

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

EA # NM-510-2006-0048

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The proposed action will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

/s/ T. R. Kreager

5/15/2006

T. R. Kreager
Assistant Field Manager, Resources

Date

ENVIRONMENTAL ASSESSMENT

For

Section 15

GRAZING AUTHORIZATION

ALLOTMENT #62034

**Townships 5 & 6 North, Range 19 East
NMPM**

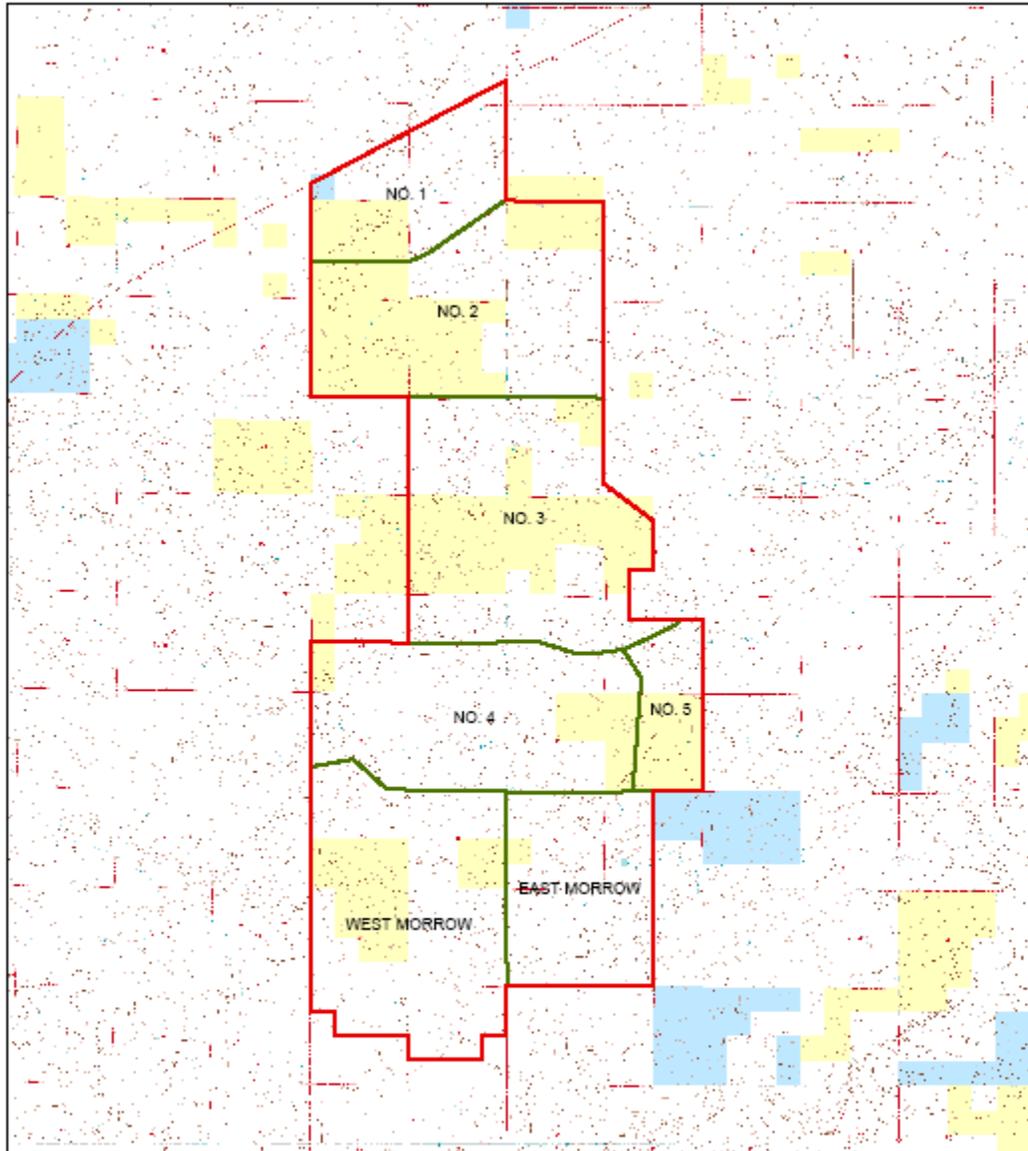
EA-NM-510-2006-048

February 2006

**U.S. Department of the Interior
Bureau of Land Management
Pecos District
Roswell Field Office
Roswell, New Mexico**



Pastura & Pinada - 62034



- | | |
|--------------|--------------------|
| Public Land | Allotment Boundary |
| State Land | Pasture Boundary |
| Private Land | |

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Produced by the RFO GIS Specialist on March 24, 2006.

I. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit/lease on allotment #62034.

The scope of this document is limited to the effects of issuing a 10-year grazing permit. Other future actions such as range improvement projects will be addressed in a project specific environmental assessment. There are no current plans for additional management actions on this allotment.

1. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing permit would be to reauthorize livestock grazing on public land on allotment #62034. The permit would specify types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, 4130.3-2 and 4180.1. The new permit would be issued for a term of up to, but not to exceed, ten years.

2. Conformance with Land Use Planning

The Roswell Resource Management Plan/Environmental Impact Statement (October 1997) has been reviewed to determine if the proposed action conforms with land use plan's Record of Decision. The proposed action is consistent with RMP/EIS.

3. Relationships to Statutes, Regulations, or Other Plans

The proposed action is consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Federal Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management and Executive Order 11990, Protection of Wetlands.

II. Proposed Actions and Alternatives

1. Proposed Action

Proposed action is to authorize Betty Shahan, a grazing permit for BLM allotment #62034 (Pastura and Pintada). This permit would authorize 126 Animal Units (AU's) yearlong for 1512 Animal Unit Months (AUM) at 100 % Public Land.

2. No Permit Authorization Alternative

This alternative would not issue a new grazing permit. There would be no livestock grazing authorized on public land within allotment #62034.

3. Convert the Grazing Use Authorization To Establish a Set Stocking Rate for the Allotment

Grazing authorizations for Section 15 Leases (the allotments lying outside the Grazing District boundary) are established by the amount of forage produced on the public land; the public land is often scattered and not well blocked. The Grazing Regulations do permit the consideration of establishing a set stocking level for the allotment through the consultation process. To achieve this action a forage allocation review is required. The amount of forage produced on all private, state and public land is considered; the grazing authorization is established by the percent of forage produced on public land.

A preliminary and tentative review of this scenario (based on historical adjudication data) would set a stocking level of approximately 13 AUs/section; the permitted use for the allotment would be 380 AUs yearlong at 33 percent public land for 1512 AUMs.

The long term monitoring data through 2002 was evaluated during this environmental assessment process using the established RFO protocols. These protocols utilize forage yield and range condition ratings and similarity index ratings to verify sustainable use. A forage quality factor (to limit allocation of moderate to low value forage plants) was also used. Current long term monitoring indicates the long term stocking rate should be approximately 10 AUs/section; this would place the permitted use level at about 275 AUs. This reduction could be implemented with a Rangeland Use Agreement.

III. Affected Environment

A. General Setting

Allotment #62034 is located in Guadalupe County, directly south of Pastura, New Mexico. This allotment consists of 5,409 acres of public land and 12,203 acres of private land. Location is in: Portions of Townships 5 & 6 North, Range 19 East, NMPM.

This allotment lies outside the Roswell Grazing District Boundary established subsequent to the Taylor Grazing Act and is classified as a Section 15 Grazing Lease. Normally, permitted use on Section 15 Leases is established by amount of forage available for livestock on public land within this lease.

This allotment is defined as a Grasslands Community Type as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies those components of each community.

A distinguishing feature for grassland communities is that grass species typically comprises 75% or more of the potential plant community. Short-grass, mid-grass, and tall-grass species may be found within this community. This community also includes shrub, half-shrub, and forb species. Percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather factors and past resource uses.

The ecological (range) sites on this allotment are: CP-2 Sandy Loam, Loamy and Shallow. Range site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office or may be accessed at www.nm.nrcs.usda.gov.

The RMP/EIS established resource objectives for various Desired Plant Communities. The vegetative cover by percent composition objectives for the Grasslands Community Type (SG) are: grasses 30-40%, forbs 10-15%, shrubs 1-10%. The ground cover objectives for this community are: bare ground 14-60%, litter 8-44%, small & large rock 0-30%, grass & forbs 15-52% and shrubs & trees 3-12%.

The following resources or values are not present or would not be affected:

Prime/Unique Farmland,
Areas of Critical Environmental Concern
Minority/Low Income Populations
Wild and Scenic Rivers
Hazardous/Solid Wastes
Wetlands/Riparian Zones
Floodplains

Native American Religious Concerns

Cultural inventory surveys would continue to be required for public actions involving surface disturbing activities.

B. Affected Resources

1. Soil

For further detail refer to Soil Survey of Guadalupe County, New Mexico, 1998. Published by the Natural Resource Conservation Service (NRCS).

