

United States  
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Agriculture

**Forest Service**  
Fremont-Winema  
National Forests

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# FREMONT - WINEMA NATIONAL FORESTS

## Monitoring and Evaluation Report

**Fiscal Year 2008**



## KEY FINDINGS

**Ecological Restoration:** In 2008, the Fremont-Winema National Forests embarked on a 10-year stewardship contract with the Collins Companies' Fremont Sawmill. This project is aimed at improving environmental conditions in the Lakeview Federal Stewardship Unit, while also supplying material to the sawmill. Under the 10-year stewardship contract, task orders are offered each year to provide forest products in conjunction with restoration service work to reduce fuels and improve watershed conditions. Over the 10 year stewardship contract's life, at least 3,000 acres per year are projected to be thinned to improve forest health and reduce fuels. The contract is projected to offer at least 10 million board feet of forest products to Fremont Sawmill annually, as well as material for biomass energy.

Also on the Forest, two Community Fuels Reduction Projects were completed. The Chiloquin Community Fuels Reduction Project was a 7-year project that reduced hazardous fuels on 1,400 acres within the wild land- urban interface (WUI) around the town of Chiloquin and was the first National Fire Plan project implemented on the Forest. This project was a cooperative effort with the Chiloquin-Agency Lake Rural Fire Protection District, the Klamath Tribes, and community residents.

The second project was the Rocky Point Fuels Reduction Project. The Klamath Ranger District, with the assistance of local small business contractors and additional participation by the Bureau of Land Management and U.S. Fish and Wildlife Service, completed this 5 year project. This project reduced fuels on approximately 1,300 acres within and adjacent to the wild land-urban interface around the community of Rocky Point.

**Biomass:** While the market for biomass was thriving in 2008, the Forest was able to sell biomass and clean chips. Commercial interest in biomass on the west side of the Forest (Klamath County) increased significantly. Piles of tree limbs and tops were sold, chipped, and then trucked to biomass plants in White City, Oregon and other destinations. The Forest marketed about 30 percent of the biomass sold in the Pacific Northwest Region in fiscal year 2008.

The Forest was also able to sell clean chips from small diameter trees. This material was used for particle board, paper and other products in mills in Klamath Falls and as far away as Longview, Washington. Some of the residue piles left from clean chip operations sold for biomass energy generation. The Fremont-Winema is planning to continue to offer biomass projects for the next several years. In 2008 the Forest also sold 55 million board feet of wood and biomass products.

**Vegetation/Fuels Management:** Thinning tree stands to improve forest health, reduce fuels and fire hazards, and enhance wildlife habitat is emphasized in vegetation projects on the Forest. In addition to thinning, the Forest uses a variety of methods to implement vegetation management projects, including traditional timber sales, both integrated timber and service stewardship contracts and partnership agreements. The Healthy Forest Restoration Act of 2003 is used to expedite planning efforts, especially within the wildland urban interface (WUI) and for areas with imminent threat from insects and disease. The Forest collaborates with the Klamath Tribes, the Lake County Resource Initiative, the Lakeview Stewardship Group, county governments, rural fire departments, and other groups interested in forest restoration through vegetation and fuels management.

The Fremont-Winema National Forests have roughly 1.2 million acres available for timber management under the existing forest plans. Forest health has been improved by thinning approximately 13,000 to 16,000 acres over the past two years. These treatments included pre-commercial thinning, commercial thinning, thinning for wildlife habitat, and fuels reduction thinning.

On February 4, 2008 the Launch Integrated Fuels and Vegetation Management Project Decision Notice was signed. The planning area is comprised of approximately 9,500 acres of which 5,521 acres will receive vegetative treatments that including 4,610 of commercial timber harvest. The Healthy Forest Restoration Act of 2003 provided the direction under which the project proposal was developed.

The first stewardship contract task order, Abe Stewardship, established under the 10-year stewardship contract with Collins Companies Fremont Mill in Lakeview, was awarded in fiscal year 2008. The Abe Stewardship project includes commercial thinning to reduce ladder fuels and improve forest health, road maintenance work, removal of small trees to landings for future biomass utilization, and pre-commercial thinning. The work involved the Collins Companies and various sub-contractors and provided jobs in Lake County.

**Forest Health:** Forest health concerns on the Fremont-Winema National Forest are similar to many other forests in the area: too many trees on the landscape caused by decades of fire suppression and limited stocking control. Overcrowding results in competition for limited water and nutrients leaving the trees more susceptible to insect infestation.

An epidemic of mountain pine bark beetle has been building since 2001 and by 2008 had affected about 200,000 acres on the Forest. On the Fremont side of the Forest, dramatic mortality has occurred in lodgepole pine and whitebark pine in the higher elevations. While the mountain pine beetle is a natural component of lodgepole pine forest, epidemic outbreaks are cyclic and coincide with the natural life span of the trees, generally between 80 to 150 years. The mountain pine beetle can affect all western pines including ponderosa pine. In 2008 mortality due to the mountain pine beetle was observed in ponderosa pine stands.

