

UNITED STATES DEPARTMENT OF AGRICULTURE
Forest Service
Pacific-Southwest Region

DECISION MEMO

GARDEN GULCH FUELS REDUCTION PROJECT

Salmon River Ranger District
Klamath National Forest
Siskiyou County, California

Proposed Action

I have decided to implement a proposal to treat vegetation on 23 units that total 991 acres in the Garden Gulch area of the Little North Fork Late-Successional Reserve over the next 7 to 10 years. The proposal includes 417 acres of density reduction in mature stands, 376 acres of density reduction and release in plantations and small-sized natural stands, 943 acres of fuel reduction, and some road improvements. All acreages are estimates. The project is located in the Little North Fork Salmon River Watershed near the town of Sawyers Bar, approximately 55 miles southwest of Yreka, California. The legal description is Township 40 North, Range 12 West, Sections 10, 11, 12, 13, 14, 15, and 24, Mount Diablo Meridian. Refer to attached map for specific locations.

The project area is within the threat zone and defense zone, as defined in the National Fire Plan, of the Wildland/Urban Interface of the Sawyer's Bar Community. It is also within the Late-Successional Reserve and Riparian Reserve land allocations in the Klamath National Forest Land and Resource Management Plan (Forest Plan). The management goal for Late-Successional Reserves is to protect and enhance conditions of late successional and old growth forest ecosystems, which serve as habitat for late successional and old growth-related species including the northern spotted owl. Management goals for Riparian Reserves include providing benefits to riparian-dependent and associated species, enhancing habitat conservation for organisms dependent on the transition zone between upslope and riparian areas, improving dispersal corridors, and providing greater connectivity of the watershed.

The density reduction in mature stands, including old growth and mid-mature trees, will use a thinning from below prescription, which favors the dominant and codominant trees by removing the lower crown classes. This will remove ladder fuels while promoting maintenance of the largest trees in the stands for as long as possible. Densities will be variable as stand conditions vary with slope position and aspect. Density reduction in plantations will also use a thinning from below prescription. Suppressed, intermediate, and some codominants may be removed. Marking prescriptions have been developed and implemented collaboratively with the United States Fish and Wildlife Service (FWS). Thinning in plantations will include both precommercial and commercial thinning.

Treatments in riparian reserves associated with instability on steep slopes will not reduce the basal area more than 30% of existing stocking levels. In inner gorge and debris flow features and, along the likely limit of root support from upslope or adjacent trees, no thinning would be planned.¹ Selected Riparian Reserves associated with water would be thinned, while maintaining the desired shade component of 80 to 85%. In plantations, selected Riparian Reserves associated with water will be thinned to reduce stocking, with the intent of more rapidly reaching desired shading between 80 and 85%.

An existing non-system spur of Road 40N51 will be used to cable harvest trees. A culvert will be placed in the draw to protect aquatic resources during access and will be removed following treatment. A limited operating period will be in effect for the crossing. The spur road will be closed after use, as part of the project. An Aquatic Period of Operations will be in effect for the life of the project. Work may only take place from April 15 to October 15.

Fuel reduction prescriptions were designed based on fuel model, aspect, slope, and other site conditions. Mastication will be used on the flatter areas. Hand piling/burning or underburning will be used in steeper terrain. Plantations masticated in the past would be underburned. Areas of heavy fuels in Riparian Reserves associated with water will be hand piled and burned. Fire will be allowed to back into Riparian Reserves associated with water, but no ignitions during underburning will be allowed in those areas. Multiple entries in staged treatments will be required to complete the fuel reduction objectives.

A shaded fuel break will be created on the ridge between Cronan Gulch and Garden Gulch. The shaded fuel break will be variable in width, ranging from about 400 to 1000 feet, depending on vegetation and topography. Fuel breaks will also be created on the ridge between Garden Gulch and Titmouse Gulch, and along Road 40N51. The fuelbreak on the ridge between Garden Gulch and Titmouse Gulch is mostly within the 1½ mile defense zone of the wildland/urban interface. The fuelbreak along Road 40N51 will extend at least 200 feet above the roadside and 50 feet below; material within this area will be chipped. The three fuelbreaks together form a rough triangle. The objective for this triangle is to provide a defensible perimeter for future fires. The area between the Little North Fork and Road 40N51 will also receive special attention for reducing fuels as it is within the threat zone.

