Chapter 1. Purpose and Need for Action

1.1 Introduction

This chapter describes the need for resource management activities in the proposed Diamond Project Area and identifies the project's geographic location. This chapter also discusses the objectives and needs for each proposed activity and the measurement indicators used in the analysis for each objective. The applicable laws, policies, other environmental impact statements (EISs), and direction that influence the scope of this analysis are described in this chapter. This chapter also includes information about public involvement, scoping, and the issues that guided the development of alternatives and the analyses of effects.

1.2 Proposed Action

The Diamond Project is proposed as part of a broad resource management program to promote the ecological health of lands and economic health and stability of communities in the northern Sierra Nevada under the authority of the *Herger-Feinstein Quincy Library Group Forest Recovery Act* (HFQLG Act). The Diamond Landscape Assessment was developed in June 2005 to display key characteristics of the existing conditions within the Diamond Project Area and was used to establish the purpose and need for the proposed action. The Diamond Landscape Assessment also served to identify opportunities and constraints that affect the design of treatments for the proposed action.

The Diamond Project Area comprises approximately 100,000 acres. The proposed integrated resource treatments would occur on approximately 14,000 acres.

The United States Department of Agriculture (USDA) Forest Service, Plumas National Forest, Mt. Hough Ranger District proposes to

- implement fuel treatments by constructing shaded fuel breaks known as Defensible Fuel Profile Zones (DFPZs);
- harvest trees using group selection and area thinning;
- perform associated road system improvement work;
- carry out a range of watershed, aquatic, and riparian habitat improvement activities; and
- control the spread and introduction of noxious weeds.

Underburning, mastication, and manual cutting, piling, and burning are proposed as follow-up treatments and would be used to construct DFPZs in units with no commercial timber harvest. Herbicides would be used to control approximately 128 acres of Canada thistle. A detailed description of the proposed action and alternatives is presented in chapter 2.

1.3 Background Information

1.3.1 Diamond Project's Relationship to Herger-Feinstein Quincy Library Group Pilot Project

Congressman Wally Herger and Senator Diane Feinstein were authors of legislation that was signed into law on October 21, 1998. The legislation provided direction for a Pilot Project to demonstrate the management activities championed by the Quincy Library Group. The Quincy Library Group is comprised of local citizens with an interest and commitment to influence the management of the Lassen and Plumas National Forests and the Sierraville District of the Tahoe National Forest. The Pilot Project is designed to demonstrate the effectiveness of fuel breaks (such as DFPZs), group selection, individual tree selection (area thinning), avoidance or protection of specified areas, and implementation of a program for riparian restoration. The Diamond Project was developed as part of this Pilot Project, and the Pilot Project treatment options were incorporated into the Diamond Project design.

The HFQLG Act authorizes the use of individual tree selection as described in the Quincy Library Group Community Stability Proposal. As described in the proposal, individual tree selection incorporates a combination of single-tree selection for regeneration, intermediate thinning for forest health, and thinning from below for fuels reduction. These treatments were modeled and analyzed in the HFQLG final EIS as individual tree selection. The Sierra Nevada Forest Plan Amendment Record of Decision (SNFPA 2004, page 68, table 2) further qualifies individual tree selection as synonymous to area thinning. Throughout this Diamond Project EIS, the term "area thinning" is used to be consistent with the SNFPA. For the Diamond Project, area thinning represents a combination of intermediate thinning from below for forest health and fuels reduction.

1.3.2 Project Location

The Diamond Project Area is located in Plumas County and a small portion of Lassen County, California. The project area is located about 7 miles south of Susanville and about 9 miles northwest of Taylorsville and Greenville. The entire Project Area consists of approximately 100,000 acres. Figure 1-1 below shows the location of the Diamond Project.

The legal location encompasses all or portions of Sections 1 and 2 T26N R11E; Sections 2–6, 8–11, 14–23, 26–29, 32, and 33 T26N R12E. Sections 1, 2, 10–14, 24, and 25 T27N R10E; Sections 2–28, 30, 35, 36 T27N R11E; Sections 1–12, 14–17, 19–21, 26–35 T27N R12E; Section 6 T27N R13E; Sections 13, 14, 23–26, 35, 36 T28N R10E; Sections 1–5, 7–20, 23–26, 29–36 T28N R11E; Sections 5–9, 14–36 T28N R12E; and Section 31 T28N R13E MDM.

