

# **Record of Decision**

## **Giant Sequoia National Monument Management Plan**

### **Final Environmental Impact Statement**

**Sequoia National Forest  
Fresno, Kern, and Tulare Counties, CA  
December 2003**

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## **I. Introduction**

### **A. *The Presidential Proclamation***

A Presidential Proclamation (Proclamation) created the Giant Sequoia National Monument (Monument) on April 15, 2000. The rich and varied landscape of the 327,769-acre Monument holds a diverse array of scientific and historic resources. The Presidential Proclamation requires the preparation of a management plan for the Monument that will provide for the proper care and management of the objects of interest in the Monument.

The Giant Sequoia National Monument Management Plan Final Environmental Impact Statement (FEIS) and this Record of Decision (ROD) provide direction for the proper care and management of the objects of interest as discussed in the Proclamation (FEIS, Appendix B). The objects of interest are:

- The naturally occurring groves of giant sequoia (see Figure I-2, Giant Sequoia Groves), described in the Proclamation as “Magnificent groves of towering giant sequoias, the world's largest trees...”
- The ecosystems within the Monument that surround the groves and provide enriching recreational and social experiences, outstanding landscapes, and an array of rare and endemic species, such as the fisher, the great gray owl, the American marten, the northern goshawk, the peregrine falcon, the spotted owl, and the condor
- The historical landscape in and around the Hume Lake Basin associated with the Euro-American use of the giant sequoias since the late 1800s
- The limestone caverns and prehistoric archeological sites that provide a paleontological record of the ecological changes that giant sequoias have undergone, as well as a prehistoric record of the relationship of the area to the native tribes

### **B. *Purpose of and Need for Action***

The purpose of this Record of Decision (ROD) and associated Final Environmental Impact Statement (FEIS) is to establish the management direction for the Giant Sequoia National Monument. This ROD amends the 1988 Sequoia National Forest Land and Resource Management Plan (Forest Plan), which was previously amended by the 2001 Sierra Nevada Forest Plan Amendment (Framework).

In 1990, in response to a number of appeals on the 1988 ROD for the Forest Plan, the Mediated Settlement Agreement (MSA) was signed. This agreement resolved the appeals and provided interim management direction for a variety of resources. Within the Monument, the Presidential Proclamation supersedes the provisions of the MSA by force of law.

The Proclamation and subsequent FEIS identify the need to establish management direction in order to provide for the proper care and management of the objects of interest. The Proclamation identified two critical problems facing the giant sequoias and their ecosystems: 1) an unprecedented failure in giant sequoia reproduction, and 2) an unprecedented buildup of woody debris and surface fuels, leading to an increased hazard from severe wildfires that was rarely encountered in pre-Euro-American times.

The Proclamation and the FEIS have identified opportunities for scientific research, interpretation, and recreation. The Proclamation also requires a transportation plan, which the FEIS develops as part of the transportation strategy for each alternative.

## **II. The Decision**

Based upon my review of all alternatives, I have decided to implement Modified Alternative 6. This alternative provides the best combination of meeting the purpose and need, moving towards desired conditions, and responding to the issues. I find that its management direction will be effective in creating ecological conditions to regenerate sequoias, in reducing the threat of catastrophic fire throughout the sequoia ecosystem, and in protecting the objects of interest, while also creating and implementing opportunities for scientific research, interpretation, and recreation.

Based on public comments received on the Draft Environmental Impact Statement (DEIS), Alternative 6 was modified. Modified Alternative 6 retains the same fundamental management strategies as Alternative 6, with the following changes: 1) further clarification of the analytical basis for a 30-inch diameter limit on tree removal for ecological restoration and maintenance or public safety, 2) greater emphasis on treatments to restore plantations created by past harvesting or wildfires, 3) greater emphasis on treatments to protect special resources such as the giant sequoia groves; and, 4) greater clarification of and detail in the standards and guidelines for the protection and restoration of old forest wildlife habitat. These modifications are within the range of alternatives analyzed in the DEIS.

This decision establishes management direction in four areas: the protection of communities and other valuable resources from catastrophic fire, ecological restoration, recreation and human use, and transportation. In the first two

decades, the protection strategy will be emphasized to reduce the risk of stand-replacing wildfires. The highest priority will be to protect communities and the second priority will be to protect sequoia groves and other important resources such as wildlife and aquatic habitat. The highest priority for ecological restoration (restoration strategy) will be the restoration of plantations created by past logging and wildfires. Opportunities will be taken where they exist to address ecological restoration needs during protection activities. A wide range of recreational opportunities will continue to be provided. Management direction provides a sound foundation for changes and additions to recreational facilities and services in response to public demand. The current road system will generally remain intact, providing access for the protection of communities and resources from wildfires, as well as providing good access to a broad spectrum of existing recreational opportunities. The road system will provide access for the Tule River Indian Reservation for the protection of their resources and culturally important sites and resources. The overall ecological condition of riparian areas will gradually improve as portions of roads or recreational sites that are inconsistent with the aquatic management strategy are restored.

Prescribed fire will be the preferred treatment method and will be considered first to meet ecological restoration and public safety objectives, including the need to manage forest structure or create small openings (gaps) to promote giant sequoia regeneration. Other methods, including tree removal or the use of heavy equipment, will be permitted only if a site-specific project analysis determines and documents that mechanical treatments and/or tree removal are clearly needed for ecological restoration and maintenance or public safety. Wildland fire use will also be available as a treatment method.

I acknowledge that, although prescribed fire will be considered first for ecological restoration and protection, the use of mechanical treatments and tree removal will likely be needed in order to meet management goals and objectives. This is due to the wide variety in site conditions and the current high levels of fuels in close proximity to important resource values such as communities, giant sequoia groves, and wildlife habitat. An example of this type of complex resource conditions is the Camp Nelson area, where communities and wildland urban intermix areas overlap with giant sequoia groves and forest carnivore den sites. The recent large fires in California have continued to underscore the threat to life and property from catastrophic fires. I understand that, during implementation of this plan, there will be difficult decisions made by local line officers in order to balance the immediate need to protect communities from wildfires with the need to protect natural resources. Under certain circumstances, using prescribed fire alone would present an unacceptable risk of damage to these resources. The use of mechanical treatments and the possible removal of trees will help to mitigate these risks to acceptable levels. This expected balance of treatment methods is reflected in the FEIS in Table II-4 of Chapter II, which displays the approximate acres by treatment method based upon our analysis of local site conditions and the appropriate standards and guidelines.

When mechanical treatments or cutting of trees are clearly needed, removal of trees up to 30 inches in diameter will be allowed. I am confident that this upper limit is based upon sound analysis (see the Giant Sequoia and Mixed Conifer section in Chapter III of the FEIS) of local conditions in the Monument. This upper limit will give the flexibility needed to complete protection and restoration treatments. Vegetation smaller than 30 inches in diameter is generally less than 130 years old and represents the bulk of vegetation found in overly dense stands with a high risk of catastrophic fire.

I understand, and the FEIS discloses, that there is scientific uncertainty regarding the long-term effects of this management plan. Adapting our management strategies based on current and reliable monitoring data and scientific research is vitally important to sound resource management of the Monument. Modified Alternative 6 includes a strategy for adaptive management that includes monitoring and scientific study and research. These will focus on key research questions in order to adapt management practices as necessary. The monitoring and research will help address, among other things, the concerns and uncertainties about the efficacy and ecological effects of using prescribed fire and mechanical methods to restore desired ecological conditions.

### **III. Summary of the Selected Alternative (Modified 6)**

#### **A. *Desired Conditions***

This decision provides management direction that will begin to move the conditions in the Monument towards our desired conditions. The desired conditions summarized below are broad, overarching descriptions of conditions that are desirable for key resources or opportunities within the Monument. For a complete description, see the Desired Condition section in Chapter I of the FEIS.

