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Record of Decision and Finding of Nonsignificant Forest Plan Amendment for the Pinaleño Ecosystem Restoration Project

Coronado National Forest, Graham
County, Arizona



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Record of Decision and Finding of Nonsignificant Amendment

Introduction

The Pinaleño Ecosystem Restoration Project is designed to improve forest health and improve or protect red squirrel habitat. It also includes administrative actions to incorporate amendments to the “Coronado National Forest Land and Resource Management Plan” (referred to as the “forest plan”), which will allow on-the-ground treatments to be implemented. An environmental impact statement (EIS) was developed to analyze the potential effects of the Pinaleño Ecosystem Restoration Project. Three alternatives were considered and analyzed. The EIS was finalized in March of 2010 and made available to the public on April 28, 2010, on the Coronado National Forest Web site. This record of decision documents the alternative I have selected and the rationale for my decision.

Background of the Project

The Pinaleño Ecosystem Restoration Project area is approximately 5,754 acres located in Graham County, in Townships 8 and 9 South, Ranges 23 and 24 East (figure 1). The project area is in the Pinaleño Ecosystem Management Area and contains lands that fall within Management Area 2 (dispersed recreation, mixed-conifer), Management Area 2a (wilderness values, enhanced wildlife), and Management Area 8 (research) of the Coronado forest plan. The forest plan states that management for the Mount Graham red squirrel (*Tamiasciurus hudsonicus grahamensis*) is a primary objective. This direction is reinforced in the “Record of Decision for Amendment of Forest Plans, Arizona and New Mexico” (USDA Forest Service 1996).

The project area lies within the Pinaleño Mountains, a massive mountain range of over 300 square miles. Rising from the surrounding semidesert grasslands to the forest’s only subalpine forest, the mountain range includes the highest cross section of ecological communities found in the Southwest. It is home to numerous endemic or rare wildlife and plant species including the endangered Mount Graham red squirrel and the threatened Mexican spotted owl (*Strix occidentalis lucida*).

Its highest point, 10,720-foot Mount Graham (known by local tribes as *Dził Nchaa Si’an*), has been formally recognized, along with the entire Pinaleño Ecosystem Management Area, as a traditional cultural property important to the Western Apache and has been determined eligible for listing on the National Register of Historic Places. Many other residents of southeastern Arizona also consider Mount Graham a special place, often retreating to the mountain for relief from summer heat. Because of this, the Forest Service has principally managed the mountain for its recreational and scenic values.

Active fire suppression and other factors in the Pinaleño Mountains over the past 100 years have drastically reduced the role of natural fire, causing the forests there to become dense and filled with dead and down trees. These conditions have led to a high potential for severe wildfires. In 1996 and 2004, large wildfires burned with active crown-consuming fire, which reduced red squirrel population numbers directly by killing some of them, and indirectly by burning through their habitat.

