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Slapjack Project

Final Environmental Impact Statement

Record of Decision

Plumas National Forest
Feather River Ranger District

Butte and Yuba Counties, California

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Introduction

A Final Environmental Impact Statement (FEIS) disclosing the effects of a no-action alternative and six action alternatives has been completed for the Slapjack Project. This Record of Decision documents the decision of Forest Supervisor, James M. Peña, to select an alternative for implementation. The FEIS is available for public review at the Feather River Ranger District of the Plumas National Forest, 875 Mitchell Avenue, Oroville, California, 95965. A copy can be obtained by contacting Susan Joyce at the Feather River Ranger District, or by phone at 530-534-6500.

Purpose and Need

The Slapjack Project area is located within the Feather River Ranger District of the Plumas National Forest in Butte and Yuba Counties, California. The project area includes approximately 34,725 acres of public and private land generally situated between Lake Oroville to Dobbins on the west; the North Yuba River to Wambo Bar on the east; and from Barton Hill to the town of Feather Falls to the north.

The rural communities of Brownsville, Challenge, Clipper Mills, Dobbins, Feather Falls, Forbestown, and Strawberry Valley are all in or near the Slapjack Project area. All seven communities have been identified as being at risk from wildland fire in the Community Wildfire Protection Plans for Butte and Yuba Counties.

Forest stands in the Slapjack Project area are crowded with brush that has become increasingly flammable with age. Numbers of shade-tolerant species such as incense-cedar, white fir, tanoak have increased while shade-intolerant, fire-adapted species such as ponderosa and sugar pines have decreased. Many areas are overstocked and, as a result, susceptible to disease and insect attack. Botanical surveys indicate the presence of noxious weed infestations in the project area, including the highly flammable Scotch, French, and Spanish brooms. These conditions make watersheds in the area vulnerable to the damaging effects of a high-intensity, stand-replacing wildfire.

Logging activities, mining, roads, wildfires, urban development, and hydroelectric facilities have greatly modified overall watershed condition in and near the project area. Poorly maintained or improperly designed or located roads and stream crossings have led to the erosion of several stream channels, degrading both water quality and aquatic habitat. Meadow habitat is being lost as a result of conifer encroachment, poorly located roads, and changes to hydrologic functions. Several poorly designed or maintained culverts in the project area have created barriers for aquatic-dependent species such as rainbow trout. Understory vegetation on approximately 180 acres of habitat for the California spotted owl is too dense, making it difficult for owls to hunt and capture prey.

The need for the Slapjack Project is based on the current condition of resources summarized above. The Forest Service developed the five objectives listed below as a method of categorizing the current condition of resources and resolving the various needs for action:

- Protect rural communities in the Wildland Urban Interface from the risk of a high-intensity wildfire;
- Move the forest landscape toward the desired future condition of a healthy, fire-resilient ecosystem;
- Provide an adequate timber supply that contributes to the economic stability of rural communities;

- Implement restoration projects to achieve healthy aquatic and riparian ecosystems and improve wildlife habitat through prescribed burning; and
- Control the spread of noxious weeds as part of an Integrated Pest Management (IPM) program to maintain native plant diversity, natural communities, and Defensible Fuel Profile Zone (DFPZ) effectiveness.

Decision and Reasons for the Decision

Based on the analysis in the Final Environmental Impact Statement (FEIS) and the associated planning record, **I have decided to implement alternative D with the following modification:**

- In Unit 129, only non-chemical control tactics such as hand pulling and weed wrenches will be used to control the existing infestation of Scotch broom. The herbicide triclopyr will not be used to control the one acre infestation of Scotch broom in this unit.

My decision is based on my review and careful consideration of the environmental analysis, public comments, and new information and analysis brought forward in the FEIS. The Selected Alternative (Modified Alternative D) will provide site specific, on-the-ground actions to reduce wildfire risk to firefighters and communities, timber products and jobs to locally dependent communities, and improve long-term ecosystem health.

My decision will result in the construction of approximately 4,419 acres of fuel breaks known as Defensible Fuel Profile Zones (DFPZs) by treating surface, ladder, and canopy fuels using prescribed burning, mastication, and mechanical harvest; harvest of 219 acres of timber using group selection and 148 acres using individual tree selection silvicultural methods.

The Selected Alternative will also implement improvements to the transportation system and provide the access needed to complete the fuel treatments, group selection, and individual tree selection. Additional actions include restoration of riparian and aquatic habitats, and habitat enhancement through prescribed burning on 180 acres of spotted owl habitat.

As part of my decision, herbicides will be used as part of an Integrated Pest Management (IPM) strategy to control noxious weeds on a maximum of 30 acres in units 25, 30, 38, 41, 74, 75, 77, 78, 159, 184, 229, 329, 429, 991, 29n, and 29s (figure A-4 in appendix A and table B-4 in appendix B of the FEIS). In these 16 units, the herbicide triclopyr will be used to control broom seedlings in combination with non-chemical control tactics. Qualified herbicide applicators will apply the herbicide with a backpack sprayer directly to broom seedlings to minimize damage to surrounding vegetation and drift. Based on the analysis in the FEIS, I believe this to be the most effective means of controlling and reducing the populations of these aggressive weeds.

