

# Multiple Use and Sustained Yield Forage Resources

## ENVIRONMENTAL ANALYSIS UPDATE

PUBLIC MEETING OF THE BOARD OF TRUSTEES, MARCH 14, 2008

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### Environmental Analysis Update:

- *Multiple Use and Sustained Yield Act of 1960*
- *Purpose and Need*
- *Proposed Action*
- *Key Issues*
- *Alternatives*

## Multiple Use and Sustained Yield Act of 1960

The multiple use and sustained yield of the Preserve's resources is identified by Congress in the purpose for acquiring the Preserve and in the goals for its management. Congress clarified its use of the term as consistent with the Multiple Use and Sustained Yield Act of 1960. The act provides the following definitions for the terms "Multiple Use" and Sustained Yield"

(a) "*Multiple use*" means: *The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and condi-*

*tions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.*

(b) "*Sustained yield of the several products and services*" means *the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land.*"



*The Haglestein family—2007 livestock operators—photo courtesy of Lauren Clifton*

*The term "Multiple Use and Sustained Yield" accurately describes the intent and scope of the Proposed Stewardship Action (PSA), "Multiple Use and Sustained Yield of Forage Resources".*



*Besides extractive uses such as grazing, forage resources provide important habitat and ecosystem services and recreational values*



*Congress directed the continued management of the Preserve as a working ranch where consistent with other purposes.*

*Photo courtesy of Lauren Clifton*

## Purpose and Need—Statutory Purposes and Goals

The purpose and need for action is based on the Trust's enabling legislation; other applicable laws; the existing condition of the Preserve's resources, infrastructure, and facilities; and lessons learned from the implementation of the Interim Grazing Program.

Statutory purposes including:

*Establishing a demonstration area for an experimental management regime ...incorporate the elements of public and private administration in order to promote long term financial sustainability...*

*Provide for sustained yield management for timber production and domestic livestock grazing ...*

Management goals including:

*Continued management as a working ranch where consistent with:*

*The protection and preservation of natural, cultural, scientific, and recreational values...*

*The provision of public access, benefit to local communities and surrounding lands, optimization of income, and the multiple use and sustained yield of renewable resources.*

## Purpose and Need—Ecological Condition

Based on a synthesis of data collected since Federal acquisition, the overall ecological condition of the Preserve can best be described as "medium."

Factors affecting ecological condition include:

*Water quality measures that exceed the standard set by the New Mexico Environment Department.*

*Erosion; measurements of bare ground, litter and vegetation; species richness; ratios of grasses to forbs; and ratios of native to non-native grasses.*

*The condition and function of the streams and the diversity of aquatic life was also considered.*

There is good news - The ecological condition of the Preserve is improving!

Measurements taken from 2002 through 2006, synthesized at a sub-basin watershed level as well as at the levels of individual streams, indicate an upward trend in all measured values.

***Compared to the ideal—the ecological condition of the Preserve would receive a grade of 'C+'.***

***When compared to similar public and private lands, many would give the Preserve an 'A'***

## Purpose and Need - Forage Allocation & Infrastructure



*Fences perpendicular to streams lead to concentrated use by cattle and elk, causing erosion and sediment deposit into streams.*

Approximately 2000—3000 elk arrive on the Preserve as the snows melt in the spring and remain on the Preserve until winter snows force them off. They give birth, raise their calves, and breed—all the while grazing on the Preserve.

The lands suitable for grazing by elk overlap about 96% with the lands suitable for grazing by

livestock.

Any allocation of forage for livestock grazing or other use by the Trust needs to consider the Preserve's elk herd.

The existing system of fences is in disrepair, poorly constructed and/or located. The Trust needs an efficient, practical system of fences and infrastructure to manage pro-

grams for domestic livestock grazing and reduce threats to wildlife.



*Bull elk entangled in mesh wire fencing.*



## Proposed Action—Goals, Objectives, and Outcomes

### Ecological Goal

*The ecological condition of the Preserve would reflect the composition of landscape vegetation and disturbance attributes that, to the best of our collective expert knowledge, can sustain current native ecological systems and reduce future risk to native diversity.*

Ecological condition would be assessed at a sub-basin watershed level. These sub-basin units vary from 100's to 1000's of acres in size.

Progress towards goal attainment would be measured through a series of objectives that can be quantified and meaningfully evaluated in time and space.

The proposed objectives are based on the ecological sites represented on the Preserve.

The Trust would measure key attributes and monitor the change in these attributes over time.

