Scooter Peak Prescribed Fire Project

Proposed Stewardship Action

Scooter Peak Prescribed Fire

Background

On June 11, 2009, the Valles Caldera Trust (Trust) Board of Trustees authorized the Executive Director to collaborate with Bandelier National Monument (BNM) to plan and implement a prescribed fire in the northeastern portion of the Valles Caldera National Preserve (VCNP) adjoining BNM.

The proposed project is being planned consistent with the 2001 Federal Wildland Fire Management Policy, Bandelier National Monument's 2005 Fire Management Plan, and the Wildland Fire Management Policy of the Valles Caldera National Preserve (2005, Reviewed in 2008).

Purpose and Need

Increased tree densities and high fuel loading within Bandelier pose a threat to lands surrounding the monument. Prescribed fire is being proposed to reduce small diameter trees, ladder fuels, and dead and down fuel loading (hazardous fuels), while producing beneficial effects on ecosystems. Hazardous fuel reduction will also assist in the containment of wildfires, thereby protecting wildlife habitat and natural and cultural resources.

The proposed stewardship is being proposed to decrease risks to life, property, and natural and cultural resources and help to perpetuate the natural and cultural resource values for which the National Monument was established and which are identified for protection and preservation in the Valles Caldera Preservation Act.

Proposed Action

Managers of BNM and the VCNP are proposing to treat approximately 960 acres (730 on within BNM and 230 on the VCNP). The project Boundaries are along New Mexico State Road 4 (NM4), St. Peters Dome Road (FS 289), and a constructed hand line on the west boundary of the project area as shown in Figure 2.

The prescribed fire will be ignited using hand ignition[1] along the boundaries and aerial[2] ignition within the interior. Burning would occur over one or more days when

[1] "Hand ignition" refers to firefighters igniting fire in a controlled pattern using hand held ignition devices.
[2] "Aerial ignition" refers to the use of a helicopter which drops aerial ignition devices to ignite fire in a general pattern.

prescription[3] parameters are met. The parameters for this prescribed fire are likely to occur in the fall. Connected activities such as incidental mechanical thinning and line construction may occur prior to or during operations as necessary to: develop needed control lines, reduce fire intensities, secure the prescribed fire boundary, or extinguish any fire outside the control lines. Additional mechanical thinning may occur following prescribed burning activities to remove hazard trees or hazardous fuels created as a result of prescribed fire activities.

