

Proposed Action for the Jarita Mesa and Alamosa Allotments

Analysis Area

The Jarita Mesa and Alamosa allotments are located northeast of the community of El Rito in northern New Mexico (figure 1). They are within the El Rito Ranger District of the Carson National Forest in Rio Arriba County.

The Alamosa Allotment consists of approximately 57,000 acres of which 47,396 acres are grazable. The allotment is managed through 18 ten-year permits for 440 cow/calf units and 20 bulls. The allotment is made up of 4-pastures: Alamosa, La Madera East, La Madera West, and Posos/Borracho. The grazing season is from May 1 through October 31 using a 4-pasture rotational grazing system. Due to ecological conditions and permittee preferences actual stocking of the allotment over the last 5 years has averaged 382 cow/calf units and bulls.

The Jarita Mesa Allotment consists of approximately 64,000 acres of which 52,643 acres are grazable. The allotment is managed through 17 ten-year permits for 502 cow/calf units and 16 bulls. The allotment is made up of 4-pastures: Comanche/La Tetilla, Jarita, Kiowa, and Maton de Encino. The grazing season is from May 1 through October 31 using a 4-pasture rotational grazing system. Due to ecological conditions and permittee preference, actual stocking of the allotment over the last 5 years has averaged 471 cow/calf units and bulls.

Issues

The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..."

The Forest Service identified two significant issues during the analysis:

- **Overutilization and Capacity** – stocking and distribution of livestock within the analysis area would be adjusted to achieve conservative grazing of 31 to 40% forage utilization to maintain or improve rangeland vegetation condition. A minimum 4-inch stubble height of forage species would be maintained in riparian areas. Monitoring would occur using a variety of methods.
- **Social/Economic Impact** - It is important to continue contributions to the economic and social well-being to the people of northern New Mexico. Domestic livestock grazing has occurred through generations and some of the permittees depend on it for their livelihood.

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The Forest Service identified seven other non-significant issues raised during scoping. These issues include:

- **Distribution and Compliance** – Livestock distribution and compliance with grazing permit conditions are carried out by the permittee under the direction and review of the District Ranger. Annual Operating Instructions (AOI's) are prepared in coordination with the permittee to specify those annual actions needed to implement management direction set forth in the project-level NEPA decision. AOI's are an integral part of the grazing permit. The AOI's specify the timing and duration of livestock use, the planned sequence of grazing on the allotment, improvements to be constructed/reconstructed/maintained and who is responsible for these activities, monitoring to be used, and allowable use or other standards to be applied and followed by the permittee to properly manage livestock. Annual monitoring conducted includes documentation demonstrating compliance with the terms and conditions in the grazing permit, allotment management plan, and AOI's. Permittees are responsible for meeting the terms and conditions of the grazing permit, including monitoring of livestock use and moving livestock in compliance with management guidelines. Corrective action can be taken if a permittee does not comply with grazing permit conditions. Forest Service welcomes the opportunity to collaborate with permittees by increasing the coordination meetings, by jointly monitoring the allotments, and by working together to implement improvements.
- **Proper Monitoring** - District Range Monitoring informs the decision maker, specialists, and interested public of progress towards the goals and objectives during the implementation of a project. By monitoring the effects of actions and evaluating the results, appropriate modifications in management practices can be made, resource trends can be analyzed, and new knowledge can be applied to similar projects in the future. The following monitoring would apply: Range Readiness every year before grazing season; Parker 3-Step, cover frequency, and Rapid Assessment Methodology every 5-10 years; Forage utilization measured throughout each grazing season and at the end of each grazing season; Permit compliance including stocking levels, pastures grazed, and season of use monitored throughout the grazing season; Visual monitoring by range specialists throughout the grazing season for general resource concerns; and monitoring of key use areas. In addition to utilization monitoring, projected drought, distribution patterns, and prior year utilization are considered when determining stocking levels.
- **Selection of Monitoring Sites** - Key areas were established on the Jarita Mesa Allotment in coordination with forest service personnel, permittees and New Mexico Range Improvement Task Force (RITF). Key areas were established to represent all (grazable) vegetation communities on the allotment, including piñon/juniper, sagebrush, ponderosa pine, oak, meadow grasslands, and mixed conifer vegetation communities.

For the Alamosa Allotment existing key areas would be expanded to include areas reflective of grazable acres and would be monitored in cooperation with permittees.

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- **Conservative Utilization Levels in Key Use Areas** - Key grazing areas would be established and monitored in cooperation with permittees. Key grazing areas would be monitored and evaluated for utilization every year and range condition and trend every 5 to 10 years. The intent of monitoring in key grazing areas would be to maintain good to excellent range conditions in key areas while accommodating the needs of wildlife.
- **Resting Pasture Pre and Post Fire** - An operating plan is prepared annually with the permittee to allow for current allotment conditions. The permittee carries out the plans under the immediate direction and review of the District Ranger. If resting pastures is deemed necessary, it would be part of the AOIs. Resting would normally be for two years post wildland fire. Pre and post fire resting of pastures for prescribed burning or other vegetation treatments would be evaluated and recommendations would be made and incorporated into the annual operating plan.
- **Noxious or Non-desirable Plants** - We do not anticipate any noxious weeds from this project, but mitigation measures would be in place prevent the spread of them, including improving effectiveness of prevention practices through weed awareness and education for prescribed fire and avoiding or removing sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds.
- **Season Long Grazing** – Permittees suggested flexibility such that rotation of livestock is not mandated but allowing cattle to distribute across entire allotment in certain years. This alternative was considered, but eliminated. Permit administration through AOIs allow for annual adjustments in numbers and season of use. Implementing a season long grazing strategy on a longer term basis would result in substantial livestock reductions and severely impact social economics of allotment permittees.