Pastura soil makes up 45 percent of the map unit. This map unit is in the Pecos-Canadian Plains and Valleys Major Land Resource Area. This soil is on ridges and hills. Parent material consists of eolian and alluvium derived from limestone, sandstone, and shale. Depth to a restrictive feature is 5 to 20 inches to a petrocalcic. It is well drained. Slowest soil permeability within a depth of 60 inches is moderate. Available water capacity within a depth of 60 inches is very low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. Minimum depth to a water table is greater than 6 feet. Maximum calcium carbonate equivalent within a depth of 40 inches is 40 percent. In this soil profile, there are no saline horizons, and there are no sodic horizons. This component is in a SHALLOW, ecological site. It is nonirrigated land capability subclass 7s.

Silver soil makes up 30 percent of the map unit. This map unit is in the Pecos-Canadian Plains and Valleys Major Land Resource Area. This soil is on a drainageway. Parent material consists of eolian and alluvium derived from limestone, sandstone, and shale. Depth to a restrictive feature is greater than 60 inches. It is well-drained. Slowest soil permeability within a depth of 60 inches is slow. Available water capacity within a depth of 60 inches is high, and shrink swell potential is high. Annual flooding is none, and annual ponding is none. Minimum depth to a water table is greater than 6 feet. Maximum calcium carbonate equivalent within a depth of 40 inches is 30 percent. In the soil profile, there are no saline horizons, and there are no sodic horizons. This component is in a LOAMY, ecological site. It is nonirrigated land capability subclass 6c.

Gabaldon soil makes up 15 percent of the map unit. This map unit is in the Pecos-Canadian Plains and Valleys Major Land Resource Area. This soil is on a swale. Parent material consists of mixed alluvium derived from limestone, sandstone, and shale. The depth to a restrictive feature is greater than 60 inches. It is well drained. Slowest soil permeability within a depth of 60 inches is moderately slow. Available water capacity within a depth of 60 inches is high, and shrink swell potential is moderate. Annual flooding is rare, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 25 percent. In the soil profile, there are no saline horizons, and there are no sodic horizons. This component is in the SWALE, ecological site. It is irrigated land capability subclass 2e. It is nonirrigated land capability subclass 4c.

Palma soils make up 85 percent of the map unit. This map unit is in the Pecos-Canadian Plains and Valleys Major Land Resource Area. This soil is on a swale, hill. The parent material consists of mixed eolian and alluvium derived from limestone and sandstone. The depth to a restrictive feature is greater than 60 inches. It is well drained. The slowest soil permeability within a depth of 60 inches is moderately rapid. Available water capacity within a depth of 60 inches is moderate, and shrink swell

potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 30 percent. In the soil profile, there are no saline horizons, and there are no sodic horizons. This component is in the GYP HILLS, ecological site. It is nonirrigated land capability subclass 6e.

2. Vegetation

This allotment is defined as a Grasslands Community Type as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies those components of each community. Vegetation is dominated by blue grama (*Bouteloua gracilis*), black grama (*Bouteloua eriopoda*), sideoats grama (*Bouteloua curtipendula*), galleta (*Pleuraphis* spp.), tobosa (*Pleuraphis mutica*), dropseed (*Sporobolus* spp.), muhlys (*Muhlenbergia* spp.), threeawn (*Aristida* spp.), burrograss (*Scleropogon brevifolius*) and fluffgrass (*Tridens* spp.). Woody shrub species are scarce but include mesquite (*Prosopis glandulosa*), fourwing saltbush (*Atriplex canescens*), sumac (*Rhus* spp.), wolfberry (*Lycium* spp.) shrubs like yucca (*Yucca* spp.) and cholla (*Opuntia imbricata*). Forbs are a minor component of the subtype except following periods of rainfall.

The distinguishing feature for the grassland community is that grass species typically comprises 75% or more of the potential plant community. Short-grass, mid-grass, and tall-grass species may be found within this community. The community also includes shrub, half-shrub, and forb species. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather factors and past resource uses.

The ecological (range) sites on this allotment are: CP-2 Sandy Loam, Loamy and Shallow. Range site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office or may be accessed at www.nm.nrcs.usda.gov.

Rangeland monitoring studies were established in five key areas within allotment #62034 in the early 1980's. These study data serve as basis for range trend analysis, ecological (range) condition ratings, track vegetation changes and assist in evaluation and comparison of stocking rates.

The traditional range condition methodology compares collected rangeland monitoring information with the potential vegetation community in terms of species composition by weight. The rating is based on a scaled of 0 to 100 with 100 being the potential representative site.

The National Resource Conservation Service (NRCS) has recently revised the methodology for comparing the existing vegetation community with the potential vegetation community and to aid in the determination of ecological condition. This

methodology is called the Similarity Index (SI) the BLM is currently incorporating this revision into the monitoring and evaluation processes. The SI compares existing vegetation data (collected from rangeland monitoring) with the potential vegetation community described in the NRCS ecological site guide for that site. The index is based on a scaled of 0 to 100 with 100 being the actual representative site. For example, the Loamy CP-2 ecological (range) site, the normal year production is about 1000 pounds per acre. The index takes into account vegetation species present and the relative amount of production for each species when compared to the potential for the ecological site.

Note: The individual ecological site guides are very broad and often cover several soil associations and that may support several different plant communities that differ in both plant composition and production potential. These differences must be factored in when evaluating the indices associated with both the range condition and similarity index. The similarity index rating because of the tie with production (lb/ac) may be influenced by precipitation. The ratings for individual years may vary significantly due to precipitation; this variability may be reduced by using the long term moving averages as shown on the production data sheets at the end of this document.

The RFO is currently in the process of integrating the revised methodology into current monitoring and evaluation processes. The traditional range condition rating method (used from 1980 to 1998) is retained for comparison purposes. This data is included at the end of this document.

Vegetative production is influenced by many factors; however, precipitation in amount and timing is the most critical factor. Southeast New Mexico has been in a drought stage the last few years.

Ecological condition and trend is expected to remain stable and/or improve over the long-term with proposed authorized number of livestock and existing pasture management. Rangeland monitoring data indicates that there is an adequate amount of forage for multiple resource use objectives.

3. Wildlife

The allotment provides habitat for small animals, birds, rodents, and a sustainable population of mule deer (*Odocoileus hemionus*) and pronghorn (*Antilocapra americana*). The area does contain brush or tree species that could provide quality cover for the larger animals. Other game species occurring within the area include mourning dove (*Zenaidura macroura*), and scaled quail (*Callipepla squamata*). Raptors that utilize the area on a more seasonal basis include the Swainson's hawk (*Buteo swainsoni*), red-tailed hawk (*Buteo jamaicensis*), ferruginous hawk (*Buteo regalis*), American kestrel (*Falco sparverius*), and great-horned owl (*Bubo virginianus*). Numerous passerine birds utilize the grassland areas due to the variety of grasses, forbs, and shrubs. The most common include the western meadowlark (*Sturnella neglecta*), mockingbird (*Mimus*

polyglottos), horned lark (*Eremophila alpestris*), killdeer (*Charadrius vociferus*), loggerhead shrike (*Lanius ludovicianus*), and vesper sparrow (*Pooecetes gramineus*).

The warm prairie environment supports a large number of reptile species. The more common reptiles include the short-horned lizard (*Phrynosoma douglasii*), lesser earless lizard (*Holbrookia maculata*), eastern fence lizard (*Sceloporus undulatus*), coachwhip (*Masticophis flagellum*), bullsnake (*Pituophis melanoleucus sayi*), prairie rattlesnake (*Crotalus v. viridis*), and western rattlesnake (*Crotalus viridis*).

4. Threatened/Endangered Species

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.

There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are several Federal Candidate and State listed species that may potentially occupy or utilize the area. These include the swift fox and mountain plover. For a detailed description of the range, habitats, and potential threats to the swift fox and the mountain plover, refer to the Biological Opinion (AP11-38) in the Roswell RMP. There are no known federally threatened or endangered species occurring within the proposed action area.

5. Livestock Management

This allotment is grazed by cattle and has been placed in the "M" (Maintain) category. Generally a "M" category designation indicated that the allotment is in satisfactory condition (based on monitoring data) and that there are no resource conflicts.

6. Visual Resources

This allotment is located in a Class III and Class IV Visual Management Area. The class III rating means that contrasts to basic elements caused by a management activity may be evident and begin to attract attention in the landscape. These changes, however, should remain subordinate to the existing landscape. A class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, these changes should repeat landscape basic elements.

7. Air Quality

This allotment is in a Class II area for Prevention of Significant Deterioration of air quality as defined in the Federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good. Winds are typically southeasterly during summer, and becoming southwesterly in winter and early spring. Winds average

10 miles per hour in fall and 16 miles per hour in spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in this region. (This combination gives southeastern New Mexico some of the best conditions in the nation for rapid dispersal of pollutants).

8. Recreation

Recreation opportunities are very limited in this grazing allotment because the public has limited legal/physical access to public lands. The parcels of Public lands within this allotment are scattered and are generally surrounded by private lands. The BLM has designated off-highway vehicle use on public land in this area as limited to existing roads and trails.

