Valles Caldera National Preserve

Valles Caldera National Preserve

Sandoval and Rio Arriba Counties

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Valles Caldera Trust

Multiple Use and Sustained Yield of Forage

Environmental Assessment

Executive Summary

Released for Public Review and Comment

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EXECUTIVE SUMMARY

Introduction

An Environmental Assessment (EA) regarding the proposed Multiple Use and Sustained Yield of Forage (MUSY-Forage) on the Valles Caldera National Preserve has been prepared by the Valles Caldera Trust and is available for public review and comment. The EA documents compliance with the spirit and the legal standards put forth in the National Environmental Policy Act of 1969 (NEPA) as amended. The Valles Caldera Trust (the Trust), is a wholly owned government corporation who oversees the management of the Valles Caldera National Preserve (the Preserve), located in Sandoval and Rio Arriba Counties, New Mexico. The EA can be viewed or downloaded from the Trust's website, www.vallescaldera.gov. To request a hardcopy or CD contact the offices of the Trust by calling 505/661-3333, emailing comments@vallescaldera.gov, or writing, P.O. Box 359 Jemez Springs, NM 87025.

A document in itself does not meet either the spirit or the legal standard of NEPA. It is the process leading up to and in combination with, the document that must meet the standard. In the instance of the Stewardship Action, Multiple Use and Sustained Yield of Forage (MUSY-Forage), the word, *journey* may reflect a more accurate connotation of what has occurred than *process*. The journey has included an exploration and quantification of a newly acquired jewel of public land, (the Preserve), as well as developing the organization and system to embark on this "experiment in public land management".

It has been an arduous journey at times, and many *travelers* have been along for all or part of the adventure! Like many other aspects of government, successful implementation of the NEPA is best achieved through participation by an engaged citizenry, objective experts, and an open government organization. The investment in this particular journey will allow future planning efforts related to the use and management of natural resources to be accomplished in much shorter *trips*!

The following paragraphs summarize key elements and findings of the EA: Preface, Purpose and Need, Issues and Alternatives, Environmental Consequences, and a summary of the environmental consequences in relation to key issues.

Preface "*Multiple Use and Sustained Yield of Forage*" and "*Operation of a Working Ranch*"

The Valles Caldera Preservation Act (the Act) frames the use of the Preserve's renewable resources by the definitions put forward in the Multiple Use and Sustained Yield act of 1960. The preface to the EA recalls these definitions, in their original text so readers can better understand the direct relationship the proposed management of forage to this law.

The Act also refers to the continued management of the Preserve as a working ranch in numerous sections. The Act however, failed to define or reference the meaning of "working ranch". The preface states the definition for a working ranch put forward by the Board of Trustees in their

framework document, (*Framework and Strategic Guidance for Comprehensive Management*) which was completed in 2005.

Purpose and Need/Proposed Action

The NEPA procedures of the Trust (Federal Register, 2003) require a clear statement of the proposed Stewardship Action as well as the purpose and need for action. This statement describes what is being proposed, why it is being proposed, and frames the scope of the analysis; especially the range of alternatives to be considered.

The Valles Caldera Trust (the Trust) is proposing to continue operation of Valles Caldera National Preserve (the Preserve) as a working ranch consistent with the goals stated in the Valles Caldera Preservation Act of 2000 (the Act). Toward this end, the Trust is proposing to continue programs for domestic livestock grazing and to manage the Preserve's ranch infrastructure. The trust would allocate 60 percent of the forage produced annually to remain on site in support of sustaining ecosystem services a portion of the remaining 40 percent would be allocated for domestic livestock grazing or other purposes based on the annual conditions and expected use by the Preserve's elk herd. The Trust is also proposing to adopt goals,[1] establish objectives,[2] and identify monitored outcomes[3] that would guide or prescribe the proposed multiple use and sustained yield (MUSY) of forage, as well as other future implementing decisions.

The purpose and need for action is based on the Act and other applicable laws; the existing condition of the Preserve's resources, infrastructure, and facilities; and lessons learned from the implementation of the interim program for domestic livestock grazing.

Issues and Alternatives

The development of alternatives and the focus of the analysis was framed by key issues developed through feedback from stakeholders, implementation of an interim grazing program, and environmental analysis. These key issues were associated with balancing the goals put forward in the Act.

- *Key Issue: Domestic livestock grazing can combine with use by elk and other native fauna to affect sensitive riparian areas.*
- *Key Issue: Domestic livestock grazing programs can conflict with, or affect visitor activities and experiences.*
- *Key Issue: Optimizing the attainment of any one goal is not exclusive of the attainment of any other goal but is likely to affect the level and timing of such attainment.*

The alternatives vary in both the allocation and use of forage and the types of programs developed for domestic livestock grazing. Connected infrastructure management varied accordingly.