#### **1. Giant Sequoia and the Surrounding Ecosystems**

The desired condition is to allow natural processes and vegetative structural conditions to become re-established at levels that allow ecosystems in the Monument to be both stable and resilient to environmental change. The structural conditions, and timing, intensity, and frequency of processes that existed prior to 1875 will be used as reference conditions. This period exhibited a fire regime of frequent fire return intervals, which helped promote a highly diverse vegetation mosaic of age classes, tree sizes, and species composition, along with a low risk of large catastrophic fires.

Disturbances in these ecosystems will have led to the re-establishment of young sequoias by creating gaps or openings in the forest canopy. Fire will be the primary disturbance in the mixed brush/chaparral, lower Westside hardwood, and conifer (which includes the giant sequoia groves) ecosystems. Other disturbances in these ecosystems, as well as the red fir ecosystem, will include insect and disease activity, drought, and extreme weather. Ecosystems will provide a wide variety of habitat for terrestrial wildlife and aquatic species.

## **2. Fire and Fuels**

Fires will generally be low intensity and occur frequently across the landscape. Fuel treatments have increased the efficiency of firefighting efforts and reduced risks to firefighters, the public, facilities and structures, and natural resources. Fuel treatments provide a buffer between developed areas and wildlands. Fuel conditions allow for efficient and safe suppression of all wildland fire ignitions.

## **3. Wildlife Habitat**

The habitat in the Monument will continue to contribute substantially to the long-term viability of habitat and populations that depend upon old forest conditions. This area will support a core or reservoir subpopulation of fishers that could expand northward to re-establish connections with the west coast meta-population.

## **4. Dispersed and Developed Recreation**

Visitors to the Monument will find a rich and varied range of recreational, educational, and social opportunities enhanced by giant sequoias and the natural resources of the surrounding ecosystems. Visitors to the Monument will have the opportunity to recreate in a variety of settings, from primitive to highly developed areas. Scenic opportunities will range from pristine landscapes to locations where management activities are apparent, helping visitors appreciate how healthy ecosystems function and how humans fit into them. Both self-guided and assisted interpretive services will be available to anyone wanting to learn about the human and natural history of the groves.

## **5. Historic and Prehistoric Resources**

The historic and prehistoric resources of the Monument will be protected, studied, interpreted, and managed to maintain their cultural and scientific integrity and provide educational, cultural, and recreational opportunities to visitors. The cultural and spiritual values of the Monument will be

protected, managed, and utilized for the benefit of local tribes, communities, and visitors.

## **6. Transportation System**

The road and trail network will be commensurate with the level of management activities occurring in the Monument and will supply the transportation system needed for public use related to recreation, special uses, private land access, fire protection, as well as the enjoyment, proper care, and management of the objects of interest. Roads and trails needed to meet management goals are maintained to provide safe use and limited impacts to aquatic and terrestrial habitats. Roads not needed to meet management goals are decommissioned and stabilized.

## **7. Caves**

The natural condition of caves within the Monument will be primarily preserved to maintain natural functions and protect the unique resources that depend on a cave environment for existence. Some caves will provide educational and recreational opportunities for visitors. The study of caves will provide scientific knowledge, especially regarding the paleontological and archaeological artifacts that may shed light on thousands of years of change within the giant sequoia groves, their surrounding ecosystems, and the prehistoric people who helped shape the ecosystem.

## **8. Scientific Study**

Management of the resources in the Monument will reflect an active on-site research program in close cooperation with other agencies and entities that share management responsibilities for giant sequoias, along with opportunities for meaningful public participation. On-going cooperation and joint research efforts with the scientific community and cooperating agencies will be trademarks of the Monument's commitment to adaptive management as we continue to learn and refine our approaches.

# ***B. Summary of Management Strategies and Other Direction***

## **1. Management Strategies**

Modified Alternative 6 establishes four strategies for the proper care and management of the objects of interest: Restoration, Protection, Recreation/Human Use, and Transportation:

**Restoration Strategy.** Modified Alternative 6 calls for the systematic reintroduction of fire throughout the Monument to re-establish a desired fire return interval for all fire-dependent ecosystems, including chaparral, mixed conifer-giant sequoia, and lower Westside hardwood. It would reduce the excessive fuel loads caused by long-term fire suppression. During the first two decades, it would emphasize the restoration of plantations in the Monument, primarily those started in the last 50 years to restore logged or burned areas. These plantations (including those in giant sequoia groves) would be managed to restore forest structure, hydrologic conditions, and minimize risks from catastrophic fire. Roads associated with these plantations would also be evaluated for restoration. In other areas of the Monument, more natural structural conditions such as stand densities, species composition, and new patches of young vegetation (especially giant sequoias, pines, and black oaks) would be re-established. Prescribed fire (including wildland fire use) would be the primary treatment method.

Restoration treatment areas would be located across the Monument and in different vegetation types, ranging from 50 to 500 acres in size. Management in these areas would focus on the restoration of fire to the ecosystem and re-establishing more natural structural conditions, rather than protection. Prescribed fire (including wildland fire use) would be the preferred treatment method. The Framework's aquatic management strategy would be applied for the purpose of protecting, restoring, and stabilizing hydrologic function and structure. The boundaries of restoration treatment areas would be determined during landscape analyses.

**Protection Strategy.** Modified Alternative 6 would protect communities, other sites occupied by people, the objects of interest, and other important resources such as aquatic or wildlife habitat with the full range of Framework strategies. Key strategies include the urban wildland intermix threat and defense zones, strategically placed area treatments (SPLATs), and wildland fire use. Additional management direction is provided to protect old forest habitat. Protection treatments would be implemented within the first two decades. There are approximately 12,250 acres in defense zones around communities that would receive protection treatments in the first decade.

**Recreation/Human Use Strategy.** Modified Alternative 6 encourages and focuses the development of recreation facilities to meet the increased demand for recreation in the Monument. It encourages the expansion of overnight camping, picnicking, trailheads, and interpretive opportunities. It would emphasize interpretation and education,

focusing on the historical areas on the Hume Lake District and on natural settings on the Tule River and Hot Springs Ranger Districts. The current road system would be maintained to allow visitors to explore the Monument and choose dispersed, primitive recreation sites as an alternative to developed camping or picnicking sites.

**Transportation Strategy.** Modified Alternative 6 would emphasize retaining road access for public use and for management activities similar to current access levels, approximately 900 miles of road. For public access, emphasis would be on maintaining roads to recreation sites, dispersed areas, special use sites, and private land. An extensive road system would be available for dispersed camping, recreational driving, and off-highway vehicle use. For management access, emphasis would be on ecosystem restoration and fire protection. Roads with high risks for causing unacceptable impacts to natural resources would be repaired, relocated, closed, or decommissioned to reduce impacts. Road decommissioning would focus on unclassified roads and those classified roads producing unacceptable impacts where repair or relocation is unreasonable. New roads could be constructed to meet management goals to provide access to new recreation facilities, to provide access to administrative sites, to replace roads producing unacceptable resource impacts, or to provide access for research. The maintenance strategy would be to continue to request funds to reduce the maintenance backlog and keep the road system in acceptable condition. Roads that cannot be maintained in acceptable condition would be closed or decommissioned. The transportation plans for the alternatives are in Appendix F.

## **2. Allocations, Standards and Guidelines**

I am retaining the following allocations and associated management strategies from the Framework in Modified Alternative 6, as they provide sound short-term and long-term measures to protect and restore ecological conditions: California Spotted Owl Protected Activity Centers (PACs), Northern Goshawk and Great Gray Owl PACs, Forest Carnivore Den Sites, California Spotted Owl Home Range Core Areas, Wildland Urban Intermix Defense and Threat Zones, Critical Aquatic Refuges and Riparian Conservation Areas, Willow Flycatcher Habitat, and Aquatic Management Strategy.

Modified Alternative 6 would also retain previously determined Wilderness Areas, Wild and Scenic River Areas, Inventoried Roadless Areas, and the Kings River Special Management Area within the Monument. The existing management direction for these special areas is consistent with and remains unchanged under this decision.

