

PROGRAMS AND GOALS

Potential uses of the preserve and things we might do

In this chapter we do not intend to present a blueprint for future management of the preserve. Rather, we suggest the range of activities the trust will consider undertaking in the next five or so years and identify key questions and issues that the trust will need to analyze as it develops specific programs. No program will be implemented except in conformity with the trust's StARS process, which is discussed in chapter 6. The list of questions and issues to be addressed in relation to each program area is by no means intended to be exhaustive. The trust explicitly invites readers of this draft to engage with this chapter and to forward to us their suggestions for additional questions and issues as well as their comments on the appropriateness of the range of programs we have identified. For ease of presentation and analysis, we divide our discussion of programs into three areas: landscape stewardship, public uses, and supporting

infrastructure. Even so, we acknowledge that every system of division is imperfect and that strong relationships may exist between subjects that are presented under separate categories.

The programs and goals of the trust will be directed toward achieving realization of the vision described in chapter 8. In general, the implementation of programs will be staggered, with no more than a few programs initiated in a given season. Two benefits will accrue from this sequential phasing in of activities: the trust hopes to avoid stretching its management capability too thin and thus compromising the quality of its work, and the trust also wishes to afford the public sufficient time to review and comment on each program or activity individually.

LANDSCAPE STEWARDSHIP

This program area encompasses all efforts to tend the vegetation, habitats, wildlife, waterways, and cultural

LANDSCAPE STEWARDSHIP GUIDELINES

- All significant management activities will be monitored and will proceed adaptively, utilizing the learning produced through monitoring and experimentation to adjust management toward better achievement of explicit goals.
- The learning generated through inventory, monitoring, and adaptive management should be widely and freely shared.
- A central goal of all management efforts shall be the achievement of the landscape vision.
- Another central goal shall be to contribute to soil and water conservation.
- Landscape stewardship at the VCNP should not be bound by existing approaches but where necessary should pursue goals based on fresh thinking and innovation.
- Landscape stewardship activities will be fiscally prudent and financially accountable and shall where possible generate income for the trust—but not at the risk of impairing ecological systems.
- Where landscape stewardship involves transboundary issues or dynamics, the trust will work in partnership with its neighbors.
- Managers will acknowledge that they “nudge” natural systems more than they “manage” them. Accordingly, management efforts will encourage the operation of natural processes to achieve the landscape vision.

resources of the preserve. In order to guide its activities in this area, the VCT has articulated a set of guidelines for the development of visitor activities. These guidelines are consistent with the trust’s management principles, and they will serve as criteria for evaluating proposals for landscape stewardship using the StARS process described in chapter 6. The landscape stewardship guidelines are set forth in the accompanying sidebar.

Forests

Key goals in the management of forests include reducing vulnerability to stand-replacing fires in many ponderosa pine and some mixed-conifer stands, restoration of natural fire regimes, aspen regeneration, and protection and restoration of old-growth stands. Eventually the trust hopes to harvest reasonable amounts of sawtimber on a sustainable basis and thereby to generate income.

Sample questions and issues:

- Appropriate prescriptions for thinning and other restoration treatments tend to be highly site-specific, and implementing them tends to be costly. What criteria should drive priorities for restoration work?
- How can the high costs of forest restoration be paid for? Are markets available for the output of restoration projects? Can the sale of thinned material help finance the projects?
- What combination of prescribed fire and mechanical thinning of forests will be ecologically, economically, and socially appropriate?
- At present the trust is aware of no reliably successful and affordable strategy for ensuring aspen regeneration in an environment subject to heavy browsing by elk. What strategies might the trust develop?

Grasslands

The grasslands of the Valles Caldera are a valuable renewable resource that must be managed to maintain the health of the grasses to feed both cattle and wildlife populations on the preserve. Control and elimination of invasive weeds is also essential. Consideration must be given to loss of native bunchgrasses to sod-forming bluegrass. Careful management that balances the requirements of both cattle and wildlife populations should result in

an ecologically sustainable and economically viable grazing program.

Sample questions and issues:

- The trust has initiated field experiments to help it tease apart the respective contributions of elk and cattle to a range of grazing impacts. What additional research, if any, should be initiated?
- What factors besides ungulate grazing influence the outcome of competition between bunchgrasses and bluegrass?
- What are the impacts of tree encroachment on the preserve's grasslands?
- What types of livestock grazing systems should be initiated on the preserve?

Aquatic and Riparian Communities

Key goals for aquatic and riparian communities include attainment of high levels of water quality and restoration of stream health, including restoration of woody riparian vegetation where appropriate and improved stream channel morphology (i.e., deeper, narrower channels with more pools). These kinds of changes will result in improved trout habitat and enhance opportunities for fishing.

