Record of Decision
Tule River Reservation Protection Project
U.S. Forest Service

Western Divide Ranger District
Giant Sequoia National Monument
Sequoia National Forest

Tulare County, California

Decision

Based on my review of the Tule River Reservation Protection (TRRP) Project Environmental Impact Statement (EIS), I have decided to implement Alternative 3, which was developed to address the issues of high snag density, high woody debris concentrations along Forest Roads (FR) 21S94 and 21S12, and the risk of fire spreading from Camp Nelson, Rogers Camp, Simmons Post Camp, Mountain Aire, and Bateman Ridge private lands, especially in the upper end of Wilson Creek. This alternative proposes to reduce surface and ladder fuels on approximately 2,830 acres in the project area.

I am modifying Alternative 3 to address the resolution of an objection raised by Rene Voss on behalf of Sequoia ForestKeeper and the Kern-Kaweah Chapter of the Sierra Club. The Black Mountain Road Decommissioning Project was listed on the most recent schedule of proposed actions. This project will analyze the effects of decommissioning spur roads 21S21B, 21S25A, 21S25B, 21S25C, and 21S25D, as well as approximately the last half mile of FR 21S25. The Forest Service will not implement shaded fuel breaks on any of these road segments pending the completion of the Black Mountain Road Decommissioning Project analysis. Shaded fuel breaks will be dropped from the project on any segments selected for decommissioning.

Alternative 3 proposes four treatment areas to reduce fuels:

- Planted Stands
- Shaded Fuel Breaks
- Understory Burning
- Other Fuel Treatments

First target the smaller diameter trees for thinning on all projects acres and allow for cutting of trees over 8 inches only when necessary to meet the desired stand density as described in the FEIS. If trees greater than 8 inches are cut, that portion of the trunk greater than 8 inches will be left intact on the ground as large wood debris.

Planted Stands

The TRRP project area contains approximately 400 acres of planted stands, ranging in age from 30 to 50 years. The modified Alternative 3 proposes to reduce fuels as well as create more heterogeneity and resiliency in these planted stands, by using hand treatments to vary tree spacing. Treatments include:

- Varying spacing to favor retention of the largest trees, according to the following species priority:
  1. All trees greater than 12 inches dbh
  2. Giant sequoia
  3. Black oak
  4. Pine
  5. An average of five hardwoods per acre.
- Felling trees up to 12 inches dbh following the priority list.
- Where the largest trees are smaller than eight inches in diameter, thinning to 100 trees per acre (average tree spacing of 20 feet).
- Where the largest trees are eight inches in diameter and larger, thinning trees to 70 trees per acre (average tree spacing of 25 feet).
- Removing a sufficient amount of surface fuels to produce an average flame length of four feet or less after project completion, by piling and burning existing down woody material between one and eight inches in diameter.
- Limbing leave trees where necessary to reduce fire risk.
- After the treatments above, jackpot burning and pile burning to reduce fuel loading.
- Retaining snags larger than 15 inches dbh unless they pose an imminent safety threat to personnel.

Shaded Fuel Breaks

Modified Alternative 3 will use hand treatments to establish several fuelbreaks on approximately 690 acres of the project area. Based on terrain and vegetation features, these fuelbreaks will vary from 150 to 300-feet in width:

1) Construct a 150-foot-wide shaded fuel break along the northern boundary of the Reservation and extending from approximately east of Black Mountain to the east past Solo Peak and ending in Section 15 at the eastern edge of the Reservation.

2) Construct a 200-foot-wide shaded fuel break (100 feet on both sides of the road) along Forest Roads (FR) 21S94, 21S12 (from 21S94 to 21S25), 21S25, 21S25A, 21S25B, 21S25C, 21S25D, and 21S58. **NOTE**: *The Black Mountain Grove Road Decommissioning Project will analyze the impacts of decommissioning spur roads No. 21S12B, 21S25A, 21S25B, 21S25C, and 21S25D in the grove that do not lead to private property, as well as approximately the last half mile of Road No. 21S25. Do not implement shaded fuel breaks on any of these road segments pending the completion of the decommissioning project; drop the shaded fuel breaks from the project on any segments selected for decommissioning.*

3) Construct a 200-foot-wide shaded fuel break on National Forest System (NFS) land adjacent to private property.
4) Construct a 300-foot-wide shaded fuel break along the eastern and northwestern boundaries of the project area.

Construction of the shaded fuel breaks would include one or more of the following treatments:

- Fell shade-tolerant tree species (incense-cedar, white fir, and red fir) and retain giant sequoias, oaks, and pine trees.

- Remove sufficient surface fuels to produce an average flame length of four feet or less after project completion, by piling existing down woody material between one and eight inches in diameter.
- Remove sufficient ladder fuels to meet an average canopy base height of 20 feet, by:
  - Cutting and piling brush.
  - Felling and piling trees up to 12 inches dbh to achieve an average of no more than 70 trees per acre (average tree spacing of 25 feet).
- Where shaded fuel breaks and spotted owl protected activity centers overlap (approximately 130 acres), cut and pile brush and trees less than six inches dbh.
- Retain snags greater than 15 inches dbh unless they pose an imminent threat to personnel.
- After the treatments above, use jackpot burning and pile burning to reduce fuel loading.

The Black Mountain Grove Road Decommissioning Project will analyze the impacts of decommissioning spur roads No. 21S12B, 21S25A, 21S25B, 21S25C, and 21S25D in the grove that do not lead to private property, as well as approximately the last half mile of Road No. 21S25. Do not implement shaded fuel breaks on any of these road segments pending the completion of the decommissioning project; drop the shaded fuel breaks from the project on any segments selected for decommissioning.

