

Decision Notice
and
Finding of No Significant Impact
for the
West Drews Watershed Restoration and Vegetation Management
Project
and
Fremont National Forest Land and Resource Management Plan
Amendment Number 32.

USDA Forest Service Pacific Northwest Region
Fremont-Winema National Forests
Lakeview Ranger District
Lake County, Oregon

INTRODUCTION

The *West Drews Watershed Restoration and Vegetation Management* (hereafter referred to as West Drews) planning area is within the Lakeview Stewardship Unit and encompasses nearly 70,000 acres. The Middle Drews and Lower Hay Creeks subwatersheds are in the Drews Creek Watershed located west of Lakeview, Oregon and comprise the majority of the planning area. The USDA Forest Service manages approximately 48,000 acres of National Forest lands within the two subwatersheds of which about 31,000 acres are forested. The planning area is located within and around T. 39 S., R. 16 E., Willamette Meridian, Lake County, Oregon.

The West Drews project environmental assessment (EA) analyzes the effects of restoration activities, vegetation management, and fuels management on natural resources and the human environment. Temporary road construction and use, road maintenance activities, aquatic restoration projects, a Forest Plan amendment for cutting white fir larger than 21 inches, and road decommissioning and closing are connected actions that were analyzed in the EA. Proposals include specific design and resource protection measures to minimize or avoid impacts.

Three alternatives (including No Action) were fully analyzed in the EA. The EA is available at the Lakeview Ranger District office in Lakeview, Oregon or on the Fremont-Winema National Forests' website at:

<http://www.fs.fed.us/r6/frewin/projects/analyses/decisions.shtml>

This decision document selects and provides a summary of the alternative from the West Drews EA that will be implemented and the rationale for the decision.

Lakeview Federal Stewardship Unit (LFSU)

The West Drews Watershed Restoration and Vegetation Management Project occurs within the boundary of the Lakeview Federal Stewardship Unit which covers approximately 40 percent of the eastern portion of the Fremont National Forest. The

general purposes of the Sustained Yield Forest Management Act of March 29, 1944 (58 Stat. 132; 16 USC 583-583i) are to promote the stability of forest communities through continuous supplies of timber, continuous supplies of forest products and to “secure the benefits of forests in maintenance of water supply, regulation of stream flow, prevention of soil erosion, amelioration of climate and preservation of wildlife”. The Chief of the Forest Service established the Lakeview Federal Sustained Yield Unit on October 10, 1950. The Unit was established in recognition of the important interrelationship between the Fremont National Forest and the local communities of Lakeview and Paisley to promote their economic stability. In 2001, the Chief of the Forest Service re-authorized the Unit with a revised policy statement that established new goals and changed its name to the Lakeview Federal Stewardship Unit.

The *Long-Range Strategy for the Lakeview Federal Stewardship Unit* (November 2005) was prepared by the Lakeview Stewardship Group. This strategy is part of a unique, collaborative effort to help restore the ecological health of the 500,000 acre Lakeview Federal Stewardship Unit and to provide economic and social benefits for the local communities. The strategy is based on a common vision and set of goals and objectives developed by the Lakeview Stewardship Group, which have been considered in the development of this project. The Lakeview Stewardship Group includes conservationists, timber workers, local government officials and other civic leaders working in cooperation with the Forest Service. The long-range strategy is available at <http://www.lcri.org>.

The revised policy statement for the LFSU (2001) recognizes that community economic stability is dependent on a healthy forest, therefore the revised Policy Statement includes goals intended to promote a sustainable forest ecosystem within the Unit. The goals of the Stewardship Unit are as follows:

- Sustain and restore a healthy, diverse and resilient forest ecosystem that can accommodate human and natural disturbances.
- Sustain and restore the land’s capacity to absorb, store, and distribute quality water.
- Provide opportunities for people to realize their material, spiritual, and recreational values and relationships with the forest.

The West Drows Watershed Assessment identified that a need existed that supported the first two LFSU goals. Actions that supported a purpose and need for healthy forests and hydrologic recover have been included in the action alternatives. The concern for people and their relationship with the forest is also discussed in the analysis for this project and is summarized on page 19 of this decision.

PURPOSE of and NEED for Action

The West Drows Project is needed because the current conditions of resources differ from the desired conditions (EA pages 18-22). The need for the proposed activities is demonstrated by the current conditions and trends described in the EA and the need to move certain resource conditions toward the desired conditions or Forest goals as summarized in the EA.

The general purposes of the West Drews Vegetation Management Project would be to promote the overall sustainability of vegetative and hydrologic functions within the project planning area. An additional purpose of the proposed project is to integrate resource management projects to achieve synergistic results which contribute to ecological restoration (Forest Service Manual 2020.3). Specifically, the purposes are to:

- Reduce excess vegetation to increase vigor, health, and growth rates in the forest ecosystem, increase the resiliency of late and old structure conifer stands (LOS), and manipulate younger conifer trees in a manner that moves stands toward a sustainable LOS condition.
- Reduce fuel loading and ladder fuels (including accumulated natural and activity fuels), brush densities and other components that contribute to fire intensity and spread to move the landscape toward a lower Fire Condition Class.
- Support jobs in the local economy and provide forest products as a result of meeting the above purposes.
- Improve hydrologic function (including ground vegetative conditions that contribute to lower peak flows and increased base flows), reduce sedimentation from roads, and restore and maintain riparian areas to conditions that enhance riparian-dependent resources.

The underlying needs for the action derive from the differences between current resource conditions described in Chapter 1 and Chapter 3 of this EA and the desired, sustainable resource conditions as discussed in the Forest Plan and the *Drews Creek Watershed Analysis* (USDA 2006). The proposed action is intended to move current resource conditions closer to desired conditions.

There are five underlying needs for the project:

- The need for healthy, sustainable forests
- The need for reduced risk of severe wildfire in the West Drews Vegetation Management Project area
- The need for commercially valuable wood products from the West Drews Vegetation Management Project area
- The need for improved hydrologic function of the Middle Drews and Lower Hay subwatersheds
- The need for healthy riparian and aquatic systems
- The need for a site specific Forest Plan amendment allowing the harvest of white fir trees that are greater than 21 inches in diameter.

THE DECISION

After careful review of public comments, the environmental assessment and the analysis file, I have decided to implement Alternative B (see Final EA pages 39-40). Included in the decision is a forest plan amendment to allow harvest of white fir trees greater than 21 inches in diameter and activities common to all action alternatives (see Final EA pages 34-39).

Details of Authorized Actions (*includes Activities Common to All Action Alternatives and Alternative B*).

Thinning and Fuels Reduction: Approximately 11,600 acres will be treated with a variable density thinning from below followed by small tree thinning, with or without extraction. Approximately 5-15% of each unit will be left untreated to provide habitat diversity. Extraction will include small diameter saw logs and biomass products such as energy production or chip wood products. Stands will be treated to achieve a historic range of conditions from 40-100 square feet of basal area, favoring the survival and growth of large ponderosa pine. Live ponderosa pine trees 21 inches or greater in diameter will be retained, except for the occasional tree removed for safety or operational needs (*2430 Letter from Regional Forester, 2/2/1999*).

Logging will be accomplished using ground-based systems, likely utilizing mechanical harvesters for cutting and manufacturing logs. Harvested trees will be yarded to landings with limbs and tops attached (whole tree yarding) to reduce accumulation of activity fuels within treated units. Slash at landings will be piled for burning in the future if the material cannot be used for biomass or firewood. When the treatments are completed, landings will be scarified to provide a seedbed for re-vegetation and appropriate drainage installed to reduce erosion potential. Some existing ground fuels will be grapple piled and burned to further reduce fuel accumulations. All thinning will target trees greater than 2 feet in height. Pine and white fir stumps, except those in RHCAs will be treated with a borax product to prevent the spread of root rot. We estimate that the thinning component of Alternative B will yield approximately 20-26 million board feet of merchantable timber.