Mountain pine beetle activity is putting whitebark pine stands at high risk, and may be killing whitebark pine trees with natural blister rust resistance. Approximately 80% of the mature whitebark trees on the forest have been killed in recent attacks. The Forest is participating in the Regional conservation strategy to protect remaining whitebark pine trees and obtain seed for future restoration.

In 2008, the Forest implemented five projects in and around the mountain pine beetle epidemic areas. These projects included: Trail Stewardship (3,047 acres), Kava Stewardship (963 acres), South Fork Environmental Assessment (14,000 acres), and South Fork Fuels Treatment (2,700 acres).

In December 2008, the Forest issued the Red Zone Safety Project Environmental Assessment for public comment. This project responds to safety issues in the mountain pine beetle epidemic area and will remove dead and dying trees from 25 recreation sites and within 150 feet of each side of almost 200 miles of well-traveled roads. Green trees will also be thinned to promote forest health in appropriate areas. Approximately 7,000 total acres are expected to be treated under the Red Zone Safety Project. The Environmental Assessment and Decision Notice was issued in April 2009.

Western juniper has significantly expanded its' range on the Fremont-Winema National Forests, encroaching into landscapes once dominated by shrubs and herbaceous vegetation. Juniper expansion has adverse effects on soil resources, plant community structure and composition, water, nutrients, fire cycles, forage production, wildlife habitat, and biodiversity. To preserve habitat for species such as sage grouse, mule deer, and songbirds, cutting of juniper that do not exhibit old-growth characteristics continues in cooperation with private landowners. In 2008, 420 acres of juniper encroachment was treated.

In 2008, reforestation efforts on the Forest continued on Toolbox Complex and Grassy wild land fire areas on the Silver Lake Ranger District.

Management of the stocking levels in the forest is ongoing; however budget constraints and procedural restrictions limit the number of acres that can be treated each year. Timber stand improvement work to reduce stocking levels through thinning was accomplished with a combination of funds such as forest health, fuels reduction, and the Fremont-Winema Resource Advisory Committee (RAC).

**Fish & Wildlife Habitat:** The Forest continues to focus on habitat inventory and restoration efforts for fish and wildlife, especially those habitats for species of conservation concern. In 2008 a gate was constructed to protect 1,117 acres for elk calving on the Winema. On the Fremont, 73 acres were treated that include thinning in riparian and old growth areas for habitat improvement for a variety of species. In addition, the following collaborative programs continue to gather information on various species of concern:

- The Oregon spotted frog; egg mass surveys continue. The Forest participated in a Klamath Basin-wide interagency survey effort, which included the Bureau of Land Management, US Fish and Wildlife Service, US Geologic Survey, and several private landowners. Approximately 30 egg masses were counted on the Forest. Efforts to plan and implement improvement and restoration of Oregon spotted frog habitats on national forest lands are underway. Revisits of historic localities of Oregon spotted frog, a US FWS candidate species, suggest the species has been lost from 70 to 90 percent of its historic range.
- Northern spotted owl; the Forest continued its cooperative agreement with Oregon State University to monitor northern spotted owl nest occupancy, nest productivity, and nestling survival rate for active northern spotted owl nests on the Klamath Ranger District.
- Mule deer; through funding agreements with BLM, the Forest supported ongoing data collection for the *South Central Oregon Mule Deer Research Study*, in cooperation with the BLM and Oregon Department of Fish and Wildlife. One of the key objectives of this 5 year study is to identify habitat types and landscape characteristics preferred by mule deer in central Oregon.
- Cavity nesters and migratory songbirds; the Forest participated in the first year of post-treatment monitoring for the *Birds and Burns Network*. This project is part of the Joint Fire Sciences program and is investigating the effects of prescribed fire strategies to restore wildlife habitat in ponderosa pine forests of the interior west. Monitoring for cavity nesters and migratory songbirds in the prescribed burn and/or thinning units within the study area was conducted in conjunction with The Nature Conservancy and the Rocky Mountain Research Station, the primary partners in this study.
- Mollusks; the Forest conducted surveys for mollusk species of concern, including five species currently on the Regional Forester's Sensitive Species list for the Pacific Northwest Region. The surveys are part of the range allotment planning and management efforts across the Forest.
- Fish habitat; several reviews of culvert replacement and riparian improvement projects intended to improve fish passage for native fish species were completed. These reviews included both projects in the planning and design stages, as well as projects which have been implemented.
- Fish habitat and grazing; completed interagency monitoring reviews with USFWS and the Forest to evaluate grazing management approaches adopted to maintain and improve habitat for bull trout, Lost River sucker, and Short-nosed sucker through the Biological Assessment/Biological Opinion process.
- Bald eagle and peregrine falcon; monitoring of bald eagle and peregrine falcon nesting success at known nest sites across the Forest was continued.
- Neo-tropical migratory birds; monitoring efforts continued for these populations, in cooperation with the Klamath Bird Observatory and the Institute for Bird Populations.