Understory Burn

Understory burning is proposed on approximately 240 acres between the planted stands and some of the shaded fuel breaks. This prescribed burning will reduce surface fuels to retain an average of 15 tons per acre. In the burn area, hand crews will construct fire lines, and prune or fell incidental small trees, generally less than six inches dbh, prior to burning. Snags greater than 15 inches dbh will be retained, unless they pose an imminent threat to personnel during project implementation.

Other Fuel Treatments

In addition to the 240 acres of underburning between planted stands and the shaded fuelbreaks, the modified Alternative 3 proposes approximately 1,500 more acres of fuels reduction treatments. These treatments will focus on reducing surface and ladder fuels in more of the areas between the planted stands and the shaded fuelbreaks, and in the eastern portion of the project area using the following criteria:

- Remove sufficient surface fuels to produce an average flame length of less than six feet after project completion, by hand piling existing down woody material up to 8 inches in diameter.
- Remove sufficient ladder fuels, to meet an average canopy base height of 20 feet, by:
  - Cutting and piling brush.
  - Felling and piling trees up to 12 inches dbh to achieve an average of no more than 70 trees per acre (average tree spacing of 25 feet).
- Retain snags greater than 15 inches dbh unless they pose an imminent threat to personnel.
- Where these fuel treatments and spotted owl protected activity centers overlap (305 acres), cut and pile brush and small trees (less than six inches dbh).
- After the felling and piling, jackpot and pile burning will be used to reduce fuel loading.
- Where these fuel treatments and fisher den site buffers overlap (approximately 45 acres), use only pile and burn methods.

Background

The Western Divide Ranger District in the Sequoia National Forest proposes to reduce surface and ladder fuels on approximately 2,830 acres of the Giant Sequoia National Monument. This action is needed because of the high and continuous accumulation of woody fuels adjacent to the Tule River Indian Reservation (Reservation) that could result in a stand-replacing fire crossing between the Giant Sequoia National Monument and the Reservation, or other adjacent private lands. This project is of particular importance for reducing the threat of a stand-replacing fire in the headwaters of the watershed that supplies the Reservation with their drinking water.

The purpose of the TRRP Project is to respond to the Tule River Tribal Council's request for action under the 2004 Tribal Forest Protection Act, and to protect, restore, and maintain the Black Mountain Giant Sequoia Grove, the surrounding forest, and the other objects of interest in the project area, by conducting fuels management activities in the Tribal Fuels Emphasis Treatment Area (TFETA) defined in the Giant Sequoia National Monument Management Plan (Monument Plan). The TFETA was designed along the boundary with the Tule River Indian Reservation to not only protect the reservation and its watersheds, but also the objects of interest and watersheds in the Monument, from fires spreading from one to the other.

The need is to reduce the accumulation of woody fuels adjacent to the reservation in order to:

- Prevent unwanted wildland fire from spreading into the Tule River Indian Reservation from the project area, and protect the watershed which provides the Tribe's drinking water from a stand-replacing event.
- Move the project area toward the desired conditions in the Monument Plan for Fire and Fuels in the TFETA.

On July 22, 2004, Congress passed the Tribal Forest Protection Act (Public Law 108-278) in response to devastating wildfires that started on Federal lands and crossed onto adjacent Tribal lands. The Tribal Forest Protection Act (TFPA) provides a tool for tribes to propose work on adjacent federal lands that would reduce the threat of fires starting on those lands from spreading onto trust lands for Indian tribes.

On November 1, 2005, the Tule River Tribal Council of the Tule River Indian Tribe (Tribe), a federally recognized tribe, formally submitted a project request under the authority of the Tribal Forest Protection Act of 2004 to the Forest Supervisor of the Sequoia National Forest. The proposal identified an area for treatment along the northern boundary of the Reservation to address threats to tribal lands. That same month, the Sequoia National Forest Supervisor requested the authority to proceed from the Pacific Southwest Regional Forester, who agreed that the proposal met the criteria set forth by the TFPA and Forest Service Handbook (FSH) 2409.19, Chapter 60 (USDA 2008a).

Management direction for the TRRP Project comes from the Monument Plan and it is tiered to this document. The applicable management direction for the TRRP Project can be found in the TRRP Project FEIS on pages 4 through 9.

Decision Rationale

The TRRP Project EIS documents the accumulation of trees less than 12 inches dbh that dominate much of the giant sequoia grove, are suppressed and dying, and make up the ladder fuels that

lower the canopy base height in wildfire situations. This project will thin trees up to 12 inches diameter at breast height (dbh) to reduce ladder fuels, but still retain a mix of this size class spaced throughout the understory. Focus will be placed on retaining young giant sequoia, pine and black oak when present and reducing incense cedar and white fir. These guidelines in conjunction with proposed burning techniques will allow for the retention of both low ground cover, large down logs, and maintenance of elements most at risk, and difficult to replace, such as large live trees, snags, and down woody debris. The thinning and fuels reduction operations target the removal of only small trees (12 inches dbh or less), brush, and existing surface fuels.

Implementation of the modified Alternative 3 is not expected to result in substantial shifts in habitat quality or quantity from what currently exist throughout the TRRP project area, and will maintain suitable habitat elements necessary for wildlife over the landscape. Risk of uncharacteristically severe fire disturbances which would negatively impact wildlife will be reduced.