The Selected Alternative does not include specific treatments for the future maintenance of DFPZs. Decisions regarding long-term DFPZ maintenance—including the specific treatments to be used (such as herbicides)—will be made when the time for maintenance of the natural stands is reached (approximately 10–20 years after initial treatment).

All practicable means to avoid or minimize environmental harm have been adopted in the design of the Selected Alternative. I have included all of the project design features and mitigation measures that I believe are necessary to avoid, minimize, or rectify impacts on affected resources resulting from implementation of the Selected Alternative. Design features and mitigation measures for the Selected Alternative will be implemented as described in chapter 2 and appendix F of the FEIS.

My decision also includes the monitoring activities described in appendix F of the FEIS for rare plants; conifer seedling survival; noxious weeds; soil and water quality; threatened, endangered, or sensitive wildlife species; air quality; and heritage resources. Monitoring for the Slapjack Project will help determine the success of project activities and provide information useful for future adaptive management. In addition, programmatic HFQLG monitoring will occur at the same time as project-specific monitoring (HFQLG final EIS 1999). Since the main HFQLG monitoring sites are determined randomly, it is not yet known how many of these sites would be within the Slapjack Project area.

Rationale for Decision

Protect Communities from Wildfire. My decision will implement a combination of the most effective strategies for reducing crown fire occurrence and severity: 1) reduction of surface fuels, 2) increase height to live crown ratio (canopy base height), and 3) reduction of the continuity or density of the forest canopy (Graham, McCaffrey, and Jain 2004; Peterson et al. 2005).

The Selected Alternative will reduce the likelihood that a crown fire entering a DFPZ will continue to spread as a crown fire through the DFPZ. Fuel load and depth are significant fuel properties for predicting a fire's rate of spread and intensity. My decision will reduce fuel loading by more than 57 percent across all units, while canopy base height in most units will increase from 1 to 3 feet to over 19 feet by reducing surface and ladder fuels. Together, the reduction in fuel loading and increase in canopy base height will decrease the likelihood that surface fires develop into crown fires. Increasing canopy separation (crown spacing) to approximately 40 percent—combined with the increase in canopy base heights—will cause crown fires that enter the DFPZ to be reduced to surface fires. Wildland fires that may escape initial attack, either inside or outside the treatment units, will have a higher likelihood of being suppressed at a smaller size.

Reduction of surface fuels through underburning, piling and burning, or mastication will reduce flame lengths from 2–7 feet to 1–4 feet. The limit for direct action by hand crews is generally considered to be 4 feet, and 6 feet is considered the upper limit for direct action taken by mechanized equipment (dozers). Flame lengths in excess of these limits usually result in indirect action taken to contain the fire. Hand crews can generally respond faster and cause less impact on resources than dozers.

Implementation of this decision will reduce the risk to firefighting personnel and increase our ability to effectively suppress fires in the Slapjack Project area. The fuel treatments will create safer locations from which suppression resources can establish control points and safety zones for initial or extended attacks. Removing heavy accumulations of dead and down fuel will increase fireline production rates, allowing firefighters to construct hand lines at least twice as fast as under current conditions. Increasing the spacing between tree crowns will improve retardant and water penetration (dropped by firefighting aircraft) to the surface fuels, slowing fire progression so ground units are more effective. Repair of forest roads will shorten response times for fire suppression resources during the critical initial attack on wildland fires.

While these fuel treatments cannot decrease the risk of human or lightning caused fires starting in the Slapjack Project area, they will decrease the risk of fire spread by modifying fire behavior and enhancing the ability of firefighters to contain, suppress, and control wildfires within fuel treatment areas. The treatments will strategically connect an extensive network of fuel breaks on adjacent federal and private lands (figure A-5b in appendix A).

Healthy, Fire-Resilient Ecosystems. My decision will initiate the development of an uneven-aged, multistory forest on public lands in the project area by implementing group selection on 219 acres, individual tree selection on 148 acres, and hazardous fuel reduction on approximately 4,419 acres. DFPZ and individual tree selection units will contribute to a more fire-resilient forest by removing ladder fuels growing beneath the overstory crown canopy, and reducing canopy fuels by increasing the spacing between tree crowns. The DFPZ and individual tree selection treatments will emphasize the removal of shade-tolerant, less fire-resilient species such as white fir, tanoak, and incense-cedar, allowing more fire-resilient species like ponderosa pine and Douglas fir to become established. Reducing tree density will improve tree growth and vigor, reduce susceptibility to drought and bark beetle attacks.

Group selection harvest will create openings (0.5 to 2 acres in size) that mimic disturbances such as small fires, localized insect damage, windthrow, and snow events. These openings will allow sunlight to reach the forest floor, creating favorable conditions for the establishment and growth of shade-intolerant, fire-adapted species like ponderosa pine and Douglas fir. Over time, implementation of group selection on a landscape scale will maintain a wide range of tree ages and size classes from seedlings to large diameter trees. Group selection density will average approximately 11.4 percent of the treatment unit area to reduce the risk and uncertainty associated with group density and impacts on interior forest habitat. This level of treatment will provide an effective step toward a fire-resilient forest with limited risk to watershed condition and wildlife as discussed below.