Sample questions and issues:

- Should the trust pursue reintroduction of native Rio Grande cutthroat trout? If so, what stream or streams should be the focus of a



reintroduction effort, and what techniques should be employed?

- The obstacles to restoring woody riparian species, chiefly willow and alder, are similar to those preventing aspen regeneration. What alternatives should the trust pursue?

Wildlife

A key wildlife management goal is to determine and then attain population levels of elk that do not impair the natural communities of the preserve. Additional goals include maintaining and enhancing the natural biodiversity of the preserve and improving the vigor of wildlife populations, such as mule

deer, that have declined below long-term historical levels.

Sample questions and issues:

- The trust needs to work closely with the New Mexico Department of Game and Fish to improve its understanding of the population dynamics of elk in the Jemez Mountains. What other partners should be involved in this effort? When is understanding sufficient for the development of new management initiatives? What would be an optimal size for the herds using the preserve? What would be acceptable?
- The trust intends to monitor key wildlife populations as indices of the health of the larger ecosystem.

What species should be considered key? Should the trust undertake active management with respect to any of them? How can the trust influence the environment to tip the odds of survival more in favor of mule deer?

Cultural Resources

Key goals for the management of cultural resources include maintaining constructive consultation with tribes that are culturally affiliated with the preserve in order to ensure protection of culturally significant sites and to provide the tribes with appropriate access to them. The trust will also strive to protect the preserve's archaeology

in compliance with the National Historic Preservation Act; to launch, in partnership with appropriate research institutions, a vigorous program of archaeological research; and to channel the understandings thus attained into the preserve's interpretive and educational programs. Additional goals in this area include protective maintenance and, in some cases, the renovation of historic structures and the development of a strong interpretive program in the cultural history of the caldera. This program should trace the historical contributions of the region's Hispanic and Pueblo people, as well as such industries as ranching, logging, and tourism.





The San Antonio cabin, built in 1948, overlooks San Antonio Creek.

Sample questions and issues:

- How can the trust provide extensive public access to the preserve while also safeguarding the integrity of archaeological sites that have yet to be evaluated and that might be damaged by casual surface collection?