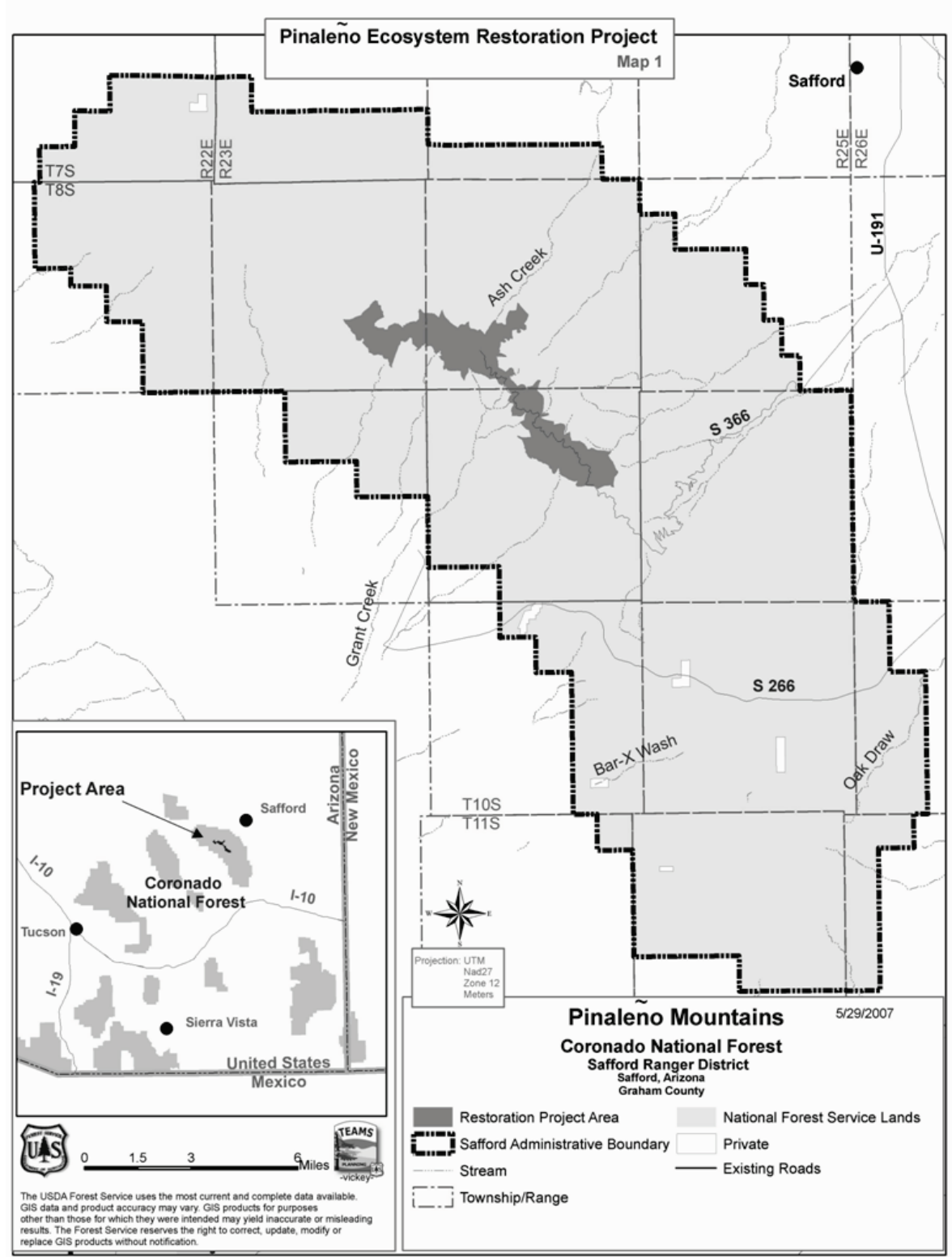


Figure 1. Location of the Pinaleno Ecosystem Restoration Project

Progressive insect infestations, beginning in 1996, began defoliating and killing trees in the spruce-fir and mixed-conifer forests. The dead and dying trees resulting from these outbreaks has resulted in increased wildfire potential and a further decline in the red squirrel population through habitat loss and decreased cone crops. Census estimates of the red squirrel population dropped dramatically in the late 1990s, and have not recovered to pre-insect infestation levels since. Viability of the subspecies is of paramount concern. The moist mixed-conifer forest is now the primary remaining habitat for the red squirrel. Fires and insect infestation effects have heightened the current concern for protecting remaining red squirrel habitat, and raised the need for restoring degraded habitat.

In response to these conditions, the Forest Service has worked closely with the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service in an interdisciplinary team of resource professionals to develop the Pinaleño Ecosystem Restoration Project.

My Decision

This record of decision documents my decision and rationale for the selection of Alternative 2 but with modifications as described on the next page. It also documents my finding that the proposed amendments to the forest plan are not significant (see finding on page 15 of this document).

Alternative 2 is described in the FEIS between pages 17 and 32. My decision includes the associated transportation system, the design features and mitigation measures (FEIS, appendix A), forest plan amendments (FEIS chapter 2, p. 36), and monitoring (FEIS, appendix B) as described in the FEIS. My conclusion is based on a thorough review of the final environmental impact statement, public comments, and the project record. I considered relevant scientific information, public concerns and opposing viewpoints, incomplete or unavailable information, scientific uncertainty, and risk.

On a landscape scale, the project works toward the goal of reducing the risk of and increasing the resistance to wide-scale disturbance events from wildfire, insects, and disease. However, this project is primarily designed to protect and improve the long-term sustainability of the habitat for the endangered Mount Graham red squirrel. This project will be accomplished over a 10-year period, following an implementation schedule that will prioritize treatments to most directly protect occupied red squirrel habitat and provide for quick monitoring feedback on potential effects to Mount Graham red squirrels and their habitat.

As directed by the Coronado forest plan, project design prioritized the policy requirements of an endangered endemic subspecies, the Mount Graham red squirrel, over those of a wider ranging threatened subspecies, the Mexican spotted owl, and prioritized both over the policy requirements of the northern goshawk (*Accipiter gentilis*), a Forest Service sensitive species, and the policy requirements of old growth forests. Two strategies were developed to reduce potential fire behavior and to initiate a restoration process for improving forest resilience to bark beetle disturbance. Both would lessen threats to habitat while insuring only low levels of potentially harmful direct impacts to the two listed species, balancing long-term benefits with short-term impacts. The selected strategy, Alternative 2, closely adheres to the recovery plan for the Mount Graham red squirrel and the best available science concerning the squirrel.

A second action alternative, Alternative 3, attempted to strictly apply the Mexican spotted owl standards and guidelines while also attempting to meet needs of the Mount Graham red squirrel.