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1 "Goals" means a desired condition for the Preserve sought by the Trust and/or a desirable condition as described in Public Law 106-248 or the Management Principals adopted by the Trust (Federal Register 2003)

2 ''Objective'' means the desired outcome that can be meaningfully evaluated by location and timing within the Preserve. (Federal Register 2003)

3 ''Monitored outcome'' means the short-, mid-, or long-term outcome selected for systematic evaluation. (Federal Register 2003)

- Alternative 'A' is the *No Action* alternative. Required by NEPA, the no action alternative provides a baseline from which to measure environmental consequences.
- Alternative 'B' emphasizes the relative values of the forage resources, allocating only a small portion (5%) for domestic livestock grazing. Depending on annual conditions, this would limit grazing to less than 500 cow/calf pairs. Also under this alternative, much of the interior fencing could be removed. Earthen tanks could be repaired or rehabilitated as needed to support wildlife, protect resources, or even provide recreation opportunities.
- Alternatives 'C' and 'D' both allocate 15-20% (depending on annual conditions and current estimates of elk population, see Appendix C) of the Preserve's forage in support of domestic livestock grazing or other uses. Both alternatives propose the management of interior fences to protect resources, wildlife, and improve the efficiency of livestock operations. Earthen tanks would be repaired, maintained, or rehabilitated, as needed to support resource protection, as well as wildlife and livestock.

  Under Alternative 'C', programs for domestic livestock grazing would be required to be economically sustainable but relative benefits would be given equal or greater consideration when selecting or developing domestic livestock grazing programs. Relative benefits could include benefits to local producers and communities, enhancing the objectives on surrounding National Forest System land (the Santa Fe National Forest), providing educational opportunities, or gaining scientific knowledge.

  Under Alternative 'D', the Trust would give the economic return of programs and program efficiencies equal or greater consideration than other relative values.

  Alternatives 'C' and 'D' are considered with and without proposed improvements to buildings and facilities in support of ranching activities.

The lines between these alternatives are not as stark as the preceding descriptors may indicate. All the action alternatives include adopting goals for continued improvements in the ecological condition of the Preserve. No alternative limits nor guarantees participation based on residency or socioeconomic condition. Furthermore, the Trust is required to achieve a variety of goals and will continue efforts to balance goal attainment. However, by framing the alternatives in this manner both decision makers and stakeholders can clearly understand the direct and indirect benefits and tradeoffs, which can be realized from working towards various objectives.

Environmental Consequences

This chapter summarizes the effects to the natural and human environment expected to occur because of either taking no action or implementing an alternative action. Each of the nine sections of this chapter describes the affected environment and the likely consequences using quantifiable data whenever possible. Outcomes or effects are measured by context (the spatial or temporal extent of the effect) and intensity (the magnitude of the effect). Outcomes may be beneficial or adverse and may be direct, indirect, or cumulative. O*utcome* is used interchangeably with *effect*.

This chapter provides information used to aid in decision-making and assess significance as required under NEPA.

A summary of the context and intensity of the effects is presented in a supporting narrative. The spatial extent of an effect is described in a narrative statement with or without a map for reference. Methodologies are included where helpful. The temporal extent of the effect is defined by three categories of duration (Federal Register, 2003):

- *Short-term*: 0-3 Years
- *Mid-term*: 3-10 Years
- *Long-term*: 10+ years

The intensity of the effect is defined by the following four levels of magnitude (intensity is influenced by context):

- *Negligible: No change would occur or the magnitude of change would not be measurable*
- *Minor: Changes would be measurable but would not alter the structure, composition, or function of the resource and would be limited in context.*
- *Moderate: Changes would be measurable and may influence the structure, composition, or function of the resource but would be limited in context.*
- *Major: Changes would be measurable, would alter the structure, composition, or function of the resource and may be extensive in context.*

As directed by NEPA, the environmental consequences section focuses on the key issues. The watershed and socioeconomic sections are lengthy and detailed. The following is a brief summary of *Chapter Three - Environmental Consequences*.

3.1 Watershed

Effects are considered on a Preserve-wide basis. Direct, indirect, and cumulative effects to water, soil, and vegetative resources combined at various watershed scales are presented. The current ecological condition of the Preserve is described as cumulatively impacted by historic grazing and timber harvest. Effects under each alternative, as measured from the existing condition are expected to be minor to moderate.

Overall conditions are expected to be maintained and/or improved, with somewhat greater improvements in both context and intensity to occur under Alternative 'B'. Localized moderate improvements to watershed conditions are expected as a result of infrastructure maintenance under all action alternatives. Proposed improvements to buildings and facilities were predicted to have negligible effects on watershed conditions at any scale.