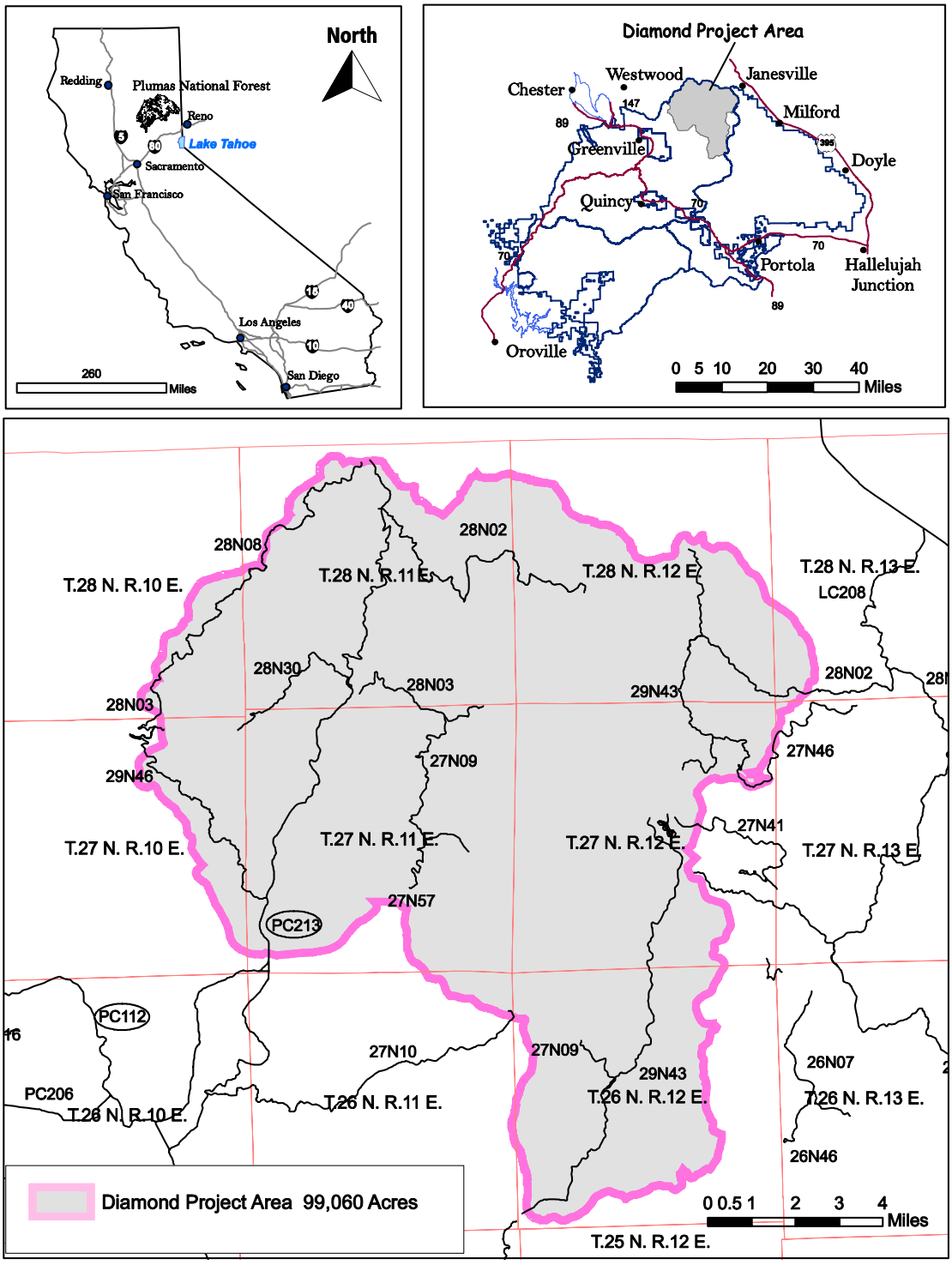

Figure 1-1. Diamond Project vicinity map.