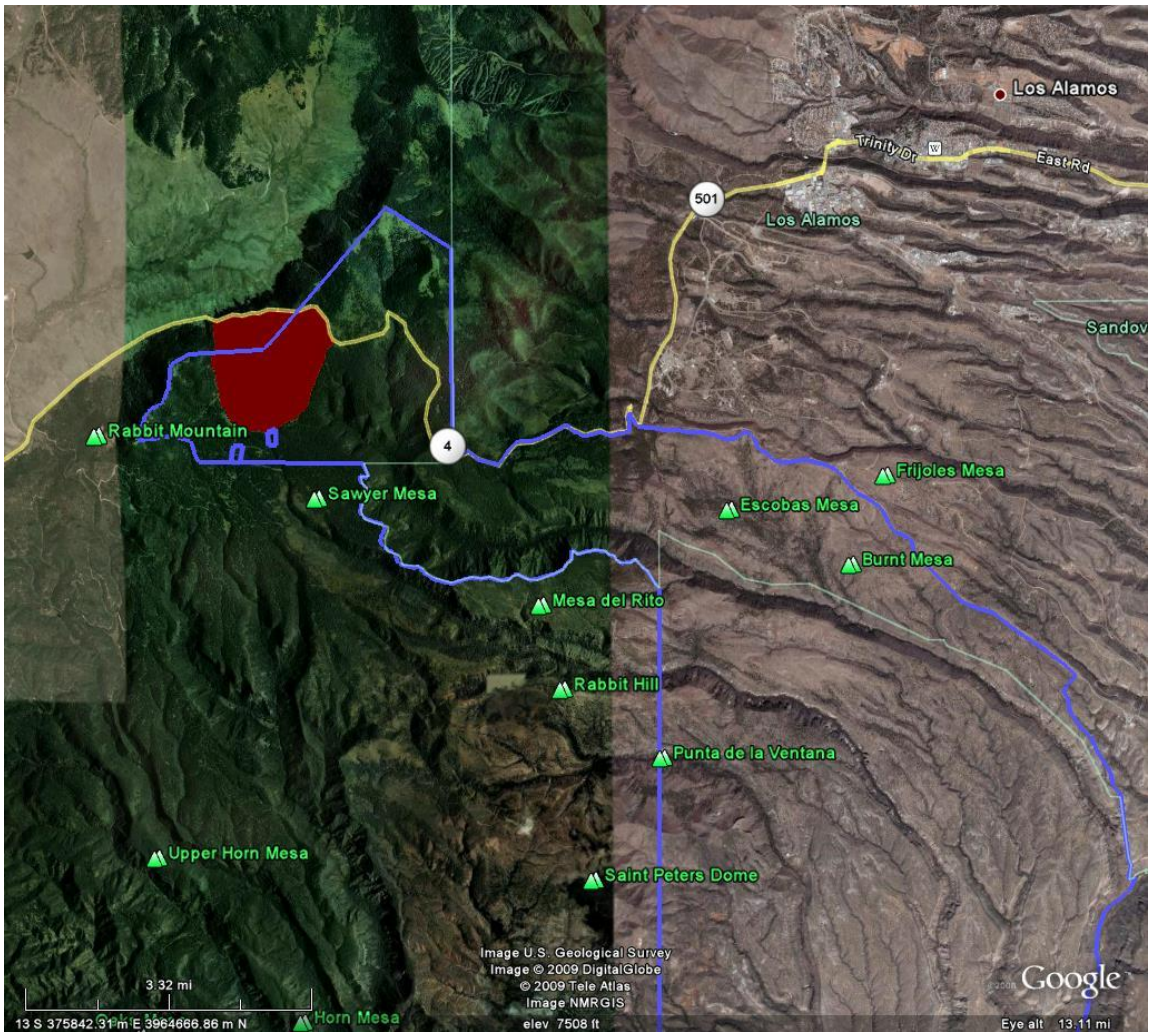

Figure 1 – Scooter Peak Vicinity Map (*provided by Bandelier National Monument)*

[3] "Prescription parameters" refers to the combination of temperature, humidity, wind speed, and live and dead fuel moisture content necessary to achieve and acceptable range of fire behavior and accomplish specific resource objectives using prescribed fire.