3.2 Fire Ecology

The effect of the action alternatives to the management of fire and the natural fire regime are considered in this section. The effects paralleled the watershed effects and are expected to be negligible to minor.

3.3 Wildlife and 3.4 Aquatic Species

These sections focus on the effects to threatened and endangered species, sensitive species, as well as species of interest. Effects are expected to be negligible to minor and localized. None of the action alternatives are expected to adversely affect any of the species considered.

3.5 Cultural Resources

Effects to cultural resources are anticipated to be negligible.

3.6 Socioeconomic

Socioeconomic impacts are considered within a two-county (Sandoval and Rio Arriba Counties) analysis area over a four-year period. In the context of this analysis area, effects were negligible. Direct benefits resulting from domestic livestock grazing would be limited to the individuals who would actually graze livestock. Benefits to individuals would not likely be significant or change the current socioeconomic condition of any community or even individual. The number of cattle that would graze on the Preserve under any action alternative would not be significant relative to the number currently grazing on the surrounding lands. Even if the animals grazing on the Preserve were redistributed from the surrounding lands, it would not be sufficient to significantly affect the surrounding socioeconomic condition. Benefits could be meaningful at the individual level.

The analysis also considered the contribution of cattle grazing to the financial condition of the Preserve. Relative to the revenue required for overall Preserve operations, the contributions from domestic livestock grazing are predicted to be minor without considering the legacy of debt in the form of deferred maintenance needs for fences and tanks. Under Alternative 'D', by achieving a maximum economic return under the most efficient operation, deferred maintenance needs over the four-year analysis period could be addressed. Under Alternative 'C', contributions would be required beyond the income received through grazing fees to meet the deferred maintenance needs. These sources could include grants, volunteer projects, goods for services, and funds appropriated by Congress. Under Alternative 'B' the majority of the deferred maintenance needs would have to come from alternative sources. However, future maintenance would be reduced under Alternative B, which includes the removal of much of the interior fencing.

3.7 Sensory Resources

This section considers the potential effects to the Preserve's sights, sounds, and overall "sense of place". The effects of any alternative were predicted to be minor. The Preserve has been a working ranch for a century and a half. This aspect of the Preserve is retained on the landscape through the remnants of the historic ranch infrastructure including picturesque cabins and corrals. All the action alternatives retain a modern component of a working ranch although the dominance of ranching activities varies between the alternatives. Relative to past management, the action alternatives include only conservative livestock programs being managed in context with a variety of programs on the Preserve, creating a contrast with the "working ranch" of the previous century.

3.8 Recreation

The effects of the action alternatives to recreation programs and activities are considered in this section. Overall, the effects are expected to be localized and minor to moderate. Recreation programs are affected by both the presence of livestock, livestock management activities as well as fences and gates that constrain movement across the landscape. While the no action alternative would eliminate logistical challenges of managing livestock in context with managing recreation programs, fences, gates, and other barriers would still impact recreation activities. Under Alternative 'B', there would be only minimal numbers of livestock and therefore impacts to recreational programs would likely be negligible to minor and localized. Most interior fences and gates would be removed creating unimpeded access for equestrian and pedestrian movement. The larger earthen tanks could be used to support recreation activities.

Under Alternatives 'C' and 'D', the number of cattle would be similar to the level grazing on the Preserve over the last five years (under the interim grazing program). However, the increased distribution of cattle supported by the management of infrastructure would reduce potential conflicts with recreation activities.

3.9 Significance

The President's Council for Environmental Quality identifies elements that need to be considered in the determination of significance. This section ensures that that the deciding official has access to all information necessary for making a determination of significance and implementing decision.

Effects in Relation to Key Issues

- *Key Issue: Domestic livestock grazing can combine with use by elk and other native fauna to affect sensitive riparian areas.*

Alternative B best addresses this key issue. While Alternative A eliminates grazing by domestic livestock, grazing by elk and other herbivores would continue. In addition, resource damage being caused by fences and tanks would persist under Alternative A. Alternative B includes only a minor allocation of forage to domestic livestock; less than what has been allocated during the interim period during which a steady improvement in ecological condition has been measured. In addition, Alternative B addresses sources of sediment deposit and erosion through the management of infrastructure.

Alternatives C and D would maintain or continue to improve ecological conditions. The degree of improvement over time would likely be somewhat less than under Alternative B. While minor or localized effects from livestock could occur under Alternatives C and D, improvements would also occur from the maintenance and improvement of infrastructure.