Monitored outcomes are syn-

thesized every five years and presented in a current State of the Preserve.

For more information about the adoption of goals and adaptive management, visit our website, [www.valescaldera.gov](http://www.valescaldera.gov). Select *About Us, Reference Documents*. View

- *The Valles Caldera Preservation Act*
- *2007 State of the Preserve*
- *NEPA Procedures of the Valles Caldera Trust*

**A goal is both qualitative and quantifiable, but is not quantified. Goals stretch and challenge us, but they are realistic and achievable**



*Other proposed uses of forage include the collection of grass seed and uses in support of science and education*

## Proposed Action - Forage Allocation and Use

The Trust is proposing to allocate forage within the Preserve to support elk and other herbivores, to preserve and protect ecosystem processes, to sustain faunal habitats, and for use by the Trust to support domestic livestock grazing or other commercial uses; as well as scientific, education, or other public uses.

This allocation would be based on the best available science,

and on accepted standards for estimating the quality and quantity of forage emphasizing the use of field sampled or otherwise measured values. This allocation should vary in time and space considering variations in ecological sites and climate inherent in wildland environments.

Based on this allocation, the Trust is proposing to continue programs for domestic livestock grazing.

Trust is proposing to operate programs that contribute to the long term financial self-sufficiency of the Trust.

Where practicable the Trust will consider programs that benefit local producers and enhance the management objectives on surrounding National Forest System (NFS) Lands while seeking to optimize the generation of income.

## Proposed Action—Infrastructure Management

The Trust is proposing to manage the existing ranch infrastructure by removing, replacing, repairing and maintaining fences to create an effect system of barriers to manage livestock and protect resources and wildlife.

The Trust is also proposing to improve access for pedestrians and equestrians by installing gates or using temporary fences at strategic locations.

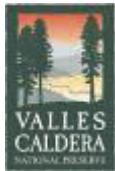
In addition, the Trust is proposing to repair, maintain, or reclaim earthen tanks as needed. Developed water on the Preserve would support the distribution of livestock and wildlife through strategically located, well maintained water sources. Repair and maintenance of larger tanks would be prioritized. The proposed improvements include lining of the spillways

and grading, widening, and leveling of the dams. Dams that have breaches in portions of the downstream berms would need additional repair. Silt may be removed from within ponds of some or all of the tanks and used as fill for repairing the spillways. Work at some or all of the tanks may involve earth removal and grading to improve the access to the tanks.



*The Trust has inventoried and assessed 136 earthen tanks on the Preserve. About 30% of these tanks are no longer functioning. Many cannot handle seasonal runoff and are causing resource damage.*

## VALLES CALDERA TRUST



AN EXPERIMENT IN  
PUBLIC LAND  
MANAGEMENT

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# Valles Caldera National Preserve



## Issues and Alternatives

The National Environmental Policy Act (NEPA) advises agencies to concentrate on the issues that are truly significant to the action in question.

Through public involvement, scientific and expert analysis, and information gleaned from managing the interim grazing program, one key issue has consistently surfaced—*Balancing the goals and purposes identified in the Valles Caldera Preservation Act.*

Specifically the goals to protect and preserve the Preserve's resources and values; benefit local communities; enhance the objectives on surrounding National Forest System land; optimize income generation;

as well as balancing elements of public and private administration.

The attainment of one goal is not mutually exclusive of the attainment of any other. However, *optimizing* the attainment of one goal can affect the level at which other goals are attained.

The Trust is considering alternatives that vary in allocation and proposed uses of forage. The analysis will look comparatively at the level and timing of goal attainment.

This approach complies with direction in NEPA to study, develop and describe alternative courses of action to address unresolved conflicts concerning alternative uses of resources.

### Get Involved!

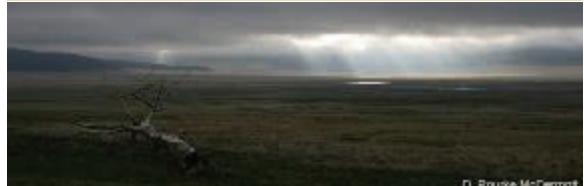
Visit our website at [www.valescaldera.gov](http://www.valescaldera.gov).

Select *Get Involved, Stewardship, Proposals* to view current planning documents.

Select *Get Involved, Public Meetings, Planning Meetings* to view scheduled meetings.

Select *About Us, Reference Documents* to view a variety of reference material about the Preserve and Trust.

To have information mailed, call us at 505-661-3333; or email us at [info@valescaldera.gov](mailto:info@valescaldera.gov)



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