I am establishing a new land allocation known as the Fisher/Old Forest Allocation. This allocation is proposed to provide integrated management for old forest-dependent species and addresses the Wildlife issue.

Standards and guidelines from the 2001 Framework that will be retained include those for: lower Westside hardwoods, large tree retention, snags and down woody debris, incidental removal of vegetation and down woody material, and noxious weeds. Additional standards and guidelines that will be used are listed in the description of Modified Alternative 6 in Chapter II of the FEIS.

### 3. Management Areas

I am establishing six management areas in order to provide protection and restoration focus to the objects of interest and ensure their proper care and management. Four of these management areas are established to reflect the different conditions and restoration needs of the giant sequoia groves and the mixed conifer forests, one management area is established to focus on historic and scientific opportunities, and one is established to include the rest of the Monument not included in the other five management areas (see the full discussion in Chapter II of the FEIS and Figure II-10 in the Map Packet).

**Management Area ZOI-NG, Zones of Influence without the Groves:**

The ecological zones of influence that surround the giant sequoia groves, not including the sequoia groves themselves. Generally these areas are defined by the boundaries of the watersheds where the giant sequoia groves are found. These boundaries are described in the Forest Service draft report entitled “Defining Ecological Zones of Influence for Giant Sequoia Groves on the Sequoia National Forest.” The zones of influence are the areas within which management activities could both directly and indirectly affect grove ecology.

**Management Area HLHA, the Hume Lake Historic Area:** This area of extraordinary historical and cultural value is the general site of the logging operations of the early 1900s. Private logging companies harvested the sequoias from the surrounding areas and established a mill site, a dam, and a small town now known as Hume Lake. This management area also includes the Millwood, Abbott Mill, and Lower Abbott Mill sites. This MA remains the same for all alternatives.

**Management Area GML, General Monument Lands:** The rest of the Monument not included in Management Areas ZOI-NG, HLHA, GSG1, GSG2, or GSG3. It includes a wide variety of vegetation types and ecological zones. Much of it is covered with mixed conifer stands but

this management area also includes low elevation chaparral, lower Westside hardwood, and red fir ecosystems.

**Management Area GSG1:** Giant sequoia groves that have had no significant disturbance for the last 120 years and with little regeneration.

**Management Area GSG2:** Giant sequoia groves that were substantially cutover during the late 1800s and early 1900s, leading to heavy stands of second growth mixed conifer-giant sequoia forests.

**Management Area GSG3:** Giant sequoia groves that had logging disturbances within the last 20 years, leading to well-established patches of young seral stage mixed conifer and giant sequoia vegetation.

### ***C. Adaptive Management, Scientific Study, and Monitoring***

The Monument Management Plan includes the development and execution of a research strategy for scientific study, as well as a two-tiered monitoring strategy (see Appendix G of the FEIS). As management proceeds, Forest Service managers will require further guidance on a number of key scientific questions addressed in the research strategy.

Adaptive management is the process of continually adjusting management in response to new information, knowledge, or technologies. It recognizes that unknowns and uncertainty exist in the course of achieving any natural resource management objectives. Knowledge gained through monitoring, scientific study, analysis, and synthesis of practical experience is central to reducing uncertainty. Using adaptive management, management practices will be adapted based upon results from monitoring and scientific study. For more information on the monitoring, scientific research strategy, and adaptive management proposed for the Monument, please see Appendix G of the FEIS.

The monitoring and scientific study will provide a reliable foundation for collaboration with members of the public, other agencies, colleges and universities, and the scientific community to address adaptation of management strategies in the future.

## **IV. Reasons for My Decision**

My decision to select Modified Alternative 6 was reached after a comprehensive review of the relevant environmental, economic, and social consequences of the seven alternatives in the FEIS. The initial discussion of this section explains why I have selected Modified Alternative 6 from among the alternatives analyzed in the FEIS and highlights several factors that were of primary importance in my decision. I find Modified Alternative 6 provides a balanced approach to management and is the best combination of meeting the purpose and need, moving towards desired conditions, and responding to the significant issues. It also responds fully to the public comments on the DEIS. I believe that the emphasis on restoring plantations; my commitment to adaptive management, scientific study, and monitoring; and my commitment to consider prescribed fire first, as the primary management tool (see Section IX of this ROD), will demonstrate the intent of the Forest Service to embrace the spirit of the Presidential Proclamation.

### **A. *Desired Conditions***

I find that the management direction in Modified Alternative 6 is responsive to creating conditions that will move the Monument toward the desired conditions, as follows:

#### **1. Giant Sequoia and the Surrounding Ecosystems**

The selected alternative will be effective over the long term in restoring the desired fire regime of frequent and low-intensity fires in fire-dependent ecosystems. This will lead to greater species diversity, a mosaic of tree sizes and ages, and a landscape that is less at risk of catastrophic fires and is more resilient and adaptable to environmental change. It is the most effective alternative in restoring desired forest structures in the short term because of its emphasis on treating existing plantations, areas that I consider to be the most inconsistent with desired conditions. The establishment of three separate management areas focused on giant sequoia groves reflects the different restoration needs of the groves and will provide greater focus and flexibility to field personnel as this decision is implemented. This alternative provides more clarification of the protection strategy to ensure that giant sequoia groves are protected in the first twenty years of implementation. The use of SPLATs to protect the groves from catastrophic fire will also produce restoration benefits to the groves. With this approach, the opportunity to return fire to its natural role in giant sequoia groves will be greater and more effective because the fuel loadings that threaten groves from outside their boundaries will be reduced, leading to a reduced risk of catastrophic fire within and immediately adjacent to the groves. I also expect that young giant

sequoias will become established in the groves in the first two decades as a result of implementing the protection strategy.

## **2. Fire and Fuels**

Modified Alternative 6 is the most effective in ensuring immediate protection to communities, giant sequoia groves, and other key resources. This is due to the emphasis not only on effective wildland urban interface treatments (defense and threat zones), but also on fuel treatments (SPLATs) explicitly intended to protect giant sequoia groves. It is also the most effective approach to reducing predicted fire behavior, improving safety for firefighters, and increasing firefighting efficiency. Treatments will provide an effective buffer between communities and adjacent forest, thereby providing better protection for both areas. The selected alternative is equally as effective as Alternatives 3, 4, 5, and 6 in restoring the desired fire regime to fire-dependent ecosystems over the long term. It is more effective than Alternatives 1 and 2, as these alternatives do not have a clear long-term strategy to restore fire to fire-dependent ecosystems.

## **3. Wildlife Habitat**

This alternative provides for a sound conservation strategy that balances the need for short-term protection and long-term sustainability of old forest habitat that supports important species such as the Pacific fisher and spotted owl. This alternative contains the most effective approach to moving toward the desired condition because: 1) it is predicted to create the most late seral/old forest habitat over the long term; 2) it provides for the protection of carnivore den sites, areas where fishers have been detected, and the protected activity centers of other key species; 3) it maintains important forest structural characteristics such as crown cover, snags, and dead and downed logs; 4) it is most effective in reducing the loss of habitat to catastrophic wildfire; and, 5) of all the alternatives, it provides the only integrated approach to conserving and sustaining old forest habitat for dependent species. The key component of this integrated approach is the establishment of the Fisher/Old Forest allocation. I find that this management direction will ensure that the Monument will continue to contribute to the viability of fisher and old forest habitat.

## **4. Dispersed and Developed Recreation**

Modified Alternative 6 is a sound foundation for providing a wide range of recreational experiences, including camping, education and interpretation, access for hikers, equestrians, and vehicle use on roads. Additional recreational opportunities will be developed based on the on-going demand analysis.

## **5. Historic and Prehistoric Resources**

By establishing the Hume Lake historic management area and by continuing to implement existing protection measures for historic and prehistoric sites, these resources will be protected from impacts that could destroy them or accelerate their natural rate of deterioration. A variety of historic and prehistoric sites will be managed and interpreted for the education and enjoyment of visitors. Access to culturally important sites and resources for use by Native Americans will also be ensured.