**Botany:** Concern regarding both existing and newly discovered invasive plant species continues on the Forest. Concentrations of known invasive plant sites have been grouped into 54 areas that take into consideration expected spread patterns associated with road systems, plantations, areas burned by wildfire, and other habitat conditions at risk of infestation. In 2008, 792 acres of invasive plants were treated with herbicide and 1,015 acres were manually removed. Monitoring and inventory on 2,097 sites indicated treatment was considered to be 50 to 100 percent effective. Of those sites inventoried/monitored, 610 sites previously treated had no remaining invasive plants in 2008. Inventories in 2008 found 495 new invasive plant sites.

For non-invasive plants, the Forest monitored 40 Pumice moonwort (*Botrychium pumicola*) sites to determine its status. Pumice moonwort, a type of fern, is a rare plant of southern Oregon and possibly northern California. Monitoring revealed that many small sites have disappeared with increasing canopy closure. For long-term monitoring, permanent plots were established at six sites. Monitoring and inventory of cultural plants also continued and approximately 8,000 acres of vascular plant surveys were conducted. Monitoring of Peck's milkvetch (*Astragalus peckii*) sites in the 9-Mile Restoration Unit occurred in 2008.

In conjunction with a challenge cost share agreement with the Carex Working Group, surveys for *Carex constanceana*, a rare sedge, were conducted. Survey results included identification of one new site and discovery of *Carex cordilleriana*, another rare sedge. Surveys for rare fungi were conducted at approximately 20 sites on 3,000 acres.

**Range:** Five grazing allotments were assessed for compliance with Forest Plan direction. Annual monitoring on 319,000 acres (administered to standard) indicated compliance with annual goals on 95% of the allotments monitored. These five Allotment Management Plans (decision pending) were updated to reflect management and monitoring goals. Several improvement and mitigation projects were identified during this assessment work and are planned for implementation in 2010.

In 2008 the authorized AUM's included Term and Term Private Grazing Permits totaling 68,538. The total Permitted Livestock was 75,888 AUM's. AUM's were less than planned due to non-use for permittee convenience.

**Recreation:** In 2008, the Forest revised its Recreation Facilities Analysis (RFA) to provide consistency with the new national template and reflect current budgets and revenues. The analysis process was developed nationally to help forests align their developed recreation sites with the unique characteristics of the forest, projected recreation demand, visitor expectations and revenue. It is the first consistent analytical process that allows National Forests to know what running a recreation site costs, the relative importance of that site and its condition. Through the RFA process, the Forest evaluated 85 developed recreation sites, including campgrounds, picnic areas, trailheads, Sno-Parks, horse camps, cabin/lookouts, boat/swim/fish areas and interpretive and observation sites. With public input, the Forest developed a "program of work" outlining the future management of recreation sites over the next 5 years.

The Forest also began travel management planning under direction of the 2005 Travel Management Rule. Highlights of the Rule include:

- Each national forest or ranger district shall designate those roads, trails, and areas open to motor vehicles.
- Designation will include class of vehicle and, if appropriate, time of year for motor vehicle use. A given route, for example, could be designated for use by motorcycles, ATVs, or street-legal vehicles.
- Once designation is complete, the rule will prohibit motor vehicle use off the designated system or inconsistent with the designations.
- Designation decisions will be made locally, with public input and in coordination with state, local, and tribal governments.
- Designations will be shown on a motor vehicle use map. Use inconsistent with the designations will be prohibited.

This planning effort is scheduled for completion, with a Motorized Vehicle Use Map issued in 2011.

**Social and Economic Aspects:** Forest Service activities have been below planned levels, thus the associated activity in the local economy has been less than originally projected in the forest plans. From 2007 to 2008 national and state unemployment rates increased an average of 1.6 percent. As of September 2008, national and State unemployment rates were 6.2 percent and 6.8 percent respectively. Klamath and Lake Counties, at 10.7 percent and 9.6 percent unemployment respectively, were well above the national and state unemployment rates. In the past 7 years, funding from the *Secure Rural Schools and Community Self-Determination Act of 2000* provided important money for activities such as watershed restoration on the Forest and adjoining private lands. Oftentimes, Title II projects resulted in leveraging resources through partnerships up to threefold.

