

Social Assessment for The Ashland LSR Habitat Restoration and Fuels Reduction Project

Julie Perrochet and Peg Boland
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A social analysis uses social science information to determine how proposed actions affect humans. Because changes in the management policy of the Forest established by the Forest Plan are not proposed, the social effects of this single proposal are limited in scope. For the Mt. Ashland LSR Habitat Restoration and Fuels Reduction Project (Mt. Ashland LSR Project or Project), discussions on social effects include economics, local community capacity, visual quality (scenery), recreation, air quality, human health and safety, transportation, heritage resources, environmental justice, a Special Interest Area, Roadless areas, Wild and Scenic Rivers and forest management values.

The discussions are supported by a number of more detailed documents. An Economic Analysis by Marc Young, dated October 24, 2006, includes background information, the assumptions and results of modeling, and the economic effects. The Mt. Ashland LSR Project Scenery Analysis by Jerry Mosier, dated October 13, 2006, evaluates the effects on scenery from sensitive viewpoints and proposed activity areas, based on field studies and interpreting photography. The Recreation Report by Charles Kraus, dated December 19, 2006, describes the existing situation for and analyzes effects on recreation, particularly roads, dispersed camping, and the Pacific Crest National Scenic Trail. The Mt. Ashland LSR Project Air Quality Assessment by Bill Snavely, dated April 4, 2007, provides background information on air quality as well as modeling and analyzing the effects on air quality. The Engineering Report by James Davis, dated April 3, 2007, provides information on road management, proposed road work, and the effects of road work on the transportation system. The analysis for wildlife species that was conducted by the US Fish and Wildlife Service addresses the purpose and need for the Project and the effects of forest management relative to wildlife and habitat fragmentation. These documents provided information for this report and are on file in the project record.

The Multiple Use-Sustained Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974, and the National Forest Management Act of 1976 direct the National Forests to supply goods and services and be managed for a broad array of resources. Consistent with these guiding laws, the land allocations and management direction for the Forest were established in the Klamath National Forest Land and Resource Management Plan (Forest Plan) with the signing of its Record of Decision on July 5, 1995 (USDA FS 1995a and 1995c). The Ashland LSR Habitat Restoration and Fuels Reduction (Ashland LSR) project proposal does not propose changes in the management policy of the Forest, but rather is a mechanism for implementing the management direction already established. Therefore, the social effects of this single proposal are limited in scope. Forest Service Manual 1973 requires a social effect analysis if the potential social effects of Forest Service actions are important to the decision (USDA FS 1992). Although important, social effects were not identified as a significant issue for the Ashland LSR proposal, so an extensive analysis is not necessary (USDA FS 1988).

Social analysis at broader scales has occurred in the Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (USDA FS and USDI BLM 1994), the Forest Plan Environmental Impact Statement (USDA FS 1995b), and the Northwest Forest Plan: the First Ten Years, Socioeconomic Monitoring Results (Charnley and others 2005, Moeur, Melinda et al . 2005). The Ashland LSR project social analysis is based, in part, on the analyses on pages 3&4-260 through 3&4-319 of the Final Supplemental Environmental Impact Statement as well as on the analyses on pages 3-130 through 3-134 and pages 4-159 through 4-162 of the Forest Plan Environmental Impact Statement. Some people have requested the Forest provide more protection of northern spotted owls, others have identified their use of the Forest for recreation and aesthetic values (including visual resources), while some analysis has considered the expected effects on communities of reduced timber harvest and community assistance programs (Final Supplemental Environmental Impact Statement and the Northwest Forest Plan: The First Ten Years, Socioeconomic Monitoring Results”) The Forest Plan Environmental Impact Statement discusses the effects of the land allocations on selected forest user groups.

Historical social setting

Contemporary American Indian land use is limited to seasonal gathering of vegetal materials such as iknish (wild celery) with a few tribal members taking part in the activities. Historic land use within the watershed is basically one of resource extraction. By the 1860s, gold mining dominated the landscape wherein various gold mining technologies occurred. Mining evolved from low impact placer mining to high impact hydraulic and dredge mining. During the Depression Era, gold mining was mainly limited to small, placer mining operations. Today, six mining claims remain active and are limited to pan or recreational dredge mining. At the turn of the century, Cinnabar Springs became famous in Northern California and Southern Oregon as a destination point for people seeking its curative powers. The mineral waters supposedly cured everything from stomach ailments to pregnancy. Railroad logging began in 1907 and continued until 1934 when Fruit Growers Supply Company pulled the tracks and converted to truck logging. Railroad logging increased dramatically after 1909 when the Northern California Lumber Company was taken over by Fruit Growers Supply Company. In the early years, fires were a common occurrence in the woods until spark arresters were installed on donkey engines. More recently, old railroad grades have gradually converted to roadbeds which now allow recreationists easy access for a variety of activities.

Development of the sheep and cattle industry increased as miners and ranchers moved into the area. Issues of overgrazing led to the implementation of Forest Service range management on public lands. Today, two range allotments remain within the watershed.

A significant number of recorded sites within the watershed reflect mining activities. Prehistoric/historic site types and their quantity are listed in the Beaver Creek Environmental Analysis--none of the recorded sites have been evaluated for significance. (USDA Forest Service,1996. Beaver Creek Environmental-Step 3- Current Conditions.)

Methodology

Effects to social values are discussed in narrative form. Indicators of the social environment are economics, community capacity, forest management values, visuals (scenic), Environmental Justice, recreation, human health and safety, Wild and Scenic Rivers, Wilderness, Roadless areas, air quality, heritage resources and tribal uses, and transportation,

Affected Environment

Economics: The assessment area for economics is the seven surrounding counties including Siskiyou, Shasta, Humboldt, and Del Norte in California as well as Jackson, Josephine, and Klamath in Oregon. People from the seven counties contract for work in the area surrounding the project including logging, planting, precommercial thinning, masticating, and conducting surveys. These people spend money on gas and food, which creates a small multiplier effect in Siskiyou County. People employed by non-profit groups also work in the seven-county area. Activities such as grazing, hunting, and recreational use also occur in the project area and can generate direct or indirect employment that can be cumulative when combined with employment generated by project activities. Because employment and community capacity are on-going, the time frame for an effects assessment is also fluid, fitting better on a continuum that surrounds the projected period of project implementation, rather than a discrete time period.

Community Capacity: Community capacity (community's ability to respond to stresses and take advantage of opportunities to meet community needs) is fluid. The infrastructure (underlying framework) in the town of Klamath River and most of the surrounding communities is limited and unemployment and poverty is high (Doak and Kusel 1997, Charnley et al. 2005). In the Ashland and Medford, Oregon communities, housing construction, a University, and the arts and entertainment bolster employment opportunities. Appendix A displays the community capacity for the communities in about a 50-mile radius of the project area.