9. Caves and Karst

This allotment has low and medium karst or cave potential. A complete significant cave or karst inventory has not been completed for public land located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public land within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this enclosure fence.

10. Noxious and Invasive species

A noxious weed is defined as a plant that causes disease or has other adverse effects on the human environment and is, therefore, detrimental to public health and to agriculture and commerce of the United States. Generally, noxious weeds are aggressive, difficult to manage, parasitic, are carriers or hosts of harmful insects or disease, and are either native, new to, or not common in, the United States. In most cases, however, noxious weeds are non-native species.

The list currently includes the following weeds: 1) African rue, 2) black henbane, 3) bull thistle, 4) camelthorn, 5) Canada thistle, 6) dalmatian toadflax, 7) goldenrod, 8) leafy spurge, 9) Malta starthistle, 10) musk thistle, 11) poison hemlock, 12) purple starthistle, 13) Russian knapweed, 14) Scotch thistle, 15) spotted knapweed, 16) teasel, 17) yellow starthistle, 18) yellow toadflax, 19) Russian olive, 20) Tamarix species, 21) Siberian elm.

Of the noxious weeds listed, the ones with known populations in the Roswell Field Office are African rue, non-native *Cirsium* spp. such as bull thistle and Canada thistle, leafy spurge, goldenrod, Malta starthistle, Russian knapweed, Russian olive, teasel, poison hemlock, Tamarix species and Scotch thistle. Also "problem weeds" of local concern are cocklebur, buffalobur and spiny cocklebur. "Problem weeds" are those weeds which may be native to the area but whose populations are out of balance with other local flora.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers \$2 to \$3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially increasing producers' feed and animal health care costs. Increased costs to operators are eventually borne by consumers.

Noxious weeds also affect recreational uses, and reduce realty values of both directly influenced and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs. Monies would be made available for these activities from the federal government, generated from the federal tax base. Therefore, all citizens and taxpayers of the United States are directly affected when noxious weed control prevention is not exercised.

Noxious and Invasive Weeds: Noxious weeds affect both crops and native plant species in the same way, by out-competing for light, water and soil nutrients. Losses are attributed to decreased quality and quantity of agricultural products due to high levels of competition from noxious weeds and infestations. Noxious weeds can negatively affect livestock productivity by making forage unpalatable to livestock thus decreasing livestock productivity and potentially increasing producer's feed costs. Potential noxious weed species include musk thistle and Russian knapweed. There are no known populations of noxious weeds on the allotment.

11. Water Quality Drinking/Ground

No perennial surface water is found on public land on this allotment. Fresh groundwater can be found in the Quaternary Piedmont Alluvial deposits, the Santa Rosa Formation and the San Andres Formation. Depth to fresh groundwater ranges from 80 to 140 feet in the area (New Mexico State Engineer Office data).

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soil

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

2. Vegetation

The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as pronghorn, mule deer, rabbits, rodents and insects. Under the proposed action, it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. Rangeland monitoring data will continue to be collected.

3. Wildlife

Under the proposed action, wildlife will continue to compete with domestic livestock for space, forage and browse. With proper livestock management and carrying capacities, there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy or utilize the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

4. Threatened/Endangered Species

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment. Special Status Species:

5. Livestock Management

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently. It would also be anticipated that this area would continue to receive rest when implementing a rest rotation system.

6. Visual Resources

The continued grazing of livestock would not affect form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Air Quality

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

8. Recreation

Grazing would have little or no affect on recreational opportunities, since recreating public has no legal or physical access to this parcel of public land. Recreation activities that could occur within this grazing allotment are limited or non-existent due to land patterns.

9. Significant Caves/Karst

No known significant caves or karst features are known to exist on public land located within this allotment. Grazing would not affect the karst resources.

10. Non-native and Invasive species:

Grazing should have little or no impact on invasive plants. At this time there are no known populations.

11. Water Quality Drinking/Ground

Direct impacts to surface water quality would be minor, short-term impacts may occur during stormflow events. Indirect impacts to water-quality related resources, such as fisheries, would not occur. The proposed action would not have a significant effect on ground water. Livestock would be dispersed over the allotment, and the soil would filter potential contaminants.

B. Impacts of the No Livestock Grazing Alternative

1. Soil

Soil compaction would be reduced on this allotment around old trails and bedding grounds, there would be a small reduction in soil loss on this allotment.

2. Vegetation

It is expected that the number of plant species found within this allotment will remain. However, there would be small changes in relative percentages of these species.

Vegetation will continue to be utilized by wildlife. There would be an increase in amounts of standing vegetation.

3. Wildlife

Conflicts between wildlife and livestock for habitat and dietary needs would not exist under this alternative.

4. T&E Species

There would be no impacts to threatened or endangered species or habitat.

5. Livestock management

Forage from public land would be unavailable for use by the permittee. This would have a significant adverse economic impact to the livestock operation. If the No Grazing alternative is selected, owner of the livestock would be responsible for ensuring that livestock do not enter Public Land [43 CFR 4140.1(b)(1)]. Intermingled land status on this allotment makes it economically unfeasible to fence out public land and use only private land.

6. Visual Resources

There would be no change in visual resources.

7. Water Quality/Drinking Ground

There could be a slight improvement in water quality due to minor reductions in sediment loading during stormflow.

8. Air Quality

There would be a slightly less dust under this under this alternative versus the proposed alternative, but this would be negligible when considering all sources of dust.

9. Recreation

Impacts would be very minor under this alternative. No positive impacts from livestock watering locations would occur.

10. Caves/Karst

Impacts would be the same as proposed action if no significant caves are found.

11. Non-native and Invasive species

There would be no change in existing non-native/invasive species populations.

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public land would be permitted, livestock operators grazing lands adjoining Federal land would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence this land.

C. Impacts of Converting the Grazing Use Authorization To Establish a Set Stocking Rate for the Allotment

The impacts to all resources except livestock management would be similar to those described in Alternatives A and B.

Currently the lessee pays the full grazing fees associated with the public land regardless of his stocking rate on the allotment; nonuse is not an option unless all livestock are removed from allotment. Under this alternative there could be a positive benefit in that the grazing fees would be based on the number of livestock grazed. If livestock numbers were reduced, the grazing fees would be reduced. For example, the lessee has reduced the number of livestock grazed the last few years due to drought conditions yet he paid the full grazing fee; this would be reduced under this alternative.

Based on the current lessee's livestock operation, it is doubtful that any additional benefits or impacts from those set forth in Alternatives A and B would occur. Currently the lessee is conservative in the stocking rate for the allotment.

V. Cumulative Impacts

A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

The analysis of cumulative impacts is driven by major resource issues. The action considered in this environmental assessment (EA) is the authorization of livestock grazing on Allotment 62034, and the major issue includes:

The protection of special status threatened or endangered species and its habitat within the allotment area, primarily the lesser prairie chicken. The incremental impact of issuing a grazing permit on these resources must be analyzed in the context of impacts from other actions. Other BLM actions that could have impacts on the identified resource include: Livestock authorization on other allotments within the adjacent shinnery oak dune habitat type, some oil and gas development and activities, rights-of-ways dissecting the area, and recreational use, primarily hunting and subsequent cross country driving.

All authorized activities which occur on BLM land can also take place on state and private lands. Many of the actions which could contribute to cumulative impacts have occurred over many years. Impacts from open-range and yearlong livestock grazing in the last century are still being addressed today and may continue on adjacent land owners.

The proposed action and alternatives would not add incrementally to the cumulative impacts to sensitive species or to the overall rangeland health. The conclusions that impacts to these resources from grazing authorization would not be significant are discussed in Section IV of the EA.

VI. Residual Impacts

This area has been grazed by livestock since early parts of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing, at current permitted numbers of animals, is sustainable. If mitigation measures are enacted, then there would be no residual impacts to the proposed action

VII. Mitigating Measures And/Or Permit/Lease Conditions

Vegetation monitoring studies will continue to be conducted and permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

VIII. Public Land Health

Based on the current schedule, Public Land (Rangeland) Health assessments are not scheduled for this allotment until 2012. At that time and based on the assessments and monitoring data a Determination will be made for the conformance with the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management. Upon completion a copy of this assessment can be accessed at www.nm.blm.gov/rfo/index.htm.

IX. Socio-Economic Factors

The proposed action and Alternative B as outlined in this document are not anticipated to alter the socio-economic conditions for either the permittee or Guadalupe County.

Should the no livestock grazing alternative be adopted, economic impacts would occur.

Guadalupe County would lose tax revenues on approximately 126 head of cattle annually. Overall impact to the livestock industry in SE New Mexico would be minimal.