Rationale for Decision

Fuels will be reduced along the sides of roads that provide access and egress for forest users and emergency response vehicles. Visibility will be improved by treating live fuels, brush, hardwoods, and conifers that are encroaching on the roadway, increasing safety for all users. Dead fuels will be treated, which will reduce fire activity along the roadways when fires occur. The effectiveness of the roadway as a fuel break for wildland fires and prescribed burning will be increased. The fuel breaks and buffer zones created will reduce the rate of spread for fires, providing suppression forces with a greater opportunity to contain those fires.

The fuel reduction actions will reduce forest fuel loading and reduce ladder fuels, which will reduce the potential for crown fire. Fire starts in the watershed that burn into treated areas would have dramatically reduced fire behavior, compared to untreated areas, providing suppression forces with opportunities to contain the fire and reduce the amount of area affected. This will

reduce the risk of uncharacteristically intense fire with a corresponding reduction in risk to life, property, and natural resources.

Fuel treatment on National Forest System lands will create defensible space and reduce the fire hazard within the wildland/urban interface areas. Treating these fuels will reduce the threat to private property, the watershed, and National Forest lands. This defensible space will provide protection from fires moving from the National Forest on to private property or vice versa. Additional information is available in the "Garden Gulch Fire and Fuels Assessment" by Thomas Herold dated July 29, 2003. This report provides a description of the existing fuels conditions and a discussion of effects.

The thinning will reduce stand densities, which are currently very high in most of the stands. The high density is causing mortality throughout the drainage. In many cases, it is the larger trees that are dying from overcrowding. Reducing the density through selective thinning will retain the large trees as well as selected smaller thrifty trees, providing structure and replacement trees for the future. The objective is to maintain or increase growth rates on the trees retained to achieve late-successional characteristics in as short a period of time as possible. Additional information on the vegetative condition is available in the "Garden Silviculture Input" by Dan Blessing dated August 2003.

This project will help meet Forest Plan objectives for protecting and enhancing late-successional and old growth forest conditions within Late-Successional Reserves. Reducing fire hazards, improving stand health, and accelerating late successional characteristics in plantations and natural stands will help the area progress towards the desired condition.

I believe this project will improve conditions in the Sawyer's Bar Wildland/Urban Interface and lower the risk to life and property. I believe these actions will develop sustainable forest conditions in the Late-Successional Reserve and help restore natural ecological systems. This project responds to the National Fire Plan priorities to implement projects that reduce fuel risk in the wildland/urban interface and to improve habitat for Threatened and Endangered species. I believe the project design will best achieve the project's purpose of reducing fire hazard in the wildland/urban interface. It will also promote the maintenance and development of late-successional stands, while protecting riparian dependent and associated species. The project prescriptions use variable tree spacing, including untreated areas. A variety of species, including hardwoods, will be retained. A variety of tree forms will also be retained to provide structural diversity. Numerous provisions have been included in the project design including the use of Best Management Practices (BMPs), buffers on geologically sensitive areas and Riparian Reserves associated with water, limited operating seasons, washing machinery, and buffers around Sensitive plant populations which will allow these treatments to be accomplished in an environmentally sensitive manner and be consistent with the Aquatic Conservation Strategy. I believe this project will help move this area towards the desired condition.

Scoping and Public Involvement

The proposal was first listed in the Klamath National Forest's Winter 2003 Schedule of Proposed Actions dated January 7, 2003. The schedules are posted on the Forest Web page and sent to a mailing list.

Philip Detrich and Cliff Oakley of the Yreka Field Office, FWS have worked collaboratively with the Forest Service on this proposal since its inception. Members of the interdisciplinary team met with the Sawyer's Bar Fire Safe Council in June 2003 to provide information on the proposal and see if they were also willing to collaborate on this project. The Fire Safe Council members were supportive of the proposal and stated their willingness to collaborate. Members of the Fire Safe Council and the interdisciplinary team visited the project area on July 22, 2003. Donald Flickinger of the National Oceanic and Atmospheric Administration - Fisheries (NOAA Fisheries) has also assisted in the planning for the project.

A conceptual proposal was presented to the Karuk Tribe at the March 12, 2003 monthly meeting. Letters were mailed to the Karuk Tribe of California, the Hoopa Valley tribe, and the Yurok Tribe on July 23, 2003 providing information on the proposal. A scoping letter was mailed to three agencies and two individuals on July 23, 2003, who expressed interest or might be affected by the proposal. The North Coast Water Quality Control Board provided comments on the proposal; their primary concern was that the project be designed to meet water quality standards. Later in the planning process, copies of the scoping letter were mailed to four groups who expressed interest in the project.