Visuals (Scenery): For the Mt Ashland LSR Project, the geographic scope of the scenery analysis includes the project area plus small portions of adjacent viewsheds within approximately 1.5 miles from that boundary, and the consideration of project area scenery from 5 miles eastward on Interstate 5. People value the Scenic Character within the project area for its rugged mountain landforms, diverse mixed conifer forest vegetation, and scattered high elevation mosaics of conifer forest, meadows and rocky ridgelines . The Forest Plan (USDA Forest Service 1995) describes scenic character goals for the Forest which include Visual Quality Objectives (VQOs). The Mt. Ashland Project is primarily Partial Retention VQO, with moderate scenic integrity and a goal to provide attractive, forested scenery where activities remain visually subordinate to the characteristic landscape. A portion of the Project, primarily foreground view zones within ½ mile of the PCT, Siskiyou Crest Road, and areas of Distinctive Attractiveness Class A which occur in upper elevation crest settings, are Retention VQO. Retention VQO has a goal to maintain attractive, natural appearing forest scenery (Mosier, 2006).

Recreation: Recreation use is moderate throughout much of the drainage, but use is concentrated in specific areas during certain times of year. The Pacific Crest Trail, a National Scenic Trail, crosses the northern portion of the watershed and is an important recreational feature. Trail use is

light during the spring and early summer; however, from mid-July to the end of August, hikers walking the entire trail in one year reach this section. In 2002, 200 hikers were recorded walking the entire trail; daily use ranged from 5 to 10 hikers in the peak period. The Jefferson Scenic Byway (Highway 96) crosses the watershed near the mouth of Beaver Creek. The Siskiyou Crest attracts a multitude of day and weekend use, such as sightseeing, photography, bird watching, picnicking, hiking, horseback riding, and camping. Numerous deer hunters use the many miles of open road during the fall, camping in dispersed sites throughout the drainage. Off-road vehicle use occurs where topography allows. Winter sports include cross-country skiing, snowmobiling, snow shoeing and snow play from December through May. The only developed recreation sites are the small Mt. Ashland Campground and a snow shelter maintained for cross country skiers at Grouse Gap. The Ashland Ski Area is near the top of the watershed, although no access to the Ski Area is available from Beaver Creek during the winter months because snow closes the roads. The presence of roads and traffic preclude the potential for wilderness-type recreational experiences. The nearest wilderness areas (Red Butte and Marble Mountains) are over 15 miles away.

Air Quality: The Ashland LSR Restoration Project area is located in northern Siskiyou County, California, and southern Jackson County, Oregon. In California, the project area is within the Northeast Plateau Air Basin whose boundary ends at the state and county border. The Northeast Plateau Air Basin includes all of Lassen, Modoc and Siskiyou Counties and is the fourth largest air basin in the state. The Medford-Ashland area (Rogue Valley) is part of the Medford Air Quality Management area (AQMA). The Mt. Ashland LSR Project area is located about 10 miles south of the Medford AQMA. The assessment area for air quality is Siskiyou County. Air Quality in the project area is very good. Dust from logging and recreational use of roads is the primary source of particle emission on a day-to-day basis. While occurring only occasionally, wildland fire and prescribed burns are the emission sources with the greatest effect on air quality and human health. For example, smoke caused by wildfires in 2006 completely obscured Mount Shasta, the Goosenest mountains to the east, and Highway 5 during a field review on September 30, 2006. All these attributes were clearly visible during a field review on July 6, 2006 (Perrochet field reviews, 2006). California and Oregon have air quality standards that will be met.

Human Health and Safety: The assessment area for health and safety is the project area. A number of laws and regulations to protect human health and safety govern forest practices, including the Federal Highway Safety Act, Occupational Safety and Health Administration regulations, and air quality regulations.

Transportation: The assessment area for the transportation system is the project area. The road network provides access for management activities, human uses, recreation, fire-fighting, and other emergency responses. A Forest goal is to provide an economical, safe, and environmentally sensitive transportation system, emphasizing road maintenance and restoration over new road construction where appropriate. The road system in the project area has been evaluated at the forest, watershed, and project scales (USDA Forest Service 2002b, USDA Forest Service 2002a - Appendix E, and Roads Analysis Process Paper 2005). The three analyses, and a project specific road reconnaissance, generated recommendations for the desired road network within the Project Area and along the likely haul route.

Heritage Resources and Tribal Uses: The assessment area is the project area. No designated cultural areas (Management Area 8 in the Forest Plan) are within or near the project area. The Cultural Resource Compliance Process, mandated by 36 CFR Part 800 of Section 106 of the National Historic Preservation Act, requires special review of undertakings that could affect

properties included or eligible for inclusion in the National Register of Historic Places. Archaeological field inventories were conducted in the project area and are recorded in Archeological Reconnaissance Report ARR-05-05-1651. In compliance with 36 CFR 800.1 – 800.4 for the portion of the project area in Oregon and with Region 5 Programmatic Agreement for Compliance with Section 106 of the NHPA (Provision III. D. (2)), relevant archaeological sites have been identified and will be protected by applying standard resource protection measures in or adjacent to the Area of Potential Effect (APE). Federally Recognized Tribes were contacted early in project planning, but did not identify any concerns or specific cultural use areas. Refer to Chapter 1, Public Involvement Section. This area has not been identified as an area of special spiritual interest, per the Forest Heritage specialist’s coordination with tribes in the area.

Environmental Justice: Environmental Justice: Executive Order 12898 relating to Environmental Justice requires Federal agencies to consider disproportionately high and adverse environmental effects on minority and low-income populations, it also requires that minority and low-income populations be given access to information and opportunities to provide input to decision-making on federal actions. This assessment was conducted using the format described in the Guide for Environmental Justice Analysis with the Environmental Impact Analysis Process (U.S.D.A.F. 1997). The assessment area for Environmental Justice is Siskiyou County, California and Jackson County, Oregon because these two counties are the geographic-political area (geo-political unit) that would encompass the “footprint” of the area impacted by the Proposed Project (also called the Community of Comparison).

Census data was obtained from the U.S. Census Bureau (<http://quickfacts.census.gov/>) which showed that the population of Siskiyou County is made up of Caucasians (82%), Hispanics (9%), Native Americans (4%), Blacks (1.4%), and Asians or Hawaiians (1.4%) (2005 data). Approximately 15.5% of the population is below the poverty line (2003 data). The population of Jackson County consists of Caucasians (87%), Hispanics (8%), Native Americans (1%), Blacks (1%), and Asians or Hawaiians (1.5%) (2005 data) and approximately 13.3% of the population is below the poverty line (2003 data).

The area potentially impacted by the Project (census tract) includes the Beaver Creek 5th-field watershed and the nearest communities along the Klamath River. There are 30 year-round residents living within the Beaver Creek 5th-field watershed (Beaver Ecosystem Analysis 1996) and the town of Klamath River is 10 miles downstream of the Project area along the Klamath River. Census data (2000) was obtained (<http://factfinder.census.gov/>) for zip code 96050 which included Klamath River. Data shows that the local population consists of Caucasians (90%), Hispanics (6%), Native Americans (2.4%), Blacks (1.3%), and Asians or Hawaiians (.6%) and approximately 29.9% of the population is below the poverty line.

