United States Department of Agriculture

**Forest Service** Fremont-Winema National Forests

April 2006



## FREMONT - WINEMA NATIONAL FORESTS

Monitoring and Evaluation Report

Fiscal Year 2006



## **KEY FINDINGS**

**Ecosystem Restoration:** Over the last few years, the Upper Klamath Basin and the Chewaucan Watershed have been the focus of extraordinary ecosystem restoration efforts in agricultural lands, wetlands, forested uplands, and riparian systems. In the Klamath Basin, the endangered species, water quality, and water quantity problems, with their associated agricultural, tribal, and social and economic impacts have demanded Presidential and Congressional attention and attracted millions of dollars for study and active restoration. The Fremont-Winema National Forests have been and are now cooperating and partnering with the Klamath Tribes, Bureau of Reclamation, Bureau of Land Management, Bureau of Indian Affairs, Oregon Department of Environmental Quality, Oregon Department of Forestry, Oregon Department of Fish and Wildlife, The Nature Conservancy, US Environmental Protection Agency, the US Fish and Wildlife Service, Klamath Basin Working Group, local communities, the Resource Advisory Committee and local watershed councils to restore habitats and improve water quality and quantity across the area. Data collection, large-scale wetland restoration, riparian habitat enhancement, and the addressing of point and non-point source pollution problems are progressing rapidly in and around the Fremont-Winema National Forests.

A concerted effort to restore our forested ecosystems has been occurring for a number of years on the Forest. All of our projects are designed to provide habitats that have been lost because of aggressive fire suppression and the normal growth of forests. With these projects we are providing for more open areas and fewer trees to promote the development of old growth, allow fire to return to a more natural role and provide habitat for species dependent upon larger trees. There is an unparalleled effort to reforest those lands denuded by wildfire, in order to provide forested habitats on an accelerated schedule. We have been planting at lower stocking levels to provide open habitats sooner, and to reduce the need for later silvicultural treatments. This will provide the desired habitats and allow limited funding to be used in other areas.

The Fremont-Winema Resource Advisory Committee, formed in accordance with the "Secure Rural Schools and Community Self-Determination Act of 2000," supports restoration activities on both private and federal lands. The Forest has implemented many projects with these funds, including several that reduced the impacts of roads and others that addressed hazardous fuels accumulations and riparian restoration.

**Employee Involvement.** Forest employees contribute their leadership skills and expertise to watershed restoration projects in the Upper Klamath Basin, Chewaucan, and other watersheds. They have worked closely with most of the local watershed working groups and councils. Forest employees are assisting the Klamath Basin Ecosystem Foundation (funded by the Oregon Watershed Enhancement Board) in the development of the Upper Sprague Watershed Analysis. The Forest continues to be an active partner in the Hatfield Upper Klamath Basin Working Group, responsible for many of the significant and effective restoration efforts to date.

**Implementation of Standards and Guidelines** continues to be a focus of Forest monitoring. The Forest continues to adjust range allotment management to insure continued compliance with programmatic biological opinions issued by the U.S. Fish and Wildlife Service. In 2006 the fifteen long-term monitoring sites that address the effectiveness of range management options, were revisited to examine change in ecological status. Three sites showed downward trend, two sites showed upward trend and the rest remain stable when compared to readings taken in 2002. Due to the current amount and juxtaposition of cover and forage and the need to address forest health issues, the Fremont Forest Plan was amended for the Jakabe Restoration Project area to authorize reduction of cover and habitat effectiveness across the Chewaucan Watershed. The Forest Plan requirement to leave all live trees over 21" diameter was found to interfere with the ability to retain healthy old growth ponderosa pine. This occurred in the Burnt Willow Project area where large white fir were competing with even larger ponderosa pine and threatening their survival. A proposed Fremont Forest Plan amendment is being developed to address this site-specific issue.

**Threatened, endangered and sensitive species** are doing well where there is sufficient information to make an informed judgment. Bald eagles continue to do well on the Forest. A spotted owl demographic study, involving the Klamath Ranger District, continued. Spotted frog monitoring, including egg mass surveys and water quality sampling, continued in Jack Creek on the Chemult District. A pumice grape fern sensitive plant study continues. Numerous planned forest activities were analyzed for effects to bald eagle, Lost River, shortnose, and Warner suckers, and bull trout. Partnership recovery projects are being implemented for bull trout including the removal of brook trout from Threemile Creek and removal of brook trout and bull trout/brook trout hybrids from Long Creek.

Other wildlife populations continue to be affected by habitat changes. Timber harvest activity, fire, blow-down, fuels reduction activities, or other natural disturbances do not involve enough acres across the landscape to benefit mule deer. Canopy cover is not reduced sufficiently to allow significant forage increase, possibly limiting mule deer population numbers. Partnerships for neotropical migratory bird monitoring continue. Surveys in planned activity areas continued for goshawk, great gray owl and aspen habitat.