Existing large down wood and snags will be retained. Snags within harvest units that pose a safety hazard (as defined in *Field Guide for Danger Tree Identification and Response, 2005*) will be felled and retained on site as down wood if needed to meet down wood standards per the Forest Plan. Danger trees on Forest Roads used for contractor access or timber haul, including external haul routes, will be felled and left in place as needed in RHCAs. Outside of RHCAs, danger trees may be removed.

In harvested stands, small trees will be thinned from below. Large landings, up to an acre in size, will be used to store small diameter material until it could be transported to either a biomass facility or mill, provided for fuel wood, or burned. Where machine thinning is not possible, traditional chainsaw thinning will be used. Between harvested stands, up to 3300 acres of small diameter trees will be treated using mechanical and/or underburning methods.

Under the proposed action, a landscape burn of approximately 26,000 acres will be conducted to mimic the natural historic disturbance pattern and create a mosaic pattern on the landscape. Roads, natural barriers and fuel breaks will be used wherever possible to manage the fire spread and to keep fire out of non-treatment areas. Where roads are overgrown, road clearing and brushing will occur if needed to insure fire line effectiveness. Fire control lines will be constructed to the minimum level sufficient to ensure firefighter safety and to control fire spread. Constructed fire line will be rehabilitated in accordance with the guidelines laid out by journey-level Forest aquatics staff.

Forest Plan Amendment:

The Forest Plan will be amended to allow harvesting of white fir greater than 21 inches in diameter to facilitate restoration of ponderosa pine. The need to amend the Fremont National Forest Land and Resource Management Plan arises from the “21 inch rule” in the Regional Forester’s Eastside Forests Plan Amendment No. 2 (the “Eastside Screens”). This amendment restricts harvest of live trees to those less than twenty-one inches in diameter when late old structure has been determined to be below historic range of variability (HRV) for specific biophysical types (like Dry Forest, Moist Forest, or Cold Forest). In order to restore ponderosa pine open forest character to the landscape, white fir larger than 21 inches will need to be cut and removed. Dry Forest ponderosa pine has been determined to be below HRV for open canopy, late old structure. A forest plan amendment will be needed to allow the removal of green white fir greater than 21 inches.

This decision is being made under the 2008 Forest Service planning regulations (36 CFR 219) which allow plan amendments to be made using the procedures from the 1982 planning regulations during the three-year transition period (36 CFR 219.14(b)(2)). This amendment is being made using the 1982 procedures.

Other Actions Included in this Decision

Planting

- Ponderosa pine seedlings will be planted where needed to facilitate restoration of ponderosa pine sites.

Mountain Mahogany Treatments

- Conifers (including junipers) less than 21 inches in diameter within 60 feet of mountain mahogany stands will be cut to reduce competition.
- Prescribed fire may be used to restore mountain mahogany stands where necessary to restore stand vigor and health.

Road Management Activities

Appendix C in the Final EA contains the *Roads Analysis for the Road System Associated with the West Drews Vegetation Management Project*, February 2008). Road management recommendations apply to all action alternatives for this project.

Routine maintenance could occur on approximately 280 miles of existing transportation system roads, including haul routes outside of this planning area. Road maintenance actions include clearing brush and trees from the traveled way, ditch and culvert cleaning, slough and slide removal, blading and watering, and installation of waterbars, dips, and earthen berms and/or cross ditches.

Two new road segments will be constructed to connect Forest Roads 3940-144 and 3940-317 to each end of Forest Road 3940-110. The middle segment of Forest Road 3040-110 (within RHCA) will be closed, decommissioned, and re-contoured with sufficient drainage to minimize erosion potential.

- Approximately 29 miles of existing system roads will be closed post-implementation.
- Approximately 64 miles of existing system roads will be decommissioned post-implementation.
- Temporary roads, landings, and ski trails will be rehabilitated using BMPs contained in the Forest Plan.

Aspen Stand Treatments

- Conifers, including junipers (less than 21 inches in diameter) within 60 feet of aspen will be cut and removed where consistent with other management and restoration goals.
- Larger diameter trees will be left for downed wood within and around aspen clones as needed.
- Aspen stands could receive prescribed fire to help regenerate clones.

Sagebrush Plant Communities Treatments (Juniper)

- No treatments will occur within old growth juniper communities.
- No new permanent or temporary roads will be built to access juniper.
- Effects of harvest/removal of juniper trees will be monitored – modifications may be made if needed to meet restoration goals.
- Up to 13,000 acres of sagebrush plant communities will be treated for encroaching, non-old growth juniper using traditional chainsaw and/or prescribed fire methods.

Watershed Restoration Activities (*including Fish Passage and Riparian Habitat Conservation Area treatments*)

Howard Creek Restoration Activities

Thinning will occur on up to 35 acres within the Howard Creek Riparian Habitat Conservation Area (RHCA). The affected reach begins at the lower Forest Boundary and extends upstream approximately 0.5 miles to Forest Road 3870. No mechanized, ground disturbing equipment (i.e., harvester, slashbuster, excavator, etc) will be used. We anticipate that all trees will be felled using chainsaws. Thinning prescriptions will be similar to that in upland treatment project areas. Where practicable, trees will be felled into Howard Creek to provide large wood. We estimate that approximately 50 trees will be added to Howard Creek through these efforts. If necessary, either broadcast burning

or hand piling and burning will be used to reduce fuels in the treated areas. No trees will be removed from the RHCA.

The culvert in Howard Creek at Forest Road 3870-144, near the lower Forest Boundary, will be removed during road decommissioning. The culvert is perched approximately four feet above the channel immediately downstream so the site will be stabilized after the culvert is removed. Stabilization will include reshaping that portion of the channel to an appropriate grade and installing rock and/or wood grade control structures to reduce the risk of a headcut developing at the site.

The headcut on Howard Creek, approximately 0.25 miles upstream of the lower Forest Boundary, will be treated to stop further upstream movement and eventually restore fish passage to the site. Treatment at the headcut will include adding wood and/or rock, constructing a wood and/or rock structure or some combination of the two.

Plugged drainage structures, failing drainage structures and the absence of drainage structures are causing considerable erosion at and downstream of road/stream crossings on tributaries of Howard Creek, resulting in elevated levels of sediment deposition in Howard Creek. These roads, including some non-system roads in the Howard Creek headwaters will be decommissioned utilizing BMP standards to reduce water quality impacts. Eroded areas will have juniper and/or thinning slash placed in them to help reduce erosion.

Dent Creek Restoration Activities

Wire and posts used to secure juniper in past restoration projects that are no longer needed will be removed to improve the aesthetics of the area. Wire gabions that are no longer needed will also be removed using heavy equipment or by hand.

Thinning will occur on approximately 100 acres within the perennial Dent Creek tributary RHCA. The affected reach begins at FR 3940, near the confluence with Dent Creek, and extends upstream approximately 2.5 miles. No mechanized, ground disturbing equipment (i.e., harvester, slashbuster, excavator, etc.) will be used. We anticipate that all trees will be felled using chainsaws. Thinning prescriptions will be similar to those in upland treatment areas. Where practicable, trees will be felled into the creek. We estimate that approximately 100 trees will be added to the Dent Creek through these efforts. If necessary, fuels will be reduced in treated areas using broadcast burning or hand piling and then burning accumulated fuels.