## **6. Transportation System**

The current transportation system meets our desired condition of providing road and trail networks commensurate with current demands. This decision will maintain that condition and provides for opportunities to modify the transportation system depending upon future recreational or administrative facility needs.

## **7. Caves**

Modified Alternative 6 will move the Monument toward the desired conditions of ensuring that caves will be preserved in their natural condition and that some caves will be a part of the educational opportunities provided to visitors.

## **8. Scientific Study**

This alternative will move toward the desired condition by providing for scientific study focused on varying approaches to management of the Monument, with a commitment to ensuring that results of monitoring and scientific study are considered a part of adaptive management. Scientific research will be conducted in collaboration with other agencies, colleges and universities, and members of the public.

### ***B. Issues***

Significant issues were identified after scoping and were used to develop the alternatives. I find that Modified Alternative 6 responds to the issues as follows:

#### **1. Fire and Fuels**

This alternative is fully responsive to this issue. The fuel reduction strategies will be effective in reducing the risk to communities, giant

sequoia groves, and other important resources from stand-replacing fire. SPLATs to protect giant sequoia groves are an important element of this finding. Although Alternatives 3 and 4 could meet long-term desired conditions for fire outcomes, they would not provide adequate protection to communities from wildfires in the short term. I find that a wider defense zone is important to minimize the risk of wildfire while fuel loadings are treated across the Monument. Other alternatives provide an adequate protection strategy for communities, but do not focus on protection of the giant sequoia groves and other resources as well as Modified Alternative 6.

## **2. Giant Sequoia and Mixed Conifer Restoration**

This alternative is fully responsive to these two issues. It provides management flexibility to create conditions for the establishment of young patches of trees such as giant sequoias, pines, and oaks, and will begin to move the Monument landscape toward the desired conditions for Giant Sequoia and the Surrounding Ecosystems. These opportunities are most likely to occur after the protection activities are completed in the first 20 years of implementation. After this time, restoration of the general vegetation outside of protection areas will begin in earnest. This alternative will effectively create conditions to regenerate young giant sequoias and other species. It also addresses the Mixed Conifer Restoration issue by emphasizing the protection of blue oak in the lower Westside hardwood ecosystem and improving the viability of black oak in the mixed conifer forest. Experience and monitoring results from the adjacent Sequoia and Kings Canyon National Parks provide information that supports this finding.

Modified Alternative 6 includes a clear strategy to restore fire to fire-dependent ecosystems, as well as the ecological restoration of conifer lands that were harvested and planted while being managed for a sustained flow of timber products (plantations). The restoration of these plantations, as well as areas planted after wildfires, is the highest treatment priority after protection work is completed. No other alternative emphasizes this restoration effort.

## **3. Watershed**

This alternative is the most effective in addressing this issue. Catastrophic wildfire produces the most detrimental effects landscapes can endure. The protection and restoration strategies are predicted to be the most effective in reducing the loss of vegetation from wildfire, especially over the long term (50 years). Losses from wildfire are estimated to be approximately 12,800 acres in that time period, as compared to 15,700 acres under Alternative 6. More than 20,000 acres are predicted for the other action

alternatives. This alternative also provides strong protection to riparian and aquatic habitat during project design and implementation (through the application of the aquatic management strategy).

#### **4. Air Quality**

This alternative is very effective in addressing this issue. It minimizes adverse air quality effects from prescribed fire in the short term and is the most effective of all the alternatives in the long term in reducing the predicted amounts of wildfire, the adverse effects on air quality, and the resulting effects on human health. I base this finding on the flexibility of treatment options available during implementation, specifically the potential to use mechanical treatments and tree removal if clearly needed for ecological restoration and maintenance or public safety. This decision will result in acceptable effects to air quality in the short term, which is similar to effects under Alternatives 3, 4, 5 and 6. Only Alternatives 1 and 2 would have more limited effects to air quality in the short term. However in the long term, the treatments proposed in Modified Alternative 6, like Alternatives 5 and 6, should reduce the potential for stand-replacing fires across the Monument, and therefore reduce the potential for negative effects to air quality in the long term.

#### **5. Social Values Regarding Vegetation Treatments**

This alternative provides a balance in its response to this issue. While prescribed fire is the treatment method of first choice (where conditions allow), mechanical vegetation treatments and removal of trees is also allowed in giant sequoia groves as well as in the rest of the Monument. I understand that mechanical treatments and removal of trees have been subjects for keen public debate. I am therefore requiring that a decision tree (see Figure 1) be used during project development to ensure that mechanical methods and/or tree removal is clearly needed. This process will be documented in public records. The FEIS displays estimates of the amount of wood products that might be available as by-products of management. These are not in any way expected outputs of this decision, but the results of computer modeling used to compare the alternatives and their effects. My commitment to the restoration of plantations created by past harvesting or wildfires also recognizes and addresses this issue.

#### **6. Recreation**

This alternative is fully responsive to this issue, as it identifies a wide variety of recreation opportunity areas and potential increases in recreational experiences. I am committed to completing an assessment of recreational demand, which is currently underway. The road system

provides access for current facilities and users such as private landowners and the Tule River Indian Reservation. Recreational users will continue to have good access. Recreation opportunities within caves, including interpretation and education, will be provided. Any proposals that affect road or trail access (including removal, relocation, or new construction) will be open for public scrutiny and comment during site-specific project analyses.

This alternative will provide scenic resource management to maintain or enhance high scenic value. It will use a science-based method to collect visitor information, such as the National Visitor Use Monitoring System. This data, as well as other information, will be used to help determine the demand and need for additional visitor facilities and services.

## **7. Wildlife**

Modified Alternative 6 is the most responsive alternative to this issue, as it is predicted to create the most late seral/old growth habitat over the long term. The establishment of the Fisher/Old Forest allocation and associated standards and guidelines will ensure adequate short-term protection to wildlife habitat while protection strategies are being implemented. This is critical, as implementation of the protection strategy will significantly reduce the predicted loss of wildlife habitat to wildfire over the long term.

# **V. The Scientific Advisory Board**

The Proclamation called for the establishment of a Scientific Advisory Board (Board) with the purpose of providing scientific guidance during the development of this initial monument management plan. The Board was highly effective in working closely with the planning team to review and provide sound scientific advice and I am grateful for their expertise and commitment to their charter. The Board consisted of eight members, representing a range of scientific disciplines including the physical, biological, and social sciences. One of the board members represented the Tule River Indian Tribal Council.

The Board provided scientific guidance to the Forest Service in the form of advisories. Advisories were adopted when board members reached consensus on the advice. The Board met six times in conference settings and field trips and provided 27 advisories to the Forest Service (see Appendix C of the FEIS for the complete text of these advisories). Board meetings were open to the public and open to public comment during the first 30 minutes of each meeting. For a list of the Board members and their affiliations, please see Chapter 1 of the FEIS.

## VI. Public Involvement

The Notice of Intent was published in the Federal Register on June 8, 2001. A scoping letter was mailed to interested publics on the same date. Both the Notice of Intent and the scoping letter asked for public comment on the proposal from June 8, 2001 to July 24, 2001.

Public meetings on the proposal were held in Sacramento, Los Angeles, Clovis, Bakersfield, and Porterville, California from July 10 to July 16, 2001. At these meetings, the Monument planning team provided overviews of the proposed action, answered questions, discussed the timeline, and encouraged public comment.

Over 2,500 comments were received during the scoping period. Using comments from the public, tribal consultations, the scientific advisory board, and other agencies and organizations, the interdisciplinary team developed a list of potential issues to address (see next section, Issues).

Three issues of the publication “Giant Sequoia National Monument Issues and Updates” were mailed to other agencies and interested publics to provide information on the development of the Monument management plan. They were mailed in December 2000, July 2001, and April 2002.