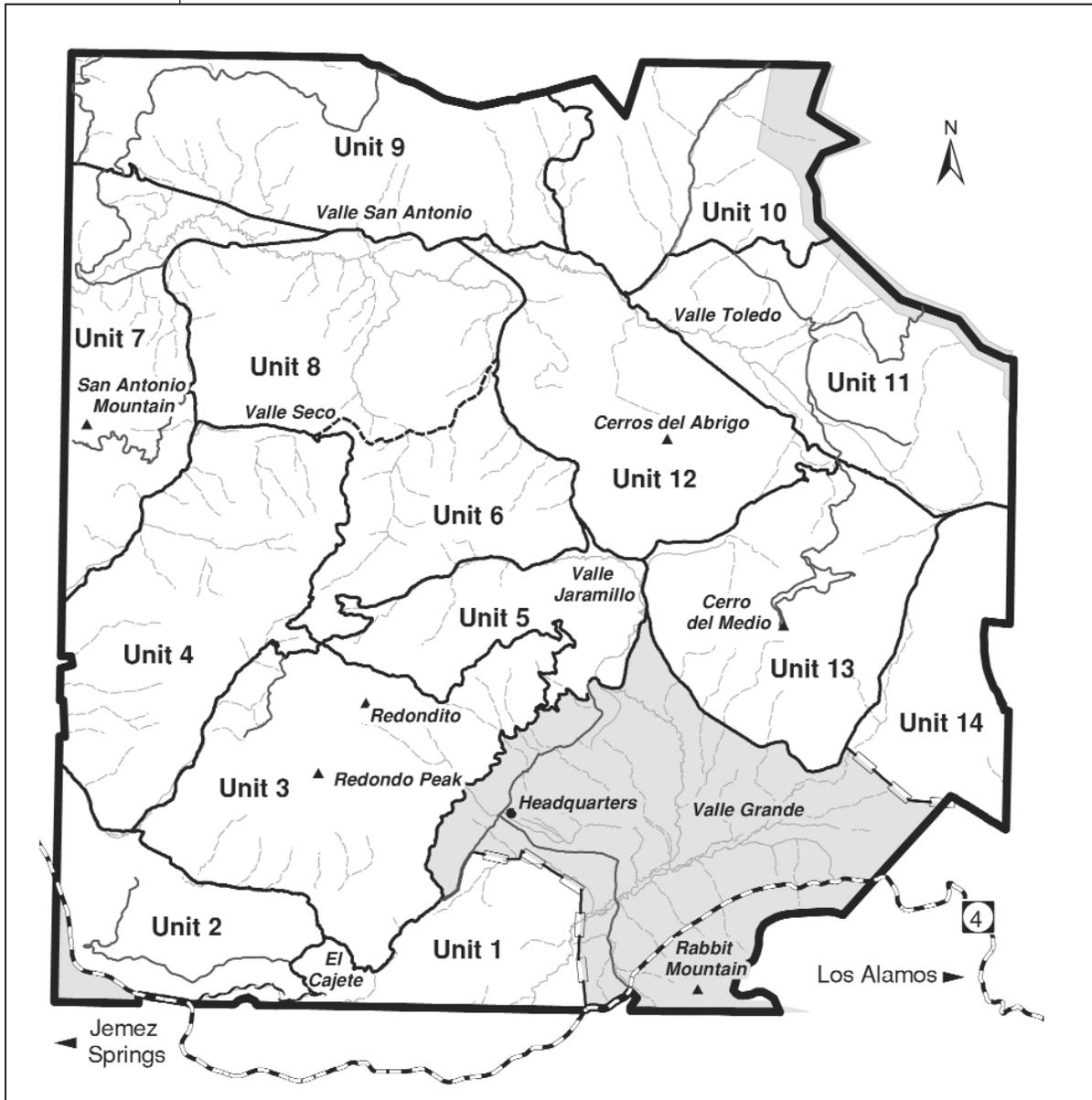
PUBLIC USES

In 2001, when the trust held a series of “listening sessions” in communities surrounding the preserve, many people spoke of having looked over the fence of the Baca Ranch for years, wishing they could enter the Valle Grande to hunt, camp, hike, and engage in the range of activities that this

extraordinary place can offer. They also spoke of the importance of protecting its special qualities through careful planning and achieving moderation in the level of activity that occurs at any one time. The trust heard these views loud and clear and shares them fully. It is committed to developing programs that provide a range of visitor activities in as timely a manner as possible. It is equally committed, however, to developing its programs incrementally, expanding them gradually, so that the quality of experience remains high and so that the capacity of the preserve to sustain the impacts of increasing numbers of people is not compromised.

VISITOR PROGRAM GUIDELINES

- The quality of the visitor experience is more important than the quantity. It may be important to limit the number of people so participants can experience the sense of expansiveness and quiet that the preserve can offer. Programs are to be initiated in a conservative fashion and phased in incrementally.
- Visitor activities must not result in serious or lasting impairment of natural systems.
- Individual activities should be planned with the entire range of preserve programs and responsibilities in mind in order to minimize conflict with landscape stewardship programs or other visitor activities.
- Visitor programs must provide income to the VCNP while including options that ensure cost accessibility to all.
- Activities must not conflict with religious and cultural priorities or uses.
- The trust will consider entering into partnerships to provide visitor opportunities, including cross-boundary activities and joint undertakings with private sector entities.
- The VCNP does not have to accommodate all possible uses of public lands, particularly when activities that might conflict with the trust's management principles may be pursued on adjacent or nearby public lands.
- The trust will offer flexible programs that can be adjusted in time and space. Restrictions may be applied to avoid conflict with episodic wildlife needs (e.g., elk calving, foraging of certain migrating raptors), weather conditions (e.g., presence or absence of winter snow), or preserve programs (e.g., elk hunts).
- The trust will consider "quiet times"—respite from all or most visitor disturbances.
- Impacts of visitor activities will be monitored and subsequently modified if needed. Monitoring will include both visitor satisfaction and landscape impacts.



2003 Elk Hunting Units



Hunting Unit Boundaries

- | | |
|-------------------|---------------------------------|
| ----- Closed Road | --- State Road 4 |
| ~~~~~ Drainage | — Open Roads (nonhunt boundary) |
| - - - Range Fence | — Preserve Boundary |
| — Road | - - - Stream, Intermittent |
| ■ Closed Areas | — Stream, Perennial |



With these imperatives in mind, the VCT has articulated a set of guidelines (see page 105) for the development of visitor activities, as it also did with respect to landscape stewardship. Once again, these guidelines are consistent with the trust's management principles, and they will serve as criteria for evaluating proposals for visitor activities using the StARS and NEPA procedures described in chapter 6.

The visitor activities the trust considers will include the program areas listed below. This list is not intended to be exhaustive, but it does include the visitor activities to which the highest priority attaches. Moreover, the trust acknowledges, as has been stated elsewhere in this

framework, that it need not and ought not attempt to accommodate all possible uses and activities within the VCNP. Rather, it should concentrate on accommodating those activities and uses that best harmonize with the special qualities of the preserve and with one another. Virtually without exception, the enthusiasts of activities the preserve does not accommodate will find that their pastime is permitted nearby on other public land. For this reason, as well as others, the preserve need not try to be all things to all people.