Adaptive Management

Adaptive management is a formal, systematic, and rigorous approach to learning from the outcomes of management actions, accommodating change, and improving management. The proposed action includes the continued use of adaptive management through AOIs, which provides flexibility for managing the allotments' livestock. Management through AOIs allows the Forest Service to adjust the timing, intensity, and frequency of grazing. AOIs are designed to provide sufficient flexibility to manage to changing circumstances. If monitoring indicates that desired conditions are not being achieved, management would be modified in cooperation with the permittee. Changes may include administrative decisions such as specific number of livestock authorized annually, specific dates of grazing, class of animal or modifications in pasture rotations, but such change would not exceed the limits for timing, intensity, period, occurrence and frequency of cattle grazing defined in this proposed action.

Best Management Practices

In addition to requiring that project implementation follow forest plan standards and guidelines, the Southwest Region's Soil and Water Conservation Practices Handbook of

best management practices for rangeland and watershed management and Forest Service policies would be applied.

Monitoring

Monitoring of the allotment would be conducted, including both implementation and effectiveness monitoring:

Monitoring of the allotment would include the participation of the permittee; however, the ultimate responsibility for monitoring the allotment rests with the Forest Service. Although the responsibility for monitoring the allotment is that of the Forest Service, the permittee would have the responsibility for ensuring guidelines are not exceeded.

Range inspections would continue to be conducted at random and when the opportunity arises during the grazing season to insure cattle are properly tagged, cattle are in the correct pasture, there are not excess cattle, pastures are not over utilized, improvements are properly maintained, range is ready to be grazed, etc. When inspections are prescheduled, the permittee would be invited and encouraged to attend.

- **Implementation Monitoring:** Short-term monitoring would be used to assess whether or not management was implemented as designed and/or did the management actions achieve the annual effect expected. Items which may be documented through implementation monitoring include, but are not limited to: actual use (livestock numbers and days), condition of range improvements, utilization, wildlife observations.
- **Compliance with AOI's:** Allotment inspections during the grazing season document compliance with the AOI. Within key areas of the Jarita Mesa and Alamosa Allotments, annual monitoring would be conducted, which may include, but is not limited to evaluating grazing intensity during the season, and utilization at the end of the growing season in order to practice adaptive management and make necessary management changes needed for plant development and plant recovery from the grazing event. These monitoring methods would give information on distribution of livestock, actual, and expected forage use.
- **Effectiveness Monitoring:** Long-term condition and trend monitoring would be used to assess the effectiveness of management in achieving desired objectives. This monitoring may include, but is not limited to measurements to track upland vegetation conditions and soil condition towards achievement of the objectives. Example methods for effectiveness monitoring may include, but are not limited to dry weight rank, pace transects, pace quadrat frequency, Parker 3-step, ground cover, and repeat photography. Monitoring would occur on historic benchmarks, which correspond with key areas. Depending upon the method selected monitoring would occur at an interval of at least every 5-10 years in key areas.
 - Range readiness inspections by Forest Service personnel during the spring would determine whether resources are in a condition capable of supporting the beginning of the grazing season.
 - Exit dates would be adjusted when monitoring results and water availability dictate.

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- Adjustments to distribution and forage use would be made to achieve conservative livestock grazing intensity of 31 to 40% by weight of annual available forage in key areas as determined by the above monitoring methods. The document “Principles of Obtaining and Interpreting Utilization Data on Southwest Rangelands” is the principle guide for utilization monitoring.

Key areas were established in 2006 on the Jarita Mesa Allotment in coordination with forest service personnel, permittees and New Mexico RITF. Key areas were established to represent full and potential grazable vegetation communities on the allotment, including piñon/juniper, sagebrush, ponderosa pine, oak, meadow grasslands, and mixed conifer vegetation communities. Thirteen rapid assessment method (RAM) clusters were established in selected key areas throughout the allotment. Use of this method identifies utilization and distribution patterns of grazing ungulates. Each cluster consists of three transects of 100 paces with a clipping at every 20th pace to determine current forage production in pounds per acre. Forage production can vary annually as several factors such as drought, ongoing grazing, and other environmental factors can affect current production. This transect data would also be used to assist in determining stubble height, grasses, species composition, and identifies opportunities to improve distribution, and would use a pellet count belt transect to assist in determining ungulate use.

For the Alamosa Allotment, key grazing areas would be established and monitored in cooperation with permittees. Key grazing areas would be monitored and evaluated for utilization every year and range every 5 to 10 years. The intent of monitoring in key grazing areas on both allotments would be to range condition and trend in key areas while accommodating the needs of wildlife.

Existing Conditions

Jarita Mesa Grazing Management

Currently, seventeen individual 10-year term grazing permits and one association bull permit are issued for the Jarita Mesa Allotment, authorizing 502 cow/calf units (c/c) and 16 bulls to graze from May 1 to October 31 (3,177 animal unit months (AUM's)). The Jarita Mesa allotment is also part of the Jarita Mesa Wildhorse Territory. Wild horses inhabit the territory year-round and efforts to achieve the appropriate management level (AML) are ongoing. Management of the wild horse herd is administered through the Jarita Mesa Wildhorse Environmental Assessment and is not part of this analysis.

The Jarita Mesa Allotment is made up of four pastures: Comanche, Maton de Encino, Jarita, and Kiowa. Grazing management is a rotational system in which cattle graze lower elevation pastures early in the grazing season and move to higher elevation pastures as the season progresses. Due to ecological conditions and permittees' preferences, actual stocking of the allotment over the past 10 years has averaged 445 c/c and 16 bulls.

Table 1. Jarita Mesa Allotment Actual Use - Livestock Numbers, Period of Use.