Modified Alternative 3 best meets the purpose and need for the TRRP Project, because by treating fuels on all the project acres, I expect to reduce the risk of fire spreading from NFS lands into the Reservation; and protect, restore, and maintain the Black Mountain Giant Sequoia Grove, the surrounding forest, and the other objects of interest in the project area. Modified Alternative 3 also addresses the issues of high snag density and high woody debris concentrations.

- The data on fire behavior and treatment show that modified Alternative 3 will best meet the purpose and need by reducing the potential for active crown fire, and by reducing surface and ladder fuels by treating a total of 2,380 acres, an additional 1,500 acres of fuels treatments on NFS lands along the boundary with the Reservation that Alternative 2 did not propose to treat.
- Modified Alternative 3 has the greatest potential of the three alternatives to break up fuel concentrations, reduce woody debris, and protect the private lands within or close to the project area, by reducing fuels in the wildland urban intermix (WUI) surrounding these tracts of private land, especially in the Wilson Creek area.
- In response to the issue regarding snags both as wildlife habitat and a safety hazard, each alternative is likely to retain more snags per acre than required for wildlife habitat by the Monument Plan. However, modified Alternative 3 includes the stipulation that snags or live trees that pose a safety hazard may be felled when clearly needed for firefighter or public safety.
- Canopy cover in the more mature and dense forest habitat types will be retained best in the modified Alternative 3. In terms of wildlife habitat, though modified Alternative 3 proposes treatments in close proximity to known nesting and denning areas, the overall changes in California Wildlife Habitat Relationship (CWHR) scores will be minimal in the event of a wildfire occurring after project implementation. Thinning small trees, while leaving large-and moderate-sized trees in the overstory, will lead to improved stand health, and a diversity of canopy layers.
- Modified Alternative 3 complies with the intent of the Tribal Forest Protection Act by complementing the fuels reduction work that the Tule River Tribe has done on their side of the boundary with NFS lands. This project also implements key features of the Monument Plan, particularly in the Tribal Fuels Emphasis Protection Treatment Area.

Mitigation measures were developed following current management direction from the Monument Plan and applicable laws, regulations, and policies. Mitigation measures were also developed to address issues raised during scoping, specifically to protect large sequoias from fire, and retaining large snags and down woody debris for wildlife habitat.

The TRRP Project EIS documents the analysis and conclusions upon which this decision is based.

Public Involvement

The Forest Service issued a news release describing the preliminary TRRP Project on February 28, 2006. A letter soliciting input about the proposal was sent to 37 interested individuals on March 2, 2006. Two responses were received.

The TRRP Project was added to the Sequoia National Forest's Schedule of Proposed Actions (SOPA) in June 2006. A field trip to the project area, scheduled for September 2, 2006, was announced in a news release on August 21, 2006, and in a letter sent to the pre-scoping list of interested individuals. The field trip was attended by 27 individuals. Suggestions regarding the project were incorporated into the proposal. Another field trip to the project area was held on October 26, 2007, with 15 people attending.

A notice of intent to prepare an EIS was published in the Federal Register on August 28, 2008 (73 FR 50301), initiating a 30-day scoping period for the TRRP Project. In addition, the proposed action was listed in the Sequoia National Forest Schedule of Proposed Actions and updated periodically during the environmental analysis. The scoping letter was mailed on August 26, 2008 as well. There were 10 responses to scoping containing several concerns and suggestions regarding the proposed action. The following issues were identified from scoping comments and were used to determine the scope of the analysis. The issues raised include the abundance of snags (too many for safety, and not enough for wildlife); the proposed action did not treat enough of the large accumulations of woody debris along Forest Roads 21S94 and 21S12 to provide an effective barrier, or stop fire from coming onto the forest from the private properties; and mastication can inhibit the natural germination of plants, which would interfere with the restoration of plantations. A full description of issues significant to the proposed action appears in the FEIS on pages 11 to 12. The scoping comments from the public are also in the project record on file at the Western Divide Ranger District Office in Springville, California. The field trip was attended by Tribal representatives, local property owners within the project area, and other interested parties. No new issues were raised during that field trip.

A draft environmental impact statement (DEIS) was published for review and comment on April 25, 2014 in the *Federal Register*. There were 18 respondents, of which the majority supported selection of Alternative 3. However, comments from the public included a number of recommendations for and against the 12-inch dbh upper diameter limit; requests for a sale of some type of forest product (no forest or wood product sales are proposed as part of the TRRP Project); views about the effectiveness of fuelbreaks and their locations along several existing roads in the project area; opinions for and against road decommissioning, and statements for and against snag retention. Three respondents commented on the need to protect the watershed from a stand-replacing fire since it is the main drinking water source for the Tule River Indian Reservation.

Several commenters wanted confirmation or clarification that the project will proceed in compliance with NEPA, other applicable regulation or policy, and current management direction, including but not limited to the Air Quality General Conformity requirements, Freedom of Information Act, Tribal

consultation requirements, the Monument Plan, and consideration of new science. There were comments that the TFETA is arbitrarily large, that there is no requirement to fence cattle out, that the project is not consistent with the 1990 Sequoia National Forest Mediated Settlement Agreement, and that the cumulative effects analysis was not adequate.

Administrative Objection

A draft record of decision and final EIS was published for objection on August 8, 2014, in the Porterville Recorder. There were three respondents, of which two were college students submitting comments. Objections were filed by Rene Voss on behalf of Sequoia ForestKeeper and the Kern-Kaweah Chapter of the Sierra Club.