A web site for public access was made available with information on the monument management plan, the Board, and links to other sites regarding giant sequoias. The address is: [www.r5.fs.fed.us/giant\\_sequoia/](http://www.r5.fs.fed.us/giant_sequoia/).

In January 2002, a letter was mailed to the public requesting participation and information for the Roads Analysis Process as a part of the Monument planning process (see Appendix E). Opportunities to meet with the team leader were offered as part of the input process and were scheduled with two groups in February 2002.

Public meetings were held in Porterville on March 11, 2002 and in Bakersfield on March 12, 2002. At these meetings, the monument planning team provided information on the development of alternatives for managing the Monument, answered questions, and encouraged public involvement.

The Draft Environmental Impact Statement (DEIS) was released for public comment on December 2, 2002. The full DEIS was available for review in hard copy, on compact disc (CD), and on our website (see above). Comments were requested in written form and an e-mail inbox was made available, linked to the website.

Public meetings were held in Porterville, Bakersfield, Los Angeles, and Fresno, California from February 10 to February 20, 2003. The purpose of these

meetings was to review and discuss the DEIS. Question-and-answer sessions were held at the end of each of these meetings, and forms were available for submitting written comments on the DEIS.

The public comment period for the DEIS ended March 17, 2003. A total of 16,122 letters, postcards, public meeting forms, e-mails, and faxes containing comments were received from individuals; preservation and environmental groups; businesses; grazing permittees; county, state, and federal government entities; tribal governments; place-based groups; special use permittees; wood products associations; academic institutions; and motorized and non-motorized recreational groups. For more information on the comments received on the DEIS, how they were analyzed, and their responses, please see Appendix A of this FEIS, Response to Comments.

## **VII. Other Alternatives Considered**

In addition to the selected alternative, I considered five other alternatives that were designed to meet the purpose and need and one “no action” alternative (Alternative 1). I find that Modified Alternative 6 is the environmentally preferred alternative. This finding is based upon the comprehensive balance that this alternative provides for: 1) reducing the risk of catastrophic wildfire to valuable resources such as communities, giant sequoia groves, and wildlife habitat, and 2) restoring important ecological processes and forest structures such as a more natural fire regime and a mosaic of tree species, ages, and sizes. A detailed discussion and comparison of these other alternatives can be found in Chapter II of the FEIS. A summary of them follows:

### ***A. Alternative 1 (No Action)***

Alternative 1 provides the baseline for the effects analysis in Chapter IV. Under this alternative, current management direction, the Forest Plan as amended by the Framework and the Proclamation, would continue to guide management of the Monument. See Figure II-1 for a display of the allocations proposed for Alternative 1 and see Appendix D for a summary of the allocations and standards and guidelines from the Framework.

### ***B. Alternative 2 (Proposed Action)***

Alternative 2 does not specifically address the significant issues found in Chapter I because the issues were developed largely based on public comments to this Proposed Action. Alternative 2 applies all the direction found in the Framework (see Appendix D of the FEIS) and provides additional management direction for the proper care, management, and enjoyment of the objects of interest in the Monument. It places emphasis on the application of current direction specific to the objects of interest.

Alternative 2 proposes goals to meet the desired conditions (see Chapter I): to protect giant sequoias, their ecosystems, and the natural processes that sustain them; to improve developed and dispersed recreation opportunities; to protect and interpret historic and prehistoric resources; to provide a useful, safe, and environmentally acceptable transportation system; and to provide for scientific study of the Monument's resources.

Alternative 2 would primarily treat areas of the Monument that have high fire susceptibility to reduce the risk of catastrophic fire. The highest priority would be to protect communities and sensitive resources in the Monument. Approximately 41,830 acres would be treated in the first decade of implementation. No explicit strategy for ecological restoration is proposed.

Alternative 2 proposes three management areas (see Figure II-2 in the FEIS Map Packet):

**Management Area ZOI-WG, Zones of Influence Including the Groves:**

This management area (MA) includes the ecological zones of influence for the giant sequoia groves and their surrounding ecosystems, including the groves. Generally these areas are defined by the boundaries of the watersheds where the giant sequoia groves are found. These boundaries are described in the Forest Service draft report entitled "Defining Ecological Zones of Influence for Giant Sequoia Groves on the Sequoia National Forest." The zones of influence are the areas within which management activities could both directly and indirectly affect grove ecology.

**Management Area HLHA, the Hume Lake Historic Area:** This area of extraordinary historical and cultural value is the general site of the logging operations of the early 1900s. Private logging companies harvested the sequoias from the surrounding areas and established a mill site, a dam, and a small town now known as Hume Lake. This management area also includes the Millwood, Abbott Mill, and Lower Abbott Mill sites.

**Management Area GML, General Monument Lands:** This MA includes lands not included in Management Areas ZOI-WG or HLHA. It includes a wide variety of vegetation types and ecological zones. Much of it is covered with mixed conifer stands but this management area also includes low elevation chaparral, lower Westside hardwood, and red fir ecosystems.

### **C. *Alternative 3***

Alternative 3 emphasizes the use of prescribed fire and associated hand treatments to reduce the risk of catastrophic fire, restore a more natural fire regime, and move resources toward their desired conditions (see Chapter I).

This alternative is similar to management strategies used in the Sequoia and Kings Canyon National Parks. Approximately half of the giant sequoia groves would be identified as high profile groves and managed for protection, ecological restoration, and concentrated recreational use. Approximately 59,000 acres would be treated in the first decade of implementation. Restoration treatments would be the priority after initial protection treatments are completed.

This alternative responds to the following significant issues:

Social Values Regarding Vegetation Treatments: The emphasis on prescribed fire and hand treatments responds to this issue by minimizing the area where mechanical treatments can occur. The area where mechanical methods could be used is generally limited to the community defense zones (about 200 feet around communities).

Giant Sequoia, Mixed Conifer Restoration, and Watershed: Restoration of the high profile groves would be done at a conservative pace, approximately one percent per year. The other giant sequoia groves would be managed as part of the surrounding mixed-conifer ecosystem. Road closures, road decommissioning, and elimination of some dispersed recreation sites would reduce the environmental impacts from compacted surfaces. This alternative would avoid using mechanical treatments except for community protection.

Recreation: The high profile groves would be managed for concentrated recreational use in concert with restoration and protection needs. Road closures, road decommissioning, and elimination of some dispersed recreation sites would provide more areas isolated from the effects of motorized traffic. Use of unlicensed off-highway vehicles would not be allowed on roads or trails. Recreational opportunities would increase for day use activities, education, and interpretation, but overnight and dispersed opportunities would be reduced or stay the same.

Fire and Fuels: Defense zones approximately 200 feet wide would be used to protect communities and occupied areas. Local conditions would be used to refine the actual boundaries and there would be approximately 3,600 acres in these defense zones. This approach would replace the Framework's wildland urban intermix defense and threat zone prescriptions.

Alternative 3 proposes three management areas (see Figure II-5 in the FEIS Map Packet):

**Management Area HPG, the High Profile Groves:** High profile giant sequoia groves that currently have or have the potential for high public use, or have special features.

**Management Area HLHA, the Hume Lake Historic Area:** This area of extraordinary historical and cultural value is the general site of the logging operations of the early 1900s. Private logging companies harvested the sequoias from the surrounding areas and established a mill site, a dam, and a small town now known as Hume Lake. This management area also includes the Millwood, Abbott Mill, and Lower Abbott Mill sites. This MA remains the same for all alternatives.

**Management Area GMA, General Monument Area:** The rest of the Monument not included in Management Areas HPG and HLHA, including non-high profile giant sequoia groves. It includes a wide variety of vegetation types and ecological zones. Much of it is covered with mixed conifer stands but this management area also includes low elevation chaparral, lower Westside hardwood, and red fir ecosystems.