Pasture	Season of Use	Permitted Use	Permitted AUM's	AUM's* Available before treatments (30-40%)	AUM's Available after treatments (30-40%)
Comanche	5/01 – 5/31	245 c/c + 8 bulls	264	248-331	248-331
Maton de Encino	5/01 – 5/31	257 c/c + 8 bulls	276	317-422	418-558
Jarita	6/01 – 7/15	502 c/c + 16 bulls	783	567-755	677-902
Kiowa	7/16 – 10/31	502 c/c + 16 bulls	1879	654-872	1059-1411
Total	5/01 – 10/31	502 c/c + 16 bulls	3202	1786-2380	2402-3202**

* An animal unit month (AUM) is the amount of feed necessary for a 1,000 pound cow and her calf (up to 6 months of age) for one month. This equates to approximately 780 pounds of feed a month or 26 pounds per day.

** AUM's available would be dependent on forage vegetation response to treatments and consistent herd management achieved through distribution practices such as herding and salting.

Table 2. Jarita Mesa Allotment existing grazing management summary

Class of Livestock	Permitted Numbers	Average Actual Numbers Since 1996	Permitted AUM's	Average Actual AUM's Since 1999	Grazing System	Grazing Season (months)	Pastures Used
Cows/calves	502 c/c 16 bulls	445 c/c 16 bulls	3,202	2,756	Rotational	6	Comanche/Maton De Encino, Jarita, And Kiowa

Livestock entry onto the allotment has typically been within two to three weeks of the May 1st entry date to allow the vegetation to mature and meet range readiness guidelines. Based on past monitoring information and the current and desired vegetation conditions, there is a need for flexibility on entry and exit dates that reflect range readiness and utilization thresholds on the allotment. In the late spring and early summer, forage plants need additional time for root growth, formation of basal buds, development and production of seed and food storage. Livestock are usually taken off the allotment within two weeks of October 31. Flexibility with exit dates should reduce the chance of over-utilization and allow for maintaining native food and cover for wildlife species that are dependent on a grass/forbs habitat.

Livestock distribution has historically been an issue on Jarita Mesa. Cattle tend to congregate in favored grazing areas, which in addition to grazing pressure from wild horses often results in overgrazing of full capacity sites such as meadows. Compliance with AOIs has been an issue. Pasture rotations are often not followed as gates are left open and cattle drift into the next pasture on their own. Pastures are not cleaned out and

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there are several instances where cattle remain in the same general area throughout the entire grazing season. It is not uncommon to have cattle spread out throughout the entire allotment. The end result is that plants and grasses have minimal recovery during the growing season and are not allowed to seed out. There have been several instances in the past where range readiness guidelines were not met resulting in delayed entry onto the allotment. Livestock are usually taken off the allotment within two weeks of October 31. Flexibility with exit dates should reduce the chance of over-utilization and allow for maintaining native food and cover for wildlife species that are dependent on a grass/forbs habitat.

Exterior fences and natural barriers separate the Jarita Mesa Allotment from other allotments. However, fences on the allotments, particularly interior fences, are in a state of disrepair and in some cases are non-existent.

Alamosa Existing Grazing Management

Existing Grazing Management

Currently, seventeen individual 10-year term grazing permits and one association bull permit are issued for the Alamosa Allotment, authorizing 440 cow/calf units (c/c) and 20 bulls to graze from May 1 to October 31 (2,852 animal unit months (AUM's)).

The Alamosa Allotment is made up of four pastures: La Madera East, La Madera West, Posos/Borracho, and Alamosa. The Posos/Borracho pasture used to be two separate pastures. In the late 1990's, district range staff decided to join the two pastures due to lack of division fence maintenance. Grazing management is a rotational system in which cattle graze lower elevation pastures early in the grazing season and move to higher elevation pastures as the season progresses. Due to ecological conditions and permittee preference, actual stocking of the allotment over the past 10 years has averaged 353 c/c and 19 bulls.

Table 3. Alamosa Allotment Actual Use - Livestock Numbers, Period of Use

Pasture	Season of Use	Permitted Use	Permitted AUM's	AUM's* Available before treatments (30-40%)	AUM's Available after treatments (30-40%)
La Madera East	5/01 – 5/31	440 c/c + 20 bulls	481	328-437	328-437
La Madera West	5/01 – 5/31	Simultaneous use	**	308-432	308-432
Posos/Borracho	6/01 – 7/31 10/01-10/31	440 c/c + 20 bulls	946	966-1288	1108-1477
Alamosa	8/01 – 9/30	440 c/c + 20 bulls	946	293-392	431-576
Total	5/01 – 10/31	440 c/c + 20 bulls	2854	1895-2549	2170-2922***

* An animal unit month (AUM) is the amount of feed necessary for a 1,000 pound cow and her calf (up to 6 months of age) for one month. This equates to approximately 780 pounds of feed a month or 26 pounds per day.

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** La Madera East and West pastures have been grazed simultaneously in the past due to lack of fence maintenance.

*** AUM's available would be dependent on forage vegetation response to treatments and consistent herd management achieved through distribution practices such as herding and salting.

Table 4. Alamosa Allotment existing grazing management summary

Class of Livestock	Permitted Numbers	Average Actual Numbers Since 1996	Permitted AUM's	Average Actual AUM's Since 1999	Grazing System	Grazing Season (months)	Pastures Used
Cows/calves	440 c/c 20 bulls	353 c/c 19 bulls	2,854	2297	Rotational	6	La Madera East and West, Posos/Borracho, and Alamosa

Livestock entry onto the allotment has typically been within two to three weeks of the May 1st entry date to allow the vegetation to mature and meet range readiness guidelines. Based on past monitoring information and the current and desired vegetation conditions, there is a need for flexibility on entry and exit dates that reflect range readiness and utilization thresholds on the allotment. In the late spring and early summer, forage plants need additional time for root growth, formation of basal buds, development and production of seed and food storage. There have been several instances in the past where range readiness guidelines were not met resulting in delayed entry onto the allotment. Livestock are usually taken off the allotment within two weeks of October 31. Flexibility with exit dates should reduce the chance of over-utilization and allow for maintaining native food and cover for wildlife species that are dependent on a grass/forbs habitat.