1.4 Purpose and Need

1.4.1 Introduction

A Forest Service interdisciplinary team (ID Team) developed six primary objectives for the Diamond Project based on site-specific resource problems identified in the June 2005 Diamond Landscape Assessment, relevant laws, and Forest Service direction. These objectives led to the development of specific treatments and activities within the proposed Diamond Project Area. The Diamond Project Area involves complex ecological systems and human uses. The treatments and activities that make up the proposed action stem from the need to shift the existing conditions toward desired future conditions. The proposed activities and treatments are described in the alternatives section in chapter 2.

Listed below are the project objectives, the underlying purpose of and need for taking action, legislation and policy direction for the objectives, and measurement indicators. The measurement indicators are used in the analysis to quantify and describe how well the proposed action and alternatives would meet the project objectives.

1.4.2 Project Objectives and Need for Action

Objective 1: Modify fire behavior to protect communities, fire fighters, and biological resources.

Need for Action. High densities of small trees and high fuel loads are contributing to high accumulations of ladder fuels and canopy fuels. Trees killed by region-wide drought in the 1980s have now fallen over and created extremely high fuel loads throughout the Project Area. The fuels contribute to crown fire initiation and spread and increase the potential for high-severity stand-replacing fire events. This potential fire behavior could lead to increased risk to fire fighters, forest visitors, biological and other resources, structures, and private property within and adjacent to the Diamond Project Area.

Desired Condition. A forest structure that has a low probability of crown fire initiation and spread under 90th percentile weather conditions (a typical late-summer day with temperatures about 90 degrees Fahrenheit). Additionally, the proposed fuel treatments would

- reduce the potential size and intensity of wildfires by creating conditions that improve fire suppression effectiveness and decrease potential fire severity;
- result in an average flame length of 4 feet under 90th percentile weather conditions;
- result in increased rates of line construction and greater ability for aerial retardant to penetrate through the tree canopy to surface fuels;
- provide safe locations for firefighters to take action against a wildland fire;
- contribute to the larger HFQLG landscape-level DFPZ network and existing fuel treatments;

- increase the likelihood of successful initial attack in treated areas and provide evacuation corridors for firefighters, residents, and forest visitors;

- provide consistency with the Plumas Fire Safe Council's efforts to reduce fuels inside the Wildland Urban Interface and enhance fire suppression capabilities in the Wildland Urban Interface, which would potentially lead to better protection of life and property;

- provide better protection to undeveloped adjacent lands from fire spread from public lands and vice-versa; and

- reduce the risk of high-severity fire in Riparian Habitat Conservation Areas.

Applicable Legislation and Policy Direction—1998 HFQLG Act, 2004 Sierra Nevada Forest Plan Amendment (SNFPA) final supplemental EIS and Record of Decision; 1988 *Plumas National Forest Land and Resource Management Plan* (the "Forest Plan"), as amended by the 1999 HFQLG final EIS and Record of Decision; *National Fire Plan* of 2001; and *Healthy Forest Restoration Act* of 2002.

Measurement Indicators—Flame length and susceptibility to crown fire (fire type).

Objective 2: Modify forest structure and species composition to promote the development of an uneven-aged, multistoried, fire-resilient forest.

Need for Action. High densities of small trees in the Diamond Project Area are contributing to stand conditions in which trees are stressed due to competition for water, light, and nutrients. These dense stands perpetuate conditions in which insect and disease infestations may increase beyond what naturally occurs. In addition, these high stand densities create conditions where stands are more susceptible to mortality caused by drought, insects, disease, and fire.

High stand densities also create closed canopy conditions that are not favorable for regeneration, growth, and development of shade-intolerant species such as aspen, Baker cypress, and ponderosa and Jeffrey pine. These shade-intolerant species require more sunlight from open canopy stands and gaps to regenerate successfully. The HFQLG Pilot Project identified the need for creating canopy openings using group selection to provide for regeneration of shade-intolerant species such as ponderosa and Jeffrey pine. The HFQLG Pilot Project is designed to test the effectiveness of group selection in establishing an uneven-aged, multistoried, fire-resilient forest.