The Mt. Ashland/Siskiyou Botanical Special Interest Area: The Mt. Ashland/Siskiyou Peak area was designated as a botanical Special Interest Area in the Forest Plan. It was designated for the rare and endemic plants in the Crest Zone community. SIAs are managed for recreational experiences where education and interpretation of the unique or special natural resource values are emphasized. Direction for SIAs can be found in the Forest Plan on Pages 4-117 through 4-120. The assessment area for the SIA is the mapped boundary of the SIA. There are no geologic special Interest Areas within the project area.

Roadless Areas: The assessment area for the transportation system is the project area. The project area is not within an inventoried roadless area.

Wild and Scenic Rivers: The distance (considering all Alternatives) between the proposed activities and the designated Recreation Klamath River, the nearest Wild and Scenic River, is approximately 9.25 miles upstream on Beaver Creek in the Deer-Beaver Creek 7th field watershed. Water drafting will not occur in the Klamath River for this project. The action alternatives will not affect the Klamath River.

Forest Management Values: During scoping, two main social values related to forest management surfaced.

1. Maintaining existing conditions in the landscape. Specific concerns included:
 - a. Protect old growth trees;
 - b. Avoid cumulative watershed effects (water quality);
 - c. Avoid fragmentation of habitat;
 - d. No road construction; and
 - e. Maintain a pleasing visual appearance.
2. Manage natural resources wisely. Specific concerns included:
 - a. Encouraging the use of fire to reduce fuel loading; and
 - b. Thinning treatments should protect the largest and oldest trees with the best likelihood of contributing to desired late-successional forest structure.

The Project development was based on the northern spotted owls' need for mature habitat in Northern California and the conditions of Westside LSRs and a concern about the high risk of stand-replacing fires in the Beaver Creek watershed. The United States Fish and Wildlife Service (FWS) - Yreka Field Office and the Klamath National Forest (Forest) began looking for opportunities to improve mid-successional stands in LSRs early in 2004 to accelerate development of late-successional characteristics. An interagency team analyzed Westside LSRs to determine priorities for treatment (Westside LSR Team: Review of Five LSRs on the Westside of the Klamath NF, April 19, 2004). The team consisted of FWS Wildlife Biologist Dave Johnson and Forest Service employees: Wildlife Biologist Sue Stresser, Fuels Specialist Jeff Keiser, and Silviculturist Carl Varak. The majority of the southeastern portion of the Mt. Ashland LSR was railroad logged by private timber companies from the 1910s through the 1920s. The Forest Service also logged the area several times from the 1950s through 1980s. Due to this logging, many stands in the LSR are dominated by mid-successional and early-successional pole stands that are young

and thrifty enough to respond favorably (accelerate development of late-successional characteristics) to density reduction such as thinning. Over time, thinning produces larger trees than in unthinned stands (Kramer and Kozlowski 1960, DeBell and others 1997). The team found Mt. Ashland LSR to be a high priority for habitat restoration and recommended it for treatment.

Mt. Ashland LSR is also a high priority for treatment because of fuels conditions. Fire suppression since the 1920s caused many mid-successional stands to have denser stocking than would have been found historically. The stand densities exceed the site capacity to support vegetation (are not sustainable). Surface and live ladder fuels have also accumulated from the suppression of frequent mixed severity fires that characterize the Klamath Mountains (Taylor and Skinner 1998). The stands are currently at risk for high rates of tree death and burning at stand-replacing intensities in a fire. “Mid- and upper slope positions often experience higher fire intensities than lower slopes due to preheating of fuels, higher effective windspeeds, and lower canopy cover” in the Klamath Mountains (Taylor and Skinner 2003, Skinner 2003). The project area has an upper slope position.

The Mt. Ashland and Forest-wide Late-Successional Reserve Assessments and the Beaver Creek Ecosystem Analysis all identified thinning of previously logged, mid-successional stands as a priority. Fire suppression has resulted in high fuel loading and white fir encroachment. White fir is less fire-resistant than the ponderosa pine, sugar pine, and Douglas-fir it is replacing (Taylor and Skinner 2003). Fuels reduction, mainly removal of small diameter material, was also identified as high priority in the three documents. “[F]uel treatments that reduce fire severity in portions of the landscape where human activities have increased available fuel will address the problem of unnaturally high fire severity” (Odion and others 2004).

Fuel breaks were also identified as important in the Mt. Ashland Late-Successional Reserve Assessment and Beaver Creek Ecosystem Analysis to break up fuel continuity and provide control lines. The team felt this would be critical to protect treated stands. Based on the analysis conducted by the Westside LSR Team, the FWS and Forest determined the Mt. Ashland LSR was a high priority for habitat restoration in 2005 and 2006.

Environmental Consequences

Alternative 1- No Action

Economics: Timber or biomass from the Project Area would not be available to regional markets and demands will be satisfied by other domestic or foreign sources. Contract work from awarded timber sales, stewardship contracts, road contracts and survey work would not be realized. Conversely, there would be no costs associated with hazardous fuels reduction and no funding needs for density reduction in mid-successional stands.

Community Capacity: With the No Action Alternative, the future social situation in the vicinity of the Project would likely be similar to the present. Community capacity and infrastructure would remain limited, and unemployment and poverty would remain high where it is currently high. Contract work from awarded timber sales, road contracts, silvicultural work, non-profit organizations, and survey work would be on-going. Residents, including American Indians, may benefit from some of these contracts. There would be no new contribution to contract work in either the local communities or the seven-county area from this alternative.

Visuals (scenic): “Scenic Stability” effects of the No Action Alternative are widespread and adverse throughout most of the project area. The No Action Alternative would maintain and prolong the currently diminished scenic character, with its excess of overly dense stands of smaller and intermediate trees, and shortage of large trees within more open stands and scattered small (1-5 acre) openings. Since much of the project area has missed several cycles of natural wildfires the No Action alternative would also prolong the substantial risk of excessively large and concentrated forest canopy openings due to extreme wildfire events and other ecosystem stressors. These events could greatly alter the canopy pattern and overall scenic character of the project area. The No Action alternative’s perpetuation of the currently diminished scenic character would remain readily apparent within most project area views, regardless of viewing distance (Mosier, 2006).

Recreation: Alternative 1, No Action, would have no effect on recreation resources in the Project Area. Recreation opportunities would not be altered.

Human Health and Safety: Short-term risks to human health and safety are not expected to change from the current condition with the No Action Alternative. Increasing fuel loads in the project area would increase fire hazard, so any stand-replacing fire in the project area would have the potential to move to the other areas of the watershed where community members live, over the Siskiyou Crest, and/or toward the Mt. Ashland ski area.

Wild and Scenic Rivers, Roadless Areas, Air Quality, Heritage Resources and Tribal Uses, and Transportation: Alternative 1 would have no direct, short term impact on these types of values. In the long term and in the event of a stand replacing fire, air quality would be the most directly affected of these value elements and roads may have to be built for fire suppression (relative to the Transportation value element). There would be no change to inventoried roadless areas because there are no inventoried roadless areas in the project area. Regarding the Wild and Scenic River, the Klamath River could potentially be affected by a large scale fire if sediment delivery was increased beyond functional capability of the watershed. Heritage resources and tribal uses may be impacted by a large scale fire.