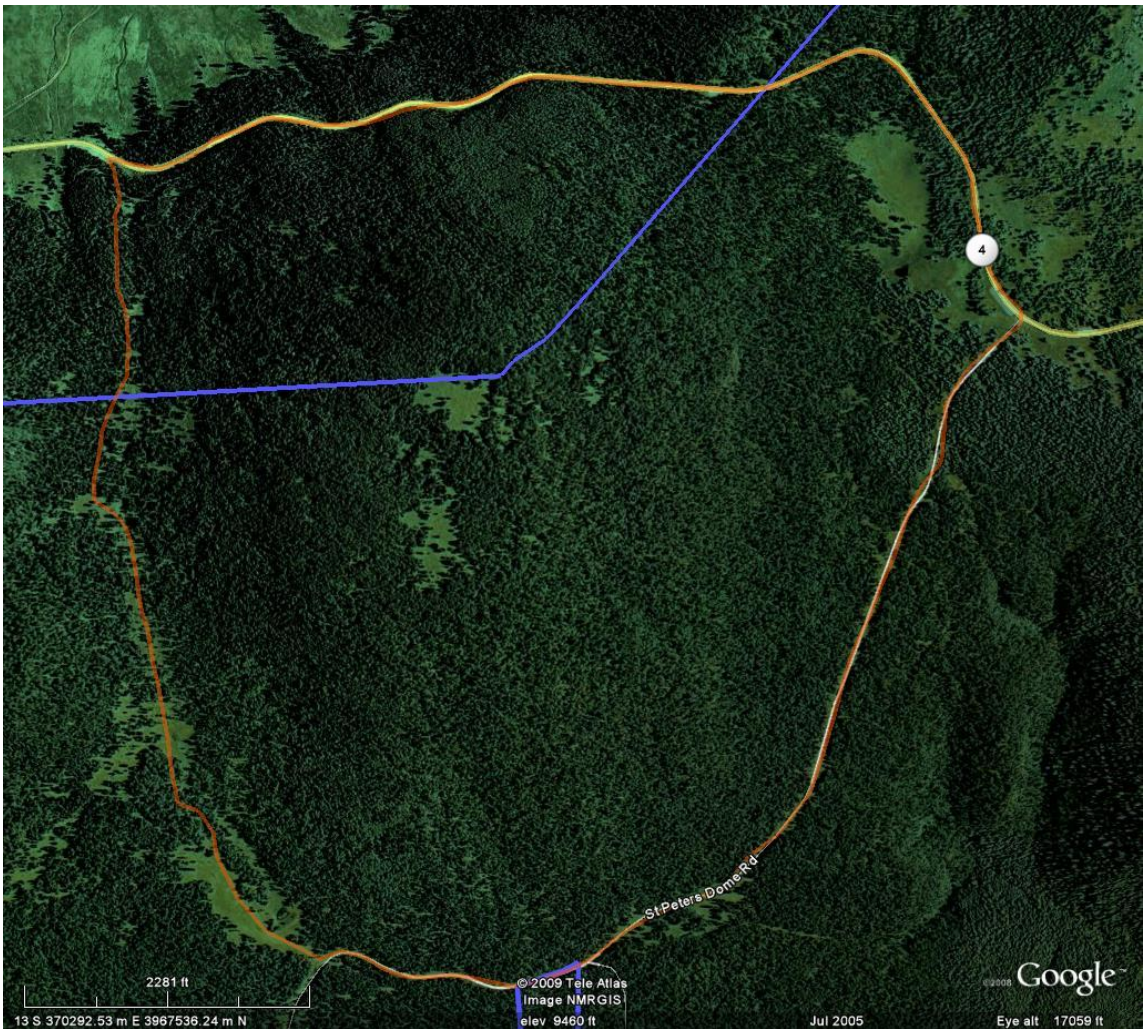

Figure 2 – Scooter Peak Project Area (*provided by Bandelier National Monument)*

Performance Requirements

Areas of concern identified in this burn plan include, but are not limited to, visitor and firefighter safety and smoke impacts to roadways. Management actions will be taken to mitigate the risk to visitors, resources, and developments. These mitigation's will include the timing and type of ignition methods used, line construction, water and foam use, and environmental conditions when fires are ignited.

In addition a thinning and pile project was conducted from NM 4 along Forest Road 289 to the Bandelier/Santa Fe National Forest boundary in 2005/2006. The reduced fuel loading due to the thinning and pile burning will reduce the fire intensity and duration along the unit boundary. There are existing trails and control lines within the project area which can be used to control the spread of the fire if resource objectives are not being met or environmental conditions change.

The following requirements will mitigate or eliminate any potential adverse effects that my result from the proposed activities.

❖ *Firefighter and Public Safety*

- Prescribed fire planning and implementation will be completed in compliance with interagency procedures for fire and aviation management and policies and procedures of the USDI National Park Service and the Valles Caldera Trust.
- All personal involved in prescribed fire planning and implementation will be fully qualified or serving as a trainee consistent with *NWCG PMS 310-1 Wildland Fire and Prescribed Fire Qualifications System Guide*.

❖ *Cultural Resources*

- Cultural resource inventories will be completed prior to project implementation.
- The Trust's Cultural Resource Clearance Process will be completed prior to implementation.
- Specific mitigations to protect cultural resources will include:
- Cultural resource sites will be clearly marked and identified for avoidance by any ground disturbing activities associated with the prescribed fire.
- Disclosure of site locations will be limited to the level necessary to ensure protection.
- Thinning by hand crews with chainsaws may be permitted within sites where materials can be removed by hand where such mechanical treatment is necessary for prescribed fire management.
- Other specific protections may be identified for site specific activities.
- Heavy fuels will be removed from sites prior to implementation when features may be vulnerable to the effects of fire.
- Wooden features will be protected from fire by the removal of fuels, construction of control lines, use of foam, water, shelters or other barriers, and or management of ignitions.