Reasons for Categorically Excluding the Proposed Action

The environmental impact of the proposed action is minimal and consists of thinning and treating fuels on approximately 991 acres. Based on interdisciplinary analysis, it is my determination that this activity will be of limited size, duration, and degree of disturbance. I find the proposed action qualifies under provisions of FSH 1909.15, 31.2 category 10: "Hazardous fuels reduction activities using prescribed fire not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres." All practicable means to avoid or minimize environmental harm have been adopted.

Past experience and environmental analysis reveal that no extraordinary circumstances exist that might cause the action to have significant effects upon the human environment. This proposed action is therefore excluded from further documentation in either an environmental assessment or environmental impact statement. The conditions considered in determining whether extraordinary circumstances exist are discussed below.

Steep Slopes or Highly Erosive Soils: The project area is moderately steep and underlain by erosive soils derived from deeply weathered granite and granodiorite. A number of past storm events have produced landslides, debris slides, and erosion in the area. Because of the risk of instability, a very cautious approach to the project was taken. A detailed prescription for unstable areas was developed by the Geologist and is documented in the "Garden Gulch Fuels Reduction Project Geology Report" by Bill Snavely, along with the conclusion that there will be no effect on mass stability if root strength is maintained above critical levels. BMPs for the unstable areas are identified in the Geology Report and will be implemented on the project.

Cumulative Watershed Effects: An interdisciplinary cumulative watershed effects analysis was completed for the proposed project that included past, current, and reasonable foreseeable future projects. The analysis indicated that adding the effects of project activities to the cumulative effects was not a concern. The project would generate numbers that remain well below inference point ranges (levels where the risk of initiating or contributing to existing cumulative adverse watershed impacts becomes a concern) for the Surface Erosion and Equivalent Road Acres models. Although the Mass Wasting Model is currently above the inference point for both Sur Cree-Garden and Kanaka-Olsen 7th Field Watersheds, the model does not predict the production of any sediment from project activities, nor any change in risk ratio. Modeling Mass Wasting cumulative watershed effects with a future fire does produce sediment, but the estimated amount produced is 55% less sediment than with no action. A detailed discussion of existing conditions and the direct, indirect, and cumulative watershed effects is documented in the “Garden Gulch Fuels Project Hydrology Report” by Sharon Koorda dated July 25, 2003. BMPs and other resource protection measures, including Wet Weather Operations Standards, for the project are identified in the Hydrology Report and will be implemented on the project. The proposed action complies with the Clean Water Act, Porter-Cologne Water Quality Control Act, applicable water quality control plans, and the Regional Board Waiver (Order No. R1-20044-0015).

Threatened, Endangered, and Sensitive Fish Species: Federally-listed as Threatened, the Southern Oregon/Northern California Coasts (SONCC) coho salmon and the Region 5 Sensitive Upper Klamath-Trinity (UKT) Chinook salmon and Klamath Mountains Province (KMP) steelhead are known to use streams below the project area. Stream channels in the project area will be protected as discussed above. An Aquatic Period of Operations will be in effect in which operations may only occur from May 15 through October 15, unless otherwise agreed to by the District Fisheries Biologist under very specific conditions. The specific conditions and other resource protection measures are documented in the “Biological Assessment/Evaluation For Threatened, Endangered, Proposed, Petitioned and Sensitive Species That may be affected by the Garden Gulch Fuel Reduction Project” (Fish BA) by Rebecca Quiñones. The Fish BA documents the existing conditions and the direct, indirect, and cumulative effects of the project on Federally listed fish species. The Fish BA has determinations of “May Affect and is not Likely to Adversely Affect” SONCC coho or its Critical Habitat, and of “will not adversely affect Chinook and coho salmon EFH (Essential Fish Habitat).” It also determines that the project “may affect individuals but is not likely to trend toward Federal listing or loss of viability for KMP steelhead or UKT Chinook salmon. The project will help to protect anadromous fish habitat from post-fire adverse effects.”

Threatened and Endangered Wildlife Species: There are no bald eagle nests within the analysis area and no effect is anticipated on bald eagles. The project area is not within the range of marbled murrelet. There is suitable northern spotted owl habitat within the project area, although much of it is in a degraded condition due to the dense understory. Field surveys conducted in the project area in 2003 did not locate nesting northern spotted owls within the project area. If nesting northern spotted owls located in the project area during future surveys, a limited operating period will be applied to mitigate effects. Project design features for wildlife are documented in the “Biological Assessment For Wildlife Species for Garden Gulch Fuel Reduction” (Wildlife BA) by Karen West dated September 24, 2003. The Wildlife BA documents the existing conditions and the direct, indirect, and cumulative effects of the project

on Federally listed wildlife species. The Wildlife BA has determinations of “may affect, but is not likely to adversely affect” northern spotted owls, or northern spotted owl critical habitat. The project will have long-term benefits to northern spotted owls by improving habitat conditions and reducing the risk of loss of habitat from wildfire.