Environmental Justice: The lack of new work opportunities could affect individual members of local communities and/or the two-county area. Census data for the census tract representing the local population shows that the local population has a higher percentage of low-income people compared to the COC (29.9% vs. 15.5%). No adverse environmental effects will occur as a result of implementing this Alternative but the local population may be disproportionately negatively affected by the lack of work opportunities.

Mt. Ashland/Siskiyou Peak Special Interest Area: This Alternative will not affect the SIA. Three endemic species of special concern inhabit the dry, open, gravelly, granitic slopes along the Siskiyou Crest within the SIA: *Horkelia hendersonii*, *Lupinus aridus* ssp. *ashlandensis*, and *Tauschia howellii*. Because these species grow on decomposed, granitic, barren areas there is a low likelihood of impact by wildfire.

Forest Management Values: Those who are opposed to forest management would favor this alternative. Those who value creating job opportunities, including those employed by fuels reduction work and those who bid on service contracts, would not support this alternative. Some people may think that this Alternative is not wise management of the Project Area because it does not restore and protect late-successional forest or reduce wildfire risks as described as desired

conditions in the Forest Plan, the Beaver Creek Ecosystem Analysis, and in the 2006 Business Plan for the Klamath National Forest. Those that wish the forest to remain ‘as-is’, would not like this Alternative because the forest is a dynamic system and will continue to change, moving through typical western forest successional vegetative conditions.

The No Action Alternative would not implement the Selected Alternative in the Forest Plan that was identified as providing the highest net public benefit (USDA FS 1995c, page 11).

The No Action Alternative would respond to values associated with maintaining existing conditions. It would result in no management actions occurring on the landscape, which is important to some. However, it may not result in protecting old trees, water quality or pleasing scenery in the event of a wildfire. The No Action Alternative would not respond to values associated with reducing fuel loading or thinning to promote development of late-successional forest.

Action Alternatives: Alternatives 2, 4, and 5 (Alternatives 2, 4, and 5 are similar in their potential effects on social elements, and so are discussed together).

Economics: Implementation of any of the action alternatives would result in economic benefits to the local economy through use of timber sale contracts, stewardship contracts, Force Account, or a combination of the above, to accomplish Project objectives. The economic benefits from this Project could go to either Oregon or California or both depending on markets, mill capability, and location of biomass facilities. Based on modeling (Young 2006), wood products would be provided to support local mills and supply markets within the assessment area as follows: approximately 15.7 million board feet in Alternative 2, 13.6 million board feet in Alternative 4, and 15.2 million board feet in Alternative 5. The jobs attributed to this volume are estimated as 157 jobs for Alternative 2, 136 jobs for Alternative 4, and 152 jobs for Alternative 5.

Revenue generated from the sale of wood products would offset the cost of conducting habitat restoration and fuels reduction treatments. However, preliminary model estimates (without cruise data) based on market conditions as of October 2006 (*ibid.*) show that additional funding would be needed to complete the proposed actions as follows: Alternative 2 would cost an additional \$466,467, Alternative 4 would cost \$287,147, and Alternative 5 would cost \$626,752. The non-commodity values relating to stand health, the ecosystem, and stand sustainability are discussed earlier in this chapter.

Community Capacity: With these alternatives, the future social situation in Beaver Creek area would likely be similar to the present. Available contract work, including service contracts, and work with non-profit groups would increase in the short-term. Estimated jobs attributed to logging and/or stewardship contracts are displayed above and in the Economic Report. Any Action Alternative would include a temporary increase in employment, which could directly provide economic benefit to some local residents in this line of work. Small, short-term, indirect benefits might accrue to local residents if they work in support industries in the County. None of these employment effects would be substantial enough to noticeably improve community capacity. The cumulative effects of these short-term increases combined with other work available in the

communities and in the seven-county area could add up to full time employment for a limited number of people.

Visuals (Scenery): Effects of the action alternatives on the valued scenic character and its scenic vegetation attributes would be widespread and favorable throughout most of the Project Area. Because the proposed thinning and fuels reduction treatments affect 1/3 of the total acreage of the Project Area within priority stands and major ridgelines, the action alternatives would immediately enhance the currently diminished scenic character to a moderate degree within the treatment areas, and increase its ecological resiliency within the project area for several decades to come. Refer to the Scenery Analysis for a discussion of how values would be affected from a scenic standpoint (Mosier 2006).

Recreation: None of the action alternatives will result in measurable impacts to recreation activities (Kraus 2006). The operational impacts of the projects such as traffic, noise and dust will be temporary. Changes in stand structure and composition resulting from different treatments may result in changes in recreational use patterns, but the same recreational opportunities will continue which is the very nature of dispersed recreation. There is no reason to expect recreation use to measurably increase or decrease because of the proposed project.

Air Quality: The action alternatives will generate dust, primarily from hauling material during restoration and fuels reduction activities. Road maintenance and road decommissioning will also emit particulates for short periods while the activities occur. Dust abatement plans will be included in contracts, so road-related activities, including hauling, generally occur when some moisture is in the road soil. Dust abatement protects public health and safety, protects the road surface, minimizes dust on vegetation and in streams, and reduces road-related erosion. The air quality design features will minimize the potential for direct effects on air quality and indirect effects on public health due to pile burning. Visitors and local residents may detect smoke and experience short periods of visibility impairment during prescribed burning. Particulate emissions from pile burning will likely persist in the atmosphere from one to several days. This smoke could travel long distances, contributing to cumulative haze and visibility impairment in the region. Implementing smoke management plans, burning during favorable weather conditions when smoke is carried away from sensitive areas, and using the best available fire and emission control measures will minimize visibility impairments in the region (Air Quality Report, 2007)

Human Health and Safety: The action alternatives would avoid adverse effects to public safety through expert project design consistent with laws and regulations. All action alternatives would include standard public health and safety clauses in all contracts and agreements. Standard precautionary measures would be used, such as dust abatement, using signs to identify the area when road use concentrated and intensive, safely securing truckloads, and maintaining the haul route. There is no use of borax, as is sometimes used for stump treatment, or strychnine, as is sometimes used for gopher control, proposed in this Project.

The Air Quality Design Features would minimize the potential for air quality effects on public health due to pile burning. Masticating/grapple yarding rather than burning fuels on 809 acres in Alternative 2; on 617 acres in Alternative 4; on 745 acres in Alternative 5 would also help limit potential emissions and reduce adverse effects on public health. Emissions would be consistent with State and Federal air quality standards as discussed in the Air Quality Report. Due to the

reduced available fuels, particulate emissions in treated areas in the event of a wildfire would be reduced, minimizing the risk of adverse effects on human health.

Felling hazard trees will provide for public safety on Forest Service roads, consistent with the requirements of the Federal Highway Safety Act and the Occupational Safety and Health Administration regulations. Hazard trees will be identified using the Klamath Hazard Tree Guidance (USDA Forest Service. 2001a).