Desired Condition. An uneven-aged, multistoried, fire-resilient forest of open forest stands dominated by large fire-tolerant trees with crowns sufficiently spaced to limit the spread of crown fire (HFQLG final EIS 1999). Stand density in smaller-diameter tree classes has been reduced and is resulting in improved forest health, which is promoting the growth of residual trees and reducing susceptibility to drought, fire, insects, and disease above what naturally occurs. Additionally, the proposed area thinning and group selection would

- promote forest stands dominated by fire-resistant trees;

- maintain uneven-aged stands, including mature trees, poles, and sprouts within aspen stands;

- reduce competition from shade-tolerant conifers and allow for the reintroduction of fire into Baker cypress stands to enhance cypress regeneration within and adjacent to the Mud Lake Unit of the Mud Lake Research Natural Area; and

- create open forest stands to promote the growth of residual trees and create openings in the forest canopy to promote the regeneration of shade-intolerant species. This, in turn, would promote the development of a more diverse distribution of seral (successional) stages that may be more resilient to disturbance events (such as fire, drought, and insect and disease infestations) on the landscape scale.

Applicable Legislation and Policy Direction—1998 HFQLG Act, 2004 SNFPA final supplemental EIS and Record of Decision and the 1988 Forest Plan, as amended by the 1999 HFQLG final EIS and Record of Decision.

Measurement Indicators—Stand structure (relative stand density), compositional structure (relative abundance of shade-intolerant species), and landscape structure (percent of open canopy forest conditions created).

Objective 3: Restore aquatic and riparian habitat and improve watershed conditions.

Need for Action. The current conditions in the Riparian Habitat Conservation Areas (RHCAs) are similar to those described above under objective 2; this includes conifer encroachment in the RHCAs. Conifers compete with riparian species that cannot tolerate a shaded environment. The high density of small trees makes many RHCAs in the Diamond Project Area vulnerable to the effects of severe wildfire because drainages can rapidly funnel hot air upslope and contribute to fire spread. For example, during the Stream Fire in 2001, several RHCAs in the Diamond Project Area were severely burned.

Some stream channels in the Diamond Project Area are actively eroding, with vertical or undercut banks. Channel erosion is a natural process, but past management practices and poorly maintained, designed, or located roads are accelerating this natural process in some areas. This is leading to an alteration of water flow, sediment loading, transport, and deposition, which is causing changes in channel morphology, channel stability, and substrate composition. Ultimately, riparian and watershed conditions are being compromised by the location of roads because eroded materials are entering the watercourse as sediment, thus degrading both water quality and aquatic habitat.

Six locations in the Diamond Project Area have been identified as having headcuts and/or excessive channel and bank erosion and instability. Where headcut erosion has occurred in meadows, the meadow may no longer function as a floodplain during high flow events. In addition, the water table in the meadow may be lowered due to the lowered streambed. Fish passage barriers have been identified in seven locations. The Forest Service has identified roads that are poorly maintained, designed, or located and are currently detrimental to water quality and wildlife habitat.

Desired Condition. Canopy and surface fuels are maintained at a level that enhances the diversity and productivity of native and desired nonnative plants, as well as wildlife populations. Fish stocks have been enhanced and aquatic habitat restored due to a reduction in channel and bank erosion and an increase in habitat connectivity from the removal of fish passage barriers. Riparian and aquatic ecosystems are stable and productive. This means that water quality, stream channel integrity, and stream flow timing and variability are being maintained and restored. Additionally, the proposed watershed and riparian restoration treatments would maintain or restore

- vegetation in the RHCAs to provide adequate summer and winter thermal regulation in riparian and aquatic zones;
- diverse and productive plant communities in the riparian zone;
- riparian vegetation to provide an amount and distribution of large woody debris characteristic of natural aquatic and riparian ecosystems;
- stream channel integrity, channel processes, and sediment regimes to reflect those under which the riparian and aquatic ecosystems developed;
- natural timing and variability of the water table elevation in meadows; and
- populations of desired plant, vertebrate, and invertebrate populations and fish access to suitable habitat.

Applicable Legislation and Policy Direction—1998 HFQLG Act, *Clean Water Act*, *National Forest Management Act*.

Measurement Indicators—Equivalent Roaded Acres, Threshold of Concern, and acres of RHCAs treated.

Objective 4: Contribute to the stability and economic health of rural communities.

Need for Action. Local factors influencing Plumas County's economy include isolation from urban job markets, reliance on natural resource-based industries, and high seasonal fluctuations in employment. In this local environment, forest health and community health share interdependent goals. The local natural resource setting provides forest products, such as timber, biomass, and water and nature-based experiences such as hiking, hunting, swimming, and bird watching, all of which contribute to visitors' physical and mental well-being.