Elk Hunting and Viewing

A large elk population spends much of the year on the VCNP,

attracting visitors both for wildlife viewing and for hunting. Management of elk within the VCNP will strongly influence the abundance, vigor, distribution, and impacts of elk throughout the Jemez Mountains. The preserve's summer elk population has been estimated at approximately 4,500 animals, but actual numbers may vary substantially. Many animals that summer on the preserve move into the lower canyons and valleys when snow falls, sometimes congregating on private lands and damaging fences and consuming substantial amounts of forage. Hunting is an important source of income for the preserve, and in the absence of heavy natural predation in the Jemez Mountains, hunting is also an important tool for managing the size of the Jemez elk herd. The preserve's 2002 interim hunting program netted the trust approximately \$300,000 and yielded a high level of hunter success and satisfaction.

Sample questions and issues:

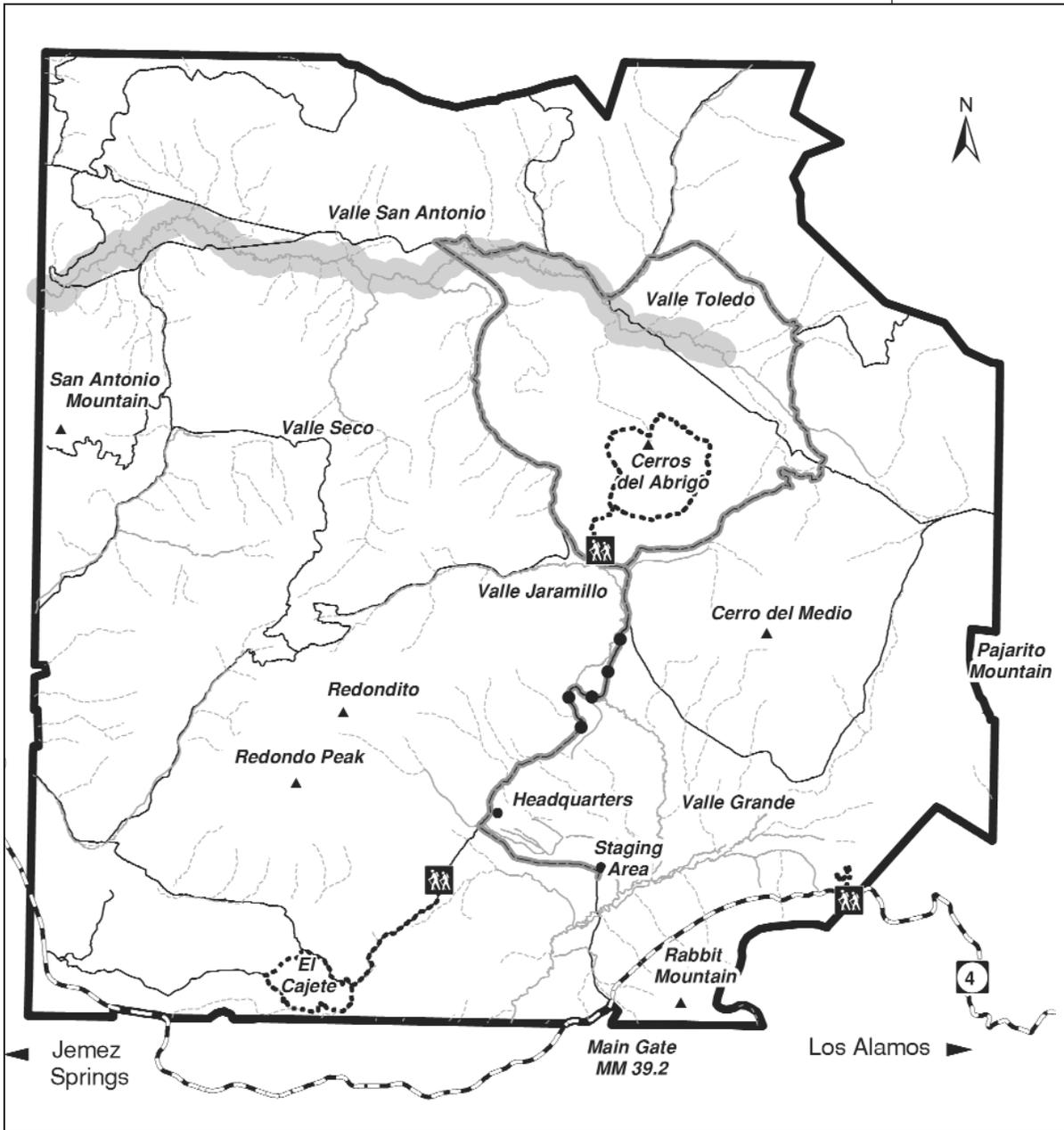
- How can elk be managed on the VCNP to maintain a healthy herd while minimizing adverse effects on the preserve's landscapes and those of its neighbors?
- How can a hunting program serve both local populations and a wider public while being at once profitable, affordable, and fair?
- What hunting strategies at the VCNP will best contribute to the

