United States
Department of
Agriculture

Forest Service
Fremont-Winema
National Forests

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FREMONT-WINEMA NATIONAL FORESTS

Monitoring and Evaluation Report

Fiscal Year 2009

KEY FINDINGS

Vegetation/Fuels Management: Accomplishments for 2009 include:

- Awarding fourteen timber sales, including three fire salvage sales and three biomass sales, totaling 48 million board feet of volume
- Improved forest health by reducing hazardous fuels and improved wildlife forage on 5,465 acres through commercial harvest
- Began implementation of three new large stewardship projects, which provided 17 million board feet of timber and continued work on six other stewardship projects
- Began implementation of the Red Zone Safety Project by removing dead and dying trees from approximately five campgrounds, six trailheads and along Dead Horse and Campbell recreation complex roads. In addition, opened a 200 acre commercial firewood cutting area
- Sold over 2,400 firewood permits totaling almost 12,000 cords of personal use firewood. Issued about 800 firewood permits for 6,400 cords of free-use firewood.
- Removed woody biomass material from roughly 6,000 acres of harvested areas instead of burning the materials in the woods. This material provided biomass fuel for generation of electricity.

Forest Health:

- The 2009 aerial survey of mountain pine beetle infestations indicate an expansion onto 270,000 acres. Roughly 90% of the area is considered light tree mortality of less than 10 dead trees per acre, and 10% is considered moderate level of tree mortality of 10 to 50 dead trees per acre. The Yamsay Mountain area had the most additional tree mortality. 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 of age. The mountain pine beetle can affect all western pines, including whitebark pine.
- Reforestation occurred on 1,495 acres, the majority was in past wildfire areas with a minor amount in mountain pine beetle-caused tree mortality areas.
- Timber stand improvement reduced overstocking of smaller trees on 6,412 acres. Implementing timber sales, prescribed fire and fuels reduction assisted in reducing inter-tree competition on approximately 23,000 acres.

Hydrology/Aquatics/Watersheds:

Forest Plan standards and guidelines provide direction to meet the goals of maintaining and improving water quality, fish habitat and other water related resources on the forests. Below is a summary of FY 2009 monitoring designed to assist in determining the effectiveness of the Forest Plan standards and guidelines in meeting the goals of protecting, maintaining, and improving the physical environment of the forest.

- The Forest-wide Level II Stream Survey Program is one of the important aquatic monitoring tools on the forest. The forest surveyed 29 miles of stream habitat in 2009. The survey data provides a record of current physical stream conditions and baseline information about the aquatic species present. Stream survey data is also used to identify aquatic habitat restoration projects and as a monitoring tool to document the success of past restoration projects.

- Stream temperature monitoring was conducted on the forest at 79 locations in FY 2009. Objectives for monitoring include watershed characterization, long-term monitoring to provide a baseline for comparison to other sites, monitoring thinning units, and monitoring stream restoration projects.
- Water quality was monitored bi-weekly at two locations on Jack Creek from June through September to assist in evaluation of riparian fencing and Oregon spotted frog habitat.
- There are 15 streams that are measured a minimum of every 5 years to detect changes in channel dimensions over time. In 2009, ten channel cross-sections were monitored on the North Fork Willow Creek. This monitoring is being conducted on streams in critical habitat or that may influence habitat for Lost River Suckers.

Wildlife:

The Forest continues to focus on habitat inventory and restoration efforts for wildlife, especially those habitats for species of conservation concern. In 2009, lodgepole encroachment was thinned on 113 acres to improve Oregon spotted frog habitat and juniper was cut on 194 acres to improve sage grouse and mule deer winter range habitat. In addition, the following collaborative programs continue to gather information on various species of concern:

- **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. 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.
- **Mollusks surveys**: 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.
- **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.

Fisheries:

The Forest continues to focus on habitat inventory and restoration efforts for fish and wildlife, especially those habitats for species of conservation concern. The following collaborative programs continue to gather information on various species of concern:

- **Fish habitat**: The Forest completed over 40 miles of stream survey to identify the current baseline conditions and formulate future restoration opportunities. The surveys are part of a regional effort to inventory our streams following a consistent protocol.
- **Fish habitat and grazing**: The Forest completed interagency monitoring reviews with US Fish and Wildlife Service and the Forest to evaluate grazing management approaches adopted to maintain and improve habitat for bull trout, Warner sucker, Modoc sucker, Lost River sucker, and Short-nose sucker through the Level I process.
- **Oregon Department of Fish and Wildlife:** completed an annual review with ODFW related to ongoing and future activities on the Forests.