The Forest Supervisor in his response to the objections concluded that "The District Ranger's rationale for this project is clear and the reasons for the project are logical and responsive to direction contained in the Giant Sequoia National Monument Management Plan. As described above, I made a reasonable and appropriate effort to resolve the concerns that were brought forward while maintaining a balanced approach to managing the lands and meeting the purpose of the project."
He issued the following instructions:

1) ***Ensure follow-up on the resolutions made by District Ranger Stevens in his letter of October 15, 2014. Specifically ensure the ROD documents the following wording:***

a. *First target the smaller diameter trees for thinning on all projects acres and allow for cutting of trees over 8 inches only when necessary to meet the desired stand density as described in the FEIS. If trees greater than 8 inches are cut, that portion of the trunk greater than 8 inches will be left intact on the ground as large wood debris.*

b. *The Black Mountain Grove Road Decommissioning Project will analyze the impacts of decommissioning spur roads No. 21S12B, 21S25A, 21S25B, 21S25C, and 21S25D in the grove that do not lead to private property, as well as approximately the last half mile of Road No. 21S25. Do not implement shaded fuel breaks on any of these road segments pending the completion of the decommissioning project; drop the shaded fuel breaks from the project on any segments selected for decommissioning.*

2) ***Supplement the Response to Comments with the results of an analysis of the effectiveness of cutting diameter limits of 8" and 10" toward meeting the objectives of project.***

The ROD will disclose the results of an analysis of effects of the removal of 8" and 10" diameter trees and whether the removal of just the smaller diameter trees would meet the objectives of the project.

In response to the objection regarding the 12-inch dbh diameter limit, the Forest Vegetation Simulator (FVS) model was rerun to clarify the potential effects of a diameter limit at the 8-, 10- and 12-inch diameter class. The model run and summary are attached to this decision. The model shows the projected fuel level is the same for both 0-8 inch dbh class and 0-10 inch dbh class following thinning

due to the lack of trees in the 8-10 inch dbh size class. Therefore, the 0-10 inch data was compared to the treatments modeled for Alternative 3, which allows thinning up to 12 inches dbh.

The predicted fire behavior projection, based on the FVS runs, shows that treating only material up to 10 inches in certain stands kills the majority of the trees in all size classes, and does not meet the intent of the TRRP Project. In contrast, thinning material up to 12 inches dbh projects 97 percent mortality in the 0 to 5 inch dbh class; 18 percent mortality in the 10 to 20 inch dbh class; and 4 percent mortality in the 20 to 30 inch dbh class. No mortality is projected to occur in the 5 to 10, and 30-inch or larger dbh size classes. Thinning up to 12 inches dbh meets the purpose and need and responds to the Tule River Tribal Council's request to reduce fuels; while protecting, restoring and maintaining the objects of interest.

Other Alternatives Considered

In addition to the selected alternative, I considered two other alternatives, which are discussed below. A more detailed comparison of these alternatives can be found in the EIS on pages 24 through 26.

Alternative 1

Under Alternative 1, current management plans would continue to guide management of the project area. No fuel reduction activities would be implemented to treat surface and ladder fuels and reduce the risk of wildland fire spreading from NFS lands onto the Tule River Indian Reservation. The purpose and need for the TRRP Project would not be achieved; the Tule River Tribal Council's request for action under the 2004 Tribal Forest Protection Act would not be implemented, and no fuel treatments would be conducted to protect, restore, and maintain the Black Mountain Giant Sequoia Grove, the surrounding forest, and the other objects of interest in the project area.

Alternative 2 (Proposed Action)

The proposed action is to reduce surface and ladder fuels on approximately 1,410 acres using a combination of activities. Treatments include hand constructing shaded fuel breaks along ridgelines, private land boundaries, and road edges; hand treatments to vary spacing and reduce fuels in planted stands; and prescribed burning in these areas and other areas using jackpot burning, pile burning, and understory burning techniques.

Findings Required by Other Laws and Regulations

The TRRP Project was designed in conformance with the Giant Sequoia National Monument Management Plan. This decision is consistent with the Monument Plan and all other requirements of the National Forest Management Act.

The National Environmental Policy Act directs that "to the fullest extent possible, agencies shall prepare draft EIS's concurrently with and integrated with...other environmental review laws and executive orders" (40 CFR 1502.25(a)).

In accordance with the Endangered Species Act, the TRRP planning team consulted, as necessary, with the U.S. Fish and Wildlife Service throughout the development of the draft and final EIS regarding the California condor and will continue to do so should any other applicable species become known in the project area. Should satellite data suggest presence of condors in the Forest that would result in occupation in the TRRP Project vicinity, a limited operating period would be

implemented in consultation with the Condor Recovery Team. The draft EIS was sent to officials of the U.S. Fish and Wildlife Service for their review and comments, and they had none.

Consultation with the National Marine Fisheries Service is not required due to the absence of anadromous fish and their habitat.

Title 17 of the California Code of Regulation – Subchapter 2, Smoke Management Guidelines for Agriculture and Prescribed Burning and Public Resource Code 4291 – for Hazard Reduction Burning in the foothill and mountain areas of the San Joaquin Valley Air Pollution Control District (SJVAPCD) will be followed. Implementation of prescribed burning will only occur after approval from SJVAPCD. The conformity rule states "that the prescribed burns conducted in accordance with a smoke management program (SMP) which meets the requirements of EPA's Interim Air Quality Policy on Wildland and Prescribed Fires or an equivalent replacement EPA policy" are considered as "presumed to conform." The EPA has approved California's revised Title 17 regulations as an equivalent of a SMP. Therefore, the project will fall under "presumed to conform" for implementing prescribed burning.