The culvert in the perennial Dent Creek tributary at FR 3940 is at least a seasonal barrier to upstream migration of native Goose Lake fishes, due to its slope (3%) and minimal summer water depths in the culvert. The outlet of the culvert is sunken in backwater. We will install low rock weirs downstream of the culvert to remedy the passage issues by sinking the rest of the culvert in backwater. The rock weirs will be constructed downstream of the culvert or the culvert will be replaced to provide fish passage at the site.

Hay Creek Restoration Activities

Hay Creek, from the upper end of Dry Valley to the Forest Boundary at T. 40 S., R. 16 E., sections 12 and 13 (about 2 miles) lacks large wood. This approximately 9000 feet, forested reach contained only 3 pieces of large wood when surveyed in 2007. We will add approximately 50-75 pieces of large wood to this reach using heavy equipment to place the wood (i.e., tracked excavator). Wood sources will come from the adjacent upland units proposed for thinning, danger trees, and/or cull decks.

Non-System Road Decommissioning

Up to 20 miles of existing road within the project area are not classified as Forest Service system roads. Roads that are having adverse effects on natural resource values will be decommissioned and rehabilitated utilizing BMP standards to prevent impacts to water quality.

RHCA Juniper Cutting

Juniper will be treated within and adjacent to RHCAs. All juniper NOT exhibiting old growth characteristics will be cut. Juniper may be left on site, burned on site or removed. Juniper burning and/or removal within RHCAs will be accomplished in a manner consistent with applicable BMPs, the Forest Plan, and INFISH. The amount of burning and/or removal within RHCAs will be coordinated with Forest aquatics staff.

Rationale for the Decision

I have reviewed the EA and have determined that there is sufficient information to provide a reasoned decision. In making my decision, I considered information related to the purposes of and needs for the project, issues identified for this project, Forest Plan direction, conditions in the project area and comments from the public and the interdisciplinary team. I have selected Alternative B because it provides a reasonable mix of actions that address various resource concerns identified for the project area while providing for the best combination of prospective results in regards to stated purposes and needs. I believe the expected results of the actions associated with Alternative B will best address the goals intended to promote a sustainable forest ecosystem within the Lakeview Stewardship Unit.

How the Decision Promotes Sustainable Ecosystems - The need for action statements and underlying needs related to providing sustainable forests are discussed below.

The Need to reduce excess vegetation to increase vigor, health, and growth rates while increasing resiliency of late and old structure (LOS) and moving younger forest stands toward LOS: The thinning treatments of Alternative B will reduce the potential for tree mortality from insect, disease, and high intensity wildfire on about 11, 600 acres. It provides the best opportunity to protect the existing large and old trees, while creating conditions that will allow for the development of additional large trees. Alternative B moves stands toward the Historic Range of Variation (HRV) for LOS by enhancing the stand's ability to become Late Old Structure (LOS) more quickly or shifting Multi-Stratum LOS to Single-Stratum LOS, in ponderosa pine. (Final EA page 56-59)

Alternative B treats the landscape at the subwatershed level. Currently, only 2% of the planning area is classified as single-stratum with large trees (per the Eastside Screens); at the historic range of variability (HRV) 53-80% of the planning area should be single-stratum with large trees (SSLT). Historically, 12-15% of the planning area was comprised of multi-stratum with large trees; currently, MSLT covers approximately 48% of the planning area which is above the HRV. The comprehensive suite of vegetation treatments in the West Drows project area will result in moving both SSLT and MSLT closer to HRV (Table 1).

Table 1 – Change in percentage of MSLT to SSLT by Alternative.

Physiognomic Type	Historical	West Drows National Forest Acres	West Drows National Forest Acres Post treatment	West Drows National Forest Acres Post treatment
		Alt A	Alt B	Alt C
Late-Seral Multilayer forest	12-15%	48%	24%	30%
Late-Seral Single Layer forest	53-80%	1%	25%	19%

After treatment, the forest should become more resilient to perturbations such as insect attack and fire occurrence. In practicable terms, this means reductions in total stand density and a shift in species composition back toward ponderosa pine, sugar pine, western white pine and incense cedar – the more stable species that in the past dominated stands in the area. Stand replacing events, such as fire or insects, result in a reduction of late, old and mid succession forest, an undesirable outcome (Final EA pages 55-56).

As stand densities near maximums (a large number are there or nearing that level now), density dependent stress mortality would increase. Individual large and medium diameter conifers would die from site resource competition and continued insect and disease mortality. Competitive stress would be temporarily relieved as individual overstory trees die, but this would be quickly be offset by recruitment of understory vegetation, including conifer tree regeneration. Conditions are, and would continue to be ripe for large increases in bark beetle caused mortality, with the large old desirable trees at greatest risk.

Removing surface and ladder fuels across the landscape will reduce fire intensity and severity; lowering the risk for uncharacteristic fire effects or mortality from insects in late and mid succession forests.

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Approximately 84 percent of the proposed harvest acres are currently condition class 3 and will become condition class 1 or 2. Current conditions indicate that approximately 25,611 acres of National Forest system lands in the project area are condition class 3; the action will treat 9,740 of these acres reducing them by 38 percent. The reduced fuel loads and associated fire behavior would increase survival rates should a wildfire occur; the resilience of forested landscape to wildfire would be improved (Final EA page 64).

Improve hydrologic function: The treatments included in Alternative B will have positive effects for limiting erosion, reducing evaporation, improving infiltration, and adding litter and nutrients to the soil. The open forest conditions produced through treatments will lead to improved ground cover vegetation that accommodates soil and water conservation more extensively with Alternative B than Alternative C. (Final EA pages 78 and 80). Alternative B will have little to no direct affect on stream temperature in the planning area, due to the relatively small amount of shade reduction from harvested units within RHCAs. However, indirectly there will be an increase in catchment functions in the upland treatment units leading to improved snowpack retention and cold water storage in the soil. Slower release of cold water from storage will decrease stream temperatures. Additionally, the thinned riparian systems will be better able to support riparian dependent vegetation in particular willows, alders and sedges.

The project benefits aquatic and riparian resources by accelerating attainment of Riparian Management Objectives (RMOs) (Final EA pages 95-97), improving stream channel and fish habitat conditions, enhancing riparian vegetation, and restoring connectivity of fish populations in the project area by repairing headcuts and addressing other fish passage barriers.

The project benefits aquatic and riparian resources by implementing riparian activities that would maintain or improve RMOs. These activities including removing a large segment of road for a streamside (Upset Creek) and closing or decommissioning nearly 100 miles of existing roads, fulfills one of the objectives of INFISH to reduce human impacts that directly affect fisheries habitat. Repairing headcuts will reduce potential sediment and the culvert replacements/removals improve fish passage. (EA pages 95-97)

Support jobs and local economy

The treatments described in Alternative B, designed to improve forest health, are expected to generate between 20-26 MMBF of commercial timber volume. This addresses the purposes of supporting jobs in the local economy and contributing income to the communities within the Lakeview Stewardship Unit. Producing timber products as

a result of timber stand improvement activities is consistent with the goals and objectives of the Forest Plan Management Areas occurring in the project area. Alternative B meets this purpose and need better than Alternative C which will result in lower timber volume.