- **Bull trout recovery actions**: The Forest initiated a multi-party effort to document the existing condition of migration barriers in the Upper Sprague core area and investigate the potential to rehabilitate migration barriers in light of the presence of non-native brown trout. The final product will guide managers with prioritization of future fish barrier removal projects on national forest lands and neighboring private lands.
- **Brook trout removal:** In Threemile Creek the Forest participated in a cooperative project with multiple groups to reduce the threat of hybridization of bull trout with brook trout. Extensive multi-pass electrofishing was conducted to remove brook trout through the summer. At the end of the summer, the group reviewed the results and determined the method was not effective and other methods would be pursued in 2010.

Botany:

- In 2009, 1,015 acres of invasive plants were treated with herbicide and 1,200 acres were manually treated. Monitoring indicated 50 to 100 percent effectiveness. Monitoring indicates 742 sites previously treated had no remaining invasive plants in 2009. Inventories found 475 new invasive plant sites. Work was accomplished by temporary crews, contract, and cooperative agreements with Klamath County, Integral Youth Services, and Oregon Department of Agriculture. Botanists provided invasive plant input to 16 planning projects, implemented prevention measures during underburn and timber sale projects, inspected 7 quarries, and helped host the annual Klamath County Weed Tour.
- Migration of the Forest's legacy rare plant element occurrence and survey data into the Forest Services' corporate databases (NRIS and TESP) was completed in 2009. New inventories for bryophytes and vascular plants were conducted on 1,000 acres of fen habitat on Chemult District. Approximately 7,071 acres of vernal pool habitat was inventoried on Bly and Lakeview districts. Many new rare plant occurrences were found, including 25 sites of sensitive fungi; 45 sites of sensitive bryophytes; 1 site of Lemmon's milkvetch, the only known population in Oregon; and 23 sites of other sensitive vascular plants. Monitoring of 110 acres of pumice grapefern habitat was conducted to determine the need for future habitat enhancement treatments. In partnership with Integral Youth Services, firewood slash was removed from 10 acres of blue-leaved penstemon habitat, improving conditions for this rare species. The final reports for three challenge cost share partnership projects were completed in 2009: Carex constanceana inventory/taxonomic study; *Astragalus pecki* disturbance ecology study; and *Iliamna bakeri* salvage logging study. Additionally, botanists conducted 16 biological evaluations in support of Forest projects, led 4 wildflower walks, hosted "fun with fungi", taught the botany section of RAP camp, and assisted with other public education events.
- Native plant material accomplishments in 2009 included committing funds to produce 2,400 lbs of native grass seed and purchasing 1,500 lbs of excess seed from 2007-2009 production fields. Three lots of grass seed were collected by Forest Service and Integral Youth Services crews. These lots will be multiplied with seed production contracts in the future. Shrub and various forb seeds were also collected for restoration of recreation areas at Lake of the Woods. In partnership with the US Fish and Wildlife Service, the Forests produced 6,000 hardwood seedlings which were used for various restoration projects in the Upper Klamath Basin.

Range:

- Three grazing allotments were assessed for compliance with Forest Plan direction. These three 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. Annual monitoring on 320,000 acres (administered to standard) indicated compliance with annual goals on 95% of the allotments monitored.

- In 2009, total permitted livestock, including term and term private grazing permits was 85,469 Animal Unit Months (AUMs). The Forests authorized AUMs totaling 72,736. The AUMs were less than planned due to vacant allotments and non-use for permittee convenience.

Recreation:

- Foremost among recreation accomplishments is the forest's effort on travel management. The Travel Management Rule was established to assist National Forests nationwide by providing them better planning tools to help manage their roads, trails and areas designated for motor vehicle use. In July 2009 the Forest began scoping for the Motorized Travel Management Project. The Forest received comments from 184 individuals, other agencies, and tribal governments. Review of the comments generated two additional alternatives studied in detail and considered two other alternatives not developed in detail.