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Howard Parman – Environmental Planner

Tim Kreager – Assistant Field Office Manager, Resources

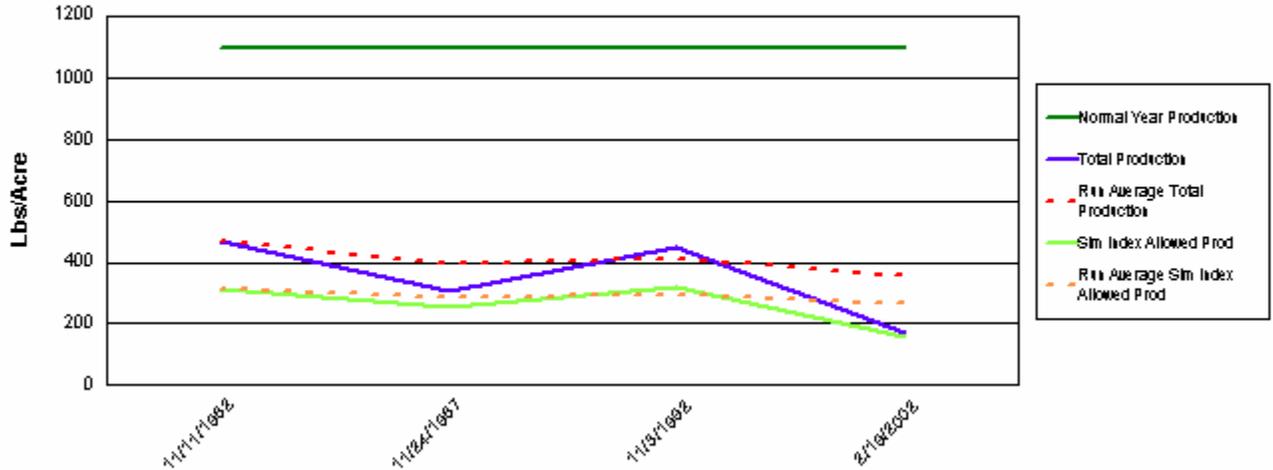
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 522				Date Printed: 10/10/2005	
Allot No. 62034	Allotment PASTURA & PINTADA	Ecosite ID 070BY054NM	Ecosite Name SANDY LOAM CP-2	Site Name 62034-WEST MORROW-	
Location: T. 0050N	R. 0190E	Sec. 18	QtrQt NESE	UTM-N	UTM-E
County,					
Soil Sur No NM019	Soil Map Unit 094	Soil Tax Name PALMA	Soil Association PALMA		

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
11/11/1982	36.15	28.55	1,100	471.00	471.00	314.00	314.00
11/24/1987	42.00	22.91	1,100	307.00	389.00	252.00	283.00
11/03/1992	36.00	28.91	1,100	451.00	409.67	318.00	294.67
02/19/2002	48.12	14.55	1,100	169.00	349.50	160.00	261.00

Production Data For Study Site



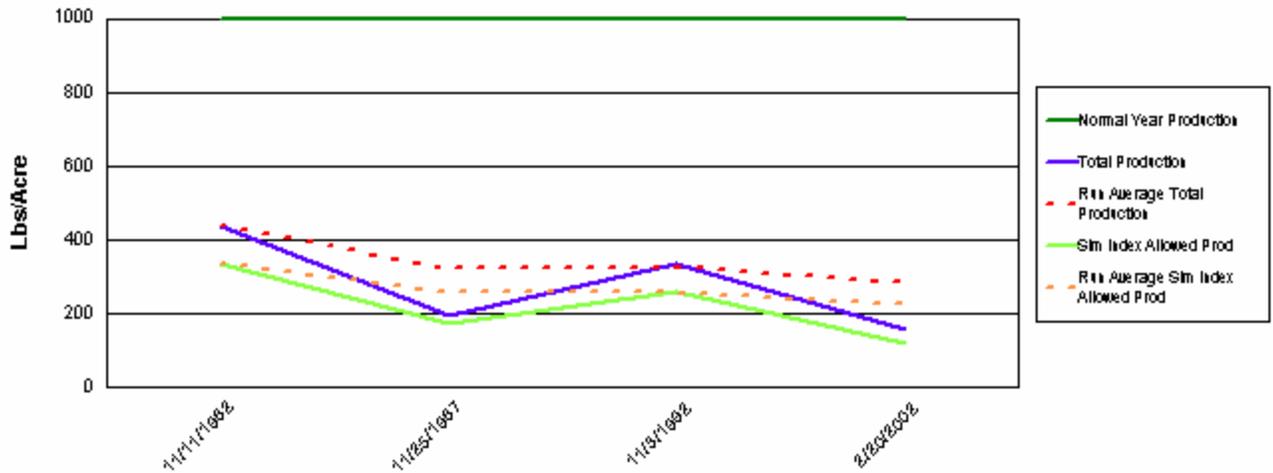
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 523					Date Printed: 10/10/2005	
Allot No. 62034	Allotment PASTURA & PINTADA	Ecosite ID 070BY052NM	Ecosite Name LOAMY CP-2	Site Name 62034-#1-E002		
Location: T. 0060N R. 0190E Sec. 07	County,		QtrQt SWNW	UTM-N UTM-E		
Soil Sur No NM019	Soil Map Unit 075	Soil Tax Name PASTURA		Soil Association PASTURA-SILVER-		

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
11/11/1982	68.55	33.50	1,000	442.00	442.00	335.00	335.00
11/25/1987	66.00	17.40	1,000	194.00	318.00	174.00	254.50
11/03/1992	55.00	25.90	1,000	338.00	324.67	259.00	256.00
02/20/2002	28.77	12.10	1,000	160.00	283.50	121.00	222.25

Production Data For Study Site



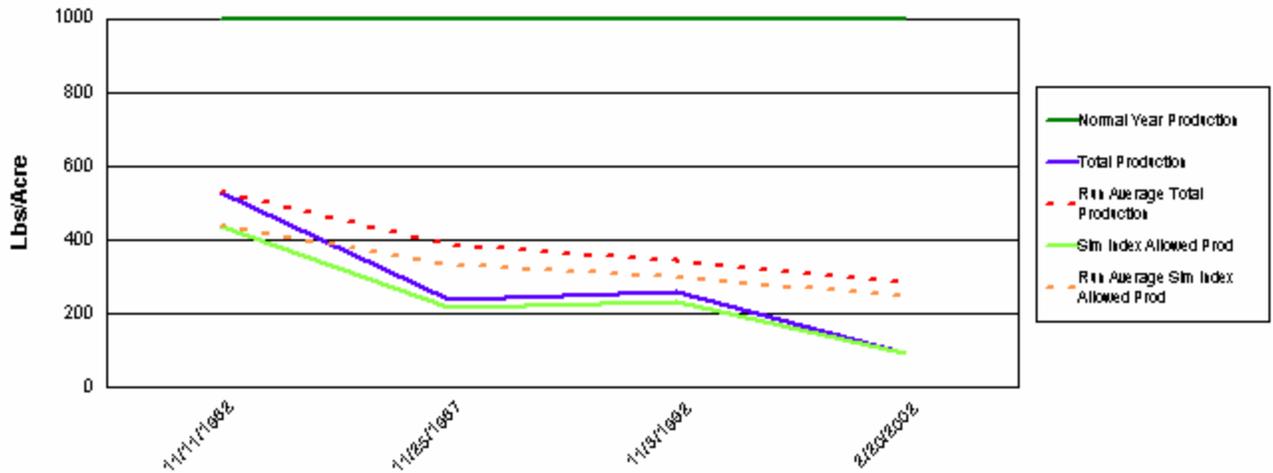
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 524					Date Printed: 10/10/2005	
Allot No. 62034	Allotment PASTURA & PINTADA	Ecosite ID 070BY052NM	Ecosite Name LOAMY CP-2	Site Name 62034-#2-E003		
Location: T. 0060N R. 0190E Sec. 18	QtrQt SWNE	UTM-N				
	County,	UTM-E				
Soil Sur No NM019	Soil Map Unit 075	Soil Tax Name PASTURA	Soil Association PASTURA-SILVER-			

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
11/11/1982	73.03	44.20	1,000	533.00	533.00	442.00	442.00
11/25/1987	65.00	21.90	1,000	239.00	386.00	219.00	330.50
11/03/1992	71.00	23.50	1,000	260.00	344.00	235.00	298.67
02/20/2002	66.39	9.30	1,000	94.00	281.50	93.00	247.25