## ***D. Alternative 4***

Alternative 4 was developed to respond directly to the issue of Social Values Regarding Vegetation Treatments. This alternative would manage monument lands as a broad, connected ecosystem, without separating or zoning for management emphasis. The exception to this would be areas of high amounts of human use, including all current developed recreation areas and other areas of concentrated human use. The primary method to reduce the risk of catastrophic fire, restore desirable forest characteristics, protect and restore giant sequoia groves, and restore a more natural fire regime would be prescribed fire and hand treatments. Trees over 12 inches in diameter would not be cut, with some exceptions such as public safety and emergencies. Approximately 59,000 acres would be treated in the first decade of implementation. Restoration treatments would be the priority after initial protection treatments are completed.

This alternative responds to the significant issues as follows:

Recreation: Areas of concentrated human use would be managed for recreation, interpretation, education, and community protection. Recreation demand would be assessed and opportunities expanded to help meet the demand for increased overnight facilities, interpretation, education, and dispersed recreation. The trail system would be expanded to increase dispersed recreation opportunities. The preferred methods to protect these areas from catastrophic fire would be prescribed fire, hand treatments, and mechanical thinning. The protection zones would range

from 50 to 200 feet wide depending on their adjacency to communities or roads.

Giant Sequoia and Mixed Conifer Restoration: The majority of the giant sequoia groves would be managed as part of the overall ecosystem and not zoned into different management areas.

Watershed: Roads or other impacted areas would be eliminated when necessary to reduce impacts to riparian areas, wildlife habitat, or other sensitive resources.

Alternative 4 proposes two management areas (see Figure II-6 in the FEIS Map Packet):

**Management Area HIZ, the Human Influence Zone**: This area includes communities, developed recreation sites, areas of concentrated human use, and special use sites, as well as a buffer of 50 to 200 feet around these sites.

**Management Area GFZ, the General Forest Zone**: The portion of the Monument not included in Management Area HIZ. This area includes most of the giant sequoia groves.

## ***E. Alternative 5***

Alternative 5 was developed to respond specifically to the Giant Sequoia and Social Values Regarding Vegetation Treatments issues by prescribing a broad range of management strategies to promote conditions for giant sequoia regeneration in the giant sequoia groves. These grove-specific management strategies would include prescribed fire, mechanical treatments (including heavy machinery), and removal of trees up to 30 inches in diameter to create small openings, or gaps, to promote giant sequoia regeneration. Outside of the groves, Framework allocations and management strategies (Appendix D), which include both prescribed fire and mechanical methods, would be applied.

Areas designated for treatments for community protection and to reduce the risk of catastrophic fire would be the first priority for treatment. Approximately 70,000 acres would be treated in the first decade of implementation.

This alternative responds to other key issues in the following ways:

Recreation: Recreation demand would be assessed and opportunities expanded to help meet the demand for increased overnight facilities, interpretation, education, and dispersed recreation, including opportunities in or near giant sequoia groves. The transportation system would provide

high levels of access for public and management use, consistent with protection and restoration of the Monument.

Fire and Fuels: The Framework strategies would include the use of urban wildland intermix defense zones and threat zones and Strategically Placed Areas Treatments (SPLATs).

Alternative 5 proposes the same six management areas as Modified Alternative 6 (see Figure II-10 in the FEIS Map Packet).

## ***F. Alternative 6***

Alternative 6 was developed to specifically address the significant issues of Giant Sequoia, Mixed Conifer Restoration, and Social Values Regarding Vegetation Treatments. This alternative would prescribe a broad range of management strategies to restore and protect all of the ecosystems found in the Monument, as well as promote conditions for giant sequoia regeneration in the groves. These strategies are the same as those applied to the giant sequoia groves in Alternative 5 but, in this alternative, they apply to all of the Monument ecosystems. These monument-wide management strategies would include prescribed fire, mechanical treatments (including heavy machinery), and removal of trees up to 30 inches in diameter when needed for restoration, protection, or to create small openings, or gaps, to promote giant sequoia regeneration.

The flexible mixture of treatment methods is most responsive to the fact that site conditions and resource objectives are highly variable depending upon location.

Areas designated for treatments for community protection and to reduce the risk of catastrophic fire would be the first priority for treatment. Approximately 79,900 acres would be treated in the first decade of implementation.

This alternative responds to other key issues in the following ways:

Recreation: Recreation demand would be assessed and opportunities expanded to help meet the demand for increased overnight facilities, interpretation, education, and dispersed recreation, including opportunities in or near giant sequoia groves. The transportation system would maintain high levels of access for public and management use, consistent with the protection and restoration of the Monument.

Air Quality: The flexible mixture of treatment methods would provide land managers with opportunities to treat existing high fuel loadings while minimizing impacts to air quality.

Fire and Fuels: The Framework strategies would include the use of wildland urban intermix defense zones and threat zones and Strategically Placed Areas Treatments (SPLATs).

Alternative 6 proposes the same six management areas as Modified Alternative 6 (see Figure II-10 in the FEIS Map Packet).

## **VIII. Means to Avoid Environmental Harm**

This decision includes a monitoring plan and scientific study program that will provide a sound foundation for on-going assessment and adaptive management of the standards and guidelines included in this management plan. The results of monitoring will be used to evaluate the assumptions used in developing this decision, and may be the basis for subsequent amendments or revisions to the plan. Monitoring will also ensure that monument-specific land allocation standards and guidelines are being applied correctly.

The Forest Service will work with the U. S. Fish and Wildlife Service and other federal and state agencies to review whether this decision's fisher/old forest strategy is adequate. If further analysis shows that adjustments are needed, the direction in this decision will be changed in accordance with the National Forest Management Act (NFMA), the National Environmental Policy Act (NEPA), and other applicable laws.

I find that the monitoring plan and scientific study program are responsive to the concerns and uncertainties regarding the efficacy and ecological effects of using mechanical methods and prescribed fire to restore desired ecological conditions in the mixed conifer forest, specifically regarding giant sequoia regeneration. Monitoring, scientific study, and adaptive management are discussed in detail in Appendix G of the FEIS.

## **IX. Implementation of Decision**

There are certain priorities that will be followed and treatment methods that will be used to implement this decision. When and how adaptive management will be used in concert with findings from monitoring is also discussed. Planning and implementation of protection and restoration projects will be coordinated with private landowners, permittees, interested public, and adjoining agencies, including Sequoia and Kings Canyon National Parks, Mountain Home State Forest, the Universities of California (Whitakers Forest), and the Tule River Tribal Council. Management strategies will be adapted over time to reflect ongoing monitoring and the best available scientific information.

I am providing the following transition direction to ensure the orderly implementation of the management direction established in this Record of

Decision. My intent is to assure the most efficient and appropriate use of government resources, to minimize impacts to holders of existing government contracts and permits, and to reduce the likelihood of confusion. When embarking on a new management scheme, tracking the status of older projects over potentially long periods of time can create confusion and extend controversy, and may not promote orderly contract administration. Providing for this short transition period moves the Forest Service forward while minimizing costs and disruptions.

This decision will be effective 30 days from the date on which the Notice of Availability (NOA) for the FEIS is published in the Federal Register, the shortest time allowed by the law. To best achieve my intentions, this new direction will apply to all projects that have decisions made on or after the effective date of this plan amendment. The new direction will not apply to any projects with decisions made prior to the effective date of this decision. However, these projects may be modified to be consistent with the new direction of this decision where appropriate.

The last day for contract awards of vegetation management projects with prior decisions will be one year from the effective date of this decision. If, for some reason, a contract is not awarded by that date, or a contract is awarded timely but is defaulted or otherwise terminated after that date, the project cannot be re-offered until it is made consistent with the new direction adopted by this ROD.