## ACCOMPLISHMENT OF OUTPUTS AND SERVICES

Monitoring Item	Winem	a NF	Fremor	t NF	Comments
	Plan	2006	Plan	2006	
Allowable Sale Quantity					Both Forests continue to sell less timber volume than anticipated in
MMCF/Year	19.4	6.8	24.7	3.7	the Forest Plans. A Regional amendment to the Forest Plans, Eastside
Timber Sale Program Quantity					Screens, eliminated harvest of trees over 21 inches in diameter but did
MMCF/Year	34.7	7.7	28.0	3.9	not change the planned harvest levels, thus current volumes are
MMBF/Year	166.8	31.8	154.8	19.1	less than planned. Budget has also limited these outputs.
Dead Lodgepole Sold					* Forest data systems can no longer track the volume of dead
MMCF/Year	11.5	*	-	*	lodgepole pine sold.
MMBF/Year	40.2	*	-	*	
Ponderosa Pine Sold					Ponderosa pine volume sold is lower than planned levels for the same
MMCF/Year	8.8	2.3	-	3.1	reasons noted above.
MMBF/Year	53.9	11.5	-	15.3	
Silvicultural Treatments					The focus of harvest has changed to thinning, selection and salvage
(Ac/Year)	2,700	8,968	7 500	12.060	harvests, with little regeneration harvests occurring. The factors
Commercial Thinning Overstory Removal	2,700	8,968 109	7,500 0	12,060 0	affecting the harvest volume also have affected the number of acres
Regeneration Harvest	500	109	8,900	0	harvested.
Selection Harvest	8,400	915	12,500	2,778	
Salvage Cut	13,700	1,032	-	11,276	
Survage Cut	13,700	1,052	-	11,270	With the leak of regeneration howests, there is little or no planting
Reforestation (Ac/Year)	6,400	0	4,000	3,372	With the lack of regeneration harvests, there is little or no planting
Kelorestation (AC, Tear)	0,400	0	4,000	5,572	needed for harvested areas. Most reforestation work was for wildfire
					restoration following the Toolbox fire.
Timber Stand Improvement					Appropriated funds limit the amount of thinning to reduce stand
(Ac/Yr)	14,400	9,137	8,000	1,619	density and ladder fuels. Alternative funds like Title II (RAC) and
					appropriated wildlife funds are providing most of the funding for TSI.
Fuel Treatment (Ac/Year)	27,600	12,053	20,000	16,050	Mechanical: Win=4483 ac, Fre=5284 ac. Balance is prescribed fire.
Road Construct/Reconstr	27,000	12,000	20,000	10,000	
(Miles)					
Forest Road Program	22	0.1	-	0.6	
Timber Purchaser Roads	31	4.1	156	0.0	
Total Road System (Miles)	5,517	6,090	-	6,790	
Road Access Mgmt (Miles)					'Open for use' is not measured annually. The figures shown are
Open for Use	-	4,589	-	4,922	estimated.
Closed to Use	-	1,501	-	1,868	
Road Access Type (Miles)					
Passenger Car	510	483	-	953	
High Clearance Vehicle	2,120	2,401	-	3,885	
Intermittant Access	2,887	3,206	-	1,952	
<b>Developed Rec Construction</b>					Winema: Williamson River Campground added 10 campsites @ 5
(PAOT)	695	50	-	0	PAOT's per camp site
Trail Construct/Reconst					Fremont: Reconstructed Cougar Peak and Cottonwood Loop Trails
(Miles)	124	0.6	-	6.5	Winema: Constructed Accessible trail in Williamson River CG.
					Actual use reflects both Term and Term Private Land Grazing
Permitted Livestock (AUM)	13,000	9,850	70,100	71,492	Permits. Actual use under Term Permits was 60,704 AUMs. Analysis
					for use in Allotment Management Plan updates was completed on 5
					allotments.
Range Improvement					Fences were constructed to implement allotment management plans.
Structures	-	0	-	5	
Acres	-	0	-	0	
Habitat Improvements					* These outputs are no longer separated by Forest. Structures are no
<u>T&amp;E Species</u>					longer tracked. Outputs in this category are:
Structures	-	*	-	*	Habitat Restored/Enhanced
Miles	-	*	-	*	Fish: Streams - 40 miles enhanced (incl 34 partnership, 12 T&E)
Other Species		*	1 450	*	Lakes - 10 acres enhanced (incl 5 partnership) Wildlife: 1 680, acres with appropriated funds
Structures	-	*	1,450	*	Wildlife: 1,680 acres with appropriated funds.
Acres	-	т Т	1,100	Ť	351 acres additional using partner funding
Watanahad Improvements					T&E Wildlife: 0 acres
Watershed Improvements		0		0	23 ac Sproats Meadow Headcut Stabilization. (Win)
Structures Acres	- 10	197	- 250	0 0	3 ac Willow Planting Along Sellers Marsh (Win)
10105	10	197	250	0	170 ac Round Meadow restore historic conditions. (Win)
					1 ac Camp McLaughlin Erosion Control (Win)