Transportation: All of the action alternatives will have similar effects relative to the transportation system except as indicated. Maintenance of haul roads for the Project will improve driver safety and comfort by clearing, blading and dust abatement where required for treatment access or haul. Clearing roadside vegetation will improve visibility. Blading will remove rocks and debris from the road surface and smooth the road surface. Dust abatement will improve user safety on gravel and native surfaced roads. However, the increased truck and heavy equipment traffic during the implementation of the project will make the haul routes more hazardous during the life of the Project. In summary the action alternatives are equally more likely to improve user safety and comfort in the years after the Project than the no action alternative, which depends on routine maintenance as funds allow to accomplish maintenance work.

Decommissioning the one system road 40S20 will not effectively reduce access in the project area. 40S20 is currently impassible approximately ¼ mile from its junction with the 20 road. Year-round closure of system roads which have been open will restrict some public access in the project area, notably at the upper end of the Long John Creek 7th-field subwatershed where five dead-end spurs have been proposed for year-round closure under all action alternatives: 40S09, 40S10, 40S13A, 40S15A, and 40S16A, totaling 8.80 miles. These roads have low recreational use, with a few historic hunter camps. Many of these roads have been heavily overgrown and only recently opened up by thinning projects. The tie through roads in this area, 40S06, 40S13, 40S15, and 40S16, will remain open. Of the roads proposed for year-round closure, only 41S13 has been closed in the past. It accesses private land and is under special use permit to the land owner. It is located at the lower end of the Beaver/ Grouse Creek 7th field watershed and is 0.50 miles long. Existing unauthorized roads used by the project and not needed for long-term management will be decommissioned; temporary roads constructed by the project will also be decommissioned. Alternative 2 will decommission 22 roads, alternative 4 will decommission 16 roads, and alternative 5 will decommission 19 roads.

Including unauthorized roads on the system provides access for this project and also for long-term management. Four existing roads and road segments would be included in the system under all action alternatives: 40S06.2 (this road will remain closed year round as it is now), 40S16.1, 40S16.6, and 41S15.1. Placement on the system would provide the mechanism and means to manage these roads and mitigate any potential resource issues.

Prior to Project implementation, a Traffic Control Plan will be developed that provides for public safety on Forest Service controlled roads and trails open to public travel. Hazard tree removal, a non-discretionary action, will meet Occupational Safety and Health Act standards for hauling, landing use, tree falling, and associated actions. Hunters will be informed well in advance of hunting season about the project and potential impacts to hunting and camping, including road conditions and closures.

The widely dispersed traffic and noise from thinning and fuels reduction activities and transporting workers, equipment, and materials could disturb people in the short-term. Visitors using roads in the vicinity of Project work may choose to avoid the area and use other parts of the Forest for a

short period of time to avoid the noise and traffic delays. The construction of spur roads would not increase or restrict traffic in the area because they are in short segments and will be decommissioned at the end of the Project

Wild and Scenic Rivers, Heritage Resources and Tribal Uses, Roadless Areas. The Action Alternatives would have no effect on Wild and Scenic Rivers because there is no effect on the outstanding remarkable values associated with the designation, which is anadromous fish or water quality in the Klamath River (Fisheries BA and Watershed Report, 2007).

The action alternatives would have no effect on historic properties because these properties would be avoided by project design; historic properties will be fully protected utilizing avoidance protection measures (buffers). Native Americans did not identify any potential conflicts or special contemporary uses during scoping; therefore, it is expected that the risk of disturbing contemporary native use sites is low. It is not anticipated that an action alternative will adversely affect contemporary Native American uses or values.

There would be no change to inventoried roadless areas because there are no inventoried roadless areas in the Project Area.

Environmental Justice: Based on the analysis of environmental effects in Chapter 3, Alternatives 2, 4 and 5 would have no adverse effects on human health or the environment that are significant, unacceptable, or above generally accepted norms. Although there are modeled negative cumulative watershed effects, there will be no adverse effects to domestic water sources or fish (refer to the Water Quality discussion). Census data for the local area (census tract) suggests that the percentage of the local population that is minority is equal to or less than the Community of Comparison (2 counties) but that there are a disproportionate number of low-income people. Therefore, implementation of Alternative 2, 4 or 4 may have beneficial social effects in that local residents may benefit from the work generated by the Project.

The Project does not appear to have a disproportionately high or adverse effect on minority or low-income populations. Extensive scoping, as described in Chapter 2, did not reveal any issues or concerns associated with the principles of Environmental Justice. No mitigation measures to offset or ameliorate adverse effects to these populations have been identified. All interested and affected parties will continue to be involved with the public involvement and decision process.

Because the project area has one of the highest road densities on the Forest, the decommissioning of one short segment of a system road and several segments of unauthorized roads would reduce motorized access in a few localized areas. The remaining roads in the project area would continue to provide access to the general area. This is not expected to disproportionately affect any group.

Mt. Ashland/Siskiyou Peak Special Interest Area: The Mt. Ashland/Siskiyou Peak Botanical Special Interest Area (BSIA) is located within the Project Area boundary at the highest elevations and outside of Project activity areas. The project has been designed to avoid adverse effects to this SIA (Knorr, 2006).

Forest Management Values: People have various perceptions on what constitutes a natural or pleasing landscape and what constitutes wise management of natural resources. The Forest Service Scenery Management System assumes that a pleasing landscape is the proxy most often used by

people to judge wise use of resources. Other elements of existing conditions and wise management include maintaining air and water quality as well as providing habitat for plant, wildlife, and fish species. Refer to Air Quality, Water Quality, Vegetation, Fisheries, and Wildlife Specialist Reports for a discussion of these values. Those who value no human intervention in the landscape would not support any of the Action Alternatives unless they view the Project as a response to past human activity to meet long term goals for the forest ecosystem.

Each of the Action Alternatives would contribute to implementing the Selected Alternative in the Forest Plan, which was identified as providing the highest net public benefit and is consistent with the 2006 Business Plan for the Klamath National Forest, Component 1.5, to “Maintain healthy vegetative condition by controlling density levels, to prevent mortality from insect, disease, drought and fire”. More specifically, the Mt. Ashland LSR project is identified as part of the Forest’s effort to improve habitats for threatened, endangered, or sensitive species that prefer late-successional forest types. Those who agree with the Forest Plan provisions and believe one of the action alternatives is the best means of implementing the Forest Plan in this area will view that alternative as wise management because it leads toward achieving the desired conditions. Those who disagree with the Forest Plan provisions will not view implementing an action alternative as wise management; this includes but is not limited to those who prefer one use to prevail for the entire Forest, those who believe allowing natural processes to dominate throughout the entire Forest is the best policy, and those who do not want any trees or any large trees or any old-growth trees to be cut. Those who agree with the multiple-use provisions of the Forest Plan, but don’t believe any of the action alternatives are the best means of implementing the Forest Plan will likely not view an action alternative as wise management. The action alternatives will please those who value job opportunities in the area.

The slight scenic alterations to the landscape could adversely affect those who use the Forest for renewal or spiritual practices, although these values were not identified as important in the project area during scoping. The noise disturbance will persist for several days in any local area, but could persist somewhere in the watershed over several seasons. In the long term, the public will enjoy the use of the watershed more because the risk of high intensity fire is reduced and over-all forest health will be improved for late-seral forest habitat dependent species by the action alternatives.