Livestock distribution has historically been an issue on Alamosa. Cattle tend to congregate in favored grazing areas, which usually results in overgrazing of full capacity sites such as meadows. Compliance AOI's has been an issue. Pasture rotations are often not followed as the gates are left open and cattle drift into the next pasture on their own. Pastures are not cleaned out and there are several instances where cattle remain in the same general area throughout the entire grazing season. It is not uncommon to have cattle spread out throughout the entire allotment. The end result is that plants and grasses have minimal recovery during the growing season and are not allowed to seed out.

Forest Plan Desired Conditions

Under the National Forest Management Act (NFMA) of 1976 (16 U.S.C. 1600 et seq.), project-level decisions, which authorize the use of specific National Forest System lands for a particular purpose, like livestock grazing, must be consistent with the broad programmatic direction established in the forest's land and resource management plan. Consistency is determined by examining whether the project-level decision implements the goals, objectives, desired conditions, standards and guidelines, and monitoring requirements from the forest plan. To ensure consistency with the forest plan, it may be required to modify a grazing permit.

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The Jarita Mesa and Alamosa allotments are within the following management areas (MAs) identified in the land and resource management plan, as amended, for the Carson National Forest (Forest Plan, 1986):

- MA 3 (Mixed-conifer Under 40%)**
- MA 4 (Ponderosa pine under 40%)**
- MA 7 (Unsuitable Timber)**
- MA 8 (Piñon/Juniper)**
- MA 11 (Revegetation Areas)**
- MA 13 (Oak)**
- MA 14 (Riparian)**

The desired conditions described in the Carson Forest Plan for these management areas are fairly broad as they relate to range. The forest plan desired condition for watersheds is to be in a satisfactory watershed condition. In order to have a better understanding of what a satisfactory watershed condition is for the Jarita Mesa and Alamosa allotments, desired conditions are described as: having stable to upward ecological trends; using management practices that achieve conservative grazing intensity in key areas (not to exceed 40% utilization measured at the end of the annual growing season); achieving and/or maintain desired density and distribution of cool-season and warm season herbaceous species and healthy and vigorous browse stands; maintaining soil loss at or below tolerance levels; and maintaining adequate ecological site desired conditions at or near site potential in order to deliver possible ecological amenities derived from those sites.