Sensitive Wildlife Species: The project area does not provide habitat for Swainson’s hawk or greater sandhill crane. The project area is unlikely to be used by peregrine falcon, great gray owl, American marten, Sierra Nevada red fox, or Townsend’s big-eared bat as it does not provide key habitat for them. Although stands with intermittent and perennial streams may contain habitat for southern torrent salamander, foothill yellow-legged frog, willow flycatcher, and cascade frog; the habitat immediately adjacent to the streams will not be affected. Stream channels will be protected as discussed above. The project will not affect northwestern pond turtles. Habitat for northern goshawk occurs within the stands. Much of the habitat is currently in a degraded condition due to the dense condition of the understory. A Goshawk Management Area is situated adjacent to Stands 17, 18, and 19. The Forest Plan encourages the use of underburning, thinning, and fuels reduction to achieve desired habitat conditions for northern goshawks and the proposed actions will improve conditions. Field surveys conducted in the project area in 2003 did not locate northern goshawks. If northern goshawks are located in the project area during future surveys, a limited operating period will be applied to mitigate effects from noise. Habitat for California wolverine and Pacific fisher occurs within the stands. There may be some effect to these species through noise disturbance, and reduction of down wood in some parts of the project. Habitat for pallid bat may possibly occur within the project area. A limited operating period will be applied to snag removal in the shaded fuel break (no snag felling from April 1 to September 30) to minimize potential harm to roosting bats. Although there may be some short-term negative effects to northern goshawks, California wolverine, Pacific fisher, and pallid bat, the project will not remove habitat for these species. The project is designed to reduce the threat of loss of habitat from wildfire and maintain and promote late-successional forest characteristics. The project may affect individuals, but is not likely to lead to a trend toward Federal listing or loss of viability for Northern goshawk, Pacific fisher, California wolverine, and pallid bat. The project will have no effect on peregrine falcon, great gray owl, willow flycatcher, American marten, Sierra Nevada red fox, Townsend’s big-eared bat, northwestern pond turtle, foothill yellow-legged frog, Cascades frog, or Southern torrent salamander. The “Biological Evaluation for Wildlife Species for Garden Gulch Fuels Reduction” by Karen West dated September 25, 2003, documents the existing conditions and the direct, indirect, and cumulative effects of the project on Region 5 Sensitive wildlife species.

Threatened, Endangered, Sensitive, and Survey and Manage Plant Species: The project is not within the range, nor is there any habitat for any Threatened or Endangered plant species. Within the project area, there are eleven populations of *Cypripedium montanum* and *C. fasciculatum*, which are Region 5 Sensitive as well as Survey and Manage species. There are two populations of Region 5 Sensitive *Smilax jamesii* in the project area. Management Recommendations for these species are to protect the microclimate. The populations will be protected from immediate, direct impacts to individuals and from loss of shading through the use of buffers in which ground disturbance is prohibited. The determination is that the project will “not affect” these species. The project is expected to have long-term beneficial effects for the species. Complete analyses are documented in the “Biological Assessment/Evaluation for Sensitive, Threatened, and

Endangered Plant Species” and “E.A. input and Botanical Analysis for Survey and Manage Plant Species,” both by Marla Knight and dated September 30, 2003.

Heritage Resources: An archaeological survey was conducted in the project area. No sites were found and there are no known heritage sites within the project area. Any sites discovered during implementation will be protected consistent with federal laws; an archaeologist will be immediately notified and all ground disturbing activities will cease until the site is evaluated.

Noxious Weeds: All contracts will include a washing requirement to prevent the introduction of weeds to, and the spread of noxious weeds within the project area, as spotted knapweed and star thistle are known to exist in the project area. This equipment washing provision has been found adequate to prevent the introduction and spread of noxious weeds in many other projects on the Forest.

The project area is not within any floodplains, wetlands, or municipal watersheds. It is not within a Congressionally Designated Area, inventoried roadless area, or Research Natural Area. There are no known American Indian religious or cultural sites within the project area. A local landowner may use water from the Little North Fork, but the management requirements incorporated into the project are expected to prevent any degradation of water quality.