Economic Stability. I have determined that this decision will meet the purpose and need of providing timber products to contribute to the economic stability of rural communities. This decision will harvest an estimated 9.8 million board feet of sawlogs with net harvest revenue of more than \$600,000 dollars. Total short-term project value, less the costs of DFPZ construction and noxious weed control treatments, is estimated at -\$493,000. From the timber harvest and service contract treatments, this decision will generate an estimated 267 jobs and a total employee related income of 11.5 million dollars.

Control of Noxious Weeds. I believe the noxious weed control strategy incorporated in my decision will maximize control and eradication of noxious weeds, particularly several aggressive species of broom found in the project area. Broom species grow rapidly, exclude native vegetation, and thrive in disturbed areas. When present in large concentrations, these species are believed to increase fire frequency and intensity. Because these species could compromise the effectiveness of the DFPZs if allowed to proliferate, my decision incorporates all available tools to control populations before they spread across the landscape.

Noxious weeds will be controlled on total of 33 acres in the project area using a variety of tools, including hand pulling, weed wrenches, backpack torches, and herbicide. Application of the herbicide triclopyr is focused on specific areas at greatest risk of noxious weed proliferation—a maximum of 30 acres in the 34,725 acre project area (figure A-4 in appendix A and table B-4 in appendix B of the FEIS). Another 3 acres infested with noxious weeds will be treated with a combination of non-chemical control tactics such as hand pulling and backpack torches.

Herbicide Concerns. My decision includes the use of herbicides on a small total area at greatest risk of broom infestation and proliferation (30 acres in the 34,700 acre project area). While I am sensitive to public concerns about the use of herbicide, I feel the treatment is justified because: 1)

using all available control tools—including herbicide—is clearly the most effective means of controlling and reducing populations of broom; and 2) the risks associated with exposure to herbicide are low.

As described below in the “Public Involvement” section, many commenters expressed concern about the potential risks herbicides pose to the health of people, domestic animals, and wildlife. The Selected Alternative addresses these concerns by minimizing herbicide application without sacrificing achievement of project objectives. Use of herbicides and all other control tactics is determined by detailed, site-specific knowledge of weed biology and system ecology.

Operational procedures incorporated into project design, mitigation measures, and adherence to Best Management Practices (BMPs) will effectively minimize risk to people, wildlife, and water quality (appendix F, FEIS). Qualified herbicide applicators will apply herbicide with a backpack sprayer directly to broom seedlings to minimize damage to surrounding vegetation and drift. No-spray buffers will be applied to streams, property lines, and sensitive resources to minimize the potential for impacts resulting from off-site and off-target drift (appendix F, table F-4). In addition, herbicide application will be restricted to the dry season to further reduce the possibility of herbicide being washed from the vegetation and soil and into streams.

Wildlife Concerns. I have considered the risk and uncertainty associated with project implementation, including impacts to California red-legged frogs, California spotted owls, northern goshawks, and forest carnivores. This decision assumes some short-term risk for mature/older-forest dependent species because it decreases habitat suitability and, potentially, use of the treated areas by these species. In the long-term, however, implementation of the Slapjack Project fuel treatments is expected to reduce the risk of loss and fragmentation of wildlife habitat from future wildfire.

California Red-Legged Frog. My decision will not result in adverse effects to the California red-legged frog. No treatments are planned within 500 feet of the known breeding site (HFQLG FEIS) or the 0.7 mile Dispersal Area buffer established by the U.S. Fish and Wildlife Service (*Federal Register*, April 2006). To further minimize impacts to areas connecting breeding habitat with upland habitat, only limited treatments will occur within 1 mile of the known breeding site, and a Limited Operating Period will ensure that activities will not take place during the wet season when frogs are migrating or using upland habitat (October 15 through April 15 or the first wetting rain; appendix F).

California Spotted Owl. This decision involves some risk associated with reducing the suitability of owl habitat and subsequent uncertainty regarding owl activity in treated areas. Approximately 89 percent of the existing habitat for the California spotted owl will be retained, including habitat in Protected Activity Centers (PACs), Spotted Owl Habitat Areas (SOHAs), Home Range Core Areas (HRCAs), and the forested habitat connecting these owl sites. Treatments in forested habitat outside of PACs and SOHAs will reduce habitat suitability by decreasing canopy cover and removing hazardous fuels in the understory. However, impacts to owl habitat will be minimized by maintaining at least 40 percent canopy cover in the DFPZs—the minimum required for suitable spotted owl habitat—and by implementing group selection at an average of 11.4 percent of the treatment unit area.

My decision will implement a low intensity prescribed burn on 180 acres of foraging habitat in a California spotted owl Protected Activity Center (PAC) and Spotted Owl Habitat Area (SOHA) (appendix A, figure A-9). The treatment is expected to enhance this habitat by consuming accumulated woody debris and thick understory vegetation that currently impede the owls’ ability to

hunt and capture prey. A Limited Operating Period will be applied during the nesting season to minimize potential short-term disturbance to the owls resulting from the underburn.

Northern Goshawk. The risk of adverse impacts to the Northern goshawk is low. No goshawk activity centers (e.g., nests, adult with young, or pairs) were detected in the project area during two years of surveys. However, there is a low level of short-term risk because project activities will reduce the suitability of approximately 14 percent of the foraging and nesting habitat in the project area. Because the goshawk prefers single-storied stands with less complex structure than the spotted owl, long-term habitat suitability is expected to improve as result of understory thinning.