Production Data For Study Site



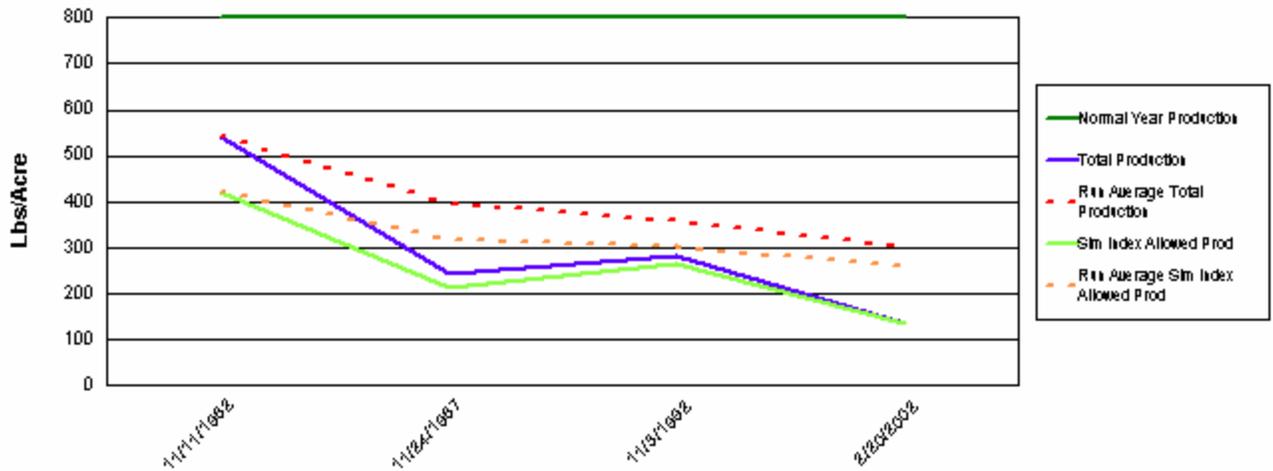
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 525				Date Printed: 10/10/2005	
Allot No. 62034	Allotment PASTURA & PINTADA	Ecosite ID 070BY075NM	Ecosite Name SHALLOW CP-2	Site Name 62034-#3-E004	
Location: T. 0060N	R. 0190E	Sec. 28	QtrQt NWSE	UTM-N	UTM-E
County,					
Soil Sur No NM019	Soil Map Unit 075	Soil Tax Name PASTURA	Soil Association PASTURA-SILVER-		

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
11/11/1982	70.72	52.38	800	541.00	541.00	419.00	419.00
11/24/1987	56.00	26.38	800	245.00	393.00	211.00	315.00
11/03/1992	73.00	33.25	800	284.00	356.67	266.00	298.67
02/20/2002	51.66	16.88	800	135.00	301.25	135.00	257.75

Production Data For Study Site



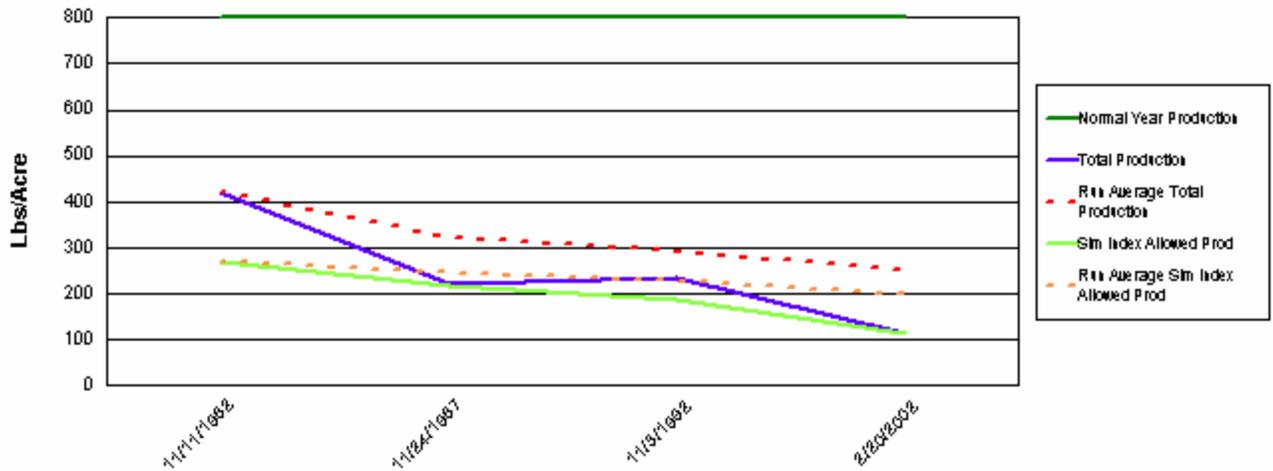
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID: 526					Date Printed: 10/10/2005	
Allot No. 62034	Allotment PASTURA & PINTADA	Ecosite ID 070BY075NM	Ecosite Name SHALLOW CP-2		Site Name 62034-#4-E005	
Location: T. 0050N R. 0190E	Sec. 03	QtrQt NENW	UTM-N		UTM-E	
County,						
Soil Sur No NM019	Soil Map Unit 075	Soil Tax Name PASTURA		Soil Association PASTURA-SILVER-		

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
11/11/1982	53.91	33.75	800	420.00	420.00	270.00	270.00
11/24/1987	69.00	27.25	800	221.00	320.50	218.00	244.00
11/03/1992	51.00	23.25	800	234.00	291.67	186.00	224.67
02/20/2002	57.37	14.13	800	113.00	247.00	113.00	196.75

Production Data For Study Site



Traditional Range Condition and Similarity Index Data

VEGID: 522

62034 PASTURA & PINTADA

62034-WEST MORROW-

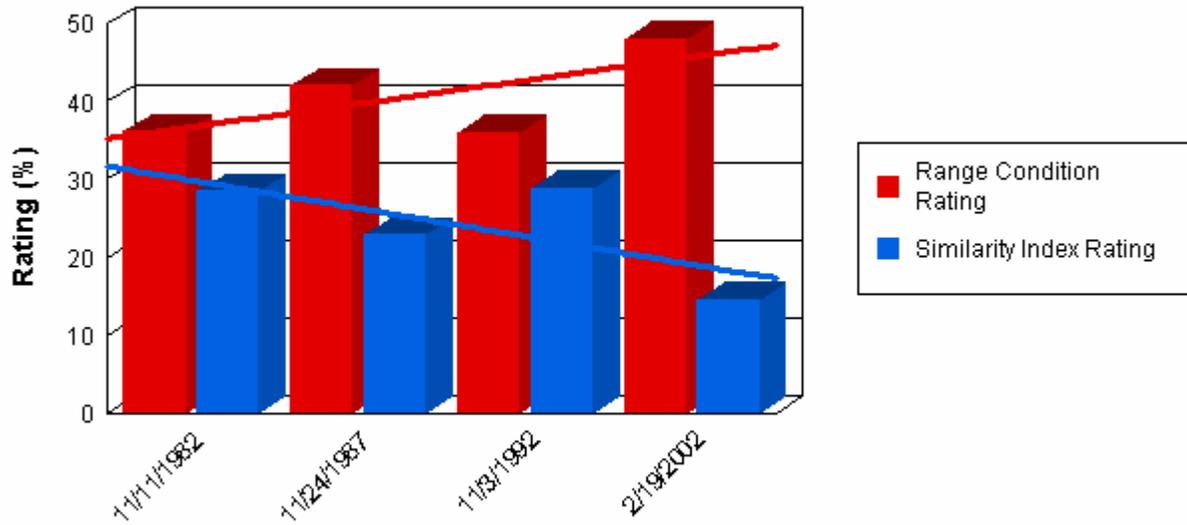
SANDY LOAM CP-2

070BY054NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
11/11/1982	36.15	28.55	471.00	1,100
11/24/1987	42.00	22.91	307.00	1,100
11/03/1992	36.00	28.91	451.00	1,100
02/19/2002	48.12	14.55	169.00	1,100

Traditional Range Condition vs Similarity Index

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 523

62034 PASTURA & PINTADA

62034-#1-E002

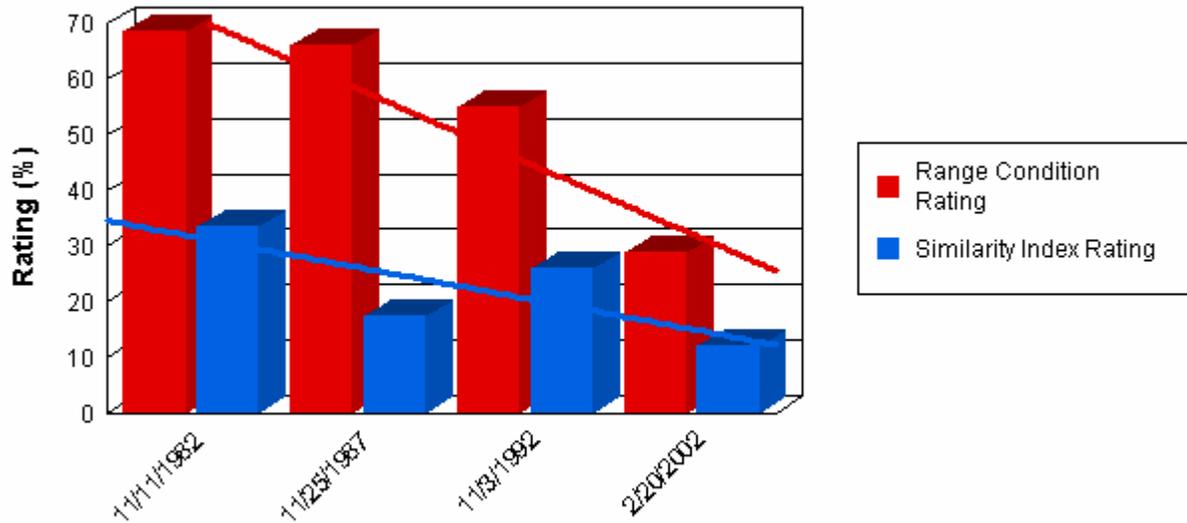
LOAMY CP-2

070BY052NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
11/11/1982	68.55	33.50	442.00	1,000
11/25/1987	66.00	17.40	194.00	1,000
11/03/1992	55.00	25.90	338.00	1,000
02/20/2002	28.77	12.10	160.00	1,000