## **A. *Map Errata***

The land allocations in the FEIS and this decision were developed using a variety of maps of differing scales (national, regional, and local). This affects the accuracy of the maps used for this analysis. For example, the level of inaccuracy of a line on a map at the broad Sierra Nevada-wide scale can be as much as 500 feet. It is the role of subsequent site-specific project planning to resolve, within the overall intent of the mapped land allocations, the actual location of activities on the ground. In some situations, there is a lack of precise map correlation or registration of a land allocation boundary between two GIS maps. Most of these variations are minor and are due to the combining of map coverages of varying resolutions. This situation results in remnants or "slivers" of small acreages of land appearing on the maps between larger polygons.

When using these maps during the development of project proposals, some variation in the boundaries of the land allocations may be identified. Dealing with and adjusting for this type of map inconsistency is not considered to be a change in the Monument Management Plan. These corrections will be done on an as-needed basis when they occur during project planning or other analyses.

## ***B. Collaborative Stewardship***

As part of the implementation of this decision, the Sequoia National Forest staff and district rangers will increase their efforts in collaborative stewardship of lands within and adjacent to the Monument. Interaction among interested people can lead to mutually acceptable resolutions of resource use issues. I am hopeful and I expect that such interaction and participation will lead to better decisions and fewer appeals and cases of litigation. The Forest Service recognizes that the success of collaborative stewardship will depend on shared commitment by all involved parties, including state and other federal agencies.

## ***C. Treatment Priorities***

Treatment priorities are established to be responsive to the need to take immediate action to protect communities and the objects of interest while at the same time restoring more natural conditions in the Monument. These priorities are consistent with the National Fire Plan. As these priorities are implemented, scientific studies will be initiated to expand our understanding of different management approaches for restoration of ecosystems. Treatment priorities are as follows:

1. Protect:
  - a. Wildland Urban Interface (WUI) Defense and Threat Zones
  - b. Strategically Placed Area Treatments (SPLATs) to protect giant sequoia groves and other resources
  - c. SPLATs to reduce the risk of catastrophic fire to the rest of the Monument
2. Restore:
  - d. Plantations created primarily from wildfires and logging from the 1950s to 1980s
  - e. Non-system roads and landings associated with the logging.
3. Restore giant sequoia and other vegetation by reintroducing fire to begin meeting structural desired conditions.

## ***D. Determining the Appropriate Treatment Method***

To move the Monument toward the desired conditions for fuels and vegetation, there are two basic categories of treatments I have considered, fire and mechanical. Fire treatments include prescribed fire and wildland fire

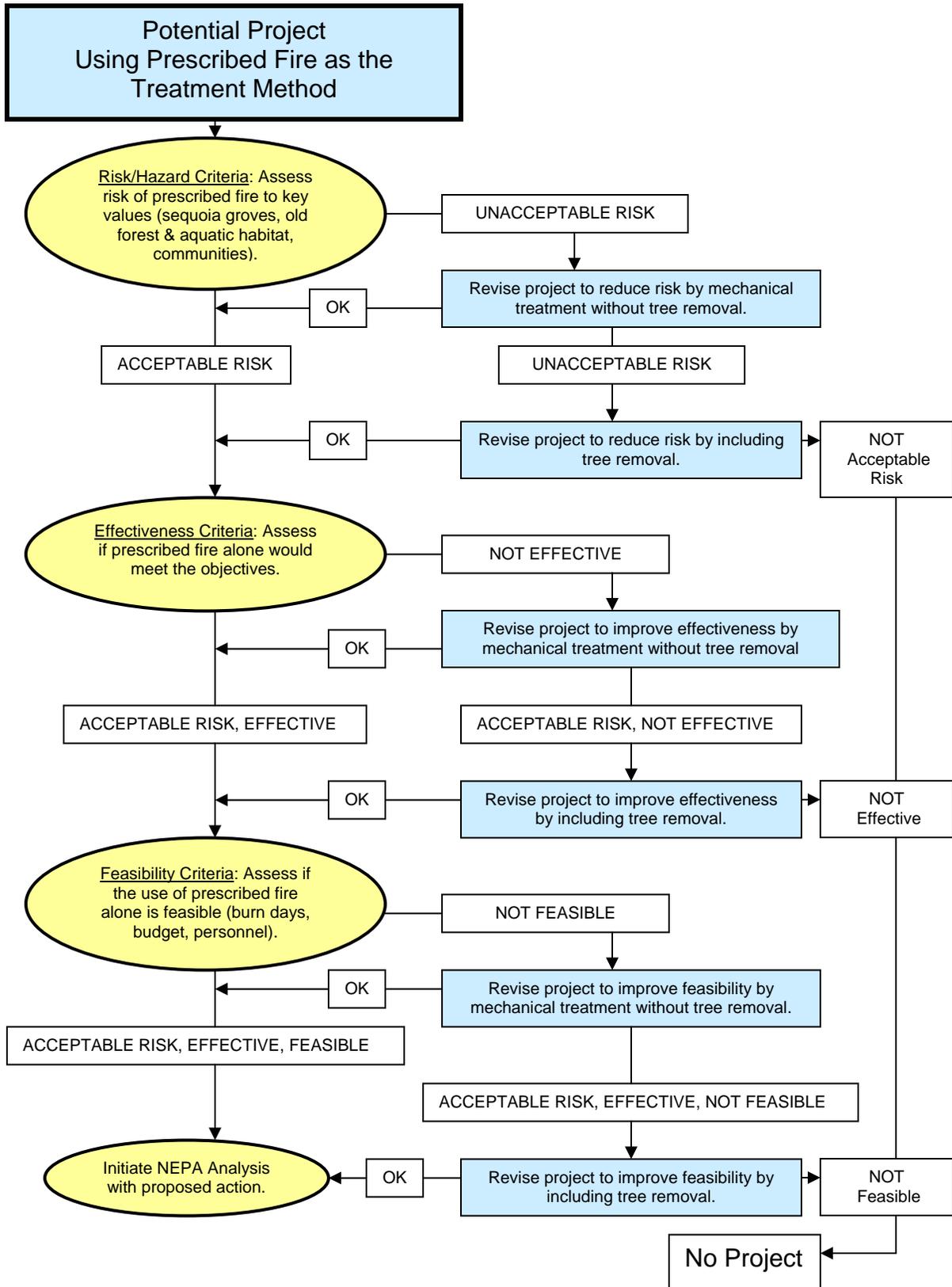
use. Mechanical treatments include heavy equipment such as piling or rearranging fuels for later burning, moving trees that have been thinned to a collection area, chopping or masticating fuels to change their flammability, or moving fuels away from trees or other special features to reduce the risk of damage from fire. Both mechanical and prescribed fire treatments, one after the other, may be used to achieve the restoration or protection goals in a specific area.

The Proclamation states that tree removal is permitted only for personal use fuelwood, or if clearly needed for ecological restoration and maintenance or public safety. Decisions as to whether tree removal is clearly needed will be made based on site-specific project analyses in the future. Removal of trees as commercial by-products may occur, incidental to meeting objectives for ecological restoration and maintenance or public safety. To determine the appropriate treatment method for a specific site, a model will be used during the analysis for each potential project (see Figure 1). This model may be refined at either the landscape analysis or project analysis level to reflect the site-specific conditions. There are three major criteria that will be considered in determining the appropriate treatment method:

1. Risk/Hazard Assessment: Would the use of prescribed fire alone create unacceptable risk and hazards to the objects of interest or to forest users? An assessment of local conditions (slope; fuel loadings; proximity to communities, giant sequoia groves, and den sites) and a site-specific analysis of fire effects must be conducted. If prescribed fire alone will create unacceptable risk, consider mechanical treatment without tree removal to reduce the risk to acceptable levels. If the risk will still be unacceptable, consider tree removal to reduce risk to acceptable levels. If the risk will still be too high, stop the project.
2. Effectiveness Assessment: Would the use of prescribed fire alone meet the restoration or protection objectives of the project? This ties in closely with the Risk/Hazard Assessment, as reducing the risk to acceptable levels by modifying the prescribed fire “prescription” may not allow objectives to be met. If it will not be effective, consider mechanical treatment without tree removal to make the project effective in meeting objectives. If the project will still be ineffective, consider tree removal. If it will still be ineffective, stop the project.
3. Feasibility Assessment: Would the use of prescribed fire alone be feasible? Factors such as personnel, cost, and favorable burn days must be considered. If it will not be feasible, consider mechanical treatment without tree removal to make the project feasible.