Pacific Fisher. My decision involves a low risk of adverse impacts to the Pacific fisher. (The project area does not contain suitable habitat for other forest carnivores such as American marten or California wolverine.) Project activities are not expected to reduce connectivity between blocks of Pacific fisher habitat because:

- Pacific fishers have not been detected in the Slapjack Project area.
- No treatments will occur within the draft Forest Carnivore Network (DFCN), a corridor designed to provide habitat connectivity between the Tahoe and Lassen National Forests.
- Treatments will reduce approximately 48 percent of available habitat outside of the DFCN to low suitability for foraging and travel (minimum of 40 percent canopy cover).

Soils Concerns. I have determined that this decision addresses potential effects to long-term soil productivity by applying Best Management Practices and mitigation measures described in appendix F of the FEIS. Field surveys indicate that three treatments units (DFPZ treatment units 5, 7 and 607) currently lack sufficient ground cover (i.e., low-growing vegetation, plant and tree litter, and surface rock fragments). Currently dominated by brush, these three units suffered severe damage during the 1999 Pendola Fire and are still recovering today, with hillslope erosion resulting from the fire event.

Although these units have a low effective ground cover in the existing condition, I am including their treatment in my decision. All three units are part of the DFPZ network and will be treated with mastication. Mastication will actually convert existing brush into ground cover as materials are chipped and broadcast across the unit. The layer of masticated material will effectively protect soil resources in these units from further erosion until grasses, forbs, and other low vegetation are re-established without adding considerably to the fuel load. Group selection treatment in unit 5 will generate slash which will add to chipped material broadcast during mastication of areas surrounding the groups. Additional mitigation measures (i.e., seeding and mulching) will be applied as described in appendix F to increase ground cover.

Watershed Concerns. I have determined that this decision addresses long-term watershed concerns by reducing the risk of high intensity wildfires within multiple watersheds. The long term benefits to watershed condition and other resources will outweigh the potential risk of cumulative off-site watershed effects (CWEs) associated with increasing the amount of equivalent roaded area (ERA, an indicator of cumulative off-site watershed effects) by implementing project activities. My decision will implement project activities that will increase the ERA score within 11 subwatersheds already above the threshold of concern (TOC) and cause the ERA score for one subwatershed to exceed the TOC. Seven subwatersheds will be approaching the TOC. Although the threshold of concern serves as a "yellow flag" indicator of increased risk of significant adverse CWEs occurring within a

subwatershed, I have decided to implement the fuel treatments and timber harvest planned for these subwatersheds. The reasons for my decision are described below.

First, without treatment, the long term potential risk of CWEs from stand-replacing wildfire greatly exceeds the short-term increased risk of CWEs related to Slapjack Project activities. For example, the analysis indicates that fuel treatments and other project activities would result in a 15 percent increase in the calculated TOC for subwatershed 24, one of the subwatersheds with an elevated ERA score. However, if the entire area of subwatershed 24 were to experience a high-intensity wildfire, the TOC could increase almost 150 percent. While the Slapjack DFPZs will not entirely eliminate the possibility of high-severity wildfire affecting some subwatersheds, the DFPZ will provide firefighters an opportunity to contain the fire to one or two subwatersheds and prevent it from spreading across larger portions of the landscape. Proposed future projects would similarly treat other portions of the landscape, and over time, the aggregate risk of stand-replacing fires would be further reduced.

Second, in the 12 subwatersheds expected to exceed the TOC, Slapjack project activities contribute just a small percentage of the ERA score. These subwatersheds are above the TOC under the existing condition due to private land timber harvesting activities, road density, and urban development. These three disturbance types constitute 80 to 90 percent of the total ERA scores. I cannot control road density, urbanization, or timber harvest on private land. While I recognize that the Slapjack Project adds to an already high ERA score, I do not want to delay treatment of these subwatersheds because of the current risk of damaging effects to both National Forest System and private lands from high intensity wildfire.

Third, in alternatives F and G, I considered eliminating group selection harvest in subwatersheds over the threshold of concern to address watershed concerns. However, reducing group selection harvest from 219 acres to 190 acres for these two alternatives will result in less than one percent difference in percent of TOC between the Selected Alternative and alternatives F and G. This one percent difference is statistically insignificant because such a small difference in already highly disturbed watershed landscapes will not result in observably different conditions on the ground.

Finally, I considered the possibility of using less ground-disturbing non-mechanical treatments to construct the DFPZ in highly disturbed subwatersheds (section 2.3.4, Alternatives Considered but Eliminated from Detailed Study). However, because of the dense stand conditions in the project area, non-mechanical treatments such as underburning may not adequately treat ground fuels, ladder fuels, or reduce biomass without a preliminary mechanical treatment such as mastication or harvest. Without treatment of hazardous fuels, the risk of high intensity wildfires within multiple subwatersheds would continue and long-term watershed concerns would not be addressed.

Road decommissioning and restoration activities (e.g., streambank stabilization, culvert replacement, etc.) will further improve watershed conditions. Potential for cumulative off-site watershed effects will decrease in one subwatershed due to road decommissioning activities.