❖ *Soils*

- Equipment use will be limited during periods when soils are saturated and therefore vulnerable to damage or compaction for equipment.
- Prescriptions will be developed to reduce the likelihood of hydrophobic conditions to minor or localized levels.
- Prescriptions parameters will be developed to reduce the consumption of large down woody debris and organic material.

❖ *Wildlife*

- Roost trees for Merriam turkey will be protected from prescribed fire activities by the removal of fuels from the base of the trees and managing ignition patterns.
- Activities within mixed conifer habitat (40 percent slope, mixed conifer forest) would occur outside the breeding season for the Mexican spotted owl unless current surveys indicate that no owls are present.

- Prescription parameters will be developed to minimize consumption of large woody debris.
- Do not disrupt fractured rhyolitic rock outcrops, large woody debris piles, or large decomposing Douglas-fir logs during thinning activities.
- Protect the same habitat components (as above) from prescribed fire by managing ignitions, creating control lines or reducing fuel loading.

❖ *Air Quality*

- Follow New Mexico Environment Department Guidelines for managing prescribed fire.

Goals, Objectives, and Monitored Outcomes

The fire and resource management goals and objectives as identified in this plan will be evaluated through Bandelier's Fire Ecology Program. Pre and post burn monitoring of vegetation and fuels will be conducted to determine if goals and objectives are being met, or if additional research is needed. If unexpected trends are identified, the fire program will be re-evaluated and/or objectives will be revised. The Valles Caldera Trust will support the Bandelier's Fire Ecology Program in project monitoring and evaluation and may perform additional tasks. Information will be shared between the two agencies.

❖ *Goals*

Management goals for the VCNP were established through section 108 of the Valles Caldera Preservation Act and the adoption of management principles for the Trust. The Scooter Peak Prescribed Fire project is consistent with those management goals and directly supports goals for the protection and preservation of natural and cultural resources and values and collaboration with neighboring land managers.

Goals for Bandelier National Monument are identified in programmatic land management plans and project specific plans. Goals for this project are consistent with the management goals established for the preserve and include:

- Provide the means for staff and the public to protect, preserve, understand, and enjoy the natural and cultural resources of Bandelier National Monument and the Valles Caldera National Preserve through an integrated program where management activities support naturally functioning ecosystems consistent with cultural resource preservation needs.
- Educate, inform, consult, collaborate, and maintain cooperative fire planning with other land agencies, landowners, and local communities.
- Achieve ecologically sustainable vegetative conditions across broad vegetation communities by restoring a natural range of variability and bio-diversity that existed prior to 1880. These conditions for mixed conifer are described as Desired Future Conditions (DFC's) in Bandelier's 2005 FMP.
- Identify and mitigate hazards related to the WUI through coordination and collaboration with neighboring agencies and landowners over time and across boundaries

- ***Objectives***
  - Reduce the density of live and dead pole trees with a diameter at breast height (dbh) between 1 and 6 in. (2.5 - 15.0 cm) by 30-80 percent within 5 years post-burn.
  - Reduce the density live over-story trees with a dbh between 6 and 20 in. (15.1 - 49.9cm) to 30-60 percent within 5 years post-burn.
  - Limit mortality in live over-story trees with a dbh greater than 20 in. (49.9cm) to no more than 20 percent within 5 years post-burn.
  - Reduce small (less than 3 in. in diameter) dead and down branches and twigs and litter and duff (compacted needles, leaves and organics) by 30-80 percent immediately post-burn.
  - Reduce solid and rotten larger (greater than three in. diameter) branches and woody material by 30-60 percent immediately post-burn.
  - Increase understory cover and diversity by 10-30 percent over five years.
- ***Monitored Outcomes***
  - Tree mortality
  - Fuel reduction
  - Understory response (cover and species diversity)

Decision(s) to be Made

The Preserve Manager as governed by the Executive Director for the Valles Caldera Trust is the Responsible Official for the proposed stewardship action. The Preserve Manager will decide whether or not to use prescribed fire within the Scooter Peak Prescribed Fire area. The responsible official will review implementation plans including prescribed fire plans prior to implementation.

Scope of the Analysis

- Environmental Documentation:

  This action falls under a category of actions, which can normally be excluded from documentation in an Environmental Assessment (EA) or Environmental Impact Statement (EIS).