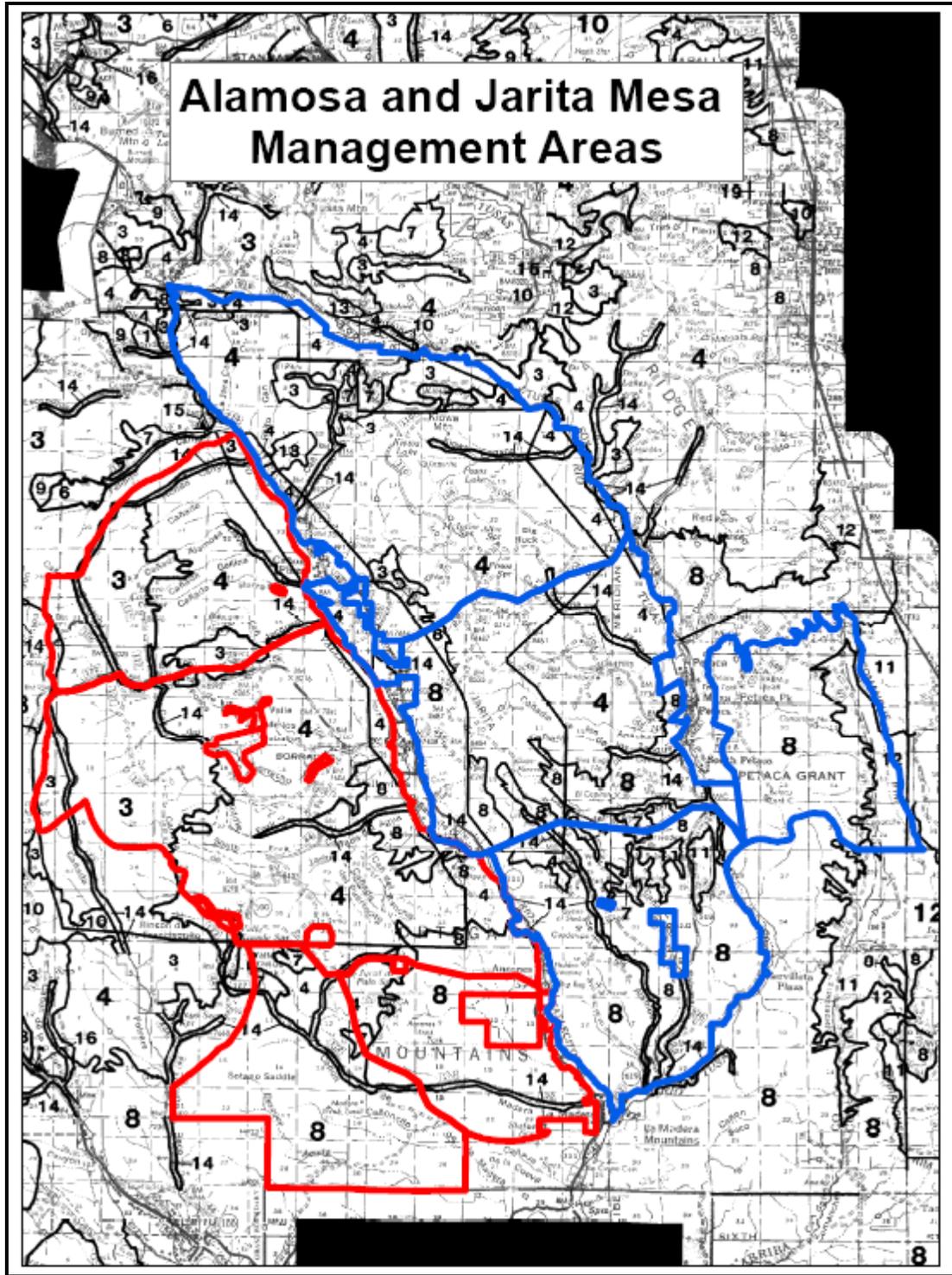


Figure 1. Jarita Mesa and Alamosa Management Areas

Alternatives, Including the Proposed Action

Alternatives to the proposed action are developed to explore different ways to accomplish the purpose and need in response to the significant issues. A reasonable alternative responds to an argument presented in a significant issue and substantially achieves the purpose and need. No significant issues were identified for the Jarita Mesa and Alamosa allotments during public scoping, thus no other action alternatives were developed for this analysis. Since the regulations implementing NEPA (40 CFR §1502.14) require the inclusion of the no action alternative in the analysis, the no action alternative of not taking any action or no grazing is addressed in the analysis. At this time the preferred alternative for this environmental analysis has not been chosen.

Alternatives Considered, but Eliminated from Further Analysis

Consider combining Jarita Mesa and Alamosa allotments and employ a true rest rotation management system

In order for this alternative to be considered there would have to be significant reductions in numbers, because it would be a high intensity short duration scheme. The infrastructure to apply a true rest rotation grazing management is not in place and early growing season does not facilitate this type of management system.

Leave as is with Existing Management

This alternative was considered, but eliminated because the level of reductions considered necessary and conditions of both allotments would be too detrimental because of the social and economic impact allotment permittees. It would take approximately a 35% cut on Jarita Mesa and 22% cut on Alamosa to meet utilization guidelines.

Season-Long Grazing

This alternative was considered, but eliminated because the level of reductions considered necessary and conditions of both allotments would be too detrimental because of the social and economic impact to allotment permittees. It would take approximately a 46% cut on Jarita Mesa and 34% cut on Alamosa to meet utilization guidelines. Permit administration through AOIs allow for adjustments in numbers and season of use.

Alternatives

Alternative 1 - No Action

Under the no action alternative, domestic livestock grazing would not occur on the analysis area. All maintenance of range facilities would revert to the Forest Service, where they would be evaluated for wildlife, watershed, and soil protection needs. Boundary fences would not be removed, as they would be needed to prevent use by livestock from adjacent active allotments. Pasture fences may be removed as appropriate. Removal or maintenance of improvements would be authorized by a separate decision. Under the no action alternative, the forest plan would continue to guide management of the area.

Alternative 2 – Proposed Action

- Authorize continued livestock grazing on the Jarita Mesa Allotment, with a maximum of 502 cow/calf units and 16 bulls. Actual number of livestock would vary up to the maximum based on resource conditions, distribution, utilization, and compliance with AOIs, etc.
- Authorize continued livestock grazing on the Alamosa Allotment, with a maximum of 440 cow/calf units and 20 bulls. Actual number of livestock would vary up to the maximum based on resource conditions, distribution, utilization, and compliance with AOIs, etc.
- Authorize grazing from May 1 through October 31 (6 months total).
- Based on the readiness of range resources to support the beginning of the grazing season, entry dates onto the allotments (season of use) would be May 1. The entry date would vary by up to one month from May 1 and the exit date off of the allotments would vary by up to one month from October 31 depending on resource conditions. Season of use in each pasture would be adjusted commensurate to AUM's available.
- Implement vegetation treatments in Comanche, Maton de Encino, Kiowa, La Madera, and Jarita pastures. Treatments would include meadow restoration, sagebrush removal, planting grass seed, and burning¹, along with maintenance treatments.
- Prescribed Burning – 11,210 acres on Jarita Mesa (El Ritito Rx – 1,200 acres, Jarita Mesa Rx– 8,400 ac, Spring Creek Rx – 1,200 acres, Maton de Encino- 410 acres), and 13,320 acres on Alamosa (Jacquez Canyon Rx – 4,800 acres, Valle Grande Rx – 7,800 acres, Ancones – 720 ac).
- Brushhogging – 400 acres in Maton de Encino (Alamosa) and 611 acres in Ancones (Jarita Mesa). Include maintenance treatments to maintain grasses and Rx burning
- Reduce use on full capacity acres in meadows on Kiowa, Jarita, and Borracho pastures, and increase use in potential capacity acres in Comanche, Maton de Encino, Jarita, La Madera, Posos/Borracho, and Alamosa pastures.
- Maintain or improve existing water developments.
- Maintain or improve existing fences.
- Construct the range improvements² in following pastures:
 - Posos/Borracho Pasture: 1 water development and 1 cattleguard, 1 spring development
 - La Madera Pasture: 1 spring development (Martinez Spring) and 1.5 miles of pasture division fence
 - Alamosa Pasture : (La Cienega) 1 cattleguard, 0.5 mile of fence, 2 stock tanks for Alamosa

¹ Additional Environmental Analysis is required to implement projects that are not identified to be implemented within the next two years are separate from this analysis. All future improvements for management of the allotments will be subject to separate Section 106 consultation and concurrence from Fish and Wildlife or any other additional permits required prior to environmental clearance.