Overall watershed condition will benefit from the restoration of 59 acres of meadow habitat. Meadow habitats within the project area are desirable for plant and wildlife diversity and sediment retention. Within these meadows, encroaching conifers will be removed and degraded streambanks will be stabilized, helping to reverse the loss of meadow habitat. Removing or upgrading six culverts for fish passage will restore habitat connectivity for riparian and aquatic-dependent species. These

improvements will open up several miles of high-quality spawning and rearing habitat for trout. Finally, my decision will stabilize 1,200 feet of streambank with large boulders, logs, and vegetation.

Public Involvement

The Forest Service began collaboration in 2003 with a group of organizations interested in reducing wildland fire risk to communities and the environment in Butte and Yuba Counties. The Forest Service met regularly with a core group comprised of representatives from the Natural Resource Conservation Service; California Fire Safe Council; Butte Fire Safe Council; Yuba Watershed Protection and Fire Safe Council; the Quincy Library Group; Rancherías; industrial timberland owners, including Soper Wheeler and Chy Company; and other private landowners. Other agencies involved include the Bureau of Land Management and California Department of Forestry and Fire Protection. The Slapjack Project grew from this collaborative effort.

Collaboration with the Butte Fire Safe Council and Yuba Watershed Protection and Fire Safe Council has been ongoing since 2003. Forest Service personnel have been in regular attendance at monthly Fire Safe Council meetings and have kept the Councils and other stakeholders apprised of changes in project status.

In May 2005, a public meeting was held in Forbestown to discuss opportunities in the six watersheds to be analyzed in the Challenge Landscape Assessment, including the Slapjack Project. Comments provided by attendees were considered during the development of the alternatives presented in the EIS. On September 14, 2005, a letter describing the proposed action (the “scoping” letter) was mailed to approximately 400 individuals and organizations, including local residents, Native American tribes, and federal, state, and local agencies. The letter was followed by the September 16, 2005, *Federal Register* publication of the Notice of Intent to prepare an EIS for the Slapjack Project. The Notice of Intent requested that comments on the proposed action be received within 30 days. More than 20 comment letters were received in response to the publication of the Notice of Intent.

The draft EIS was distributed in February 2006 for a 45-day comment period. Over 50 public and agency comments were received. Forest Service responses to these comments are contained in appendix H of the FEIS. Copies of all comment letters are located in the project record and are available upon request.

Public Concerns Identified During Scoping and DEIS Comment Period

As described in chapter 1 of the FEIS, the Slapjack Project Interdisciplinary Team (IDT) worked with me to review public and agency comments received during scoping to determine the scope of the analysis. Our review of the comments revealed two main issues raised by the public: 1) use of herbicides and 2) management activities in watersheds over the Threshold of Concern.

Working with me, the IDT developed five alternatives to the proposed action in response to the two issues identified during scoping. These alternatives are described briefly below and in more detail in chapter 2 of the FEIS. The public also provided suggestions for alternative methods for achieving the Purpose and Need. Several of these alternatives were considered, but eliminated from detailed study. Chapter 2 of the FEIS includes more discussion regarding the alternatives considered but eliminated from detailed study.

The public expressed a broad range of concerns regarding the action alternatives and effects analysis presented in the DEIS. Concerns were raised regarding effects of herbicides on human health, wildlife, and water quality. Proposed vegetation treatments—especially canopy cover and diameter limits—raised concerns about potential degradation or loss of habitat important to species like the California spotted owl and Northern goshawk. Others pointed out the risk of habitat loss due to wildfire if no action is taken at this time or if treatments proposed for certain alternatives are undertaken.

Some commenters asserted that fuels treatments, group selection harvest, and other ground-disturbing activities should be reduced or rescheduled to minimize potential watershed impacts, loss of soil cover, and noxious weed response. Others felt that proposed canopy cover and diameter at breast height (dbh) limits would promote the proliferation of surface and ladder fuels and reduce surface fuel moisture.

Alternatives Considered In Detail

In addition to the Selected Alternative, I considered six alternatives in detail, which are discussed below. A more detailed comparison of these alternatives can be found in Chapter 2 of the FEIS.

Alternative A (No Action)

Under alternative A, no fuels treatments, DFPZ construction, group selection or individual tree selection harvests, transportation system improvements, wildlife habitat improvements, or watershed restoration would be implemented to accomplish the purpose and need. Current management plans would continue to guide management of the Slapjack Project area.

I did not select this alternative because it would not improve the ability of fire management to suppress, control, and contain fires within or burning into the treatment units. It would not reduce hazardous fuel loading in the Wildland Urban Interface surrounding the communities of Challenge, Forbestown, and others. Hand crews used for fire suppression would be less effective. This alternative would rely on natural disturbances such as windthrow and density dependent mortality, or lack thereof, to shape forest structure. As a result, changes in species composition (i.e., fire resilient species like ponderosa and sugar pine), stand density, and structural diversity would be negligible.

No habitat improvement or restoration opportunities would be implemented under this alternative, so degraded streambanks, meadows, and culverts would continue to deteriorate. Alternative A would not contribute to community stability and would not generate any timber related forest products, jobs, or employee related income. Roads in good condition would continue to provide access for emergency response, woodcutting, mining, sightseeing, and other recreational activities, while roads in poor condition would continue to contribute to accelerating erosion processes, thus altering water quality and aquatic habitat and increasing cumulative watershed effects.