Desired Condition. Healthy environments and economies for communities that rely on natural resource industries. Opportunities for economic and social development are being enhanced by healthy forest ecosystems that help sustain products, services, and values. The healthy forests in the Diamond Project Area are directly and indirectly contributing to the long-term stability and economic health of Plumas County, and the communities within the county, and are providing local opportunities for diversification and value-added natural resource-based products and services. Implementation of the proposed treatments has generated income and employment opportunities in the local and regional areas. Specifically, project planning, layout, and implementation are providing

economic opportunities to both small and large businesses that are supporting pre-treatment field surveys, harvests, prescribed burns, restoration activities, and post-treatment evaluation. Additionally, the proposed treatments would

- generate products, jobs, and revenues;
- promote healthy, resilient forests that support sustainable human-environment relations; and
- draw people to the forest to engage in a variety of activities from recreational to stewardship.

Applicable Legislation and Policy Direction—1998 HFQLG Act, 2004 SNFPA final supplemental EIS and Record of Decision; 1988 Forest Plan, as amended by the 1999 HFQLG final EIS and Record of Decision.

Measurement Indicators—Dollars returned to treasury (Timber Sale Contract cost or value), total project value, number of jobs, employee-related income, and total project volume.

Objective 5: Control the spread and introduction of noxious weeds.

Need for Action. Six invasive plant species of high management concern occur in the Diamond Project Area. The weed sites range in size from 4 square feet to about 10 acres, with the majority of infestations occupying less than 0.25 acre. Invasive species have been shown to displace native species, alter nutrient and fire cycles, decrease the availability of forage for wildlife, and degrade soil structure (Bossard, Randall, and Hoshovsky 2000). One invasive plant species, Canada thistle, is of high management concern due to its distribution and abundance in the Diamond Project Area. This perennial thistle spreads rapidly by producing long horizontal underground roots that give rise to aerial shoots (ibid.).

Desired Condition. A forest with a low risk of noxious weed introduction, establishment, and spread. Additionally, the proposed noxious weed treatments would

- reduce the potential for the introduction and establishment of new weeds;
- contain and control established infestations; and
- reduce or eliminate existing infestations.

Applicable Legislation and Policy Direction—1998 HFQLG Act, 2004 SNFPA final supplemental EIS and Record of Decision; 1988 Forest Plan, as amended by the 1999 HFQLG final EIS and 2003 HFQLG supplemental final EIS and Record of Decision; Executive Order 13112 for the control of noxious weeds.

Measurement Indicators—Risk of noxious weed invasion and spread, number of acres treated, estimated cost per acre, and effectiveness of treatment.

Objective 6: Improve the road system and provide access to treatment areas.

Need for Action. There are approximately 387 miles of existing roads in the Diamond Project Area. The transportation system provides access to forest stands, recreation sites, mining claims, and other uses. Roads in the Diamond Project Area are generally in good condition; however, some roads require brushing, drainage, and/or curve improvements to allow log trucks or chip vans to safely travel them. Some road segments require relocation because they are poorly located or are situated on unstable slopes. Rainfall runs off road surfaces, carrying sediment away from the road, and as a result, some of this sediment is entering the stream network and reducing water quality. There are approximately 12 miles of roads that are contributing to resource damage. These roads are located extremely close to stream channels and are contributing large amounts of sediment to the stream network. There are also a high number of locations where roads cross streams, and wherever a road crosses a stream, there is almost always a direct connection between the road and the stream that affects runoff and sediment discharge. Roads may be impacting terrestrial wildlife. Road density across the Diamond Project Area is approximately 2.5 miles of road per square mile of land; however, road densities exceed 4 miles per square mile in some drainages. Fish barriers also exist in some places where roads cross streams. Small culverts are creating high-velocity stream flows that act as barriers to fish, and large drop offs below culverts are restricting fish passage at the road crossing. Seven fish barriers have been identified in the Diamond Project Area.