Findings Required by Other Laws and Regulations

I have determined that this action is consistent with the following legal requirements:

All management practices are consistent with the Forest Plan, as required by the National Forest Management Act of 1976. As demonstrated in the above discussion and supporting analyses, the project is consistent with the applicable provisions of the National Forest Management Act including 219.27 (a) resource protection, (b) vegetative manipulation, (c) silvicultural practices, (e) riparian areas, (f) soil and water and (g) diversity. All supporting reports are incorporated by reference and available in the project file. The “Soil Report” by Tom Laurent dated July 14, 2003, includes an analysis of the direct, indirect, and cumulative effects on the soil resource with the conclusion that Forest Plan and Regional Soil Quality Standards for soils will be met. The “Garden Gulch Project Scenery Evaluation” by Jerry Mosier dated June 25, 2003, provides a discussion of the existing landscape character, scenery protection measures, and effects of the project with the conclusion that the cumulative effects will meet Forest Plan scenery standards and guidelines. The project is consistent with Forest Plan requirements for Management Indicator Species; supporting documentation can be found in the “Klamath National Forest Management Indicator Species (MIS) Project Level Assessment ” by Karen West and Rebecca Quiñones dated September 22, 2003. The project is consistent with Forest Plan requirements for Survey and Manage species; supporting documentation can be found in the “Survey and Manage Fauna Input to Project Files” by Karen West dated September 24, 2003 and “E.A. input and Botanical Analysis for Survey and Manage Plant Species” by Marla Knight dated September 30, 2003.

Informal consultation with NOAA Fisheries has been completed and is documented by their Letter of Concurrence dated April 4, 2004. Informal consultation with FWS has been completed and is documented by their Letter of Concurrence dated November 17, 2003. The requirements of ESA have been fulfilled.

Analysis of EFH for SONCC coho and Chinook salmon is included in the Fish BA. This project does not require additional consultation with the NOAA Fisheries for EFH as described under the Magnuson-Stevens Act, because it will not adversely affect EFH.

The project area is covered by Archaeological Reconnaissance Report 05-05-1588. The project is consistent with 36 CFR 800 and the Regional Programmatic Agreement between Region 5 of the Forest Service, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the process for compliance with Section 106 of the National Historic Preservation Act.

The "Prescribed Fire Air Quality & Emission Assessment" by Thomas Herold, dated July 29, 2003, discusses the Federal and State air quality standards, describes the estimated effects of the project on air quality, evaluates alternatives to burning, and identifies mitigation measures to reduce smoke emissions. The conclusion is that overall emissions will be similar to those of the past three years, which were consistent with Federal standards. If Federal standards are met, the project will be consistent with the Clean Air Act.

The "Garden Gulch Fuels Reduction Project Wild & Scenic Rivers Analysis" by Jerry Mosier dated July 7, 2003, provides a discussion of Wild and Scenic River Act requirements, which are also included in the Forest Plan. The analysis describes the effects of the project with the conclusion that it will not affect free-flowing conditions and that the "outstandingly remarkable" values will be protected. The project is consistent with the Wild and Scenic River Act. Executive Order 12898 relating to Environmental Justice requires an assessment of whether implementation of this decision would disproportionately affect minority or low-income populations. Although there are a high proportion of lower income people living in this portion of the State, as well as a number of tribal groups of American Indians, this project would not affect them any differently than any other member of the public. Adverse environmental effects and effects on human health are minimal. Tribal groups were contacted regarding the proposal and did not express any particular interests or concerns related to it.

This project complies with the direction in Forest Service Manual 7700, Chapter 7710 – Transportation Atlas, Records and Analysis, Effective December 14, 2001. A Forestwide Road Analysis has been completed and is available on the Forest web page. It has been supplemented by additional roads analyses at the District level. I have determined that there is adequate road information to inform my decision and a permanent, system road is not needed in the area where an existing non-system road will be used temporarily for this project and then closed.

Administrative Review or Appeal Opportunity

My decision is not subject to administrative appeal pursuant to 36 CFR 215.12: "The following decisions and actions are not subject to appeal under this part ... (f) Decisions for actions that

have been categorically excluded from documentation in an EA or EIS pursuant to FSH 1909.15, Chapter 30, Section 31."

Implementation

Implementation of this proposal may take place immediately.

Contact

For further information contact: Thomas Herold, 11263 N. Highway 3, Fort Jones, California 96032-9702; (530) 468-1288.

/s/ CM Gowan

4/19/04

CHANCE GOWAN
District Ranger

Date

Enclosure

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

¹ The scoping letter and letters to Tribes contained an errata in which it was stated, "Riparian Reserves associated with instability on steep ground would not be treated." The language in the sentence preceding the footnote is the correct wording.