Proposed Action (Alternative B)

Alternative B is the original action proposed to the public during scoping in September 2005. It includes the following actions:

- Reduce fire hazards by constructing approximately 15 miles of DFPZs on approximately 4,419 acres.

- Harvest trees using group selection (219 acres) and individual tree selection (148 acres) harvest methods.
- Perform road work as follows: close 7 miles, decommission 19 miles, reconstruct 18 miles, construct 4 miles of new temporary spurs and 6 miles of new temporary roads, light maintenance of 4 miles of existing spurs, and resurface 2 miles as part of a watershed improvement project.
- Remove or upgrade six culverts for fish passage improvement; restore 59 acres of meadow; stabilize 1,200 feet of streambank; and improve foraging conditions on 180 acres of California spotted owl habitat.

Alternative B proposes to maintain native plant diversity, natural communities, and DFPZ effectiveness by controlling noxious weeds on a maximum of 33 acres annually using a combination of tactics, including herbicide (triclopyr BEE on a maximum of 31 acres), hand pulling, and backpack torches. It also proposes the use of herbicides to perform preventive maintenance of DFPZ units (1,954 acres) two to three years after DFPZ construction. The herbicide imazapyr would be used to control tanoak and shrub regrowth and prevent its re-formation as ladder fuels

I did not select this alternative because I want to defer the decision on long-term maintenance of DFPZs for future projects. I want to see the effects of the DFPZ construction in the Slapjack area before I commit to a specific plan for maintenance. While I recognize that deferring the decision will limit our ability to use herbicides as a tool for preventive maintenance of the DFPZs in the short-term, there are feasible options available for future long-term maintenance. The analysis in the FEIS indicates that mastication, prescribed burning, and herbicides all represent viable options for the future maintenance of the DFPZs constructed as part of the Slapjack Project.

In addition, I have weighed the benefits of using herbicides for preventive maintenance of DFPZs against public perceptions about their use and safety concerns. The extent of herbicide use proposed as part of alternative B entails a greater perceived risk of human health and environmental effects than the alternatives that do not propose the use of herbicides for DFPZ preventive maintenance.

Alternative C

Like alternative B, alternative C calls for the construction of approximately 4,419 acres of DFPZs and implementation of group selection (219 acres) and individual tree selection (148 acres). Road work and aquatic and wildlife habitat improvement activities would also occur as described for alternative B. However, unlike alternative B, alternative C does not propose the use of the herbicides triclopyr BEE to control noxious weeds or imazapyr as part of maintenance activities to prevent brush regrowth on 1,954 acres of DFPZs. Noxious weeds would instead be controlled on 33 acres in the project area using a variety of methods, including backpack torches and hand pulling. Herbicides for noxious weed control or DFPZ maintenance were eliminated from consideration in alternative C in response to the issues raised during scoping.

I did not select this alternative because noxious weed control without use of the herbicide triclopyr would be both more expensive and less effective than a similar program that includes herbicide. Given the biology and system ecology of the noxious weeds in the treatment units, including the herbicide triclopyr as a tool in the Integrated Pest Management (IPM) toolbox increases the probability of achieving the project objective of controlling existing populations of weeds and reducing population size.

Alternative D (Forest Service Preferred Alternative)

Alternative D proposes the same DFPZ construction, group selection, individual tree selection, road work, and aquatic and wildlife habitat improvement activities as alternative B. It also includes the use of the herbicide triclopyr BEE in combination with other treatments to control noxious weeds on a maximum of 31 acres. Unlike alternative B, alternative D does not propose the use of the herbicide imazapyr to control brush regrowth on 1,954 acres of the DFPZs.

I have selected a modified alternative D for implementation, as described above. I did not select Alternative D as described in the DEIS because I wanted to respond to public concern about using herbicides in unit 129, which is adjacent to a school and daycare. I do not feel the benefits of an additional acre of scotch broom herbicide treatment under this alternative are worth causing parents to worry. While the human health risks associated with herbicide are very low, I respect the heightened concerns people have for the health of their children.

Alternative E

Alternative E proposes the same DFPZ construction, group selection, individual tree selection, road work, and aquatic and wildlife habitat improvement activities as alternative B. Alternative E also proposes the use of the herbicide imazapyr to control brush regrowth on 1,954 acres of the DFPZs within two to three years of initial treatment. The herbicide triclopyr BEE would not be one of the treatments used to control noxious weeds under this alternative. Noxious weeds would instead be controlled on 33 acres in the project area using a variety of methods, including backpack flamers and hand pulling.

I did not select this alternative because I want to defer the decision on long-term maintenance of DFPZs for future projects. I want to see the effects of the DFPZ construction in the Slapjack area before I commit to a specific plan for maintenance. While I recognize that deferring the decision will limit our ability to use herbicides as a tool for preventive maintenance of the DFPZs in the short-term, there are feasible options available for future long-term maintenance. The analysis in the FEIS indicates that mastication, prescribed burning, and herbicides all represent viable options for the future maintenance of the DFPZs constructed as part of the Slapjack Project.

Additionally, the extent of herbicide use proposed as part of this alternative entails a greater perceived risk of human health and environmental effects than the alternatives that do not propose the use of herbicides for DFPZ preventive maintenance.