Desired Conditions. Unneeded roads are eliminated, closed, or obliterated in accordance with the 1988 Forest Plan and the ongoing *Travel Management Process (OHV Route Designation)*. Roads that are needed are maintained and improved to accommodate vehicle traffic. Roads that were causing a high level of resource damage have been decommissioned. Other roads that were contributing sediment to streams have had gravel or rock applied. Poorly located roads have been relocated to stable areas. Fish have access to suitable habitat and are not restricted from that habitat by roads. Open road densities have been reduced to lessen the impact of roads on wildlife. Additionally, the proposed treatments would

- provide roads that will ensure safe travel for forest users, and
- provide a transportation system that is adequate for all resource management needs.

Applicable Legislation and Policy Direction—1998 HFQLG Act, 2004 SNFPA final supplemental EIS and Record of Decision; 1988 Forest Plan, as amended by the 1999 HFQLG final EIS and Record of Decision.

Measurement Indicators—Miles of roads constructed, decommissioned, and reconstructed; miles of temporary road construction.

1.5 Laws, Regulations, EISs, and Other Direction that Influence the Scope of this EIS

1.5.1 Herger-Feinstein Quincy Library Group Forest Recovery Act

On October 21, 1998, the President of the United States signed the *Department of the Interior and Related Agencies Appropriations Act*, including section 401—the *Herger-Feinstein Quincy Library Group Forest Recovery Act* (HFQLG Act). The HFQLG Act states that the Secretary of Agriculture, acting through the Forest Service, and after completion of an EIS, shall conduct a Pilot Project for five years on federal lands in the Lassen and Plumas National Forests and the Sierraville District of the Tahoe National Forest.

The HFQLG Pilot Project is designed to test and demonstrate the effectiveness of certain fuels and vegetation management activities in meeting ecologic, economic, and fuel-reduction objectives. Full implementation of the HFQLG Pilot Project would result in an annual average of 8,700 acres of group selection across the Pilot Project Area, consistent with protection of ecosystems, watersheds, and other forest resources; good silvicultural practices; and economic efficiency.

1.5.2 Herger-Feinstein Quincy Library Group Forest Recovery Act EIS, Supplemental EIS, and Records of Decision (1999 and 2003)

The HFQLG Act final EIS was completed on August 17, 1999, and the Record of Decision was signed on August 20, 1999 (USDA Forest Service 1999). The Record of Decision amended the land and resource management plans for the three National Forests (Plumas, Lassen, and Tahoe) and gave direction to implement the resource management activities required by the HFQLG Act. The Record of Decision on the HFQLG final supplemental EIS addressing DFPZ maintenance was adopted on July 31, 2003 (USDA Forest Service 2003). In February 2003, the *Department of the Interior and Related Agencies Appropriations Act* was signed and extended the HFQLG Pilot Project legislation by another five years.

1.5.3 Sierra Nevada Forest Plan Amendment Final Supplemental EIS (2004)

In January 2004, the Regional Forester signed the SNFPA final supplemental EIS Record of Decision, which replaced the 2001 Record of Decision on the SNFPA final EIS and changed management direction to allow full implementation of the HFQLG Pilot Project, consistent with the goals identified in the HFQLG Act. The 2001 SNFPA final EIS and Record of Decision are incorporated by reference in the 2004 Record of Decision on the SNFPA final supplemental EIS.

The 2004 Record of Decision on the SNFPA final supplemental EIS directed the Plumas National Forest to implement the HFQLG Pilot Project, which includes creation of DFPZs for the proposed Diamond Project. These treatments are needed in order to limit the potential size and loss of resources from large high-intensity wildfires. DFPZs are strategically located and designed strips of land where surface fuels (excess down woody material), ladder fuels, and canopy fuels are treated so that large, destructive canopy fires will lose intensity and transition to surface fires. DFPZs are wide enough to capture short-range spot fires in the treated area and are designed to provide fire suppression personnel a safe location from which to take fire-suppression actions. DFPZs are usually located along roads, ridgetops, meadows, or rocky areas to enhance their effectiveness and accessibility.

1.5.4 Forest Plan Direction

The 1988 *Plumas National Forest Land and Resource Management Plan* (commonly referred to as the "Forest Plan"), as amended by the 1999 HFQLG final EIS Record of Decision, and as amended by the 2004 SNFPA final supplemental EIS Record of Decision, guides the proposed action and alternatives. The 2004 SNFPA Record of Decision (page 68) displays the standards and guidelines applicable to the HFQLG Pilot Project Area. Land allocations that apply to this proposal include Off-base and Deferred Lands, late-successional old-growth stands, California spotted owl Protected Activity Centers, Spotted Owl Habitat Areas, and the National Forest System lands outside these allocations that are available for vegetation and fuels management activities.