Response to Public Concerns

A concern raised during the 30-day public comment period was that the project will “capture mortality” of live trees that may have become snags in the future. Only snags that pose a hazard to worker safety will be felled during project implementation. Another way to look at this issue is that the project is “capturing vegetation” that has been allowed to grow due to fire suppression. The DecAid analysis (Appendix D of the Final EA) identifies the tolerance levels for cavity-dependent species. The effect of moving stands toward HRV includes slowing of snag recruitment. However, ecological processes that produce snags such as root rot, insects, drought, competition, density dependant mortality, and disease will not be eliminated within the planning area. Therefore, in treatment areas where we are moving stands from late-seral multilayer forests to late seral single layer forests, it is expected that snag recruitment and distribution will move towards historical conditions. This will mean fewer overall snags but with more of those snags occurring in the larger size classes. This will favor habitat for primary excavators that utilize larger snags such as pileated woodpeckers, white-headed woodpeckers, and northern flickers. It is expected that all snag dependant species that are currently within the planning area will continue to have habitat provided for them by the vegetation, but at different levels the present time. In addition, only about 50% of the mid-to late seral stands will receive treatment. Thus, snags will continue to be created through natural processes. After a thorough review of conditions in the project area and the snag analysis provided in the EA, it is my judgment that implementation of Alternative B will not have a significant impact on snag recruitment in the West Drows project area.

Another concern that was raised during the 30-day public comment period was the potential impact of treatments in the undeveloped areas identified by Oregon Wild within the project area. Specifically, the concern was that the analysis had not adequately addressed the potential impacts of proposed activities on the many values of roadless or unroaded areas.

There are approximately 7, 221 acres within the Oregon Wild areas of concern within the West Drows project area. The areas range in size from about 270 acres to 1800 acres in size and generally are bordered by Forest system roads (Final EA *Appendix A - Map Figure 2.3*). There are approximately 3 miles of Forest system roads within these areas of concern. However, the areas are bordered by existing Forest system roads which will be used to access and extract material from units within these areas of concern. Under the Proposed Action, approximately 2437 acres (~34% of the Oregon Wild areas of concern) will receive some type of treatment. These treatments include about 1165 acres of variable density thinning from below, 452 acres of juniper thinning, and about 821 acres of small diameter tree thinning (~16%, 6.3% and 11.4% of the Oregon Wild areas

of concern, respectively). The effects of these activities are to hydrology, soils, fisheries, fuels, vegetation, non-forested vegetation, noxious weeds, wildlife, and sensitive plants apply to the Oregon Wild areas of concern as well as the rest of the project area and are described elsewhere in Chapter 3 of the Final EA. Road decommissioning and closure will reduce road densities by more than 1 mile of road per square mile of land in the Lower Hay and Middle Drows Creeks subwatersheds.

Forest Plan Amendment

Amending the Forest Plan to allow for harvesting white fir greater than 21 inches in diameter within the West Drows project area will increase effectiveness of treatments by reducing competition to desired large ponderosa pine and will shift stand composition toward pine. Long term forest health will be improved by increasing the survival of large pines that directly benefit from the removal of white fir. Removing white fir where it competes with ponderosa pine will reduce current elevated tree evaporation and allow late season soil water drainage across the watershed, which may help alleviate warm stream temperatures.

The trees removed will be in small patches or single trees near large old pines, or where it will allow leaving pine in preference to fir. No LOS acres will have enough large trees removed to alter the status as LOS. This alternative will allow, meeting stocking objectives, to preferentially leave a smaller diameter ponderosa pine, or even two pines while removing the larger fir. For example, cutting one 25 inch fir would remove about four square feet of basal area. To meet the same density reduction level one would have to cut about three 15 inch trees, which if pine, would run counter to project objectives of pine restoration (EA page 59).

Alternatives Considered

Other than the proposed action (Alternative B) one other action alternative (Alternative C) and a No Action Alternative were analyzed in detail in the EA. Although the two action alternatives respond to the issues identified in Chapter 1 of the EA and meet the underlying needs and purposes for the proposed action, although to varying degrees, Alternative B provides greater forest health benefits than Alternative C.

Alternative A - No Action

Under the No Action Alternative, current management plans and decisions would continue to guide management activities within the West Drows Project area. Activities associated with the project would not be implemented. Previous decisions will continue to be implemented. In addition, ongoing current activities such as fire wood cutting, livestock grazing, road maintenance and recreation use will continue under current management guidelines.

Alternative C

Alternative C was developed by dropping all treatment units within the Oregon Wild undeveloped areas, eliminating all units that would be accessed using temporary roads and then assigned treatment priorities based on stand density and condition class. Only

those units with high treatment priority became Alternative C. Activities Common to All Action Alternatives would apply to this alternative.

Under Alternative C, approximately 7300 acres would receive variable density thinning from below. No treatments would occur within the undeveloped areas. This would yield approximately 12 million board feet of merchantable timber.

Approximately 2250 acres of small diameter trees (generally less than 12 inches in diameter) would be treated using mechanical and/or underburning methods. All other aspects of thinning would be the same as described for the proposed action.

Other Alternatives Considered but Eliminated from Detailed Study

During the development of this project, the Interdisciplinary Team considered a number of alternatives to the proposed action that were not developed for detailed analysis for a variety of reasons. These alternatives and the reasons for not considering them in detail are listed below.

- ***Only treat stands that are accessible by existing forest roads that are in good condition and would require only minimal maintenance.*** The Drews Creek Watershed Analysis recommended improvement of roads, drainage, and culverts that are impacting water quality and public safety. Using only roads that are currently in good condition and requiring minimal maintenance would reduce the agency's opportunities to improve road conditions and thus water quality as part of this project. In addition, only a small portion of the subwatersheds would be accessible under this type of alternative and thus the purposes and needs of this project would be met only on a very small piece of the landscape.
- ***Restrict treatments to multi-strata stands and only treat for accumulated fuels.*** This alternative was eliminated because although it would meet the need to reduce fuels in the project area it would not enable the agency to fully treat the two subwatersheds to restore resiliency and watershed health.
- ***Restrict thinning to trees less than 12 inches in diameter.*** This alternative was eliminated because it would fail to reduce the risk of crown fire, would not thin stands to the desired basal area, and would provide low levels of commercial timber products to the local communities from the Federal Stewardship Unit. It has been suggested that the Mason study on the Fremont National Forest (2003), which limits treatments to trees less than 12 inches, showed that fuel treatments would be as effective as comprehensive treatments. In the Mason study very few trees greater than 12 inches were removed because few plots had a substantial number of trees larger than 12 to 14 inches in diameter to start with. On the Fremont plots, only an estimated 5% of the trees were larger than 12 inches. This is not the case with this project. If a treatment retains the largest and best quality trees, the trees in the upper diameter classes would be kept, not harvested, unless they were not a favored species. The key factors were not so much tree size, but thinning from below and residual density. Stands with larger trees may need to have larger trees removed to meet the same risk reductions.

A more recent research paper from the Rocky Mountain Research Station in southwest in Ponderosa pine stands very similar to this area found that silviculturally treated stands faired much better than untreated stands after wildfires (Cram et al, 2006). The authors concluded that treatments which reduced stand density and increased average stem diameter decreased fire severity and fire line intensity. The more aggressive the treatment in reducing canopy bulk density (a function of residual density), the less susceptible forest stands were to crown fire. They also found that stands treated by mechanical treatments where slash was (lop and scatter) scattered were susceptible to near stand replacement mortality if subjected to a wildfire within four years. This fits with our experience on the Fremont-Winema and is why we emphasize use of masticating machines in mechanical treatments where possible, whole tree skid, and/or the removal of small material to be used as biomass fuel.