Another reason I did not select this alternative is because noxious weed control without use of the herbicide triclopyr would be both more expensive and less effective than a similar program that includes herbicide. Given the biology and system ecology of the noxious weeds in the treatment units, including the herbicide triclopyr as a tool in the Integrated Pest Management (IPM) toolbox increases the probability of achieving the project objective of controlling existing populations of weeds and reducing population size.

Alternative F

Alternative F proposes the same DFPZ construction, individual tree selection, road work, and aquatic and wildlife habitat improvement activities as alternative B. It also includes the use of the herbicides imazapyr to control brush regrowth on 1,954 acres of DFPZs and triclopyr BEE to control noxious weeds on a maximum of 31 acres in combination with other treatments. Unlike alternative B, this alternative would implement approximately 190 acres of group selection harvest instead of

219 acres because group selection units located in watersheds estimated to be over the threshold of concern were dropped in response to issues raised during scoping. Acres of individual tree selection units would not be affected because no units are proposed in watersheds predicted to be over the threshold of concern.

I did not select this alternative because I want to defer the decision on long-term maintenance of DFPZs for future projects. I want to see the effects of the DFPZ construction in the Slapjack area before I commit to a specific plan for maintenance. While I recognize that deferring the decision will limit our ability to use herbicides as a tool for preventive maintenance of the DFPZs in the short-term, there are feasible options available for future long-term maintenance. The analysis in the FEIS indicates that mastication, prescribed burning, and herbicides all represent viable options for the future maintenance of the DFPZs constructed as part of the Slapjack Project.

Additionally, the extent of herbicide use proposed as part of this alternative entails a greater perceived risk of human health and environmental effects than the alternatives that do not propose the use of herbicides for DFPZ preventive maintenance.

In addition, reducing group selection harvest from 219 acres to 190 acres would result in less than one percent difference in percent of TOC between the Selected Alternative and alternative F. This one percent difference is statistically insignificant because such a small difference in already highly disturbed watershed landscapes would not result in observably different conditions on the ground.

Alternative G

Alternative G proposes the same DFPZ construction, individual tree selection, road work, and aquatic and wildlife habitat improvement activities as alternative B. Alternative G was developed to address watershed concerns, much like alternative F. Alternative G would implement approximately 190 acres of group selection harvest instead of 219 acres because units located in watersheds predicted to be over the threshold of concern were dropped. Acres of individual tree selection units were not affected because no units are proposed in watersheds predicted to be over the threshold of concern.

Alternative G does not propose the use of herbicides to control noxious weeds or the regrowth of brush on 1,954 acres of DFPZs. Noxious weeds would instead be controlled on 33 acres in the project area using a variety of methods, including backpack torches and hand pulling.

I did not select this alternative because reducing group selection harvest from 219 acres to 190 acres would result in less than one percent difference in percent of TOC between the Selected Alternative and alternative F. This one percent difference is statistically insignificant because such a small difference in already highly disturbed watershed landscapes would not result in observably different conditions on the ground.

Another reason I did not select this alternative is because noxious weed control without use of the herbicide triclopyr would be both more expensive and less effective than a similar program that includes herbicide. Given the biology and system ecology of the noxious weeds in the treatment units, including the herbicide triclopyr as a tool in the Integrated Pest Management (IPM) toolbox increases the probability of achieving the project objective of controlling existing populations of weeds and reducing population size.

Environmentally Preferable Alternative

I consider the Selected Alternative to be environmentally preferable because of the long term benefits to resources described above in the Rationale for Decision section. The reduced risk of losing forests, watershed health, and key ecosystem components to wildfire will best protect, preserve and enhance natural resources over the long term. The ability of fire management to suppress, control and contain fires that start within or outside fuel treatments will be enhanced. The result will be potentially fewer acres of forest landscape being modified in the event of a high intensity wildfire.

In making this determination, I acknowledge that members of the public may disagree that any herbicide application could be considered environmentally preferable. However, the 30 acres of herbicide use on noxious weeds pose minimal short-term risks to the environment and human health and safety. Impacts on the physical or biological environment are limited to short-term effects, primarily to the noxious weeds targeted for treatment.

Invasive plants like the broom species targeted for treatment are recognized as one of the Four Threats to the Health of the Nation's Grasslands and Forests delineated by Forest Service Chief Dale Bosworth (<http://www.fs.fed.us/projects/four-threats/>). The Slapjack Project noxious weed control strategy provides an effective, integrated, and comprehensive approach for controlling and reducing noxious weed populations to protect native ecosystem health.

The risk and uncertainty associated with reductions in wildlife habitat suitability will be potentially offset by the benefits of the fuel treatments. Important wildlife habitat in areas such as PACs, SOHAs, and HRCAs will be less vulnerable to loss or damage by wildfire. The enhanced ability of fire management to suppress, control and contain fires will produce long term benefits for soil productivity and watershed values that would otherwise remain more vulnerable to the damaging effects of future high intensity wildfires.

I believe the Selected Alternative provides the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable or unintended consequences. This alternative also preserves the important historic, cultural, and natural aspects of the project area.

Legal and Regulatory Compliance

My decision complies with the laws, policies, and executive orders listed below and described in Chapter 4 of the FEIS.