The proposed action includes a site-specific Forest Plan Amendment. The Forest Plan (page 3-34) requires an amendment to establish and manage the Mud Lake Research Natural Area (RNA). The Forest Plan would be amended to be consistent with the management direction identified in the establishment record developed in 1989 and the management plan approved in 2006. The establishment record will replace the Forest Plan EIS directions on pages 2.32, 3.225-3.120, and 4.86. This is a nonsignificant amendment.

The goals and management objectives for the Mud Lake RNA are provided in the *Mud Lake Research Natural Area Management Plan*. This management plan was approved in March 2006 by the Regional Forester, Pacific Southwest Research (PSW) Station Director, and Plumas National Forest Supervisor. A research use permit was also submitted to conduct experimental treatments within the Mud Lake RNA and was approved by the PSW Station Director in October 2005. This permit allows the following management treatments to be tested within a portion of the Mud Lake RNA: (1) thin, and (2) thin with a follow-up prescribed burn treatment. Under this proposal for the Diamond Project, control areas would be established where Baker cypress have been left untreated until the effectiveness of the treatments has been determined.

1.5.5 Diamond Landscape Assessment (2005)

The Diamond Landscape Assessment, which was completed in June 2005, provided the overall purpose and need for the Diamond Project proposed action. Using public collaboration and an integrated vegetation management approach, the Mt. Hough Ranger District identified existing and desired conditions using the Diamond Landscape Assessment. The Diamond Landscape Assessment described existing conditions in terms of forest structure, species composition, fire and fuels, riparian and watershed, roads, noxious weeds, and recreation. Several primary needs were identified to shift the existing conditions toward the desired conditions:

- Modify fire behavior to protect communities, fire fighters, and biological resources.
- Modify forest structure and species composition.
- Restore aquatic and riparian habitat and improve watershed conditions.
- Contribute to the economic stability of rural communities.
- Control the spread and introduction of noxious weeds.

1.6 Decision Framework

The Responsible Official for this project, Forest Supervisor James M. Peña, will decide whether to implement the Diamond Project as identified in the proposed action, implement the project based on alternatives to the proposed action, or not implement the project at this time.

1.7 Project Schedule

The Responsible Official expects to make a decision on this project in November 2006, with implementation to begin in the summer of 2007.

1.8 Public Involvement

1.8.1 Scoping Process

While preparing the Diamond Landscape Assessment in June 2005, the Mt. Hough District Ranger encouraged public participation, which included an open house in Greenville, CA. A news release seeking public comment was mailed to over 100 households surrounding the Diamond Project Area, as well as other interested publics. Between June and July 2005, letters requesting information on areas and cultural concerns were sent to several federally recognized tribes and other Native American entities. In addition, the Mt. Hough Ranger District staff provided presentations to the Plumas County Fire Safe Council, Quincy Library Group, and the Plumas County Board of Supervisors. These meetings provided opportunities for developing and incorporating proposals. The data collected during this process, along with public comments, were used to develop the proposed action.

On November 3, 2005, a letter describing the proposed action (the "scoping" letter) was mailed to approximately 500 individuals and organizations, including local residents, federally recognized tribes and other Native American entities, and federal, state, and local agencies. The letter was followed by the November 10, 2005, *Federal Register* publication of the Notice of Intent to prepare an EIS for the Diamond Project. The Notice of Intent requested that comments on the proposed action be received within 30 days.

On December 8, 2005, the Mt. Hough Ranger District hosted an open house in Greenville, CA. The event notice had wide distribution, and about 20 people from the surrounding communities attended. On January 4, 2006, the local newspaper (*The Feather River Bulletin*) printed a long, in-depth report on the open house. A total of 34 contacts with agencies and individuals have been made, and 17 of the contacts submitted substantive comments, 9 only requested additional information, and the remaining 8 were the participants in the open house.

1.8.2 Scoping Issues

Issues are points of discussion, debate, or dispute about the potential environmental impacts of a proposed action. As such, issues influence the design and evaluation of alternatives to the proposed action. Issues can be categorized as either nonsignificant or significant. The Council on Environmental Quality (CEQ) regulations that implement the *National Environmental Policy Act*

(NEPA) guide federal agencies in handling nonsignificant issues by directing them to ". . . identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review" (CEQ section 1506.3; 40 CFR 1501.7).