desired dispersal and distribution of elk through the winter months in the Jemez Mountains?

- What other autumn and winter activities can take place concurrently with elk hunting?
- What areas should be left un hunted? (In 2002 and 2003 no hunting took place in the Valle Grande or in the Rabbit Mountain area.)
- What measures will best enhance opportunities for viewing wildlife (especially elk) within the preserve?
- How should wildlife viewing activities be organized and managed?

Hiking and Camping

Hiking opportunities within the VCNP are in high demand, and the preserve has the potential to offer many possibilities for rewarding and enjoyable excursions. In developing the preserve's hiking program, the trust will need to consider the interests of the full range of likely visitors, from the very old to the very young, and all levels of physical ability. The design of the program should take into account the infrastructure (e.g., facilities serving recreational vehicles and other developed campgrounds) available on nearby lands, as well as the present lack of infrastructure within the preserve. A major concern associated with the trust's interim hiking programs has involved costs, either to the participants or the trust.



2003 Recreation Opportunities



- | | |
|---------------|----------------------|
| Fishing Area | Preserve Boundary |
| Hiking Trails | State Road 4 |
| Trailhead | Open Preserve Roads |
| Van Tour | Stream, Perennial |
| Wagon Ride | Stream, Intermittent |



Fishing clinic
participants,
September 2003.

Future programs should, at a minimum,

- Develop an array of activities and a permitting system that will accommodate the public's desire to access the preserve for hiking, touring, and other day uses;
- Develop a permitting system and use guidelines for short-term backpacking activities;
- Develop additional infrastructure that will accommodate additional capacity;
- Provide educational opportunities and offer interpretation to visitors.

Sample questions and issues:

- What is the correct balance between guided and unguided hikes?
- What infrastructure improvements—staging areas, trailheads, trails—are needed?
- How can protection be ensured for backcountry archaeological sites if lands are open for unguided hiking?
- How will the sites selected serve to enhance the visitor experience by offering good opportunities for interpretation of the preserve?
- How will hiking be approached in an interpretive master plan?
- What is a fair and appropriate fee schedule for hiking and camping activities?
- Should specific zones be designated for overnight camping? If so, where?

- What is the proper fit of mountain biking or of horseback riding in the mix of permitted activities?
- How should interest in use of nonmotorized trails (hiking, horseback riding, mountain biking) be integrated, separated, or cooperatively managed?
- Should the trust seek to develop a “rim trail” around the Valles Caldera in cooperation with managers of adjacent public lands?

Touring and Education

The VCNP is rich in possibilities for educational activities, including opportunities for “hands-on” learning in ecology, archaeology, geology, astronomy, livestock and ranch management, and other fields. To the extent its operational capacity permits, the trust will explore collaborations with schools, universities, and other prospective partners in developing educational programs. In addition, the trust’s interpretive programs might include subject-specific excursions focusing on wildlife observation, landscape photography, or archaeological site preservation, to name only three possibilities. Dark-night astronomy excursions are another activity that seems to have considerable appeal. VCNP educational programs might ultimately include summer resource camps for youth. The VCNP visitor facility, when

it is developed, will offer a range of educational and interpretive programs as well. The VCT’s ongoing research, inventory, and monitoring program will greatly enrich all of these programs with a steady harvest of new learning as well as field opportunities for participation in data collection and other functions.

Many people will likely first experience the preserve through guided tours. Tours may range from trips around a standard sight-seeing loop in multipassenger vehicles to natural and cultural history excursions following routes tailored to specific subject matter. Given the preserve’s potential for learning and inspiration, all programs and tours should take advantage of opportunities for research, reflection, and education.

Sample questions and issues:

- What assumptions might fairly be made about visitors who will be primarily interested in experiencing the preserve via guided tours? Via exhibits at a visitor facility? Via field schools? And so on.
- How can the trust best work with educational institutions, private contractors, and volunteers to develop a range of affordable educational programs?
- How can the preserve’s educational programming be integrated with ongoing inventory and monitoring efforts?