would be allowed to occur in this portion of the WSA without the influence of domestic livestock. This change would significantly benefit wilderness resources on 488 acres. Because these 488 acres are approximately 1.5% of the total WSA, such an exclusion of livestock would have local benefits to wilderness values including the natural abundance and distribution of plants and animals, but would not be anticipated to provide significant benefits to the naturalness of the WSA as a whole.

DESCRIPTION OF MITIGATION MEASURES AND RESIDUAL IMPACTS:

MITIGATION

Future rangeland projects will require an archaeological survey. Although there have been few archaeological surveys and sites recorded within these allotments there is a high potential for archeological sites/features to exist due to several drainages and the Brokeoff Mountains in the allotments and the Guadalupe Mountains being located to the east. Regarding allotment No. 09022, there is also a high potential for archaeological sites/features to exist due to the lease being located in and adjacent to the Guadalupe Mountains. Should an allotment management plan be prepared for the allotment, the possibility of archaeological sites/features must be taken into account.

Monitoring

Monitoring studies will be used to determine utilization levels and ecological conditions for both allotments. Data collected will help determine the proper livestock stocking rates for both allotments.

Use Supervisions will be completed yearly to supplement monitoring data being collected. The following information will also be gathered:

- a. Utilization of key forage species at established key areas.
- b. Estimation of trend at each of the key areas.
- c. Livestock counts to include: distribution and condition of the livestock.
- d. Range improvements - condition and need for maintenance.
- e. Other resource considerations, (recreation, wildlife, ORV, roads, cultural, visual, etc.).

Residual Impacts

The immediate residual impacts of the proposed action would be the continued grazing by livestock on the renewable resources on the public lands.

PERSONS/AGENCIES CONSULTED:

██████████ - Permittee

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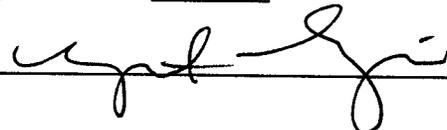
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Preparer(s): Walter Lujan Date: 2/19/99

EA Coordinator's Signature: 
Date: 2/19/99