Social and Economic Aspects:

Secure Rural Schools Act, Title II:

- For the FY 2009 program, the Fremont-Winema RAC recommended, and the Forest approved, approximately $2.3 million of Title II funding for 31 watershed restoration projects including $1.65 million for Klamath County and $655,000 for Lake County.
- Of the 31 projects awarded, 19 are in Klamath County and 12 are in Lake County. In addition to Forest Service projects the RAC supported funding of 11 proposals submitted by several private landowners and agencies outside of the Forest Service, including U.S. Fish and Wildlife Service, The Nature Conservancy, Klamath Basin Rangeland Trust, Oregon Department of Fish and Wildlife, Bureau of Land Management, Town of Lakeview, Lake County Resource Initiative, Lake County Coop Weed Board, Klamath County, and Clean Forest Project.
- The funded 2009 projects involve hazardous fuels reduction, fish passage and connectivity, wildlife habitat improvement, erosion control, noxious weed treatments, trash clean up, stream channel restoration, wildlife habitat improvement and meadow and riparian area restoration. Most of these projects are expected to be implemented by the fall of 2010. In addition to land stewardship benefits, these projects created employment opportunities to members of local communities. The 2009 accomplishments build on previous years work.

Implementation of Forest Plan Standards and Guidelines:

The Forest continues to focus on Plan Standards and Guidelines through project planning and implementation monitoring. The Fremont Forest Plan was amended for three actions and the Winema Forest Plan for one.

Fremont Forest Plan Amendments

- Amendment 32: A non-significant amendment specific to the West Drews Watershed Restoration and Vegetation Management Project to cut white fir greater than 21 inches to facilitate ponderosa pine restoration
- Amendment 33: A non-significant amendment specific to the Red Zone Safety Project to allow the cutting and removal of hazard trees in old-growth management areas MA 3 and 14 for public safety along Forest Roads.

- Amendment 34: This is a non-significant amendment by the Secretary of Agriculture to designate potential energy corridors across the Fremont National Forest increasing MA 12- Utility and Transportation Corridors.

Winema Forest Plan Amendments

- Amendment 18: This is a non-significant amendment by the Secretary of Agriculture to designate potential energy corridors across the Winema National Forest. The decision lists the Winema National Forest but maps indicate that the corridors do not cross the forest.

The *2009 Accomplishment of Outputs and Services* table on the following page 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/

2009 ACCOMPLISHMENT OF OUTPUTS AND SERVICES

MONITORING ITEM	FOREST PLAN PROJECTED OUTPUTS		2009 ACCOMPLISHMENTS
	Winema	Fremont	
FOREST MANAGEMENT			
Allowable Sale Quantity			
MMBF/Year	19	25	40 [3]
Timber Sale Quantity			
MMCF/Year	35	28	90 [3]
MMBF/Year	167	155	48 [3]
Silvicultural Treatments (Ac/Year)			
Commercial Thinning	2,700	7,500	3,915
Overstory Removal	1,600	0	
Regeneration Harvest	500	8,900	
Single Tree Selection Harvest	8,400	12,500	1,222
Salvage Cut	13,700	-	208
Reforestation (Ac/Year)	6,400	4,000	1,495
Timber Stand Improvement (Ac/Year)	14,400	8,000	6,412
Fuel Treatment (Ac/Year)	27,600	20,000	23,000
TRAVEL MANAGEMENT			
Road Const./Reconstr (Miles)			
Forest Road Program	22	-	-
Timber Purchaser Roads	31	156	-
Total Road System (Miles)	5,517	-	6,426
Road Access Mgmt (Miles)			
Open for Use	-	-	-
Closed to Use	-	-	-
Road Access Type (Miles)			6,426
Passenger Car	510	-	
High Clearance Vehicle	2,120	-	796
Intermittent Access	2,887	-	195
RECREATION			
Dev Recreation Construction (PAOT/Days)	695	-	800
Trail Const/Reconstruction (Miles)	124	-	200
RANGE			
Permitted Livestock (AUM)	13,000	70,100	72,736
WILDLIFE			
Habitat Improvements			
T&E Species			
Structures	-	-	0
Miles	-	-	0
Other Species			
Structures	-	1,450	
Acres	-	1,100	807
WATERSHED			
Watershed Improvements			
Structures (Acres)	10	250	0

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