Red squirrels and spotted owls require similar old growth conditions as part of their habitat requirements; however, there were inherent conflicts in Alternative 3 treatment priorities. See page 11 for a detailed explanation.

In selecting and modifying Alternative 2, I carefully reviewed disclosures in chapter 3 of the FEIS regarding how well the alternative will achieve our objectives. Notable conclusions include:

- Alternative 2 will treat the most acres (2,641) with the overlap of activities (such as thinning, prescribed fire, and other fuel reduction treatments) providing the most reduced potential for stand-replacing wildfire (FEIS, p. 46), which is the primary threat to the Mount Graham red squirrel.
- Alternative 2 will increase the amount of area that supports surface fire rather than active and passive crown fires with flame lengths that exceed those that can be fought with direct attack (FEIS, p. 108).
- Alternative 2 will thin trees under a forest restoration prescription across the most acreage (1,722 acres), applying variable density thinning, thinning from below, and group selection treatments. Compared to the other alternatives, this alternative will produce the largest and most long-standing effects reducing insect and disease susceptibility and increasing tree growth and vigor, while retaining greater structural diversity and providing for long-term sustainability of the ecosystem (FEIS, p. 73).
- Alternative 2 will treat additional acres (849 acres) under an important wildlife treatment prescription by applying variable density thinning, thinning from below, and group selection treatments to only the smaller diameter trees and snags (maximum 9-inch-diameter limit), and retain higher overstory stocking levels (more trees per acre) within forest stands within the most important wildlife areas including Mexican spotted owl core areas (166 acres).
- Effects to existing and potential Mount Graham red squirrel habitat are similar in both Alternatives 2 and 3. However, Alternative 2 will increase tree growth and vigor to a greater extent on the most acreage resulting in moving more stands closer to old-growth characteristics preferred by the Mount Graham red squirrel, producing larger and more frequent cone crops, and creating the potential to provide more habitat to the species over the long term (FEIS pp. 101-107).
- The application of prescribed fire, lop and scatter, pile and burning, mastication and small-diameter thinning, will maintain or enhance fire-dependent ecosystems (2,641 acres).

Modification of Alternative 2

Modifications Resulting from Inventoried Roadless Area Direction

Upon completion of the FEIS, the forest recognized that a 308-acre portion of the treatments in Alternative 2 were located within the Pinaleno Inventoried Roadless Area. Although this is only 0.23 percent of the roadless area acres, and treatment within this area either met or could be modified to meet our inventoried roadless area guidelines, the forest failed to inform the public of the status of this land through the NEPA scoping process. Because of this failure, I have elected to drop these acres from the proposal. The inventoried roadless area treatment units dropped from the project are listed in appendix A.

Project Modifications Resulting from the Endangered Species Act (Section 7) Consultation Process

During the Endangered Species Act Section 7 consultation process with the U.S. Fish and Wildlife Service (USFWS), treatment modifications and additional design features were developed in order to reduce the level of incidental take issued by the USFWS. These modifications are all related to Mexican spotted owl conservation. Changes were made to the project that will reduce potential impacts to six of the Mexican spotted owl protected activity centers in the project area.

In some cases, our changes involved small modifications to treatment unit boundaries to completely avoid entry into a protected activity center. In other protected activity centers, we dropped some units near core nesting or roosting sites from the project. I have also decided to defer a decision at this time on an entire implementation subdivision, Clark Peak, because of potential impacts to two protected activity centers. The forest may reinitiate consultation at a later time on this unit after initial monitoring results are reviewed.

An additional projectwide design feature was added that restricts all project treatment actions to the nonbreeding season of the Mexican spotted owl. Only monitoring and project preparation activities will occur between March 1 and August 31 each year.

Changes to Alternative 2 are listed in appendix B and summarized below. A final project map is attached at the end of this document.

- **Moonshine protected activity center** – 3.5 acres of treatments were dropped in the Grant Creek implementation unit removing all potential impacts to this protected activity center.
- **Riggs Lake and Nuttall protected activity centers** – 602 acres in the Clark Peak implementation unit and 42 acres in the Lefthand implementation unit were deferred or removed, removing all impacts to these protected activity centers; this also will reduce impacts to the Chesley and Lefthand protected activity centers.
- **Chesley protected activity center** – an additional 11.5 acres of treatments were dropped that were too close to core nesting and roosting areas, no treatments will now occur south of Swift Trail within this protected activity center.
- **Webb Peak protected activity center** – 109.1 acres were removed from treatment in the Columbine implementation unit that were too close to core nesting and roosting areas; no treatments will now occur south of Swift Trail within this protected activity center.
- **Grant Vista protected activity center** – 44.5 acres were removed from treatments in the Bible Camp and Columbine implementation units, reducing potential impacts to this protected activity center.

In total, 644 acres of treatments have been deferred from a decision at this time and an additional 168.6 acres of treatments have been removed from the project.