² New water developments are subject to approval of water rights applications by the NM Office of the State Engineer.

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Kiowa Pasture : (La Cienega) 1 cattleguard, 1 trick tank, and a new fence

Maton de Encino Pasture: 0.5 mile fence for water gap on Tusas Box

Alternative 3 – 18% Reduction in Permitted Cow/calf Numbers

- Authorize continued livestock grazing on the Jarita Mesa Allotment, with a maximum of 412 cow/calf units and 16 bulls. Actual number of livestock would vary up to the maximum based on resource conditions, distribution, utilization, and compliance with AOIs, etc.
- Authorize continued livestock grazing on the Alamosa Allotment, with a maximum of 361 cow/calf units and 20 bulls. Actual number of livestock would vary up to the maximum based on resource conditions, distribution, utilization, and compliance with AOIs, etc.
- Authorize grazing from May 1 through October 31 (6 months total).
- Based on the readiness of range resources to support the beginning of the grazing season, entry dates onto the allotments (season of use) would be May 1. The entry date would vary by up to one month from May 1 and the exit date off of the allotments would vary by up to one month from October 31 depending on resource conditions. Season of use in each pasture would be adjusted commensurate to AUM's available.
- Implement vegetation treatments in Comanche, Maton de Encino, Kiowa, La Madera, and Jarita pastures. Treatments would include meadow restoration, sagebrush removal, planting grass seed, and burning³, along with maintenance treatments.
- Prescribed Burning – 11,210 acres on Jarita Mesa (El Ritito Rx – 1,200 acres, Jarita Mesa Rx– 8,400 ac, Spring Creek Rx – 1,200 acres, Maton de Encino- 410 acres), and 13,320 acres on Alamosa (Jacquez Canyon Rx – 4,800 acres, Valle Grande Rx – 7,800 acres, Ancones – 720 ac).
- Brushhogging – 400 acres in Maton de Encino (Alamosa) and 611 acres in Ancones (Jarita Mesa). Include maintenance treatments to maintain grasses and Rx burning
- Reduce use on full capacity acres in meadows on Kiowa, Jarita, and Borracho pastures, and increase use in potential capacity acres in Comanche, Maton de Encino, Jarita, La Madera, Posos/Borracho, and Alamosa pastures.
- Maintain or improve existing water developments.
- Maintain or improve existing fences.
- Construct the range improvements⁴ in following pastures:

³ Additional Environmental Analysis is required to implement projects that are not identified to be implemented within the next two years are separate from this analysis. All future improvements for management of the allotments will be subject to separate Section 106 consultation and concurrence from Fish and Wildlife or any other additional permits required prior to environmental clearance.

⁴ New water developments are subject to approval of water rights applications by the NM Office of the State Engineer.

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Posos/Borracho Pasture: 1 water development and 1 cattleguard, 1 spring development

La Madera Pasture: 1 spring development (Martinez Spring) and 1.5 miles of pasture division fence

Alamosa Pasture : (La Cienega) 1 cattleguard, 0.5 mile of fence, 2 stock tanks for Alamosa

Kiowa Pasture : (La Cienega) 1 cattleguard, 1 trick tank, and a new fence

Maton de Encino Pasture: 0.5 mile fence for water gap on Tusas Box

In 1980, allotment management plans (AMP's) for the Jarita Mesa and Alamosa allotments were developed in cooperation with Jarita Mesa and Alamosa Livestock Associations. At that time permitted numbers were temporarily increased by approximately 18% on both allotments to accommodate for a later entry date. This AMP was developed for use on a five-year basis and management was to be evaluated at the end of this period.

Follow-up studies were to be conducted to determine whether the range could sustain the increase in numbers and actual use. It was also noted that if the deferred management system or the proposed rest-rotation system were not closely followed, it is certain that the temporary stocking level would not continue and a reduction in numbers would be forthcoming.

Currently, management remains the same on the Alamosa allotment as in 1980. Season of use and permitted numbers remain the same. A follow-up to the five-year or studies AMP did not occur. A rest-rotation system was not implemented; however, the majority of structural range improvements proposed in the AMP were implemented.

This alternative addresses the increased permitted numbers and reduces the numbers by 18% to adjust to the increase in 1980. This alternative also addresses the lack of utilization and capacity that became apparent during this analysis. Reductions would take place over the next five years to lessen the economic impact to allotment permittees and would be employed through the new AMP after completion of this analysis. Forest Service would welcome additional opportunities to voluntarily reduce numbers for the resource benefit of the allotments regardless of alternative selected.

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Table 5. Range Comparison of Alternatives

	Alternative 1	Alternative 2	Alternative 3
Class of livestock	N/A	cow/calf	cow/calf
Permitted numbers	0	Jarita Mesa - 502 c/c 16 bulls	Jarita Mesa – 412 c/c 16 bulls
		Alamosa – 440 c/c 20 bulls	Alamosa – 361 c/c 20 bulls
Management system, with natural barriers between pastures	N/A	Rotational	Rotational
Grazing season	N/A	6 months	6 months
Allowable forage utilization	N/A	40%	30-40 %