Public Involvement

The Klamath Tribes were informed of the proposal at the fall 2006 quarterly pre-Schedule of Proposed Actions meeting between the Klamath Tribal Directors and the Fremont-Winema National Forests staff. Scoping packets were sent to Tribal Directors in the winter of 2007.

This proposal was first described to the public in the winter quarter 2007 edition of the Fremont-Winema National Forests' *Schedule of Proposed Action*. In addition, we sent approximately 150 letters and scoping notices to citizens, industry, environmental groups, other government agencies, and the Klamath Tribes in February 2007 requesting that they provide comments on our project proposal. We received 6 responses to our initial public scoping and incorporated those thoughts and suggestions into our project planning. Project information was posted on the Fremont-Winema National Forests' public website and presented in public forums to the Lakeview Stewardship Group.

A full description of the proposed actions and a preliminary version of the EA (referred to in the project file as the "West Drows Public Review Copy") were made available for a 30-day public review and comment period in August 2008 which ended on September 15, 2008. The Forest Service received two letters in response during the comment period. All comments received were reviewed and an evaluation of the comments is documented in Chapter 4 of the Final EA (Table 4.1 - Comment Analysis).

FINDING OF NO SIGNIFICANT IMPACT

My determination of significance is based on careful consideration of the EA and project file as compared to the context and intensity factors listed in 40 CFR 1508.27.

Context

The actions included in the selected alternative are described in Chapter 2 of the EA. The disclosure of effects differs by the resource of concern with the scale of analysis often extending beyond the Planning Area to cover complete subwatersheds or other

geographic area comprising the ecological unit needed for a complete look at impacts. Multiple scales and levels of analysis were used to determine the significance of the actions' effects on the human environment. The overall planning area for the West Dreads Watershed Restoration and Vegetation Management Project included about 70,000 acres, approximately 48,000 is National Forest system lands the rest is private lands. The selected alternative included vegetation modification activities on 11,600 acres by commercial thinning, 3,300 acres of small tree thinning, 13,000 acres of sage brush treatments, and up to 26,000 of prescribed fire in condition class 2 and 3 stands plus multiple riparian, stream, and road decommissioning actions. Activities were designed to improve ecosystem function and resilience to natural disturbance by moving stocking levels, species composition, forest structure, and fuel loads toward their desired fire behavior. Water qualities and flows would not be measurably impacted. Wildlife and its habitat, soil stability and productivity, and fisheries habitat would also be affected. The impacts of the selected alternative on each of these are disclosed in the EA (Chapter 3). Based on the analysis and the extent of potential effects this project is local in scope and does not extend beyond the Forest boundary.

Intensity

The environmental effects for all parts of the action are documented in Chapter 3 of the Environmental Assessment. The beneficial and adverse direct, indirect, and cumulative impacts discussed in the EA have been disclosed within the appropriate context and effects are expected to be low in intensity because of project design, including Resource Protection Measures (Final EA pages 43 to 46) and BMPs (Final EA Appendix B) developed to protect or reduce impacts to resources. Significant effects to the human environment are not expected. The rationale for the determination of significance is based on the environmental assessment, in light of the factors listed below:

1. Impacts that may be both beneficial and adverse (40 CFR 1508.27(b)(1)): The implementation of these activities provide multiple beneficial resource improvements. The analysis discloses how the treatments would restore desired stand conditions for creating and maintaining large old forests by increasing resilience to insects and uncharacteristic wildfire through thinning and fuel reduction activities. INFISH RMOs will be maintained and riparian impacts reduced through vegetation management designed to increase or improve the condition of desired riparian vegetation, increase instream large woody debris, and reduce sediment associated with roads through decommissioning 64 miles and moving a portion of FR 3940110 out of the riparian area. Direct, indirect, and cumulative effects were disclosed in the EA to contrast with beneficial impacts to determine what mix of actions to implement. The analysis and consideration of public comments did not indicate a need to change the activities proposed in Alternative 2. The following is a summary of impacts disclosed in the EA;

About 8,600 acres of late and old succession forest will have densities reduced which will allow more growing space and site resources to the large old trees that characterize these areas. Understories would be reduced but not eliminated. After treatment, these stands will be moved toward an open, single story stand structure more closely resembling the

historic range of variability (HRV). The trend toward multi-layered, very dense stands will be reversed. Thinning from below on approximately 8,200 acres of mid-succession stands (including small diameter trees and juniper with extraction) will maintain or increase diameter growth to encourage development of additional large trees as well as shifting composition and stand dominance back toward ponderosa pine.

Following stand treatments, approximately 53% of the planning area will be moved from Fire Regime Condition Class (FRCC) 3 to FRCC 2 or 1, where fire regimes are within or near the historical range, the risk of losing key ecosystem components is low, and vegetation attributes (species composition and structure) are intact and functioning within the historic range (Final EA page 64). Horizontal and vertical fuel continuities will be disrupted within areas treated. This will create areas where fire intensity is reduced due to lower fuel loads and fire is slower to spread and more easily controlled.

Soil compaction effects are expected to be minimal in areas treated by harvest and mechanical thinning because the soil transects conducted for this project found no growth limiting compaction from past ground based mechanical harvest (Final EA pages 72-73). Tree thinning will result in an open forest with an increased growth response in complimentary ground cover. The proposed treatments will limit erosion through increase surface vegetation, improve infiltration, and add litter and nutrients to the system. Within a fire-maintained, open forest structure, subsequent ground fires every 15 years there is a 16% chance of measurable sediment delivery. A 25 year storm event the year following a prescribed fire could produce about 0.11 tons of sediment per acre. If treatments did not occur and a high severity fire burns through these stands, the chance of sediment delivery the first year after the fire is 88% and the estimated amount of sediment is 1.5 tons per acre (Final EA pages 74-75).

Temporary road construction will generate some sediment; however, in this dry climate the rate of erosion from roads is lower than that of ground fires. With best management practices for water quality, such as water bars for seasonal closures, erosion will be minimized to the greatest extent possible (Final EA pages 78-79). Implementation of the road decommissioning and road closures will result in lower road density and less connectivity between roads and streams. This will reduce the estimated 114 tons of sediment per year flowing into streams within the project area by nearly half (Final EA page 79). Sixty-four miles of Forest system roads will be decommissioned and an additional 29 miles of Forest system roads will be closed, reducing erosion from about 42 miles of roads within 300 feet of streams. Road densities near streams (within 300 feet) will drop from 4.4 miles/square mile to 2.5 miles/square mile. Relocating approximately 3 miles of Forest Road 3940-110 out of the Upset Creek drainage will reduce erosion into Upset Creek. The decommissioned segments will be re-vegetated and properly drained to prevent future erosion from the road bed. Access through Upset Creek is needed for fire suppression and range management and thus two new short road links will be constructed at either end of an existing mid-slope road, Forest Road 3940-317 (Final EA, Appendix A Map 8). The new segments will not cross any drainage features and presents no soils or hydrology concerns. There is an intermittent stream crossing on the existing portion of FR 3940-317 that is interrupting hydrologic function of the stream. This

situation will be remedied by constructing two cross drain dips and moderate road maintenance (see Hydrology Report for Upset Creek Road, Shakespeare December 2008 in the West Drows Project Record).