Traditional Range Condition vs Similarity Index

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 524

62034 PASTURA & PINTADA

62034-#2-E003

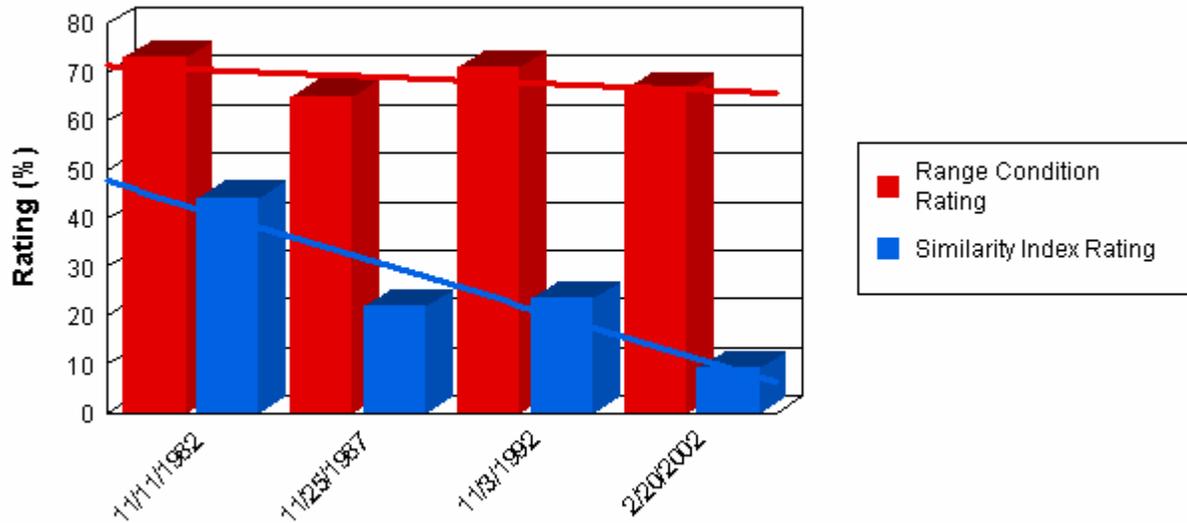
LOAMY CP-2

070BY052NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
11/11/1982	73.03	44.20	533.00	1,000
11/25/1987	65.00	21.90	239.00	1,000
11/03/1992	71.00	23.50	260.00	1,000
02/20/2002	66.39	9.30	94.00	1,000

Traditional Range Condition vs Similarity Index

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 525

62034 PASTURA & PINTADA

62034-#3-E004

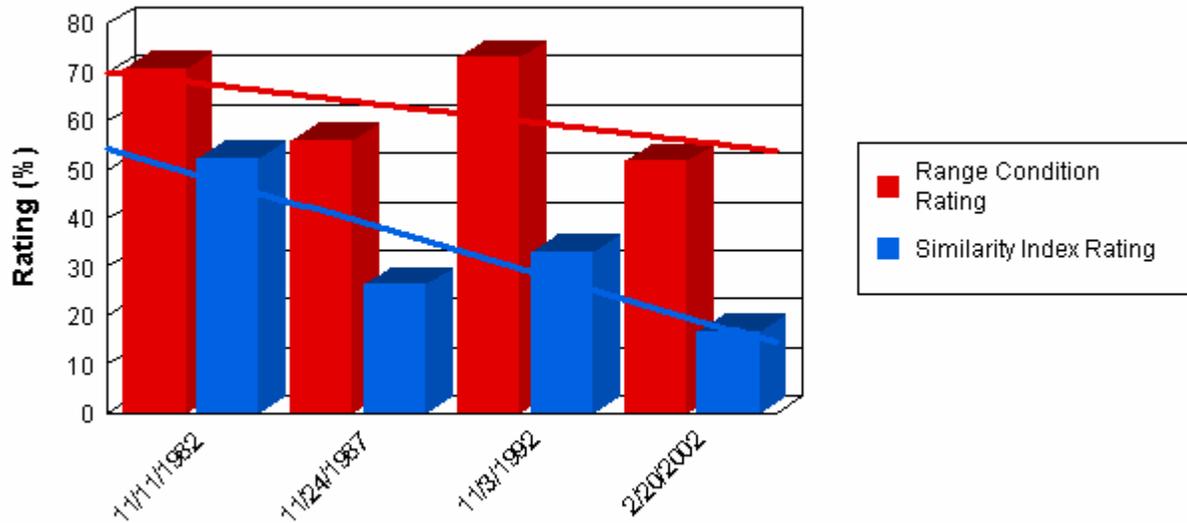
SHALLOW CP-2

070BY075NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
11/11/1982	70.72	52.38	541.00	800
11/24/1987	56.00	26.38	245.00	800
11/03/1992	73.00	33.25	284.00	800
02/20/2002	51.66	16.88	135.00	800

Traditional Range Condition vs Similarity Index

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 526

62034 PASTURA & PINTADA

62034-#4-E005

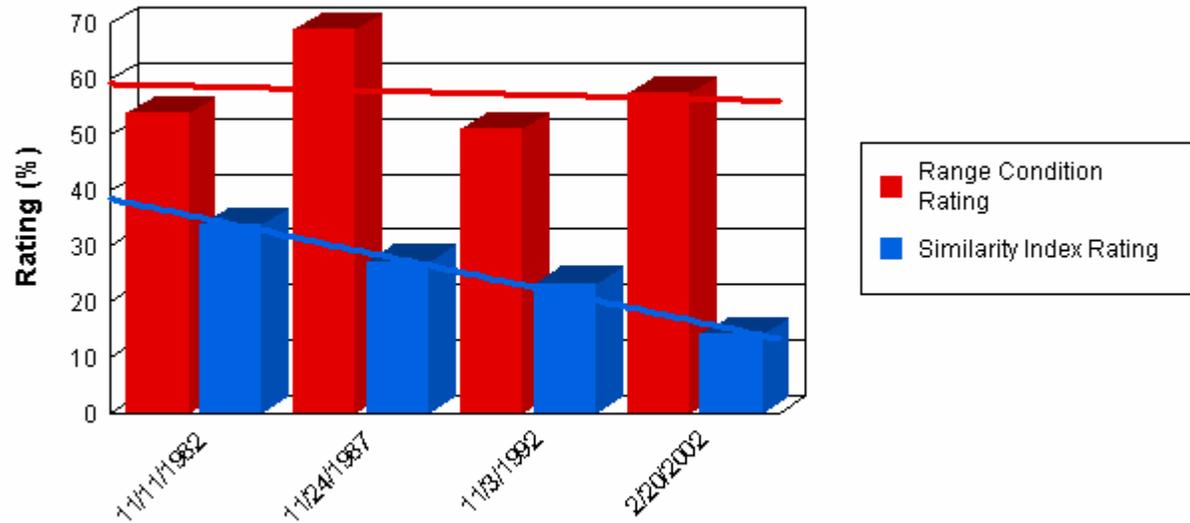
SHALLOW CP-2

070BY075NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
11/11/1982	53.91	33.75	420.00	800
11/24/1987	69.00	27.25	221.00	800
11/03/1992	51.00	23.25	234.00	800
02/20/2002	57.37	14.13	113.00	800