The action alternatives would respond to values associated with protecting old trees and late-successional habitat because large trees will be retained as part of the prescription and prescriptions are designed to promote development late-successional forest. Fuels reduction treatments are designed to reduce the risk of catastrophic wildfire and subsequent loss of forested habitat. Although effects are minor, the action alternatives would not respond as well as the No Action alternative to values relating to no road construction, no watershed effects, and no habitat fragmentation.

Other Contributors

Mark Young (Economics) Jerry Mosier (Scenery), Charles Kraus (Recreation) Juan DelaFuente and Julie Knorr (SIA), Candy Cook-Slette (Heritage), Jim Davis (roads assessment), Debi Wright (Air Quality), Peg Boland (Social Scientist) and Susan Stresser (Project Team Leader).

Preparers' Background

Julie Perrochet has a Bachelors of Art in Biology and a Masters of Artsdegree in Geography. She has worked in the biological sciences with the forest Service since 1986 and has been a member and/or leader of project interdisciplinary teams for nearly 20 years. She participated in a number of field trips related to monitoring and projects, which were attended by people with a broad array of opinions, values, and views. She has attended numerous training sessions for implementing the National Environmental Policy Act, National Forest Management Act, and the Endangered Species Act.

Peg Boland has a Bachelors of Art and Masters of Art in Sociology and was a sociologist for the National Forests in North Carolina. She has participated in national social science reviews and projects integrating social science and National Environmental Policy Act planning.

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APPENDIX A

The Project's link to larger planning efforts

The assessment area for effects on social values is both local and nationwide, because these are public lands. Values are also a part of social well-being. A value is a shared standard of preference or desirability and several components of these values were assessed, based on public input, policy, law, and regulation.

The USDA Forest Service revised the Strategic Plan for the agency in February 2004, addressing plans for 2004-2008 (http://fsweb.rmrs.fs.fed.us/lt/LT_Strat_Plan0408.pdf) and the Klamath National Forest completed a Business Plan in May 2006. Beginning in 2000, the goals and objectives included in the Strategic Plan were developed with input from the public, some of which was obtained through a telephone survey. Shields and others (2002) reported the results of the survey and summarized it in their abstract: "Members of the American public were asked about their *values* with respect to public lands, *objectives* for the management of public lands, *beliefs* about the role the agency should play in fulfilling those *objectives*, and *attitudes* about the job the agency has been doing. The public sees the promotion of ecosystem health as an important objective and role for the agency. There is strong support for protecting watersheds. The public supports multiple uses, but not all uses equally. Motorized recreation is not a high priority objective, while preserving the ability to have a 'wilderness experience' is important. [The 'wilderness experience' value is not significantly relevant to this project because of the high road density in the Beaver Creek watershed.] There is moderate support for providing resources to dependent communities. The provision of less consumptive services is more important than those that are more consumptive. There is a lack of support for subsidies for development and leasing of public lands. Preservation of traditional uses is a somewhat important objective. Development and use of the best scientific information enjoys wide support, as does information sharing and collaboration. A national direction for the management of National Forest lands is a slightly important objective. Increasing law enforcement on National Forests and Grasslands is an important objective and an appropriate role for the agency. The public has a strong environmental protection orientation, has a moderately strong conservation/preservation orientation, and supports some development." The Strategic Plan for 2004-2008 concludes that goals and objectives in the Strategic Plan are responsive to the current and future resource conditions and societal demands presented in the RPA Assessment (USDA Forest Service, 2000), as well as to other sources cited in the Plan.

The Klamath National Forest Business Plan uses both qualitative information, gathered primarily through interviews, and quantitative data. The plan describes the Klamath National Forest strategies for promoting financially and ecologically sustainable forest management, and it provides a key internal and external communication tool for sharing the Forest leadership team's plans and expectation for the future. The Ashland LSR project is identified in the 2006 business plan (Page 38) under Component 1.5 to "Maintain healthy vegetative condition by controlling density levels, to prevent mortality from insect, disease, drought and fire." More specifically, the Ashland LSR project is identified as part of the Forest's effort to improve habitats for threatened, endangered, or sensitive species that prefer late seral forest types.

A scoping letter, dated October 3, 2005, was sent to interested and potentially affected parties. A Notice of Intent to prepare an Environmental Impact Statement (EIS) was published in the Federal

Register on October 7, 2005. Two public meetings were held to discuss the landscape needs and the public interest. Letters or e-mails were received from 24 groups and individuals. Based on comments received during the scoping process for this proposal and other public involvement efforts for Forest projects, public values pertinent to forest management in the project area were identified.

Background information to determine the Affected Environment for the Ashland LSR project

In the 1990s, the Forest contracted for a study on communities within the Klamath Region (Doak and Kusel 1997). The study examines the socioeconomic status and community capacity as indicators of the well-being of communities. Relative socioeconomic status was assessed using a scale of factors. “The design of the socioeconomic status scale assumes that higher levels of home ownership, education and employment indicate higher levels of socioeconomic well-being, and higher levels of poverty and higher percentages of children in homes receiving public (sic) assistance income indicate lower levels of socioeconomic well-being... Community capacity is defined as the collective ability of residents in a community to respond to external and internal stresses; to create and take advantage of opportunities; and to meet the needs of residents, diversely defined. Physical capital, human capital and social capital are the primary components of community capacity” (page i).

The names and descriptions of the Aggregations and social well being is from Doak and Kusel’s 1997 report on “Well-Being Assessment of Communities in the Klamath Region”. Prepared for the United States Forest Service, Klamath National Forest under contract 43-91W8-6-7077, October 20, 1997. <http://www.inforain.org/indicators/klamath>

Population data for the Aggregations came from <http://www.inforain.org/indicators/klamath>.

Population data for the town of Happy Camp: <http://www.happycampchamber.com/community.html>.

Population data for the town of Klamath River:

<http://realestate.yahoo.com/Neighborhoods/detail.html?csz=Klamath%20River,CA>.

Low **socioeconomic scores** highlight a range of societal needs within aggregations. Low **capacity scores** indicate a reduced ability of local communities to effectively address those needs and to self-develop.

The description of the community capacity of surrounding communities

The communities below are listed in order based on geographic proximity to the project area with consideration of the population size, the likely social use of the Beaver Creek watershed based on the description of the social attributes by Koak and Kusel, 1997 and knowledge of populace’s behavior. For example, residents of Happy Camp are more likely to drive by Beaver Creek watershed than Ashland or Hornbrook residents because Happy Camp residents travel to Yreka via

highway 96 and pass the town of Klamath River and the mouth of Beaver Creek to get basic services in Yreka. Ashland and Hornbrook would receive services in Ashland or travel Highway 5 to Yreka without passing the Beaver Creek watershed. Hunting is a more common recreation in Happy Camp, Yreka, and Klamath River than in Ashland per the social description of these aggregations in Doak and Kusel, 1997. In general, the Beaver Creek watershed is not accessible to the Oregon communities for part of the year because roads get the presence of snow prohibits road access, ranking social use of the watershed higher for Siskiyou county residents than Ashland area residents. Ashland residents could be more concerned about fuels reduction in the watershed, but this was not expressed during the public scoping phases of the project...it is displayed via the development of the Ashland Resiliency project, EIS, Rogue-Siskiyou National Forest. The economic benefits from this project could go to either Oregon or California or both and are considered part of the existing integration of natural resource benefits of communities surrounding the area. The potential benefits of this project related to the restoration and protection of habitat for species listed under the ESA was not used in the consideration of prioritization because citizens in both Oregon and California communities have expressed an interest in managing natural resources wisely, including management of the habitat for species listed under the ESA.