The timber harvest and thinning portions of this project will not retard or prevent attainment of Riparian Management Objectives (RMOs) or adversely affect native fish (TM-1 and FM-1 of INFISH), as no adverse direct or indirect effects to any fish species is expected. All RHCA treatments are designed to acquire desired vegetation characteristics in order to attain RMOs (TM-2 of INFISH). Fuels reduction in the Project Area will reduce the risk of wildfire and its effects on fish habitat thereby contributing to the attainment of RMOs (FM-4 of INFISH). The project area is not in an INFISH priority watershed. None of the alternatives involve road construction within RHCAs. Proposed temporary road construction within RHCAs has been minimized to the greatest extent possible (RF-2 of INFISH), while providing for maximum benefits to forested stand conditions across the project area. Proposed road decommissioning and reconstruction and the addition of wood to streams will serve to accelerate attainment of RMOs and are fully consistent with the goals and applicable INFISH standards and guidelines, particularly RF-2 and FW-1 of INFISH. The proposed culvert replacements and headcut restoration projects will restore or enhance fish passage at the sites, making them fully compliant with RF-5 of INFISH.

The greatest potential to retard attainment of RMOs with any one of the action alternatives stems from the potential sediment delivery to streams while performing instream work to repair headcuts and replace or remove culverts. The amount of sediment delivered to streams in the short-term is expected to be immeasurable compared to the existing site conditions and is expected to be reduced in the long-term (Final EA pages 93-94). Implementation of Alternative B is not expected to retard the attainment of RMOs, adversely affect inland fish nor will it prevent attainment of RMOs as described in INFISH (Final EA pages 98-99).

There are no Inventoried Roadless Areas (IRAs) within the West Drows project area. Oregon Wild has suggested that the Forest Service consider the values contained in undeveloped areas that their organization has identified within the West Drows project area (Final EA, Appendix A Map 2) and the effects of the proposed activities on these areas. There are approximately 7, 221 acres within the Oregon Wild areas of concern within the West Drows project area. The areas range in size from about 270 acres to 1800 acres in size and generally are bordered by Forest system roads (*Appendix A - Map Figure 2.3*). There are approximately 3 miles of Forest system roads within these areas of concern. However, many of these areas are bordered by existing Forest system roads which will be used to access and extract material from units within these areas of concern.

Approximately 2437 acres (~34% of the Oregon Wild areas of concern) will receive some type of treatment. These treatments include about 1165 acres of variable density thinning from below, 452 acres of juniper thinning, and about 821 acres of small diameter tree thinning (~16%, 6.3% and 11.4% of the Oregon Wild areas of concern, respectively).

No new roads will be built into the undeveloped areas. Access is provided by existing Forest system roads that border the undeveloped areas. There are no unique plants or animal habitat characteristics in the undeveloped areas proposed for treatments that do not exist within the rest of the project area. The undeveloped areas are managed under the guidelines of the Forest Plan for Management Area 5 - Timber and Range Production; it has not been managed for primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation. Past human activities make it unlikely that these areas will be useful as a reference landscape. It is unlikely that these undeveloped areas would be considered for potential wilderness due to past management activities and the fact that they do not contain characteristics considered to be unique relative to the rest of the West Drows project area and the Fremont-Winema National Forests (Final EA page 100).

All activities on the Forest have the potential to introduce and spread noxious weeds. Implementation of resource protection measures and Forest Plan Standards and Guidelines will help minimize the cumulative effects of the project. In the long-term, the West Drows project will reduce the probability of a high severity fire which creates noxious weed habitat (Final EA page 110). In addition, closing and/or decommissioning 93 miles of Forest system roads will reduce disturbed habitat and corridors for weed infestation. Following Forest Plan standards and guidelines and implementing prevention practices as described in Chapter 2 of the Final EA (page 45) or in Appendix A of this decision document, such as requiring cleaning of all off road equipment to result in weed free equipment and avoidance of known weed infestations will decrease any potential risk for establishing new noxious weed sites as a result of project activities.

Non-forested plant communities will benefit from removal of encroaching conifers and junipers. Removal of encroaching vegetation will increase light, water, and nutrients available for non-forested plant species. Removal of juniper in sagebrush sites will increase species diversity and richness, herbaceous cover and biomass and ground cover (Final EA page 117). The activities associated with thinning, piling and burning will have minimal effects to the sites treated due to the mechanisms used. Using chainsaws to fell trees and hand piling will not decrease ground cover or result in effects to plant vigor. Burning will have some short-term effects at the piles but will be relatively small relative to area and time (Final EA page 117). Burning non-forested vegetation will result in short term loss of plant cover and vigor. Early and mid-seral species will occupy the sites that are burned at high intensity. Areas that have a somewhat intact perennial species component that are burned at moderate to low intensity may see an increase in production as early as the following growing season. Long-term effects to species composition and cover and overall plant community function will be beneficial. Late seral non-forested species will dominate and add to an increase in ground cover, resulting in decreased bare ground. Removing juniper in aspen stands and burning within and around the aspen stands will stimulate regeneration and invigorate stands (Final EA page 116). Water absorption and storage capacity will increase as canopy cover decreases. Loss of soil moisture through evapotranspiration will be reduced as canopy cover is decreased and there are less tree limbs to intercept and evaporate precipitation. The reduced canopy allows higher amounts of snow to reach the forest floor increasing snow retention and

groundwater recharge. Increases in ground cover and herbaceous species will also benefit water storage and retention.

There will be no direct effects to permitted grazing in the West Drows project area. Grazing will continue to be administered under the terms and conditions of grazing permits issued (Final EA page 113-114).

During implementation existing recreation opportunities will continue to be available. There will be a short-term interruption of solitude in specific areas as treatments and project activities are implemented do to noise and locally increased human activity. Dispersed camping and other recreational activities may be disrupted or displaced in specific areas for a short time while thinning treatments and fuels reduction or prescribed fire are being implemented. The closing and decommissioning of approximately 93 miles of existing roads will reduce motorized recreation opportunities but would increase opportunities for solitude in the future. The road system that remains in place will still provide approximately 186 miles of Forest system roads for recreational travel and access.

Traffic will increase on system roads as log hauling occurs and when contractors are working on projects. Forest road conditions will be improved for public use through routine maintenance and road improvements in the project area.

The proposed activities will result in more open park-like stands which will allow increased sight distances, improved ground vegetation and larger trees. Fish passage and habitat conditions will be improved which could lead to better fishing opportunities.

The treatments will achieve desired future conditions and meet the visual quality objectives of Maximum Modification for the area. In the short-term, the increased number of stumps and the open nature of the stands will likely be the most apparent visual change resulting from implementation. Skid trails and rehabilitated temporary roads will be noticeable in the short-term until vegetation becomes established. All logging slash and activity fuels will be treated or removed to be used as fuel for biomass energy production thus minimizing visual effects. Prescribed fire will have the temporary visual effect of blackening ground vegetation, scorching needles of low branches or killing the smallest trees. Thinning and prescribed fire will result in long-term benefits through improved vegetative health. Watershed improvement activities will lead to improved riparian and stream conditions. The proposed activities will have some short term effects, but these will not be apparent to the casual forest visitor in a few years. In the long-term, scenic integrity will be enhanced through the diversity that exists in healthy forest stands (Final EA page 120).

The temporary increase in human disturbance may contribute to wildlife species altering movement patterns and habitat use; however, the activities will be temporary and short-term in nature and disturbance levels will return to normal when project implementation is completed (Final EA pages 124-136). Thinning will decrease stand densities and move habitat toward the open ponderosa pine stands that historically occurred in the area. This

will benefit wildlife species that use open stands; however, this will have a negative effect on those wildlife species that use denser conifer stands. Improved stand health will likely reduce the number of snags created annually in the project area. It is expected, however, that incidental stress related mortality will contribute to snag and downed wood components over the long term. Green ponderosa pine trees 21 inches in diameter or larger will be retained, allowing the largest and oldest trees to eventually become snags and large downed wood. The natural processes of age, drought, and insect and disease stresses will likely lead to scattered mortality of trees in the planning area. Untreated areas will continue to provide increased snag densities. Stand densities will be decreased yet remain fully stocked and within the historic range of variability (Final EA page 130-131).