Management of the resources within TRRP Project in terms of cooperation with Native American and Tribal interests is governed by the laws and executive orders applicable to cultural resources, specifically the Archaeological Resources Protection Act of 1979, Native American Graves Protection and Repatriation Act of 1990, Indian Sacred Sites Executive Order (EO) 13007, and Consultation and Coordination with Indian Tribal Governments EO 13175.

The Tribal Forest Protection Act (TFPA) (Public Law 108-278) provides a tool for tribes to propose work on adjacent federal lands that would reduce the threat of fires starting on those lands from spreading onto trust lands for Indian tribes. The TRRP Project was proposed based on a request from the Tule River Indian Tribe under the Tribal Forest Protection Act. Tribal consultation has been on-going and includes several presentations to the Tule River Tribal Council, and a field trip on July 30, 2012 to review the proposal. No new issues were raised during this trip, or from the presentations to the Tribal Council.

In addition to the Tribal Forest Protection Act of 2004, other laws potentially applicable to the TRRP Project include the National Indian Forest Resources Management Act (NIFRMA) (Public Law 101-630, November 28, 1990), American Indian Religious Freedom Act (AIRFA) (Public Law 103-344, October 6, 1994), Healthy Forest Restoration Act (HFRA) (Section 303 of Public Law 108-148, December 3, 2003), and the Farm Bill: Food, Conservation, and Energy Act of 2008 (Public Law 110-234). There are no known or anticipated conflicts between federal, regional, state, local, or Indian reservation land use plans, policies, and controls for the TRRP project area at this time (40 CFR 1502.16(c)).

The Clean Water Act of 1948 (as amended in 1972 and 1987) establishes federal policy for the control of point and non-point pollution, and assigns the states the primary responsibility for control of water pollution. Compliance with the Clean Water Act by national forests in California is achieved under state law. The California Water Code consists of a comprehensive body of law that incorporates all state laws related to water, including water rights, water developments, and water quality. The laws related to water quality (sections 13000 to 13485) apply to waters on the national forests and are directed at protecting the beneficial uses of water. As described in the EIS (Effects on Watershed, pp. 124-130), all

actions in Alternative 3 with modification result in the greatest potential for positive effects on hydrologic function.

Executive Order 11988 applies to Floodplain Management. Floodplains are found along stream channels throughout the project area. Executive Order 11990 requires protection of wetlands. Wetlands within the project area include meadows, stream channels, springs, fens, and shorelines. As described in the EIS (Effects on Watershed, pp. 124-130), all actions in Alternative 3 with modification result in the greatest potential for positive effects on hydrologic function.

This decision complies with the Migratory Bird Treaty Act. Likely impacts to habitats and select migratory bird populations resulting from the Tule River Reservation Protection Project have been assessed in detail within the project MIS report and impacts to select bird sensitive species and their habitats have been analyzed in the project Biological Evaluation.

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population" requires that federal agencies make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority populations and low-income populations. Chapter 4 of the FEIS for the Monument Plan, to which the TRRP Project is tiered, addresses environmental justice and our relationship with the Tule River Indian Tribe. Implementation of Alternative 3 will not disproportionally impact minority or disadvantaged groups.

In accordance with Pacific Southwest Region guidance (letter dated November 6, 2013) and the agreement with the State of California, though this project includes activities in the Black Mountain Inventoried Roadless Area (IRA), it does not warrant Regional Office review. Specifically, fuel reduction treatments in the Black Mountain IRA include hand piling, jackpot and pile burning in the planted stands, and along the fuelbreaks, and underburning. None of these activities would change the characteristics for which the Black Mountain IRA was identified. There is no timber sale or road construction component in the TRRP Project.

Short-term Uses and Long-term Productivity

The consideration of "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (40 CFR 1502.16) is required by NEPA. This includes using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans (NEPA, Section 101). Discussion related to short-term uses and long-term productivity can be found in detail in the effects analysis discussions for the individual resources in the FEIS.

Modified Alternative 3 will implement fuel reduction activities that could produce the greatest number of short-term effects to soil and water quality, while providing the greatest long-term benefits in terms of prevention of and protection from wildfire. In contrast, in the event of a wildfire under extreme weather conditions, Alternative 1 (The No Action) could produce many short-term effects to soil and water quality, while providing limited long-term benefits in terms of prevention of and protection from wildfire.

Unavoidable Adverse Effects

There are no known unavoidable adverse effects from implementing modified Alternative 3.

Irreversible and Irretrievable Commitments of Resources

There are no known irreversible or irretrievable commitments of resources from implementing modified Alternative 3.

Environmentally Preferred Alternative

Alternative 3 with modification is the environmentally preferred alternative. By treating fuels on all the project acres, modified Alternative 3 will reduce the risk of fire spreading from NFS lands into the Reservation. It will protect, restore, and maintain the Black Mountain Giant Sequoia Grove, the surrounding forest, and the other objects of interest in the project area.

Modified Alternative 3 will maintain suitable habitat elements necessary for wildlife over the landscape and will not result in substantial shifts in habitat quality or quantity from what currently exists throughout the TRRP Project area. Modified Alternative 3 reduces the risk of uncharacteristically severe fire disturbances which would negatively impact wildlife.

Modified Alternative 3 will lead to improved stand health, and a diversity of canopy layers by thinning small trees, while leaving large-and moderate-sized trees in the overstory. Modified Alternative 3 retains canopy cover in the more mature and dense forest habitat types.

Implementation Date

The expected date of implementation is in spring of 2015.

Contact

For additional information concerning this decision, contact: Marianne Emmendorfer, District Planner, 559-338-2251, extension 313; or write to her in care of Western Divide Ranger District, 32588 Highway 190, Springville, California 93265.