Forest Plan Consistency

This decision to implement the Slapjack Project is consistent with the intent of the forest plan's long term goals and objectives. The project was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines for Plumas National Forest Land and Resource Management Plan (1988), Heger-Feinstein Quincy Library Group Final Environmental Impact Statement and Record of Decision (1999), and Sierra Nevada Forest Plan Amendment Final Supplemental Environmental Impact Statement and Record of Decision (2004).

Permits, Licenses, and other Consultation Requirements. No federal permits, licenses, or entitlements are necessary to implement the Slapjack Project. State requirements, based on federal laws, and administered by the County Agricultural Commissioner for air quality management and herbicide use, will be followed. Smoke permits are required from the Feather River and Butte County

Air Quality Management Districts. Timber Harvest Activity Waivers are required from the California Regional Water Quality Control Board.

The Forest Service consulted with federal and state agencies, including the United States Fish and Wildlife Service and California Department of Fish and Game, during the development of this EIS. Details of these consultations are in “Chapter 4: Consultation and Coordination.” In addition, the Forest Service consulted the following federally recognized tribes and interested and affected tribes: Mooretown Rancheria, Enterprise Rancheria, Berry Creek Rancheria, Chico Band of Mechoopda Indians, and the Konkow Valley Band of Maidu.

Principle Environmental Laws

I have determined that the Slapjack Project meets the requirements of the following laws as described in chapter 4 of the FEIS:

- Endangered Species Act
- Clean Water Act
- Clean Air Act
- National Historic Preservation Act
- National Forest Management Act
- National Environmental Policy Act

Special Area Designations

I have determined that the Slapjack Project complies with laws, regulations, and policies that pertain to the following special areas:

- **Challenge Experimental Forest.** Consistent with the direction provided by the 1988 Forest Plan, group and individual tree selection will not be conducted in the Challenge Experimental Forest.
- **Other Special Areas.** There are no designated Wild and Scenic Rivers, Wilderness Areas, Inventoried Roadless Areas, Semi-Primitive Areas, Research Natural Areas, or Special Interest Areas in the Slapjack Project area.

Executive Orders

Executive orders provide additional direction to federal agencies. I have determined that the Slapjack Project meets the requirements of the following executive orders as described in chapter 4 of the FEIS. The executive orders that apply to the Slapjack Project are listed below.

- Consultation and Coordination with Indian Tribal Governments, Executive Order 13175 of November 6, 2000
- Environmental Justice, Executive Order 12898 of February 11, 1994
- Indian Sacred Sites, Executive Order 13007 of May 24, 1996
- Invasive Species, Executive Order 13112 of February 3, 1999
- Floodplain Management, Executive Order 11988 of May 24, 1977, and Protection of Wetlands, Executive Order 11990 of May 24, 1977
- Migratory Birds, Executive Order 13186 of January 10, 2001
- Recreational Fisheries, Executive Order 12962 of June 6, 1995
- Use of Off-Road Vehicles, Executive Order 11644 and 11989, amended May 25, 1977

Contact Information

For additional information concerning this decision or the Forest Service appeal process, contact:

Susan Joyce, Planner
Feather River Ranger District, Plumas National Forest
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(530) 534-6500

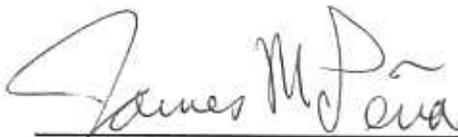
Implementation

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, the 5th business day from the close of the appeal filing period. When appeals are filed, implementation may begin on, but not before, the 15th business day following the date of the last appeal disposition.

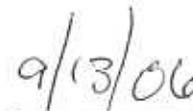
Administrative Review or Appeal Opportunities

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. Only those individuals and organizations who submitted comments during the 45 day comment period (36 CFR 215.6) and otherwise meet the specific requirements of 36 CFR 215.13 have standing to appeal. The Environmental Protection Agency published a Notice of Availability (NOA) for the draft EIS in the *Federal Register* on February 24, 2006; the opportunity to comment ended 45 days following that date. Appeals must be filed within 45 days from the publication date of the legal notice of this decision in the *Feather River Bulletin* newspaper. The publication date of the legal notice is the exclusive means for calculating the time period to file an appeal (36 CFR 215.15 (a)). Those wishing to appeal should not rely on the dates or timeframe information provided by any other source.

Notices of the appeal must meet the specific content requirements of 36 CFR 215.14. An appeal, including attachments, must be filed (regular mail, fax, e-mail, hand-delivery, express delivery, or messenger of service) with the appropriate Appeal Deciding Officer (36 CFR 215.8) within 45 days following the publication date of the legal notice of this decision. Appeals must be submitted (regular mail, fax, e-mail, hand-delivery, express delivery, or messenger of service) to the Appeal Deciding Officer: Bernard Weingardt, Regional Forester, USDA Forest Service, 1323 Club Drive, Vallejo, CA 94592. Appeals may be submitted by FAX (707) 562-9229 or by hand-delivery to the Regional Office, at the address shown above, during normal business hours (Monday-Friday 8:00am to 4:00pm). Electronic appeals, in acceptable [plain text (.txt), rich text (.rtf) or Word (.doc)] formats, may be submitted to: appeals-pacificsouthwest-regional-office@fs.fed.us [Subject: Slapjack FEIS].



JAMES M. PEÑA
Forest Supervisor



Date