Traditional Range Condition vs Similarity Index

With Trendlines



Allotment Weighted Average Range Condition and Similarity Index

NM06000

Date Printed: 10/10/20

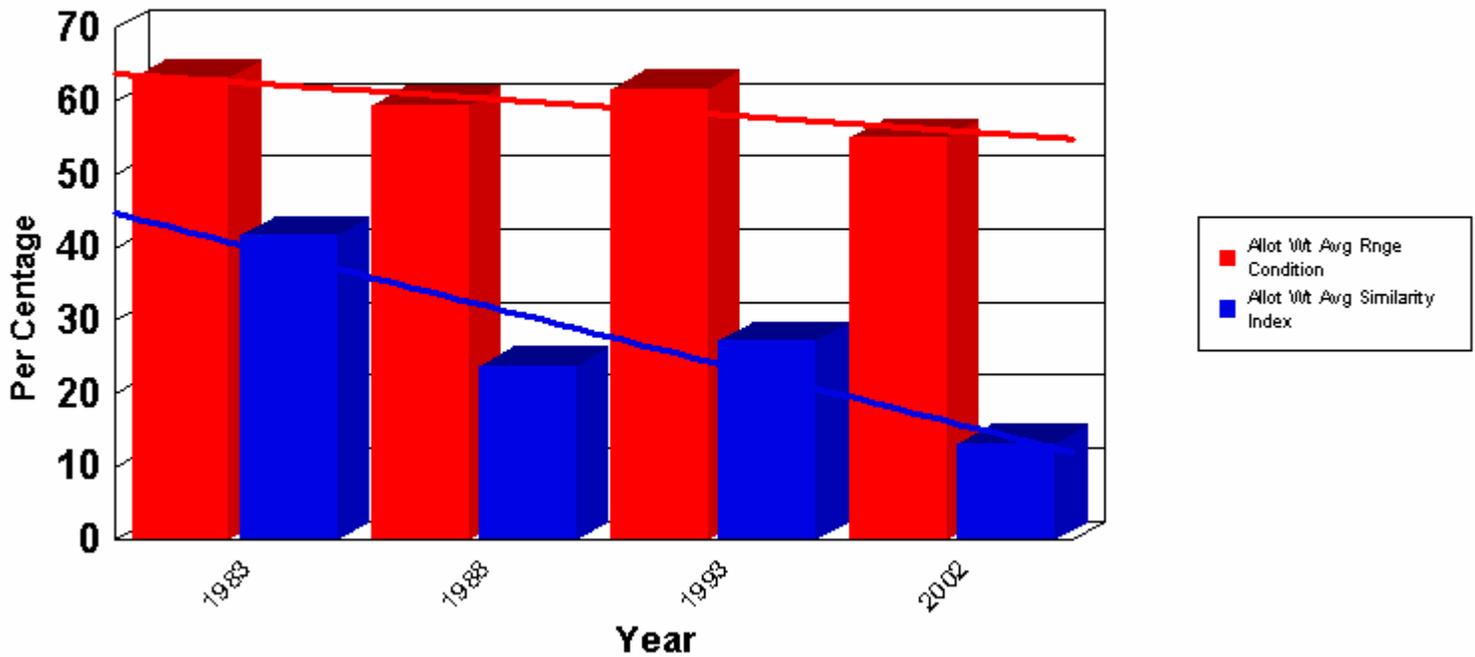
62034 PASTURA & PINTADA

Data Information presented below is based on the allotment weighted average of range condition and similarity index ratings for the years included in the allotment monitoring evaluations. The trendline is based on linear regression for each data set.

Year	Range Condition	Similarity Index
1983	63.26	41.66
1988	59.57	23.88
1993	61.76	27.29
2002	55.10	13.28

Weighted Average Range Condition vs Similarity Index

With Trendlines



62034 PASTURA & PINTADA

WEST MORROW

Vegid#: 522

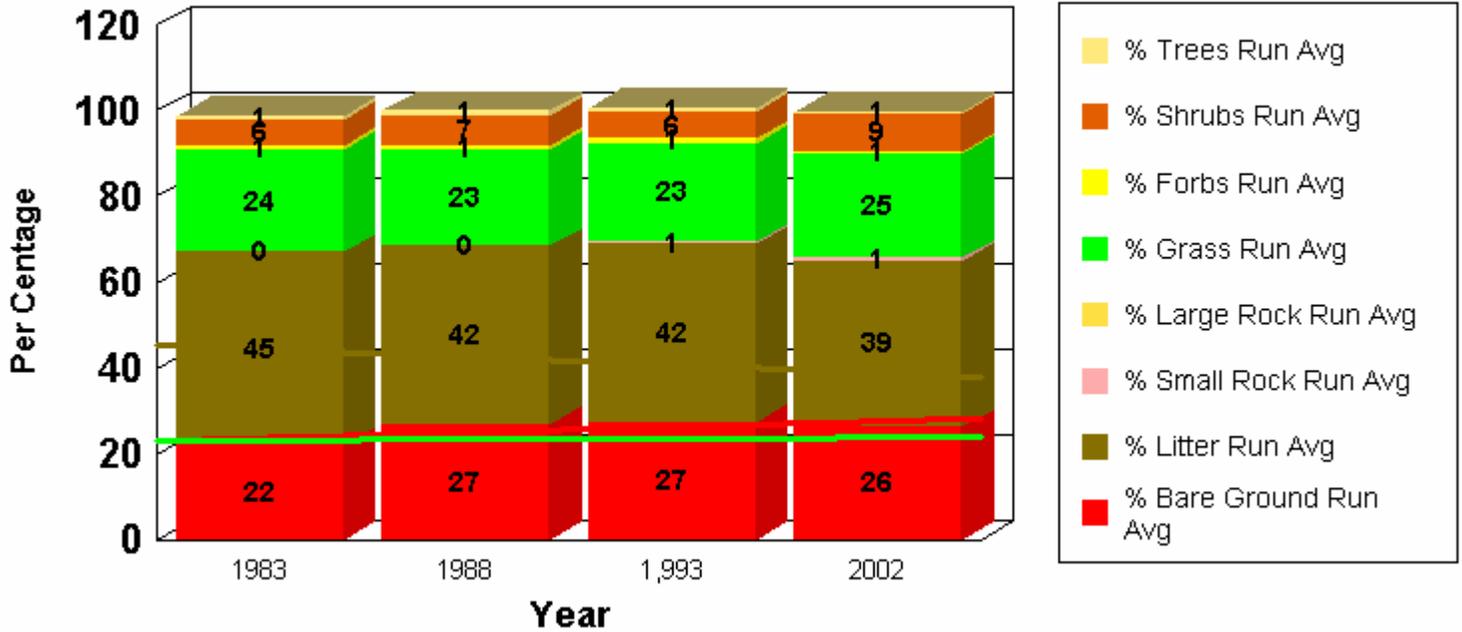
62034-WEST MORROW-

Ecological Site No.: 070BY054NM

Location: Township: 0050N Range 0190E Section 18 QtrQtr: NESE

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	22.00	45.00	0.00		1.00	24.00	6.00	1.00	22.00	45.00	0.00		1.00	24.00	6.00	1.00
1988	32.00	38.00				21.00	8.00		27.00	41.50	0.00		1.00	22.50	7.00	1.00
1993	28.00	42.00	1.00			24.00	5.00		27.33	41.67	0.50		1.00	23.00	6.33	1.00
2002	23.00	30.00	1.00		0	29.00	16.00	0.00	26.25	38.75	0.67		0.50	24.50	8.75	0.50

Running Average Ground Cover Trends
With Trendlines



62034 PASTURA & PINTADA

#1

Vegid#: 523

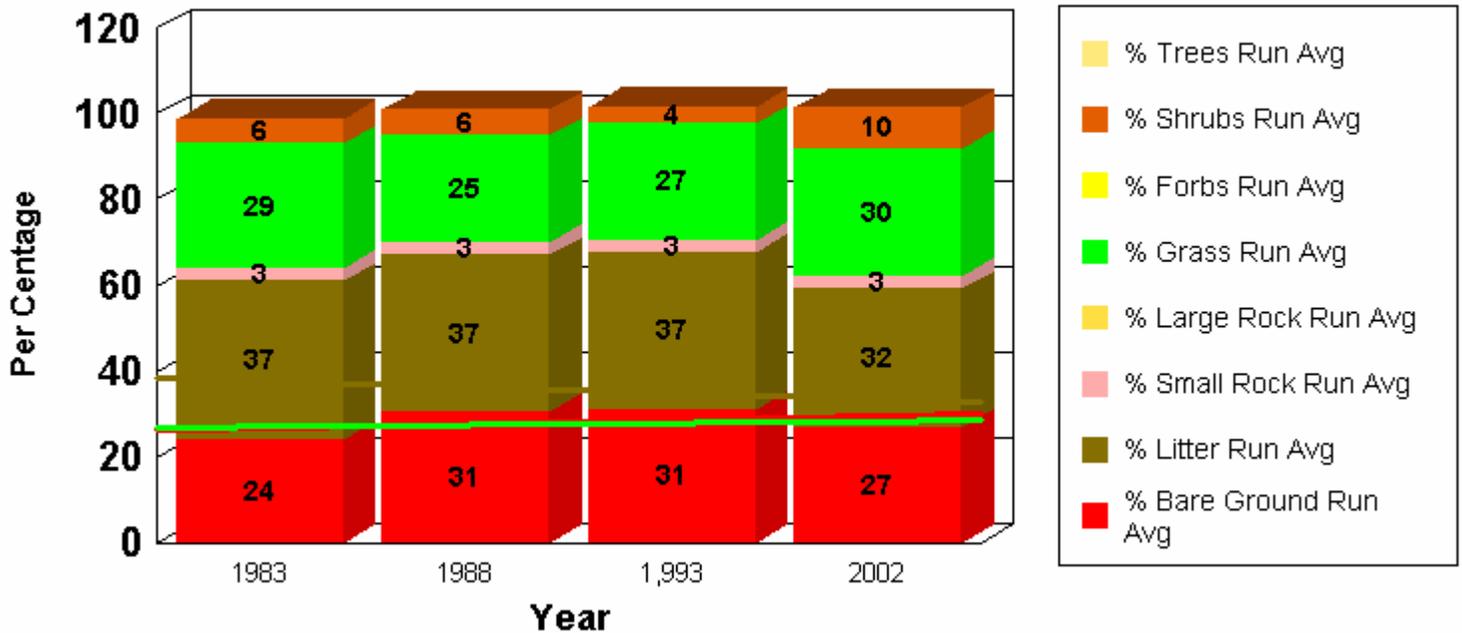
62034-#1-E002

Ecological Site No.: 070BY052NM

Location: Township: 0060N Range 0190E Section 07 QtrQtr: SWNW

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	24.00	37.00	3.00			29.00	6.00		24.00	37.00	3.00			29.00	6.00	
1988	37.00	36.00				21.00	6.00		30.50	36.50	3.00			25.00	6.00	
1993	32.00	37.00				31.00	0.00		31.00	36.67	3.00			27.00	4.00	
2002	15.00	19.00	3.00			38.00	26.00		27.00	32.25	3.00			29.75	9.50	