The project area lies within the Happy Camp/Klamath River aggregation which is rated as medium for socio-economic and community capacity conditions. The description of this aggregation is somewhat overshadowed by the larger community of Happy Camp. The statements applicable to the small communities of Klamath River, Hamburg, and Seiad Valley follow: "Happy Camp/Klamath River is a remote, natural resource dependent community. Native Americans, most of whom are members of the Karuk Tribe, account for 17 percent of the population. Ten percent of the population is Hispanic. Long dependent on the timber industry, this area is evolving towards a greater dependence on recreation and tourism.... Based on the 1990 census data, 26 percent of workers are employed in the durable goods manufacturing sector, a level that has likely declined since the mill shut down. Thirteen percent are employed in the agriculture, forestry and fisheries sector, and 17 percent in retail services... (T)he 1990 unemployment rate of 18 percent is the highest in the subregion. Twenty-two percent of males are unemployed compared to 11 percent of women. Federal employees comprise 13 percent of the work force. Services are limited and there is no medical clinic in the area; residents must drive two hours to see a doctor or dentist. Most of the land is federally managed. Mobile homes and trailers make up 37 percent of the housing stock. There is a small population of higher educated residents, which includes teachers, business owners, and USFS employees. Collectively, residents are identified as "rugged individualists" with a variety of outdoors-oriented skills... One area the groups are working on is keeping schools open." (Doak and Kusel, pages 72-73).

The 2000 Census (U.S. Census Bureau: California: 2000, Summary Social, Economic, and Housing Characteristics, Issued March 2003) did not show improvement in the employment figures for those employed outside the home, nor in per capita income in Siskiyou County. However, since 2000, communities along the Klamath River have shown increased willingness and ability to join together to accomplish important tasks related to improving watershed health and reducing unwanted fuel loading on private land. Some of this revitalization of community capacity was probably due to the financial assistance available through the National Fire Plan and the Secure Rural Schools and Community Development Act of 2001 for communities that banded together

and sought opportunities for grants. More recent information on the social situation in the mid-Klamath River area is available in the case study conducted for the “Northwest Forest Plan: The First Ten Years, Socioeconomic Monitoring Results” by Susan Charnley and others of the Northwest Forest Plan Monitoring Group (Susan Charnley and Margaret Boland, personal communication).

The Kusel study states that almost every community meets around local volunteer fire departments and schools. Local fire safe councils, created since the study, increasingly play this role. The Klamath River Elementary School, kindergarten through grade 8, are open but have declining enrollment. The Klamath River Hose company (volunteer fire department) provides fire protection and fund-raising activities. The Klamath River Hose Company, which covers the area from Horse Creek to Humbug, maintains a station in Horse Creek. The Klamath River Fire Safe Council provides a means for community members to collaborate on fuel reduction projects.

Other fire safe councils have formed to address the potential of and community response to Wildland fires near their community (<http://www.firesafecouncil.org/find/index.cfm>). The small community of Colestine in Jackson county Oregon, also has a fire safe council called the Colstin (sic) Rural Fire District (<http://crfd.org/wildlandfireprevention.htm>). The council’s geographic boundaries can be roughly described as: Just beyond Interstate 5 to the east, the Mt. Ashland ski road to the north, Cottonwood drainage to the west, and the California-Oregon border to the south. The fire council committee focuses on developed urban and suburban lands that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics. Owners of these lands will be required to reduce potentially flammable vegetation around structures and along driveways. In 2005, the council developed a Colestine & Hilt Community Wildfire Protection Plan [http://www.crfd.org/CWPP_\(without_Appendices\).pdf](http://www.crfd.org/CWPP_(without_Appendices).pdf). Although not in the project area or in the Beaver Creek watershed, fuels reduction efforts in the project area may be of interest to the council. From their website, their concern about wildfire associated with California is noted:

Through David Clarke, at the College of the Siskiyous, we received a **photo slide show** portraying other views of the devastation throughout the region. This was originally forwarded to him by OSU biologist Ann Kreager, who writes, "This is an excellent slide show depicting the California fires - ...Unbelievable to view especially for those of us from the area... from a biologist's perspective, it is wrenching." And it is. Be prepared. [Click here](#) to open. Left-click once to advance each photo. (PC users can also roll the mouse over the lower left corner for a pop-up menu; select 'Next' to advance each frame.)

Community-Social Aggregation	Population	Socio-economic condition (1 to 7)	Community Capacity condition (1 to 5)	Geographic distance to Beaver Creek watershed (at mouth of the Beaver Creek at the Klamath River and the top of the watershed at the ski area). The project area is in the mid watershed area and near the crest of the watershed. ¹
Klamath River (Happy Camp/Klamath River Aggregation)	445 (Klamath River community only)	4	3	1 mile to mouth of Beaver Creek 55 miles to the Mt Shasta Ski area in winter
Happy Camp (Happy Camp/Klamath River Aggregation)	1,277 people were counted during the year 2000 census in Happy Camp. Aggregation population: 2,876	4	3	47 miles HC to mouth of Beaver Creek 72 miles to Ashland Ski area
Yreka	7,971	4	5	28.4 miles to mouth of Beaver Creek 36 miles Mt Ashland Ski area
Hornbrook/Hilt	717	5	1	28.8 miles to mouth of Beaver Creek 15 miles to Mt Ashland Ski area
Montague	(This is not a separate aggregation. It is included within the Yreka aggregation.)	n/a	n/a	36 miles to mouth of Beaver Creek 42 miles to Mt Ashland Ski Area
Colestine	3,744	4	2	47.5 miles to mouth of Beaver Creek 10 miles to Mt Ashland ski Area
Ashland	17,588	5	5	45.4 miles to mouth of Beaver Creek 20 miles to Mt Ashland Ski area

¹ The sources of distances between communities/aggregations and the top and bottom of the Beaver Creek watershed were from <http://www.ashlandinn.com/act.html>, and yahoo.com driving directions, and Mt Ashland ski area websites)

Community-Social Aggregation	Population	Socio-economic condition (1 to 7)	Community Capacity condition (1 to 5)	Geographic distance to Beaver Creek watershed (at mouth of the Beaver Creek at the Klamath River and the top of the watershed at the ski area). The project area is in the mid watershed area and near the crest of the watershed. ¹
Ashland/Lincoln-Pinehurst (town of Pinehurst)	1,394	7	2	58.2 to mouth of Beaver Creek 32 miles to Mt Ashland ski area
Medford	57,387	4	5	58 miles to mouth of Beaver Creek 33 miles to Mt Ashland ski area
Nearest off-ramp on Highway 5	n/a	n/a	n/a	8 miles to Mt Ashland Ski Area
Nearest off-ramp on Highway 5	n/a	n/a	n/a	21.1 miles to mouth of Beaver Creek