All Forest Plan standards and guidelines for Management Indicator Species (MIS) will be met with implementation of Alternative B of the West Drows project. No significant effects to any wildlife species have been identified in the EA (Final EA pages 128-130).

2. My decision will not adversely impact public health or safety (40 CFR 1508.27 (b)(2)). No significant effects to public health or safety have been identified (Final EA page 137). This finding is supported by knowledge of past similar projects in which no effects to public health or safety have occurred. The project will meet all criteria to protect air quality and will not result in any long-term effects to air quality (Final EA pages 69-70). Alternative B could result in a slightly beneficial effect upon public health and safety because in the long-term, the risk of high intensity wildfire will be reduced. When activities occur near roads or high recreation use areas, contracts require warning signs to be posted.

3. There will be no significant effects on unique characteristics of the area (40 CFR 1508.27(b)(3)) such as parklands, prime farmlands, wild and scenic rivers, or ecologically critical areas as there are no such area in the project vicinity (Final EA page 136).

4. The effects on the quality of the human environment are not likely to be highly controversial (40 CFR 1508.27(b)(4)). These types of activities have taken place on the Lakeview Ranger District in similar areas and the resulting effects are well known and understood. In that sense, there is no known scientific controversy over the impacts of the project. The Council of Environmental Quality guidelines relating to controversy refer not to the amount of public opposition but to where there is a substantial dispute as to the size, nature or effect of the action. Given the site-specific conditions and impacts disclosed in the West Drows EA (Final EA pages 49-139), the effects of implementation of this decision on the quality of the human environment are not likely to rise to the level of scientific controversy as defined by the CEQ.

5. The alternative I have decided to implement will not impose highly uncertain or involve unique or unknown risks (40 CFR 1508.27 (b)(5)). The Fremont-Winema National Forests have considerable experience with the types of activities to be implemented and the activities proposed in this decision are well-established land

management practices. The risks are well-known and understood. Based on previous similar actions, the probable effects of this decision on the human environment, as described in the Final EA, do not involve effects that are highly uncertain or involve unique or unknown risks.

6. My decision to select Alternative B of the West Drows Watershed Restoration and Vegetation Management Project for implementation does not set a precedent for other projects that may be implemented to meet the goals and objectives of the Forest Plan, nor does it represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)). The Forest Plan amendment that is included in Alternative B is limited to the West Drows Watershed Restoration and Vegetation Management Project.

7. West Drows EA Alternative B is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)). The Final EA provides cumulative effects analyses for the particular resources in Chapter 3.

8. Cultural resource field surveys were completed prior to preparing the analysis for this project. Alternative B will not adversely affect districts, sites, highways, structures, or objects listed in, or eligible for, listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural or historical resources (40 CFR 1508.27 (b)(8)). This is because all known sites will either be avoided and/or resource protection measures will be implemented to protect known sites. Under the auspices of the *Memorandum of Agreement* with the State Historic Preservation Officer (SHPO), the Forest Archaeologist has certified that the project will have “No Effect” on listed or eligible cultural resources.

9. The actions associated with Alternative B are not likely to significantly adversely affect any endangered, threatened, or sensitive terrestrial wildlife, aquatic, and/or plant species or designated critical habitat (40 CFR 1508.27 (b)(9)) under the Endangered Species Act of 1973 based on the following information from biological evaluations and assessments prepared for this project:

Documented or suspected habitat for federally listed Threatened, Endangered, or Candidate plant species does not occur within the project area. The project area has been surveyed for listed plants several times from July 1992 through July 2007. Sensitive plants were found in the project area. Potential habitat exists throughout the project area for Baker’s globe mallow (*Illiamna bakeri*), long-bearded mariposa lily (*Calochortus longebarbatus* var. *longebarbatus*), and blue-leaved penstemon (*Penstemon glaucinus*). Implementing Alternative B will benefit both Baker’s globe mallow and blue-leaved penstemon, although for different reasons. Baker’s globe mallow thrives and expands in areas of disturbance while blue-leaved penstemon needs more open forested areas to flourish. Thinning stands and re-introducing fire will provide disturbance for Baker’s globe mallow and more open canopy stands for blue-leaved penstemon. There will be little or no effect on long-bearded mariposa lily because they occupy the edges of seasonally moist meadows. These areas are excluded from mechanical treatment so there is likely to be little or no effect on this species (Final EA page 124).

There are no federally listed wildlife species within the project area. The bald eagle (*Haliaeetus leucocephalus*) was de-listed in July 2007 and is now addressed as a Forest Service sensitive species. The Forest Service continues to manage Bald Eagle Management Areas (BEMAs) within the project area. Outside of BEMAs thinning and fuels reduction will modify existing vegetation conditions, but will not affect habitat for bald eagles. Within BEMAs, thinning to 55 - 80 ft² basal area while retaining the largest trees available, small tree thinning and fuels reduction will be conducted as needed to increase forest resiliency to damage from insects and wildfire. Projects within the BEMAs will modify existing vegetation conditions to benefit habitat creation, sustainability, and resiliency. Work within BEMAs will occur outside the nesting season (January 15 – August 31) unless it can be documented that young have fledged, or nesting did not occur. **This includes layout, preparation, and recon work related to proposed projects.** There may be some work that can be completed within BEMAs without disturbing eagles during the nesting season. These situations will be looked at on a case by case base by a wildlife biologist on the Forest. Therefore, nesting and young will not be affected by the proposed projects. Prey species would not be affected by the proposed projects (*West Drows Wildlife Biological Evaluation*, Ramsey 2008).

The Oregon spotted frog (*Rana pretiosa*) and Columbia spotted frog (*Rana luteiventris*) are Federal candidate species for listing under the Endangered Species Act. Both the Oregon and Columbia spotted frogs are also considered Forest Service sensitive species and have been thoroughly addressed in the Biological Evaluation (West Drows Project Record, Lakeview Ranger District). The activities authorized by this Decision Notice may impact individuals or habitat but are not likely to contribute to a trend toward federal listing or loss of viability to species or population (Final EA page 128). Egg mass surveys of the best potential spotted frog habitat in the project area were conducted during 2005 - 2007; none were detected (*West Drows Wildlife Biological Evaluation*, Ramsey 2008).

No federally listed (proposed, endangered, or threatened) fish occupy habitat within the Middle Drows Creek and/or Lower Hay Creek subwatersheds (Final EA page 81). Redband trout (*Oncorhynchus mykiss*), Goose Lake sucker (*Catostomus occidentalis lacusanserinus*), Goose Lake tui chub (*Gila bicolor thalassina*), Pit roach (*Lavina symmetricus mitrulus*), Pit sculpin (*Cottus pitensis*), Goose Lake Lamprey (*Lampetra tridendata* sp.), and Pit-Klamath brook lamprey (*Lampreta lethophaga*) are Forest Service Region 6 sensitive fish species that occur within the potentially affected subwatersheds. Redband trout is the only one known or thought to occur within all fish bearing streams in both the Middle Drows and Lower Hay Creeks subwatersheds (Final EA page 82). The adverse effects to these sensitive species is very low; it may impact individual redband trout, Goose Lake sucker, Goose Lake tui chub, Pit roach, Goose Lake Lamprey, and Pit-Klamath brook lamprey but will not contribute to a loss of species viability or lead to federal listing of any sensitive species.