Running Average Ground Cover Trends
With Trendlines



62034 PASTURA & PINTADA

#2

Vegid#: 524

62034-#2-E003

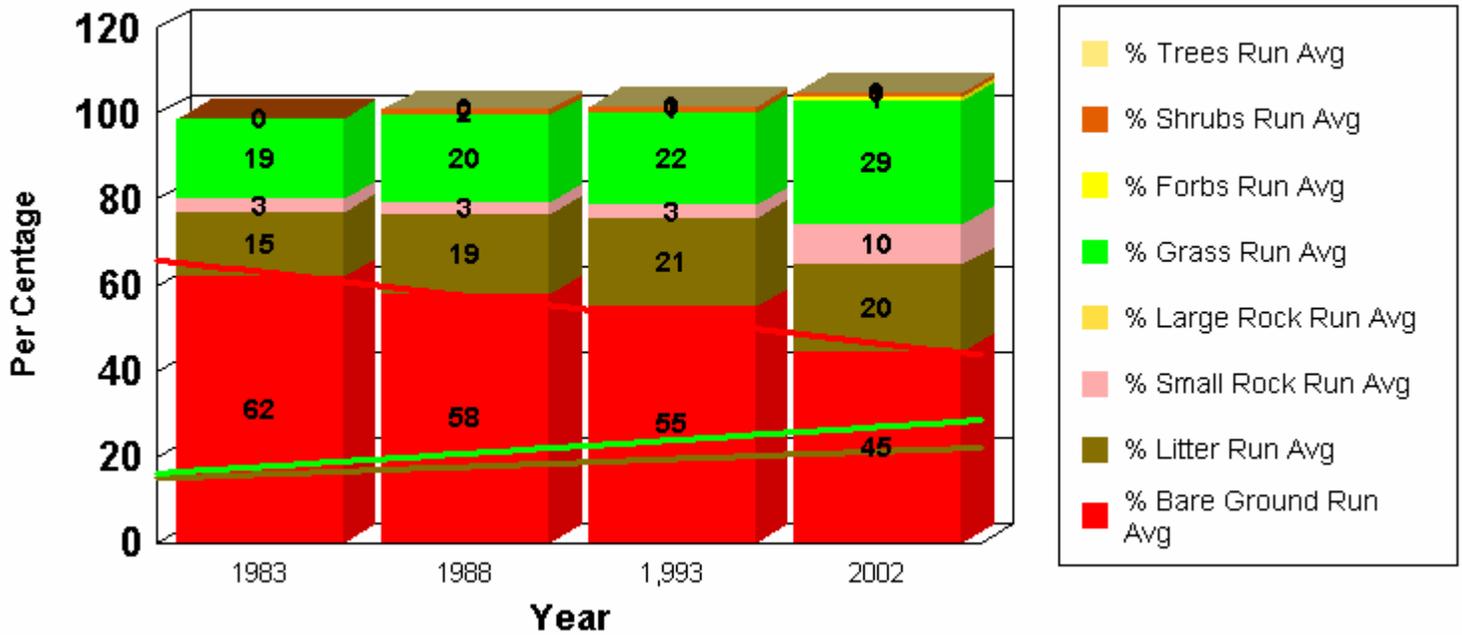
Ecological Site No.: 070BY052NM

Location: Township: 0060N Range 0190E Section 18 QtrQtr: SWNE

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	62.00	15.00	3.00			19.00	0.00		62.00	15.00	3.00			19.00	0.00	
1988	54.00	22.00				21.00	3.00	0.00	58.00	18.50	3.00			20.00	1.50	0.00
1993	49.00	25.00				25.00	1.00		55.00	20.67	3.00			21.67	1.33	0.00
2002	13.00	19.00	16.00		1.00	50.00	0.00		44.50	20.25	9.50		1.00	28.75	1.00	0.00

Running Average Ground Cover Trends

With Trendlines



62034 PASTURA & PINTADA

#3

Vegid#: 525

62034-#3-E004

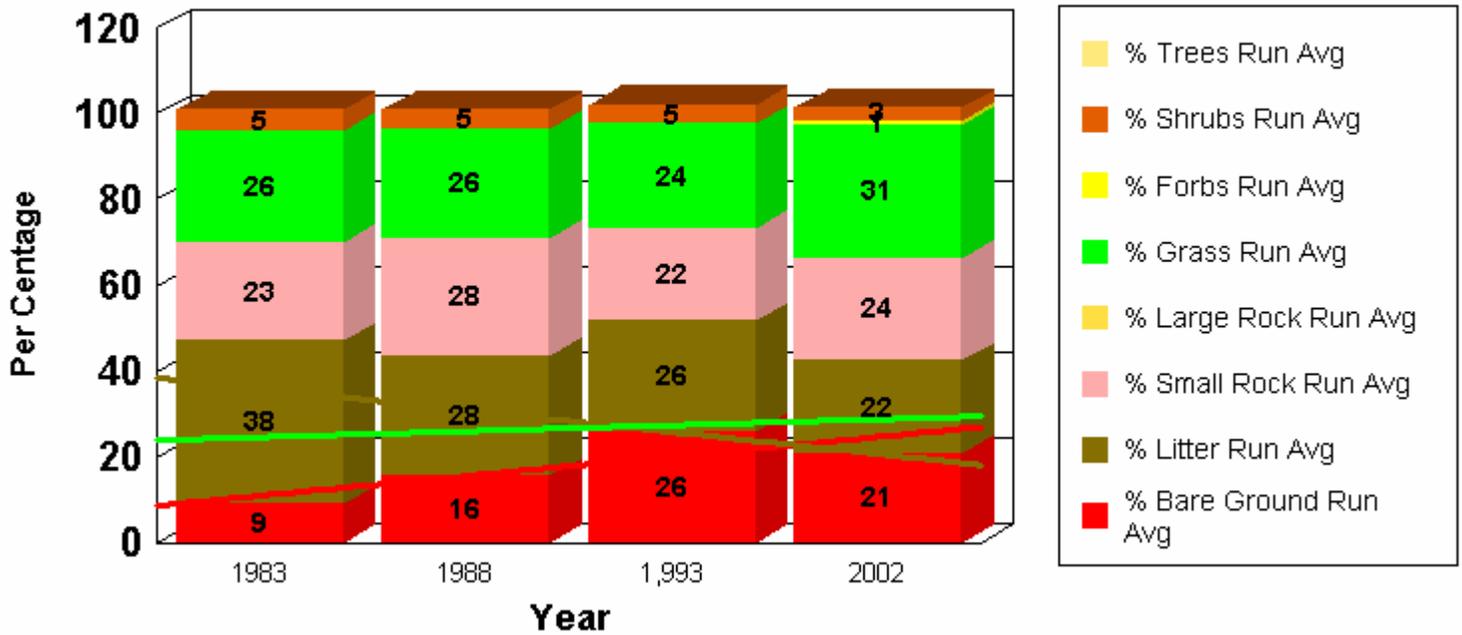
Ecological Site No.: 070BY075NM

Location: Township: 0060N Range 0190E Section 28 QtrQtr: NWSE

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	9.00	38.00	23.00			26.00	5.00		9.00	38.00	23.00			26.00	5.00	
1988	22.00	18.00	32.00			25.00	4.00		15.50	28.00	27.50			25.50	4.50	
1993	47.00	21.00	10.00			22.00			26.00	25.67	21.67			24.33	4.50	
2002	5.00	10.00	31.00		1.00	51.00	0.00		20.75	21.75	24.00		1.00	31.00	3.00	

Running Average Ground Cover Trends

With Trendlines



62034 PASTURA & PINTADA

#4

Vegid#: 526

62034-#4-E005

Ecological Site No.: 070BY075NM

Location: Township: 0050N Range 0190E Section 03 QtrQtr: NENW

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1983	40.00	7.00	34.00		1.00	15.00	2.00		40.00	7.00	34.00		1.00	15.00	2.00	
1988	18.00	24.00	36.00		0	20.00	0.00		29.00	15.50	35.00		0.50	17.50	1.00	
1993	32.00	28.00	18.00	1.00		21.00			30.00	19.67	29.33	1.00	0.50	18.67	1.00	
2002	12.00	23.00	29.00		0	32.00	0.00		25.50	20.50	29.25	1.00	0.33	22.00	0.67	

Running Average Ground Cover Trends
With Trendlines