George Powell
GEORGE POWELL
Acting District Ranger

Date: January 29, 2015

Supplement to Appendix D: Tule River Reservation Protection Project Comments and Responses

The results of an analysis of the effectiveness of cutting diameter limits of 8" and 10" toward meeting the objectives of project.

The Forest Vegetation Simulator (FVS) was used to model thinning up to 8, 10 and 12 inches in diameter at breast height (dbh). The result for both 0-8 and 0-10 inch thinning was the same due to the lack of trees in the 8-10 inch size class. This 0-10 inch data (Model run smcrd_wf_10) was compared to the treatments modeled for Alternative 3, which allows thinning up to 12 inches in diameter at breast height (Model run Smc4dwf22_12) (See Appendix A). All the other inputs were unchanged.

Table 1 compares the mortality from a crown fire in year 2022 for thinning up to both 10 and 12 inches. Any comparison to thinning trees less than a 10 inch limit would be futile because the results could only be the same or worse.

Table 1: Comparison of Mortality at Different Thinning Diameters

Treatment size in diameter	Percent mortality by diameter class				
	0-5"	5-10"	10-20"	20-30"	30"+
0-10 inches	100	100	100	100	100
0-12 inches	97.5	0	18	4	0

The predicted fire behavior based on the FVS runs shows that treating only material up to 10 inches dbh in certain stands is projected to kill the majority of trees in all size classes, and does not meet the intent of the TRRP Project. In contrast, allowing thinning of material up to 12 inches dbh shows a projected 97 percent mortality in the 0 to 5 inch class, 18 percent mortality in the 10 to 20 inch class, and 4 percent mortality in the 20 to 30 inch class. No mortality is projected to occur in the 5 to 10, and 30 inch or larger dbh size classes. Allowing thinning up to 12 inches dbh is projected to meet the purpose and need to respond to the Tule River Tribal Council's request to reduce fuels; and to protect, restore and maintain the objects of interest

Appendix A

The following data are excerpts from the actual FVS model runs for the 8, 10 and 12 inch treatment sizes.

8" smc4d_wf22out

****** FIRE MODEL VERSION 1.0 ******
FUEL CONSUMPTION & PHYSICAL EFFECTS REPORT
STAND ID: 051352SMC4D0001 MGMT ID: NONE

YEAR	PERCENT MINERAL SOIL EXPOSR	FUEL CONSUMED (TONS/ACRE) LITR	DUFF	0-3"	3"+	3-6"	6-12"	12"+	HERB& SHRUB	CRWNS	TOTAL CONS.	%CONSUME DUFF	%CONSUME 3"+	% TREES WITH CRWNG	SMOKE PRODUCTION (TONS/ACRE) <2.5	< 10
2011	50	1.2	18.1	4.5	18.5	5.0	6.4	7.2	0.0	0.0	42.2	50	72	0	0.36	0.42
2022	58	0.6	13.4	5.0	4.0	1.5	1.4	1.0	0.3	13.7	36.9	75	61	100	0.38	0.45

****** FIRE MODEL VERSION 1.0 ******
MORTALITY REPORT
STAND ID: 051352SMC4D0001 MGMT ID: NONE

NUMBER KILLED / NUMBER BEFORE (BY DIAMETER CLASS IN INCHES)

YEAR	SP	0.0- 5.0	5.0-10.0	10.0-20.0	20.0-30.0	30.0-40.0	40.0-50.0	>=50.0	BASAL AREA	TOTAL CU FT
2011	SP			0/ 8	0/ 4				0.00	0
	WF			0/ 98	0/ 30		0/ 1		0.00	0
	IC		0/ 11		0/ 4				0.00	0
	PP				0/ 3				0.00	0
	ALL		0/ 11	0/ 107	0/ 42		0/ 1		0.00	0
2022	SP	4/ 4		7/ 7	4/ 4				34.30	1391
	WF	9/ 9		84/ 84	35/ 35	0/ 0	1/ 1		242.78	10377
	GS	4/ 4							0.07	0
	IC	9/ 9	10/ 10		4/ 4				20.79	621
	PP	4/ 4			0/ 0	2/ 2			16.62	778
	OS	4/ 4							0.01	0
	ALL	40/ 40	10/ 10	92/ 92	45/ 45	3/ 3	1/ 1		314.57	13169

10" smc4dwf22_10out (this table is the same as the 8" table)

12" smc4dwf22_12out

****** FIRE MODEL VERSION 1.0 ******
FUEL CONSUMPTION & PHYSICAL EFFECTS REPORT
STAND ID: 051352SMC4D0001 MGMT ID: NONE

YEAR	PERCENT MINERAL SOIL EXPOSR	FUEL CONSUMED (TONS/ACRE) LITR	DUFF	0-3"	3"+	3-6"	6-12"	12"+	HERB& SHRUB	CRWNS	TOTAL CONS.	%CONSUME DUFF	%CONSUME 3"+	% TREES WITH CRWNG	SMOKE PRODUCTION (TONS/ACRE) <2.5	< 10
2011	50	1.2	18.1	4.9	20.0	5.2	7.6	7.2	0.0	0.0	44.2	50	72	0	0.38	0.44
2022	58	0.6	13.4	4.8	4.3	1.6	1.6	1.0	0.3	0.0	23.5	75	61	0	0.24	0.28