Nonsignificant issues are those that are (1) already addressed by law, regulation, forest plan, or other higher level decision; (2) beyond the scope of the purpose and need described in the Notice of Intent; (3) not connected to the proposed action; (4) conjectural and not supported by scientific or factual evidence; or (5) irrelevant to the decision to be made.

The Diamond Project Interdisciplinary Team (ID Team), through the interdisciplinary process and in coordination with the Responsible Official, looked at internal issues (brought up by the ID Team) and external issues (from public scoping comments) to provide a basis for the analysis of environmental effects (contained in chapter 4 of this EIS). To narrow the focus of the environmental analysis, the ID Team focused on issues that provided measurable elements to the proposed action and emphasized the most important environmental effects. These are elements of the ecosystem that can be measured to indicate an increase or decrease in trends in ecosystem health. To compare these elements, indicators and appropriate measures were developed to show the differences between the alternatives and provide a clear basis for a decision to be made by the Responsible Official. Thus, the purpose and need, range of alternatives, environmental effects, and final decision will be connected using the scoping comments, internal issues, and the corresponding indicator measures. Issues for the Diamond Project are summarized below.

Issue Statement 1: Some members of the public are opposed to the use of herbicides.

There were concerns that the use of herbicides would present an unnecessary ecological and human health risk. There were concerns that herbicides would not be an effective method of control, and alternative nonherbicide control methods were suggested. The indicator measures for this issue include

1. acres of herbicide treatment (as a means to evaluate potential exposure);
2. cost per acre of treatment; and
3. effectiveness of treatment.

Issue Statement 2: Preliminary analysis of costs associated with harvest systems and road treatments.

There were concerns that helicopter and skyline logging would increase the costs of treatments that would include biomass removal, activity fuel treatment, and road construction.

The indicator measures for this issue include

1. dollars returned to treasury (Timber Sale Contract cost or value);
2. Service Contract cost; and
3. total project value.

Issue Statement 3: Proposed mechanical treatments may be detrimental to old-forest conditions and the wildlife species dependent on these conditions.

There were concerns that forest structure, habitat connectivity, and interior forest habitat characteristics important to sensitive wildlife species would be degraded by the proposed treatments.

The indicator measure for this issue is

1. acres of suitable habitat for the California spotted owl, northern goshawk, and mesocarnivores.

Issue Statement 4: Implementing ground-disturbing activities in subwatersheds that are approaching or over the Threshold of Concern increases the risk of adverse effects and cumulative watershed effects.

Three of the 48 subwatersheds are over the Threshold of Concern, and 6 are approaching the threshold in the existing condition. The Forest Service Region 5 Cumulative Effects Model (Equivalent Roaded Acres) rating reflects existing subwatershed condition and resulting impacts on the aquatic systems.

The indicator measure for this issue is

1. the Equivalent Roaded Acres Threshold of Concern derived from the Forest Service Region 5 Cumulative Effects Model.

1.9 Permits, Licenses, and other Consultation Requirements

No federal permits, licenses, or entitlements are necessary to implement the proposed project. State requirements, based on federal laws, and administered by the County Agricultural Commissioner for air quality management and herbicide use, will be followed. These requirements include burning only on permissive burn days, or receiving a special variance prior to ignition, as well as the use of Certified Pesticide Applicators for the herbicide treatments. Smoke permits are required from the Plumas County Air Quality Management District. Timber Harvest Activity Waivers are required from the California Regional Water Quality Control Board.

The Forest Service consulted with federal and state agencies, including the U.S. Fish and Wildlife Service and California Department of Fish and Game, during the development of this EIS. Details of these consultations are in "Chapter 5: Consultation and Coordination." In addition, the Forest Service consulted the following federally recognized tribes and interested and affected tribes: Greenville Indian Rancheria, Tyme Maidu Tribe of Berry Creek Rancheria, Mechoopda Indian Tribe of Chico Rancheria, Susanville Indian Rancheria, Concow Maidu Tribe of Mooretown Rancheria, and the Estom Yumeka Tribe of Enterprise Rancheria.