- *Key Issue: Domestic livestock grazing programs can conflict with, or affect visitor activities and experiences.*

This issue would be best addressed by Alternative B. Alternative A eliminates grazing by domestic livestock thereby eliminating potential conflict between recreation and grazing. However, Alternative B includes only a minor allocation of forage to domestic livestock, well within the ability of the Trust to all but eliminate any potential conflicts. In addition, Alternative B includes the removal of most interior fences, increasing opportunities to traverse the Preserve

unimpeded by fences and gates. Under Alternative B, several of the larger earthen tanks on the Preserve would be repaired creating possible locales for picnicking or the development of flat-water fisheries in the future.

Alternatives C and D would allow the Trust to reduce conflicts with recreation activities by allowing greater flexibility in distributing livestock than has been the case during the interim grazing period. In addition, the management of infrastructure would support the desired distribution and management of livestock. While these alternatives would retain much of the interior fencing currently in place, they would also permit the construction of ride or walk through gates to improve cross-country access. These alternatives include the repair of earthen tanks however; the purpose of these tanks would primarily be to improve the distribution of cattle and would limit opportunities to develop these water sources for recreational purposes.

- *Key Issue: Optimizing the attainment of any one goal is not exclusive of the attainment of any other goal but is likely to affect the level and timing of such attainment.*

All the action alternatives allow for the operation of the Preserve as a "working ranch" consistent with other goals and purposes. Alternative B has only a minor component of what is traditionally the dominant activity on ranches. However, it permits a variety of land-based revenue generating activities that are consistent with a working ranch and may reflect a more modern trend increasingly common on small ranches. Alternative B does not include a sufficient cattle operation to cover the deferred maintenance costs of the ranching infrastructure.

Alternative C provides for the most "balanced" level of goal attainment. This alternative allocates forage in context with wildlife and goals for continued improvement to ecological measures. Domestic livestock programs implemented under Alternative C would weight relative values such as benefits to local communities and enhancement of objectives on surrounding forest land as equitable to monetary returns (provided that monetary returns were sufficient to cover operational costs).

Alternative D_1 is the only alternative where revenue generated through domestic livestock grazing are estimated to not only pay for annual operations but would be sufficient to cover the deferred and annual maintenance of infrastructure. Under Alternative D_1, forage is allocated in context with wildlife and the continued improvement to ecological measures. Where consistent with ecological goals and the needs of wildlife, the emphasis would be on economic returns. Relative benefits could be considered where they did not outweigh revenue concerns.

Alternatives C_2, and D_2 address the deferred maintenance needs of several ranch related facilities. Unlike Alternative D_1, D_2 could not be implemented with revenues generated from domestic livestock grazing. It is important to note that the deferred maintenance of both facilities and infrastructure represent a debt inherent with the acquisition of the Preserve. Facilities maintenance and improvements proposed under C_2 and D_2 are not connected or necessary to the implementation of livestock grazing or other programs. Either of these Alternatives could be selected with the caveat that implementation may or may not occur based on available funding or sufficient revenue generation.

None of the action alternatives would make more than minor contributions towards the Trust's goal for financial self-sufficiency. Federal overhead required to ensure compliance with laws and program oversight are not included in the financial assessment.

Findings and Decisions

The outcomes that could result from taking either no action or any of the alternative actions are presented in a detailed summery in the environmental consequences section. The Executive Director (ED) of the Trust, governed by the Board of Trustees is the Responsible Official who will make the implementing decision regarding MUSY-Forage. The ED will carefully review this analysis to determine if any of the alternatives would result in a significant effect to the environment or the way people interact with the environment, using the *No Action* alternative as the baseline for comparison. Comments received during the review period will be included to further inform decision-making. Based on the detailed summary provided in the EA and subsequent comments, the ED will either make a Finding of No Significant Impact (FONSI) and an implementing decision or, if no such finding can be made, decide to either terminate the action, modify the action, or to prepare an Environmental Impact Statement. To aid in their decision-making they may request additional information about any aspect of the proposed or alternative actions. Furthermore, the ED may decide to implement the alternatives in a phased approach, on a trial basis, or in a modified form.

As stated, comments received regarding this EA will be considered in decision-making. Comments may be submitted electronically to *comments@vallescaldera.gov*; type *MUSY-Forage* in the subject line. Comments may be sent via surface mail to P.O.B. 359, Jemez Springs, NM 87025. Comments may also be delivered in person to the administrative offices of the Trust located at 18161 State Highway 4, Jemez Springs, NM, during normal business hours: Monday – Friday; 8:00 AM – 4:30 PM (closed weekends and Federal holidays). Comments will be accepted through 4:30 PM MST, February 2, 2009.