****** FIRE MODEL VERSION 1.0 ******
MORTALITY REPORT

STAND ID: 0513525MC4D0001 MGMT ID: NONE

YEAR	SP	NUMBER KILLED / NUMBER BEFORE (BY DIAMETER CLASS IN INCHES) 0.0- 5.0	5.0-10.0	10.0-20.0	20.0-30.0	30.0-40.0	40.0-50.0	>=50.0	BASAL AREA	TOTAL CU FT
2011	SP			0/ 8	0/ 4				0.00	0
	WF			0/ 89	0/ 30		0/ 1		0.00	0
	IC				0/ 4				0.00	0
	PP				0/ 3				0.00	0
	ALL			0/ 98	0/ 42		0/ 1		0.00	0
2022	SP	4/ 4		0/ 7	0/ 4				1.50	58
	WF	9/ 9		14/ 75	3/ 35	0/ 0	0/ 1		30.03	1255
	GS	4/ 4							0.07	0
	IC	9/ 9			0/ 4				0.83	25
	PP	4/ 4			0/ 0	0/ 2			0.54	23
	OS	4/ 4							0.01	0
	ALL	39/ 40		15/ 83	3/ 45	0/ 3	0/ 1		32.98	1362

Supplemental Information Report for the Migratory Landbird Conservation on the Sequoia National Forest

Tule River Reservation Protection Project

Under the National Forest Management Act (NFMA), the Forest Service is directed to "provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives." (P.L. 94-588, Sec 6 (g) (3) (B)). The January 2000 USDA Forest Service (FS) Landbird Conservation Strategic Plan, followed by Executive Order 13186 in 2001, in addition to the Partners in Flight (PIF) specific habitat Conservation Plans for birds and the January 2004 PIF North American Landbird Conservation Plan all reference goals and objectives for integrating bird conservation into forest management and planning.

In 2008, a Memorandum of Understanding between the USDA Forest Service and the US Fish and Wildlife Service to Promote the Conservation of Migratory Birds was signed. The intent of the MOU is to strengthen migratory bird conservation through enhanced collaboration and cooperation between the Forest Service and the Fish and Wildlife Service as well as other federal, state, tribal and local governments. Within the National Forests, conservation of migratory birds focuses on providing a diversity of habitat conditions at multiple spatial scales and ensuring that bird conservation is addressed when planning for land management activities.

The Draft Avian Conservation Plan for the Sierra Nevada Bioregion identified montane meadows, riparian habitat, late successional/old growth forest and oak woodlands as priority habitats for conservation (Siegel and DeSante 1999). Maintaining a diversity of habitats, including those identified as important for bird conservation is identified as a goal in the 2012 Giant Sequoia National Monument Management Plan.

Opportunities to promote conservation of migratory birds and their habitats in the project area were considered during development and design of the Tule River Reservation Protection Project (MOU Section C: item 1 and Section D: item 3).

Project Specific Design Features:

Several project design features would be utilized to protect key bird habitat during implementation of one of the action alternatives. These measures, in conjunction with standard Best Management Practices would decrease the potential for disturbance during the critical time frames in the nesting period, and assist in the retention of suitable habitat and structural elements necessary for key migratory bird species. These include maintenance of elements most at risk, and difficult to replace, such as large live trees, snags, and down woody debris.

Likely impacts to habitats and select migratory bird populations resulting from the Tule River Reservation Protection Project have been assessed in detail within the project MIS report and impacts to select bird sensitive species and their habitats have been analyzed in the project Biological Evaluation. These impacts are summarized below:

Effect on Fox Sparrow Habitat from the Project Management Indicator Species Report (Cordes 2014):

Cumulative Effects to Fox Sparrow Habitat (Shrubland) in the Analysis Area.

The direct, indirect, and cumulative effects of Alternative 3 of the TRRP Project will result in: (1) no change in acres of shrubland habitat, (2) a reduction in shrub ground cover classes on a maximum of 1,868 acres of shrubland habitat, and (3) a reduction in CWHR size classes of shrubs on a maximum of 1,868 acres. This represents 21% of the shrubland in the Middle Fork Tule River watershed analysis area.

Relationship of Project-Level Habitat Impacts to Bioregional-Scale Fox Sparrow Trend.

Since the alternatives in the TRRP Project will result in a reduction in shrub ground cover and size class on less than 1% of existing shrubland habitat, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of fox sparrows across the Sierra Nevada bioregion.

Effect on Mountain Quail Habitat from the Project Management Indicator Species Report (Cordes 2014):

Cumulative Effects to Mountain Quail Habitat (early seral and mid seral coniferous forest).
The direct, indirect, and cumulative effects of the TRRP Project Alternative 3 will result in: (1) no change in acres of early and mid seral coniferous forest habitat, (2) no change in CWHR tree size class on any acres, (3) a reduction in tree canopy closure on a maximum of 1,501 acres of early and mid seral coniferous habitat, and (4) a decrease in understory shrub canopy cover on a maximum of 1,501 acres. This represents less than 7% of the early and mid seral coniferous habitat in the Middle Fork Tule River watershed.

Relationship of Project-Level Habitat Impacts to Bioregional-Scale Mountain Quail Trend.

Since the direct, indirect, and cumulative effects of the alternatives in the TRRP Project will result in no change in early and mid seral coniferous forest habitat acres and size classes and moderate change in canopy closure and shrub understory on less than 1% of the available habitat, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of mountain quail across the Sierra Nevada bioregion.

Effect on Sooty Grouse Habitat from the Project Management Indicator Species Report (Cordes 2014):

Cumulative Effects to Sooty Grouse Habitat (late seral open canopy coniferous forest):
The direct, indirect, and cumulative effects of the TRRP Project Alternative 3 will result in: (1) no change in acres of late seral open canopy coniferous forest habitat, (2) a slight reduction in tree canopy closure on a maximum of 65 acres, and (3) a reduction in understory shrub canopy closure on a maximum of 65 acres. This represents about 34% of the late seral open canopy coniferous habitat in the Middle Fork Tule River watershed.