The project area is also associated with the Hornbrook/Hilt aggregation, the Yreka aggregation, the Ashland aggregation, and the Ashland/Lincoln-Pinehurst aggregation. The Hornbrook/Hilt aggregation has a low community capacity, with a medium-high socioeconomic condition -- one of the highest in the subregion, perhaps because some workers commute to Medford and Yreka. For the Yreka aggregation, good planning 20 years ago has led to sound physical infrastructure in Yreka today (socioeconomic condition is medium, with a high community capacity condition). Fire services and law enforcement are also good. Based on the 1990 census data, 62 percent of residents over 25 years of age have only a high school education and/or some college (but no degree), which is average for the region. Current education levels are likely to have increased with the recent opening of the new hospital. The hospital and new YMCA exemplify the ability of the community to work together and accomplish projects. The poverty rate is second lowest in the subregion at nine percent. Yreka, the county seat, has little divisiveness, and groups in the community, such as the chamber of commerce and city council, among others, work well. The Process Technology Training Center at the College of the Siskiyous is focused on developing a more skilled work force. Yreka's adjacency to Interstate 5 attracts commercial traffic, but retail sales are limited due to the relatively close proximity to Medford (<http://www.inforain.org/indicators/klamath/pg17.htm>).

The Ashland aggregation rates medium high for socioeconomic status and high for community capacity. Ashland is a community with a vision for its future. It has a skilled and highly educated populace that drives a diverse economy that includes tourism and education as well as some secondary wood products manufacturing. Two-thirds of all workers in Ashland have management related occupations. While there is a manufacturing sector in the local economy, only eight percent of workers have occupations as operators, fabricators or laborers, the fifth lowest percentage in this category in the Klamath region. Non-profit organizations have a significant presence in Ashland, with 11 percent of workers employed by non-profit groups (<http://www.inforain.org/indicators/klamath/pg16.htm>). There is also a community aggregation along the I-5 corridor, the Ashland/Lincoln-Pinehurst aggregation with a population of 1,394). Ashland/Lincoln-Pinehurst is a rural corridor. The area lacks infrastructure and is primarily a bedroom community of Ashland. This aggregation has one of the highest socioeconomic status scores in the region, yet has only a medium low capacity score. Like neighboring Ashland, residents are well educated, and have the fifth highest education score in the Klamath region. Thirty-one percent of residents 25 years of age or more have a four-year college degree or higher graduate level education. The poverty rate is low at seven percent, and there are no children under the age of 15 living in households receiving public assistance income. Some residents are involved in resource related work, and others are service workers and artists who commute to Ashland for work. While human capital in this aggregation is high, physical capital is limited and social capital in turmoil. Community cohesion is constrained by conflict between liberals and conservatives, although recent efforts to work collaboratively have occurred. The Pinehurst School, with 30 students in eight grades, is in financial trouble. With a high cost per student ratio, the school cannot continue to operate on limited state funding. Residents are banding together to keep the school operating. The Friends of Greensprings Association is also striving to enhance the local community.

The area of influence for broader social effects is the seven-county area described on page 3-134 of the Forest Plan Environmental Impact Statement (USDA FS 1995b). Traditionally, the Forest's contribution to job creation within the area of influence was primarily related to timber production. People from the seven-county area contract for work in the area surrounding the project including,

but not limited to, logging, planting, precommercial thinning, masticating, laborers, light industry, non-profit groups, and services related to those endeavors. These people spend money on gas and food, which creates a small multiplier effect in Siskiyou County.

With the reduction in timber outputs that occurred over the last several decades, in particular the reductions associated with the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (Northwest Forest Plan) and Forest Plan, the Forest Service has expanded its role and tourism makes up a increased portion of revenue (in Ashland, for example). Grants are important in the seven-county area of influence. Since 1992, community development and similar programs intended to help build local capacity and accomplish resource goals have contributed significantly to economic stability and growth in Siskiyou and the surrounding counties. These programs include Jobs-in-the-Woods, the Rural Community Assistance program, Community Economic Revitalization Team, National Fire Plan Grant programs, and Payments to States Title II. The Forest also contributes to the job training and retraining programs that help the workforce in the seven-county area adjust to changes in resource products, markets, and skills. Refer to Forest Monitoring Reports (USDA FS 2001, 2002a, 2003, 2004, 2005) for additional information; they are available on the Forest web page at the following web address: www.fs.fed.us/r5/klamath/projects/forestmanagement/

Irreversible and Irretrievable Commitment of Resources

Irreversible commitment of resources refers to a loss of non-renewable resources, such as mineral extraction, heritage (cultural) resources, or to those factors which are renewable only over long time spans or at great expense, or to resources that have been destroyed or removed. No irreversible commitments of resources were identified for the Project.

Irretrievable commitment applies to losses that are temporary, such as use of renewable natural resources. The production lost would be irretrievable, but the action would not be irreversible. Under the No Action Alternative, there would be an irretrievable commitment of forest vegetation in the event of a wildfire. Under the Action Alternatives, risk of wildfire and subsequent loss of forest vegetation will be reduced. Vegetation removed as commodity byproducts of restoration and fuels treatments would constitute loss of production of individual trees or groups of trees but would not result in loss of productivity of entire stands of vegetation. Functioning of forest habitats will continue and conditions are expected to improve (achieve late-successional conditions sooner) within several decades. Under the action alternatives there would be an irretrievable loss of individual trees or groups of trees but not of forest conditions. This impact is in accordance with the management goals and objectives of habitat restoration and hazardous fuel reduction treatments.

Energy Requirements, Conservation Potential, Depletable Resource Requirements

Consumption of fossil fuels will occur with the action alternatives during logging and hauling timber and during the decommissioning of temporary roads. No unusual energy requirements are included nor do opportunities exist to conserve energy at a large scale. With the proper application of the Forest Plan standards and guidelines for soils, soil productivity will be conserved; supporting information can be found in the Soil Report. The project was developed, in part, to promote the conservation and recovery of late-seral dependent wildlife species, such as the northern spotted owl.

Prime Farmland, Rangeland, and Forest Land

The project area does not contain any prime farmland or rangeland. Prime forest land does not apply within the National Forest System.

Possible Conflicts with Other Land Use Plans

The action alternatives are entirely on National Forest System land. The large amount of private land within the 5th field watershed and the small amount within the project area are generally managed for timber production and grazing, so conflicts are not likely to occur. The action alternatives are not in conflict with planning objectives for Siskiyou County or local tribes.

Other Required Disclosures

NEPA at 40 CFR 1502.25(a) directs “to the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with ...other environmental review laws and executive orders.”

Consultation with National Oceanic and Atmospheric Administration Fisheries and the United States Fish and Wildlife Service is ongoing and will be completed as required by the Endangered Species Act. As no water impoundments or diversions are proposed, the Forest is not required to consult with the Fish and Wildlife Service under the Fish and Wildlife Coordination Act.

No properties eligible for the National Register of Historic Places will be affected. No consultation under the National Historic Preservation Act is required.