**The Forest's timber program** includes vegetation management projects designed to restore forested ecosystems as described above. Some of these projects use timber sales and provide commercial products that will help sustain local communities economically, though this is not their primary purpose. These projects are designed to sustain old growth conditions; protect spotted owl habitat connectivity between Late Successional Reserves and Crater Lake National Park; rehabilitate meadows, hardwoods, and riparian habitats; reduce the risks of fire, tussock moth, budworm, and root rots; and allow the reintroduction of fire's function in the system. These projects also include road closures, obliteration, and relocation. Commercial salvage of the 85,000-acre Toolbox Fire Complex was essentially completed in 2005. Even with significant salvage harvest, a small fraction of planned timber harvest has occurred during the life of the Forest Plans. Regional Foresters' Amendment 2 (Eastside Screens) limited the types of live trees that can be harvested, but did not adjust the allowable sale quantity for the Forests accordingly. Timber harvest within the range of the northern spotted owl has been very limited due to the cost and difficulty in developing adequate compliance with legal requirements. The Fremont -Winema National Forests' Land and Resource Management Plan revision process has been delayed for budgetary reasons. The revision process will re-address the relationships between timber management, wildlife habitat, and socio-economics, as recommended over the last several years by the Forest's interdisciplinary team.

**Forest health** concerns are related primarily to the effects of too many trees on the landscape caused by decades of fire suppression and limited stocking control. This overcrowding results in too little water and too few nutrients getting to each tree to maintain good tree health. With the trees stressed, they are more susceptible to attacks by mountain pine beetle on the pine trees, and fir engraver on the white fir trees. The drought in recent years has added additional stress that has led to increased mortality in lodgepole pine on the Paisley District, and white and Douglas fir on the Klamath District. Past mortality in the white fir will continue to be a problem due to the increased fire danger those dead trees present. Management of the stocking levels in the forest is ongoing, but we will continue to have overstocked stands due the financial and procedural limitations on the amount of work we can accomplish in a year. Bark beetle activity on the Paisley Ranger District is currently very high in both lodgepole pine and ponderosa pine. There is sufficient lodgepole to sustain the outbreak through 2007. After that, we expect it to persist within ponderosa pine but probably at a lower level than now. Aerial observation revealed small areas of light defoliation caused by pandora moths. This amount of damage is a dramatic decline from 2004 levels. Some defoliated trees that were subsequently attacked and killed by bark beetles were noted near the Klamath Marsh. The moths will be mating in 2007 and will be out during July and August. The moth population may, or may not, rebound from 2006 levels.

Invasive plants are also a concern. Monitoring revealed that about 7700 acres on the Forests are infested with invasive species including Canada thistle (1287 ac), musk thistle (5124 ac), medusahead (676 ac), hounds tongue (198 ac) and several others. Development of an EIS to address this issue began in 2007.

**Outputs of goods and services** 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 planned levels in all categories that involve ground-disturbing work, except reforestation and watershed improvements. This highlights the major emphasis on ecosystem restoration. The timber related outputs are low for the reasons discussed above. The recreation related outputs are low due to insufficient funding to do the planned work. Generally, budget levels are limiting outputs in several programs including recreation, timber and fuel treatments.

From the social and economic aspect, Forest Service activities have been well below planned levels, thus the associated activity in the local economy has been much less than originally anticipated. Unemployment rates are still above the national (4.6%) and state (5.2%) averages with Klamath and Lake Counties at 5.9 and 5.4% respectively in August of 2006. Employment improvements in Lake County are due to opening of a new state prison near Lakeview and the increased state government employment associated with the prison. Klamath County is seeing employment improvement associated with an incoming retiree population, particularly in the wholesale/retail trade and construction sectors. The "Secure Rural Schools and Community Self-Determination Act of 2000" eliminated the linkage between current National Forest receipts and payments to the states. Thus, changes in National Forest activities do not directly affect county budgets as they have in the past. During 2006, funds provided under that Act were used for ecosystem restoration activities on the Forests and private lands and contributed to increased economic activity. The Act expired on September 30, 2006 and is now the subject of Congressional debate. Expiration of the Act will have implications on county budgets as well as the ability of the Forest to continue the current level of TSI, habitat improvement, watershed improvement and fuels reduction work. Since the 25% Fund Act of 1908 returns to effect upon expiration of the Secure Schools Act, county budgets would again be tied to annual gross receipts from the National Forests. Those receipts are expected to be much less than in decades past. In addition, receipts associated with stewardship contracts do not contribute to the 25% fund and the use of those contracts is expected to increase. While this does not benefit the counties directly, all receipts from these contracts can be used for contract work on the forest, thus creating jobs and income with the receipts that would have otherwise been returned to the U.S. Treasury.

For more information about forest monitoring see: www.fs.fed.us/r6/frewin/projects/monitoring/