Relationship of Project-Level Habitat Impacts to Bioregional-Scale Trends.

Since the direct, indirect, and cumulative effects of the alternatives in the TRRP Project will result in no change in acres of late seral open canopy coniferous forest habitat and changes in tree canopy closure and understory shrub canopy closure on less than 1% of the available habitat, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of sooty grouse across the Sierra Nevada bioregion.

Effect on California Spotted Owl Habitat from the Project Management Indicator Species Report (Cordes 2014):

Cumulative Effects to California Spotted Owl Habitat (late seral closed canopy coniferous forest):
The direct, indirect, and cumulative effects of the TRRP Project Alternative 3 will result in: (1) no change in acres of late seral closed canopy coniferous forest habitat, (2) a slight reduction in canopy closure on a maximum of 1,385 acres (This represents 12% of the late seral closed canopy coniferous habitat in the Middle Fork Tule River watershed), (3) a possible reduction in the number of large snags (>15" dbh) per acre if snags that pose an imminent safety hazard are removed.

Relationship of Project-Level Habitat Impacts to Bioregional-Scale Trends.

Since the direct, indirect, and cumulative effects of the alternatives of the TRRP Project will result in no change in late seral closed canopy coniferous forest habitat acres, a reduction in canopy closure and the average large snags per acre on less than 1% of the available habitat, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of California spotted owl across the Sierra Nevada bioregion.

Determination of effects on Northern Goshawks and California Spotted Owls from the Wildlife Biological Evaluation (Galloway 2014):

The determination was that the TRRP Project "may affect individuals" but "would not lead to a trend toward federal listing or a loss of viability" for the California spotted owl and northern goshawk.

Implementation of either Action Alternative was not expected to result in substantial shifts in habitat quality or quantity from what currently exist throughout the TRRP Project Area, and would maintain suitable habitat elements necessary for these species over the landscape. Risk of uncharacteristically severe fire disturbances which would negatively impact the species would be reduced. Therefore, the project action "would not lead to a trend toward federal listing."

Effect on Hairy Woodpecker Habitat from the Project Management Indicator Species Report (Cordes 2014):

Cumulative Effects to Hairy Woodpecker Habitat (snags in green forest):
The direct, indirect, and cumulative effects of the TRRP Project Alternative 2 or Alternative 3 will result in: (1) a possible slight reduction in the average number of medium and large snags per acre if safety hazard snags are removed; (2) a possible slight reduction in the average number of large snags (>30" dbh) per acre if safety hazard snags are removed. Alternative 3 could potentially reduce the number of medium and large snags per acre more than Alternative 2 because a larger number of acres would be in the treatment area.

Relationship of Habitat Impacts to Bioregional-Scale Hairy Woodpecker Trend.
Since the direct, indirect, and cumulative effects of the alternatives of the TRRP Project will result in a possible decrease in snags >15" dbh and >30" dbh per acre on less than 1% of the forested habitat available, this project will not alter the existing trend in snags, nor will it lead to a change in the distribution of hairy woodpecker across the Sierra Nevada bioregion.

References:

CalPIF (California Partners in Flight). 2002. Version 2.0. The oak woodland bird conservation plan: a strategy for protecting and managing oak woodland habitats and associated birds in California (S. Zack, lead author). Point Reyes Bird Observatory, Stinson Beach, CA. http://www.prbo.org/calpif/plans.html.

Cordes, J.R. 2014. Management Indicator Species Report for the Tule River Reservation Protection Project. Western Divide Ranger District, Sequoia National Forest. 34 pp.

Galloway, R.S. 2014. Biological Evaluation for the Tule River Reservation Protection Project, Western Divide Ranger District, Giant Sequoia National Monument/ Sequoia National Forest, Tulare County, California.

Rich, T. D., C. J. Beardmore, H. Berlanga, P. J. Blancher, M. S. W. Bradstreet, G. S. Butcher, D. W. Demarest, E. H. Dunn, W. C. Hunter, E. E. Iñigo-Elias, J. A. Kennedy, A. M. Martell, A. O. Panjabi, D. N. Pashley, K. V. Rosenberg, C. M. Rustay, J. S. Wendt, T. C. Will. 2004. Partners in Flight North American Landbird Conservation Plan. Cornell Lab of Ornithology. Ithaca, NY.

Siegel, R. B. and D. F. DeSante. 1999. Version 1.0. The draft avian conservation plan for the Sierra Nevada Bioregion: conservation priorities and strategies for safeguarding Sierra bird populations. Institute for Bird Populations report to California Partners in Flight.

USDA Forest Service, U.S. Fish and Wildlife Service. 2008. Memorandum of Understanding between the US Department of Agriculture Forest Service and the US Fish and Wildlife Service to promote the conservation of migratory birds. FS Agreement #08-MU-1113-2400-264. Washington, D.C.

USDA Forest Service. 1988. Sequoia National Forest Land and Resource Management Plan. USDA Forest Service, Pacific Southwest Region.

USDA Forest Service. 2000. Landbird Strategic Plan, FS-648. Washington, D.C.

USDA Forest Service. 2012. Giant Sequoia National Monument Management Plan. Porterville, CA. 158 pp.

U.S. Fish and Wildlife Service. 2008. Birds of conservation concern 2008. Division of Migratory Bird Management, Arlington, Virginia. 87 pp.