Table 6. Comparison of Resource Effects by Alternative

Resource	Alternative 1	Alternative 2	Alternative 3
Range condition and trend	Overall range condition and trend would improve in the analysis area.	Condition and trend would improve, but not as quickly as alternative 3 and authorized numbers would be held at lower levels to achieve desired results.	Condition and trend would improve to fair or better condition across all pastures and with stable to upward trend.
Range Capacity	Overall range capacity would improve over time.	Overall range capacity would remain the same. Proposed treatments would increase capacity, but less than alternative 3.	Overall range capacity would improve with proposed vegetation treatments and fence and water improvements and utilization guidelines.
Soils	Soil nutrient retention, vegetation growth, and soil stability would improve	Gradual improvement to soils in analysis area. Increase or maintain vegetation growth and soil nutrient retention.	Gradual improvement to soils in analysis area. Increase or maintain vegetation growth and soil nutrient retention.
Riparian areas, water quality, and wetlands	Riparian vegetation and stream sediment improve. Designated uses supported and water quality status maintained. Wetland function improved.	Riparian vegetation and stream sediment improve. Designated uses supported and water quality status maintained. Wetland function maintained.	Riparian vegetation and stream sediment improve. Designated uses supported and water quality status maintained. Wetland function maintained.
Floodplains	Floodplain function maintained.	Floodplain function maintained.	Floodplain function maintained.
Air Quality	Attainment status maintained.	Attainment status maintained.	Attainment status maintained.
Mexican Spotted Owl	No grazing in the analysis area would increase herbaceous shrub and forb species composition, species diversity, and plant vigor providing additional cover needs for MSO prey base species.	No impact to population. Would not result in a loss of any MSO. Would provide cover needs for prey base species that support MSO.	No impact to population. Would not result in a loss of any MSO. Would improve cover needs for prey base species that support MSO.
Sensitive Species	Prey species availability, plant species diversity, plant vigor, ground cover, and availability of seeds would improve foraging habitat for these species with no	Prey species availability, plant species diversity, plant vigor, ground cover, and availability of seeds would improve from existing condition.	Prey species availability, plant species diversity, plant vigor, ground cover, and availability of seeds would improve from existing condition.

Jarita Mesa and Alamosa Allotments – Proposed Action and Additional Information

Resource	Alternative 1	Alternative 2	Alternative 3
	livestock grazing.		
Aquatic Macro-Invertebrates	No decrease to macroinvertebrate populations or habitat.	No impact to forest-wide habitat or populations trends of macroinvertebrates.	No impact to forest-wide habitat or populations trends of macroinvertebrates.
Migratory Birds	No impact to populations. Habitat and prey availability improved.	No impact to populations, but individuals may increase. Habitat and prey availability improved.	No impact to populations, but individuals may increase. Habitat and prey availability improved.
Heritage Resources	No adverse effect on sensitive and non-sensitive cultural sites.	No adverse effect on sensitive cultural sites. Possible livestock trampling on non-sensitive sites but no resulting loss of sites.	No adverse effect on sensitive cultural sites. Possible livestock trampling on non-sensitive sites but no resulting loss of sites.
Fire	Risk of fire would increase without implementing prescribed burns.	Reduce risk of catastrophic wildfire by implementing prescribed fire and producing fuel breaks..	Reduce risk of catastrophic wildfire by implementing prescribed fire and producing fuel breaks.
Wild and Scenic Rivers	No effect on the Tusas Box wild and scenic river values. Eligibility values would be maintained.	No effect on the Tusas Box wild and scenic river values. Eligibility values would be maintained.	No effect on the Tusas Box wild and scenic river values. Eligibility values would be maintained.
Economics	No income generated by permittees.	Permittees would continue to generate income from cattle operations.	Permittees would generate income, but less than alternative 2.
Social Environment	Permittees would have to find alternate grazing location, may have to reduce numbers, or cease operations.	Existing traditions of livestock management would continue for permittees.	Existing traditions of livestock management would continue for permittees, but at a decreased rate than alternative 2.
Environmental Justice	This alternative could impact minority and low-income populations.	Selection of this alternative would not result in adverse or disproportionate effects on low income or minority populations.	Selection of this alternative would not result in adverse or disproportionate effects on low income or minority populations.