If a project cannot be designed using these criteria, the project will not proceed.

**Figure 1: Determining Recommended Treatment Methods for Protection and Restoration Projects.**



## X. Findings Required By Other Laws and Regulations

I find that this decision is consistent with all applicable federal laws and regulations, including but not limited to the following:

1. **Presidential Proclamation of April 15, 2000:** Establishment of the Giant Sequoia National Monument. This decision establishes management direction for the proper care and management of the objects of interest, as required by the Proclamation.
2. **National Environmental Policy Act (NEPA):** The NEPA requires that federal agencies prepare detailed statements on proposed actions that significantly affect the quality of the human environment. The requirement is designed to serve two major functions: (1) to provide decision makers with a detailed account of the likely environmental effects of a proposed action prior to its adoption, and (2) to inform the public of, and allow comment on, such efforts. I find that the environmental analysis and public involvement process complies with each of the major elements of the requirements set forth by the CEQ for implementing the NEPA (40 CFR 1500-1508).
  - First, the DEIS considered a broad range of reasonable alternatives. Alternatives presented in the FEIS reflect a broad range of responses to the key issues as well as to public comments.
  - Second, the Final EIS reflects consideration of cumulative effects of the alternatives by evaluating past, present, and reasonably foreseeable future actions in the planning area.
  - Third, the FEIS makes use of the best available information. Application of a geographic information system (GIS) was used to evaluate complex spatial effects resulting from implementation of the alternatives, such as how types of wildlife habitat could change over time. The best available science was used to help estimate environmental consequences as evidenced by the list of references.
  - This ROD does not authorize any specific activity in the Monument. Site-specific decisions will be made on projects in compliance with all applicable environmental laws following appropriate public involvement and, where appropriate, administrative appeal procedures.

3. **National Forest Management Act (NFMA):** My decision conforms to the 1982 planning regulations (36 CFR 219) that implement the NFMA.
4. **Endangered Species Act (ESA):** Consultation requirements under Section 7 of the ESA, as amended, have been completed with the U. S. Fish and Wildlife Service. The Fish and Wildlife Service reviewed the Biological Assessment for the proposed threatened and endangered species under their regulatory jurisdiction. The Fish and Wildlife Service concluded that this decision is “not likely to jeopardize the continued existence of threatened and endangered species” occurring in the Monument.
5. **Clean Water Act:** Full implementation of this decision is expected to maintain and improve water quality and to satisfy all state water quality requirements. This finding is based on the standards and guidelines contained in the decision, the application of state-approved Best Management Practices specifically designed to protect water quality, and the discussion of water quality and beneficial uses contained in the FEIS. Examples include: (1) stream-type flexible-width riparian areas, (2) critical aquatic refuges, (3) comprehensive landscape level analysis including existing uses, and (4) conservation assessments of threatened and endangered species. Additionally, site-specific project analyses subsequent to this decision will be required to demonstrate compliance with Clean Water Act and state water quality standards.
6. **Clean Air Act:** At the level of a programmatic plan such as this, the overall level of activities proposed in this decision is not anticipated to violate ambient air quality standards. This finding is based on information presented in the FEIS. Conformity determinations will be made at subsequent levels of planning and analysis (landscape and project) where emissions can be more accurately quantified and reasonably forecasted and local impacts can be assessed.
7. **Flood Plains and Wetlands (Executive Orders 11988 and 11990):** These executive orders require federal agencies to avoid, to the extent possible, short and long-term effects resulting from the occupancy and modification of flood plains, and the modification or destruction of wetlands. Standards and guidelines are provided for soil, water, wetlands, and riparian areas to minimize effects to flood plains and wetlands. They incorporate the Best Management Practices of the Soil and Water Conservation Handbook. The standards and guidelines apply to all floodplains and wetlands where less restrictive management might otherwise occur. I find that the management direction will provide sound protection to the aquatic environment.

8. **Civil Rights:** The Forest Service is committed to equal treatment of all individuals and social groups in its management programs in providing services, opportunities, and jobs. Because no actual or projected violation of legal rights to protection under the law is foreseen for any individual or category of people, no civil rights impacts are reported in the FEIS.

## **XI. Native American Relations**

The relationship of the Forest Service with Native Americans is important in the management and restoration of ecosystems in the Monument. During the development of the EIS, the Tule River Tribal Council and the Forest Service established a highly effective working relationship to ensure that tribal concerns, opportunities, and comments were clearly heard. It is my intention to continue this relationship. In order to meet our responsibilities and to encourage the participation of Native Americans in national forest management, I am making the following commitments on behalf of the Forest Service:

- We will consult with the Tule River Indian Tribal Council regarding fire protection and fuels management activities that potentially affect the Tule River Indian Reservation.
- During landscape analyses and similar activities, we will assess vegetation community conditions where a specific area has an identified importance to an affected tribe or tribal community. We will consult with the Tule River Indian Tribe and confer with other Native American communities to consider traditional and contemporary uses and needs.
- We will consider the relationship between fire management and plants culturally important to Native Americans. Where fuels treatments may affect tribes or tribal communities, or plants culturally important to them, we will consult on the development of burn plans, and consider approaches that accommodate traditional scheduling and techniques of fire and vegetation management.
- When implementing noxious weeds management programs we intend to maintain or, if appropriate, increase the availability of plants traditionally used by Native Americans. We will consult with appropriate tribes, tribal communities, or tribal organizations to identify areas of new or worsening weed infestations and develop plans for appropriate weed control.
- We will, where appropriate, include culturally significant species in monitoring protocols related to management activities.
- We will maintain appropriate access to sacred and ceremonial sites and to tribal traditional use areas. We will consult with the Tule River Indian Tribe to address access to culturally important resources and

culturally important areas when proposing management that may alter existing access.

## **XII. Appeal Rights**

This decision will be implemented no sooner than 30 days after the publication of the FEIS. This decision is subject to appeal in accordance with the provisions of 36 CFR 217 by filing a written Notice of Appeal within 45 days of the date the legal notice of this decision is published in the *Porterville Recorder*, Porterville, California. Two copies of the Notice of Appeal must be filed with the Reviewing Officer:

Regional Forester  
USDA Forest Service  
Pacific Southwest Region  
1323 Club Drive  
Vallejo, CA 94592

The Notice of Appeal must include sufficient narrative evidence and argument to show why this decision should be changed or reversed (36 CFR 217.9). For a period not to exceed 20 days following the filing of a Notice of Appeal, the Reviewing Officer shall accept requests to intervene in the appeal from any interested or potentially affected person or organization (36 CFR 217.14(a)).

The Proclamation and the Framework each brought significant changes to the Forest Plan. For example, the Proclamation removed the Monument area from any consideration of suitability for timber production. This Monument Management Plan does not significantly alter any other resource outputs. The Framework established major new land allocations for the Sequoia National Forest, including the Monument. In contrast, this plan represents only marginal changes to the Forest Plan as amended by the Framework. Further, this amendment comes late in the planning cycle, shortly before plan revision, when these policies may be under additional review. It involves slightly more than one-quarter of the Sequoia National Forest's total land area, clearly a limited portion. For these reasons, I have concluded that the Monument Management Plan constitutes a non-significant forest plan amendment (FSH 1909.12.5).

## **XIII. Contact Person**

For additional information concerning this decision or the Forest Service appeal process, contact Jim Whitfield, Giant Sequoia National Monument Planning Team Leader, Sequoia National Forest, 900 W. Grand Avenue, Porterville, CA 93257.

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Arthur L. Gaffrey  
Forest Supervisor  
Sequoia National Forest