The list of federally Endangered, Threatened, and Candidate wildlife species has been reviewed for species that may be present on the Fremont-Winema National Forests and

found within the project area. There will be no effects to Canada lynx or yellow-billed cuckoos because no habitat is available for these species in the West Drows project area and no individuals are known to occur (Final EA page 125).

The Forest Service Region 6 Sensitive Animal species list (revised November 2004) was reviewed for species that may occur within the project area. Oregon and Columbia spotted frogs have been discussed earlier in this document and there is no habitat in the project area for Canada lynx, yellow-billed cuckoo, fringed myotis, pygmy rabbit, horned grebe, least bittern, greater sage grouse, yellow rail, upland sandpiper, tricolored black bird or peregrine falcon. Therefore, there are no impacts expected to these species (Final EA 128 and *West Drows Wildlife Biological Evaluation*, Ramsey 2008).

A finding of “May impact individuals or habitat, but will not likely contribute to a trend toward federal listing or loss of viability to the population or species” was made for the following Region 6 sensitive species: pallid bat, bald eagle, Oregon spotted frog, Columbia spotted frog, northern leopard frog, northwestern pond turtle, bufflehead, gray flycatcher, and the California wolverine (Final EA page 128).

10. This decision is in compliance with relevant Federal, State, and local laws, regulations, and requirements designed for the protection of the environment (40 CFR 1508.27(b)(10)).

Finding of non- significant effects: Sufficient information has been disclosed in the analysis to make a reasoned choice among alternatives. No significant impacts on the quality of the human environment have been identified in the Final West Drows Watershed Restoration and Vegetation Management Project EA (USDA Forest Service, December 2008). Information available from past actions of similar context and intensity in this area also indicates that no significant impacts would be anticipated.

The actions described in Alternative B will be limited in scope and geographic application (40 CFR 1508.27(a)). The location of the actions is described in the Final EA (page 18) and on maps (Final EA Appendix A - Maps 1-8). The physical and biological effects are limited. Except for smoke from prescribed burning, no effects were identified that would extend beyond the project area within the Middle Drows Creek and Lower Hay Creek subwatersheds of the Drows Creek Watershed.

Based on the site-specific analyses summarized in the West Drows Project EA and on previous experience with similar proposals, I have determined that implementation of the actions described in Alternative B do not constitute a major Federal Action, individually or cumulatively, and will not have a significant effect on the quality of the human environment, considering the context and intensity of the impacts (40 CFR 1508.27). Therefore, an environmental impact statement will not be prepared.

Other Findings

1. Federal regulations require that permits, contracts, cooperative agreements, and other activities on the Lakeview Ranger District are consistent with the Fremont National

Forest Land and Resource Management Plan (Forest Plan), as amended. I have reviewed my decision against Forest Plan direction, and I have determined that this action is consistent with the goals, objectives, and direction contained in the Record of Decision (ROD) for the Fremont National Forest Land and Resource Management Plan and accompanying Final Environmental Impact Statement (1989). With the Forest Plan Amendment to cut white fir trees greater than 21 inches in diameter, Alternative B complies with all applicable direction, including both Management Area and Forest-Wide standards and guidelines, Regional Forester's Eastside Forest Plan Amendment No. 2 and the Inland Native Fish Strategy (INFIISH 1995). The project meets the "does not retard attainment" of Riparian Management Objectives of INFISH because no direct or indirect adverse effects to any fish species are expected (Final EA page 98).

2. The procedures used to initiate and complete the planning of the project are consistent with the 1999 Memorandum of Agreement between the Klamath Tribes and the U.S. Forest Service. The project is not expected to have an adverse effect on Treaty Rights or treaty right resources (Final EA page 121).

3. This decision is in compliance with Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Final EA page 137). This project also complies with Executive Order 11990 (protection of wetlands) (Final EA page 136-137) and Executive Order 13112 (invasive species) (Final EA page 105).

4. This decision is consistent with Forest Service manual direction regarding roads analysis. I have determined that additional roads analysis is not needed for this project based on the following factors:

An interdisciplinary team (consisting of the SE Zone Roads Manager, hydrologist, fisheries and wildlife biologists, recreation specialist, assistant fire management officer, and range management specialist) was directed by the District Ranger to perform a focused roads analysis for the West Drows project area and make recommendations based on resource and access criteria. The team recommended roads for decommissioning and closure after the project is completed.

5. As required by 36 CFR 219.35, I have considered the best available science in making this decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and where appropriate, the acknowledgement of incomplete or unavailable information, scientific uncertainty and/or risk.

NFMA Finding of Non-Significant Forest Plan Amendment No. 32 for the West Drows Project

This decision is being made under the 2008 Forest Service planning regulations (36 CFR 219) which allow plan amendments to be made using the procedures from the 1982 planning regulations during the three-year transition period (36 CFR 219.14(b)(2)).

This amendment is being made using the 1982 procedures. FSH 1909.12, Section 5.32, outlines the factors to be used to determine whether a proposed change to the LRMP is significant or not significant, based on National Forest Management Act requirements.

I have determined that my decision to adopt the proposed Forest Plan amendment is a non-significant amendment to the Fremont National Forest Land and Resource Management Plan (1989 as amended), in accordance with regulations.

This Forest Plan amendment will result in a departure from the standard and guideline to maintain all live trees greater than 21 inches in diameter. This is a component of the 1994 Regional Forester's Eastside Forest Plan Amendment No. 2 (also known as the "eastside screens"). This amendment will allow for removal of white fir greater than 21 inches in diameter where it will contribute to forest health and restoration of ponderosa pine. This amendment applies only to the West Drows project area and does not apply to any future decisions in other areas. It will not alter multiple use goals and objectives for long-term land and resource management. The Eastside Screens modified the emphasis on timber production by directing that a balance be struck between Forest Plan objectives for timber production and maintenance of late and old seral structure. This amendment is intended to compliment the suite of activities for the West Drows project, with the objective of improving LOS conditions and moving them toward HRV.

IMPLEMENTATION, ADMINISTRATIVE REVIEW and APPEAL OPPORTUNITIES

This decision is subject to appeal pursuant to 36 CFR 215. Any written notice of appeal of the decision must be fully consistent with 36 CFR 215.14, "Appeal Content".

The Appeal Deciding Officer is Mary Wagner, Regional Forester. Any Appeal should be addressed to the Regional Forester. Hard copy of the appeal can be delivered using the postal address ATTN 1570 Appeals, P.O. Box 3623 Portland, OR 97208-3623; it can be faxed to (503)808-2255; e-mail should be sent to, appeals-pacificnorthwest-regional-office@fs.fed.us or the appeal can be delivered by hand to 333 SW First Avenue, Portland, Oregon between the hours of 8:00am to 4:30 pm, except legal holidays. The appeal must be received within 45 days of the legal notice announcing this decision in the Klamath Falls *Herald and News* newspaper. The publication date of the legal notice in the Klamath Falls *Herald and News* is the exclusive means for calculating the time to file and appeal and those wishing to appeal should not rely on dates or timeframes provided by any other source.

Electronic submittals must contain the projects name and the appellant's name, address, and phone number, if available, and either a scanned signature or other verification of authorship upon request. Electronic appeals must be submitted as part of the actual e-mail message, or as an attachment in Microsoft Word, rich text format, or portable document format only. E-mails submitted to e-mail addresses other than the one listed above, in other formats than those listed, or containing viruses will be rejected. For electronically mailed comments, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender