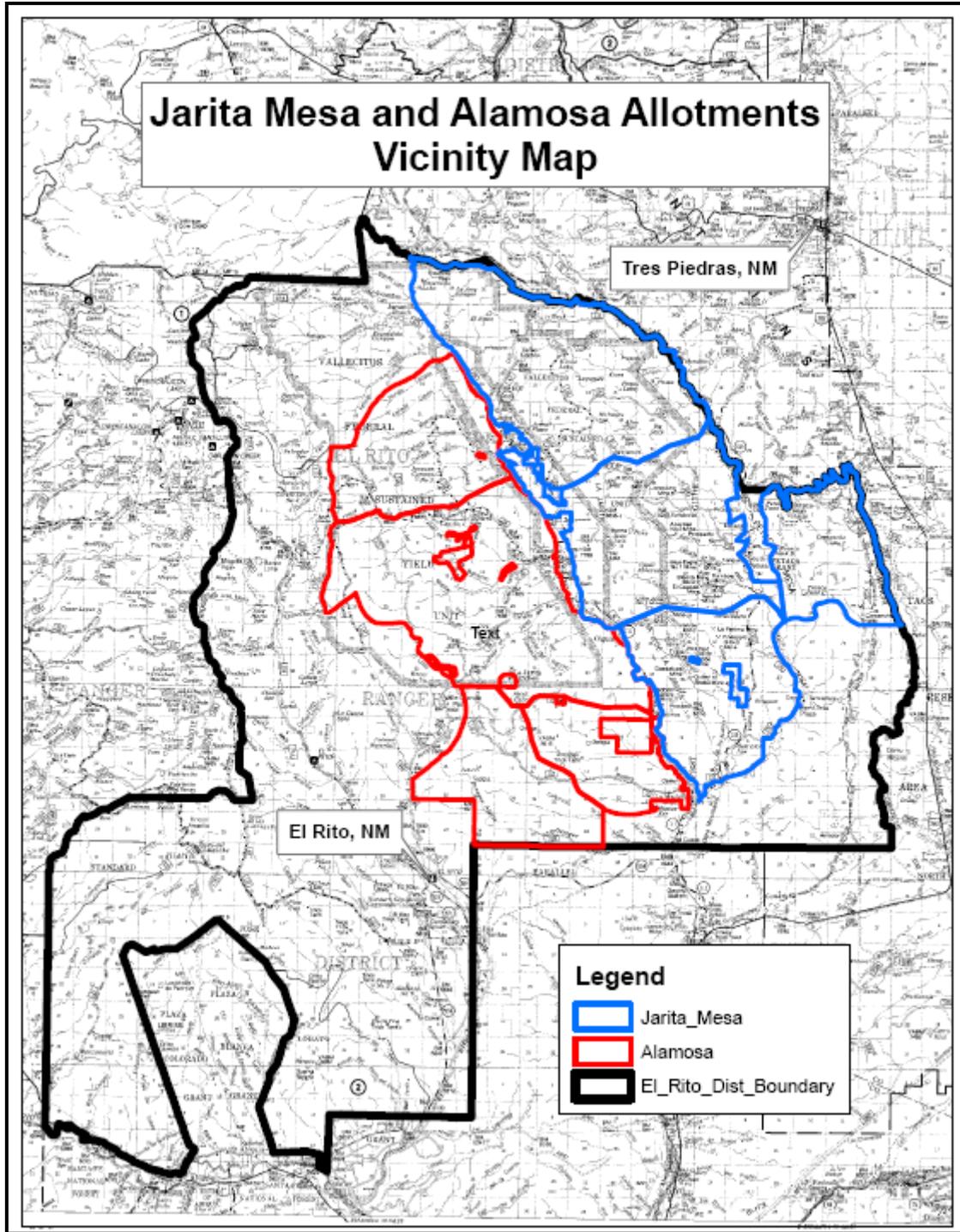


Figure 2. Jarita Mesa and Alamosa Allotments Location Map

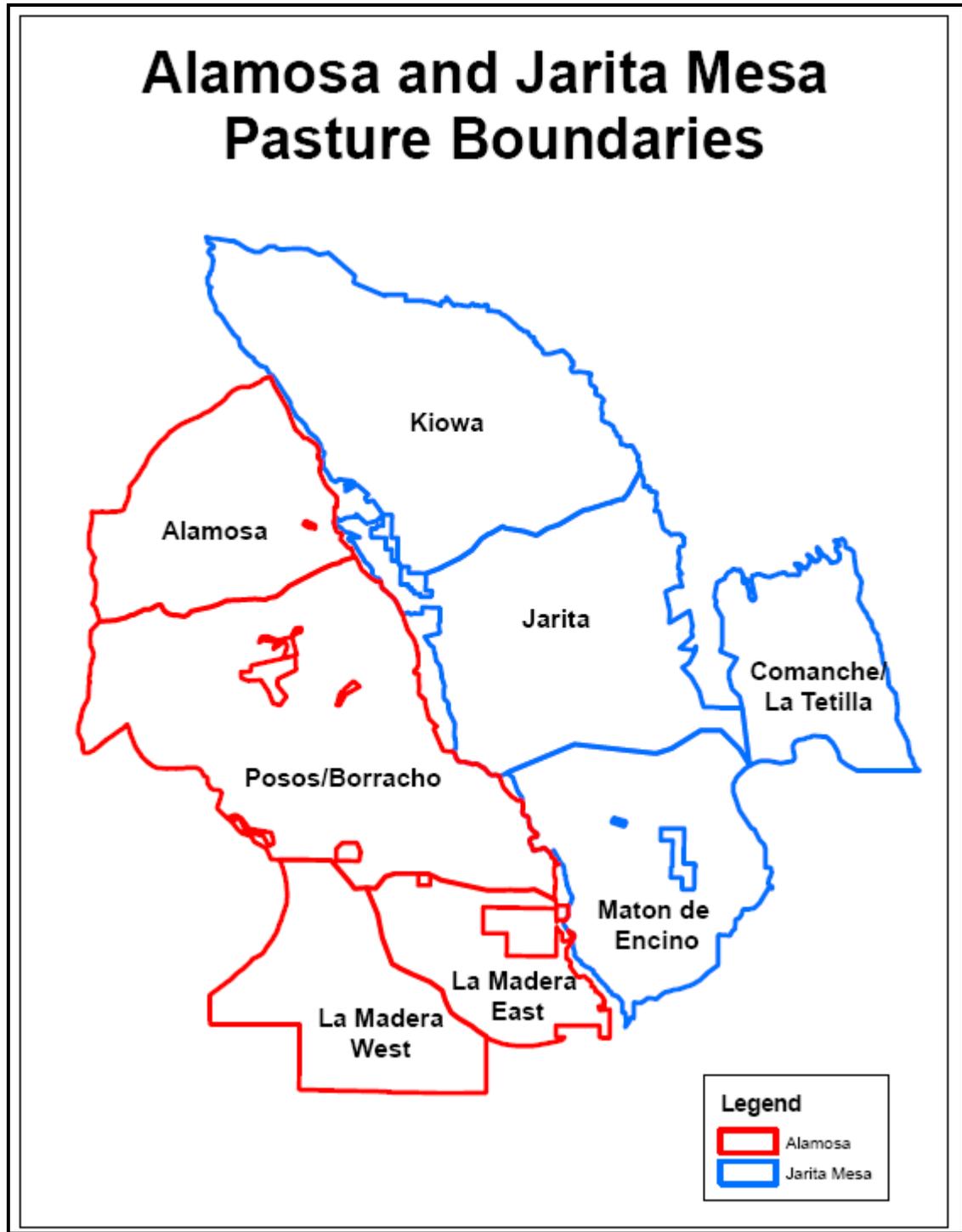


Figure 3. Jarita Mesa and Alamosa Allotments Pasture Map