

Banco Bonito Fuels Reduction Project

April 07, 2010 Implementing Decision

Proposed Stewardship Action

Adjustment of 2003 VCNP Vegetation Management and Fuels Reduction Project.

Background

On August 8, 2003 the Valles Caldera Trust (Trust) decided to implement the VCNP Vegetation Management and Fuels Reduction Project.

This decision permitted thinning and removing trees under 16 in. diameter at breast height (dbh), with most trees ranging from 7-12 dbh. Inventories show an average of 750 trees per acre with 40 percent of the trees measuring from 5-8.9 in. and 40 percent measuring from 9-15.9 in. dbh. Seedlings, trees less than 5 in. dbh, account for 13 percent of the trees and only 7 percent of the trees measure greater than or equal to 16 in. Canopy cover generally exceeds 50%. Forests comprised of dense, small trees can more easily support a crown fire than open forests or forests of larger, taller trees. Smaller trees can be more easily ignited from a surface fire burning below them. When tree canopies are close or layered, fire can move from tree to tree, especially when the wind is blowing.

The project area is aligned to the west and southwest. This topography and alignment further contributes to the fire danger. The west and southwest exposure offer the fuels to longer exposure to heating and drying by the summer sun and direct alignment to the prevailing winds.

Thinning was adjacent to NM 4; north and south of the highway. Human caused fire occurrence along the corridor of NM 4 is quite high due to the amount of recreational use as well as the presence of several residential communities. Lightning caused fires are also frequent.

High fire occurrence, fuels, topography, and the alignment with wind and weather combine to create a high risk to crown fire or other fire behavior likely to exceed initial attack resource capabilities.

Besides the fire hazard, the current condition of the forest affects the ecosystem processes and services. The dense forest canopy intercepts snow and rain allowing the moisture to sublimate into the atmosphere; never reaching the forest floor, penetrating into the soil, or feeding the streams of the watershed.

Historic logging and the elimination of natural fire perpetuated this condition. Historic logging removed nearly all the large mature trees and scarified the land, encouraging tree seedlings to germinate and establish in the openings. Without fire the seedlings that germinated and established, survived in unprecedented numbers.

Proposed Action

The Trust is proposing to extend the project area from the current boundary south and west to the boundary of the preserve; treating an additional 185 acres. The proposed treatments within the extended area will remain the same. A variety of thinning prescriptions were used based on site specific tree data and all prescriptions returned satisfactory results. No modifications are recommended. A variety of equipment was used including chainsaws and bobcats outfitted with saw heads, Masticating equipment was used to thin trees and treat slash. All methods returned satisfactory results and any or all may continue to be used.

Monitored outcomes were the reduction of trees per acre, ladder fuels and surface fuels resulting in a decrease wildland fire hazard. Other monitoring has included the vegetative response, changes in soil chemistry, and use by Merriam's turkey. These monitoring activities are ongoing and will also incorporate effects from prescribed fire, which has not been implemented.

Purpose and Need

The purpose and need remain unchanged from the original project (Valles Caldera Trust, 2003):

Dense conifer stands have created fuel hazards along a heavily traveled road corridor and around the Headquarters area that is frequently used by visitors.

Due to past fire exclusion, small conifers are creating fuel ladders that could carry fire from the ground to the crowns of the mature trees.

Meadow encroachment by conifers is changing the ecosystem type and reducing the overall forage capability.

Thinning and removal of small diameter trees will create a more open stand that is resilient to disturbances, such as fire, insects, and disease.

Development of a defensible fuel profile zone provides a safe and effective point from which to fight fire.

In addition by extending the boundary prescribed burning activities can better utilize existing roads, natural barriers, and potential opportunities to collaborate with the Santa Fe National Forest to decrease costs and increase efficiencies.

Performance Requirements

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

❖ Cultural Resources

- Cultural resource inventories will be completed prior to any ground disturbance activities.
- The Trust's Cultural Resource Clearance Process will be completed prior to implementing any ground disturbing activities.
- Specific mitigations to protect cultural resources will include:

- Cultural resource sites will be clearly marked and identified to the contractor for avoidance.
 - 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.
 - Other specific protections may be identified for site specific activities.
 - Heavy fuels will be removed from sites prior to prescribed fire use 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**
- The use of tracked equipment will be limited to slopes less than 30%.
 - 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.
 - Prescription parameters will be developed to reduce the consumption of large down woody debris and organic material.
- ❖ **Wildlife**
- **Merriam turkey**
 - 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.
 - **Mexican spotted owl**
 - 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.
 - **Jemez Mountain salamander**
 - Prescription parameters will be developed to minimize consumption of large woody debris.
 - Fractured rhyolitic rock outcrops, large woody debris piles, or large decomposing Douglas-fir logs will be avoided during thinning activities.
 - The same habitat components (as above) will be protected 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.
- ❖ **Old Growth Characteristics**
- **Large and old trees**

- Thinning prescriptions will favor the retention large (>16”) and old ponderosa pine and Douglas-fir.
- **Large down logs and snags**
 - Large down logs and snags (standing dead trees) will be protected from prescribed fire by the management of ignitions, removal of fuel, or creating control lines.
- ❖ **Compliance**
 - The Trust’s interdisciplinary clearance process will be completed prior to implementation of individual activities.