In 2008, the Fremont-Winema Resource Advisory Committee (RAC) recommended approximately \$2 million of Title II funding for 22 watershed restoration projects such as fish passage, fuels reduction, and habitat improvement. These projects also provided employment in local communities. Of the 22 projects to be implemented, 15 are in Klamath County and 7 are in Lake County. The RAC supported funding of 10 proposals submitted by nonprofit organizations and agencies, including US Fish and Wildlife Service, The Nature Conservancy, Klamath Basin Rangeland Trust, Oregon Department of Fish and Wildlife, City of Lakeview, and Lake County Resource Initiative.

**Implementation of Plan Standards and Guidelines** continues to be a focus of the Forest through project planning and implementation monitoring. All projects implemented in 2008 were consistent with their respective Forest Plan standards and guidelines, with the exception of the Launch Integrated Fuels and Vegetation Management Project, which required a forest plan amendment to reduce the cover standard for mule deer winter range and allow white fir larger than 21 inches to be cut in stands that were historically ponderosa pine forests. The removal of large diameter white fir was necessary to increase resiliency of remnant ponderosa pine or achieving desired stand density objectives. The reduced stocking levels necessary to meet fuel objectives and return the forest to historic stand conditions caused mule deer winter range cover to drop below forest plan standards.

**The 2008 Accomplishment of Outputs and Services** table which follows, shows numerically what the Forest has produced in comparison to what was planned. Since implementation of the Forest Plans, the Forest has produced well below projected levels in all categories that involve ground-disturbing work, except reforestation and watershed improvements. This highlights the major emphasis on ecosystem restoration. The recreation related outputs are low due to insufficient funding to do the planned work. Generally, budget levels are limiting outputs in program areas including recreation, timber and fuel treatments.

For more information about forest monitoring see: [www.fs.fed.us/r6/frewin/projects/monitoring/](http://www.fs.fed.us/r6/frewin/projects/monitoring/)

## 2008 ACCOMPLISHMENT OF OUTPUTS AND SERVICES

MONITORING ITEM	FOREST PLAN PROJECTED OUTPUTS		2008 ACCOMPLISHMENTS
	Winema	Fremont	
<b>FOREST MANAGEMENT</b>			
<b>Allowable Sale Quantity <sup>1</sup></b>			
MMBF/Year	19	25	55.9 <sup>3</sup>
<b>Timber Sale Quantity <sup>2</sup></b>			
MMCF/Year	35	28	140 <sup>3</sup>
MMBF/Year	167	155	70 <sup>3</sup>
<b>Silvicultural Treatments (Ac/Year)</b>			
Commercial Thinning	2,700	7,500	4,209
Overstory Removal	1,600	0	
Regeneration Harvest	500	8,900	
Single Tree Selection Harvest	8,400	12,500	2,296
Salvage Cut	13,700	-	247
<b>Reforestation (Ac/Year)</b>	6,400	4,000	1,364
<b>Timber Stand Improvement (Ac/Year)</b>	14,400	8,000	17,875
<b>Fuel Treatment (Ac/Year)</b>	27,600	20,000	20,000
<b>TRAVEL MANAGEMENT</b>			
<b>Road Const./Reconstr (Miles)</b>			
Forest Road Program	22	-	105
Timber Purchaser Roads	31	156	2
<b>Total Road System (Miles)</b>	5,517	-	12,843
<b>Road Access Mgmt (Miles)</b>			
Open for Use	-	-	7,771
Closed to Use	-	-	5,071
<b>Road Access Type (Miles)</b>			
Passenger Car	510	-	995
High Clearance Vehicle	2,120	-	6,776
Intermittent Access	2,887	-	5,071
<b>RECREATION</b>			
<b>Dev Recreation Construction (PAOT)</b>	695	-	0
<b>Trail Const/Reconstruction (Miles)</b>	124	-	28
<b>RANGE</b>			
<b>Authorized Term Grazing Permits (AUM)</b>	8,191	60,347	
<b>Permitted Livestock (AUM)</b>	13,000	70,100	75,888
<b>WILDLIFE</b>			
<b>Habitat Improvements</b>			
<u>T&amp;E Species</u>			
Structures	-	-	
Miles	-	-	
<u>Other Species</u>			
Structures	-	1,450	
Acres	-	1,100	1,190
<b>WATERSHED</b>			
<b>Watershed Improvements</b>			
Structures (Acres)	10	250	

1. Chargeable volume is the quantity of timber that may be sold, from the area of suitable land covered by the Forest Plan, for a time period specified by the Plan. This quantity is usually expressed on an annual basis as the "average annual allowable sale quantity".

2. The volume of timber planned for sale during the first decade of the planning horizon. It includes the allowable sale quantity (chargeable volume) and any additional material (non-chargeable volume) planned for sale. Expressed as the average for the first decade.

3. Source: PTSAR Report