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 Responsible Official will also select the appropriate contracting instrument to use in 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).
- ❖ Category for exclusion

101.6 (11) Treatment of forest structure and fuel conditions for the purpose of reducing the hazard of large, stand replacing crown fires in areas where such high severity fires are outside an historic range of variability. Projects under this category are limited to an aggregate area in the Preserve of no more than 640 acres in a calendar year, and may involve prescribed fire and/or the removal of live trees, the diameter of which will be:

 - (A) No larger than nine inches at breast height; or
 - (B) Determined by publicly available site-specific size class information used to define an appropriate diameter and basal area distribution of trees to be removed;

Implementing Decision

Based on a review of the proposed action, the monitored outcomes from implementation of the original project, public comments received during scoping, subsequent public and agency field trips, recent scoping conducted for the similar Redondo Canyon Forest Management Project and the information provided above it is my decision to extend the boundary of the VCNP Vegetation Management and Fuels reduction project. It is my determination that this project falls under the category (101.6, (11)) and is excluded from the preparation of an EIS or EA.

Signature

Dennis Trujillo, Preserve Manager

Date

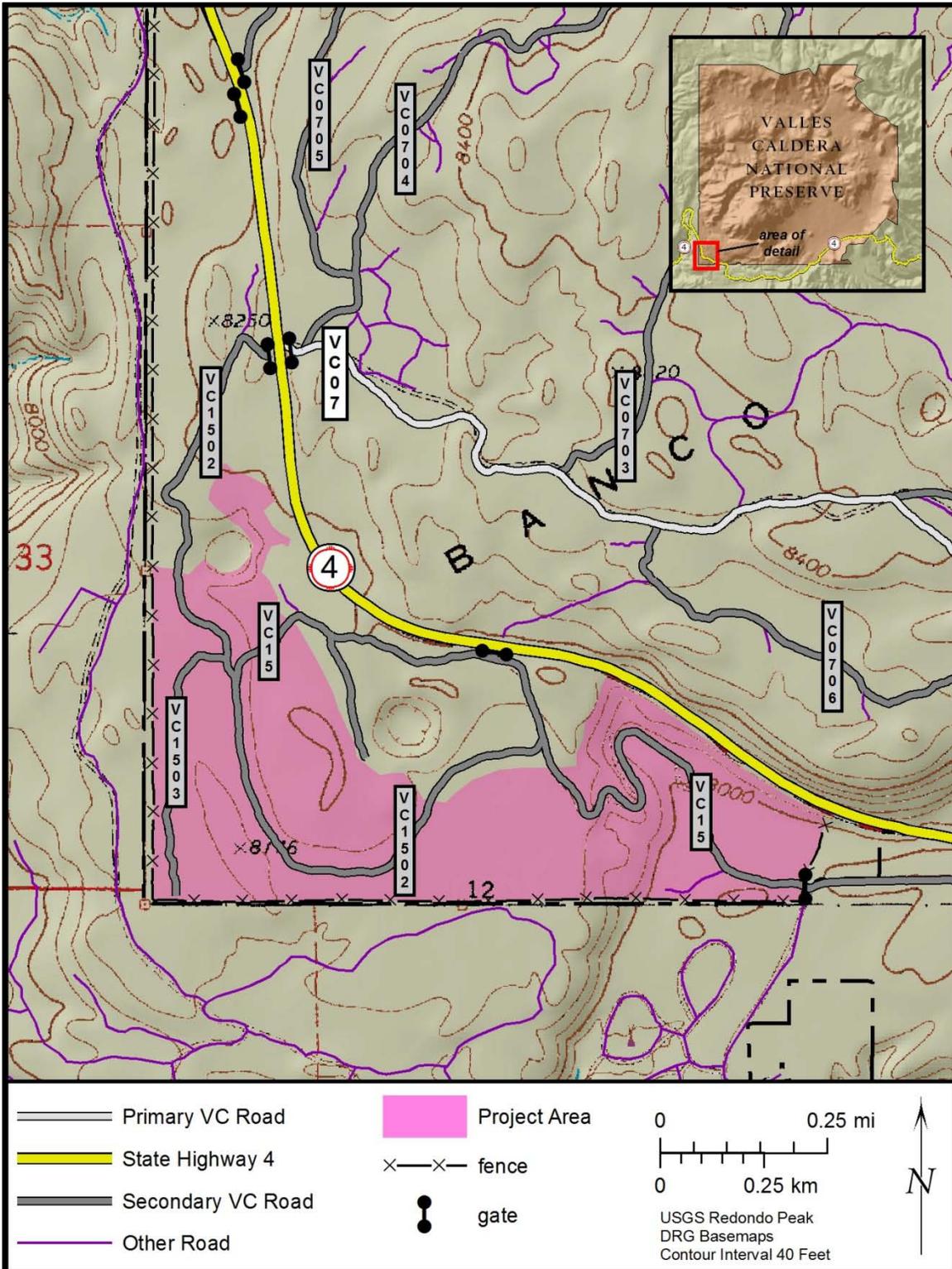


Figure 1 – VCNP Vegetation Management Boundary Extension