

Malheur National Forest

FOREST SUPERVISOR OFFICE

P.O. Box 909
431 Patterson Bridge Road
John Day, Oregon 97845
(541) 575-3000
Bonnie J. Wood, Forest Supervisor

BLUE MOUNTAIN RANGER DISTRICT

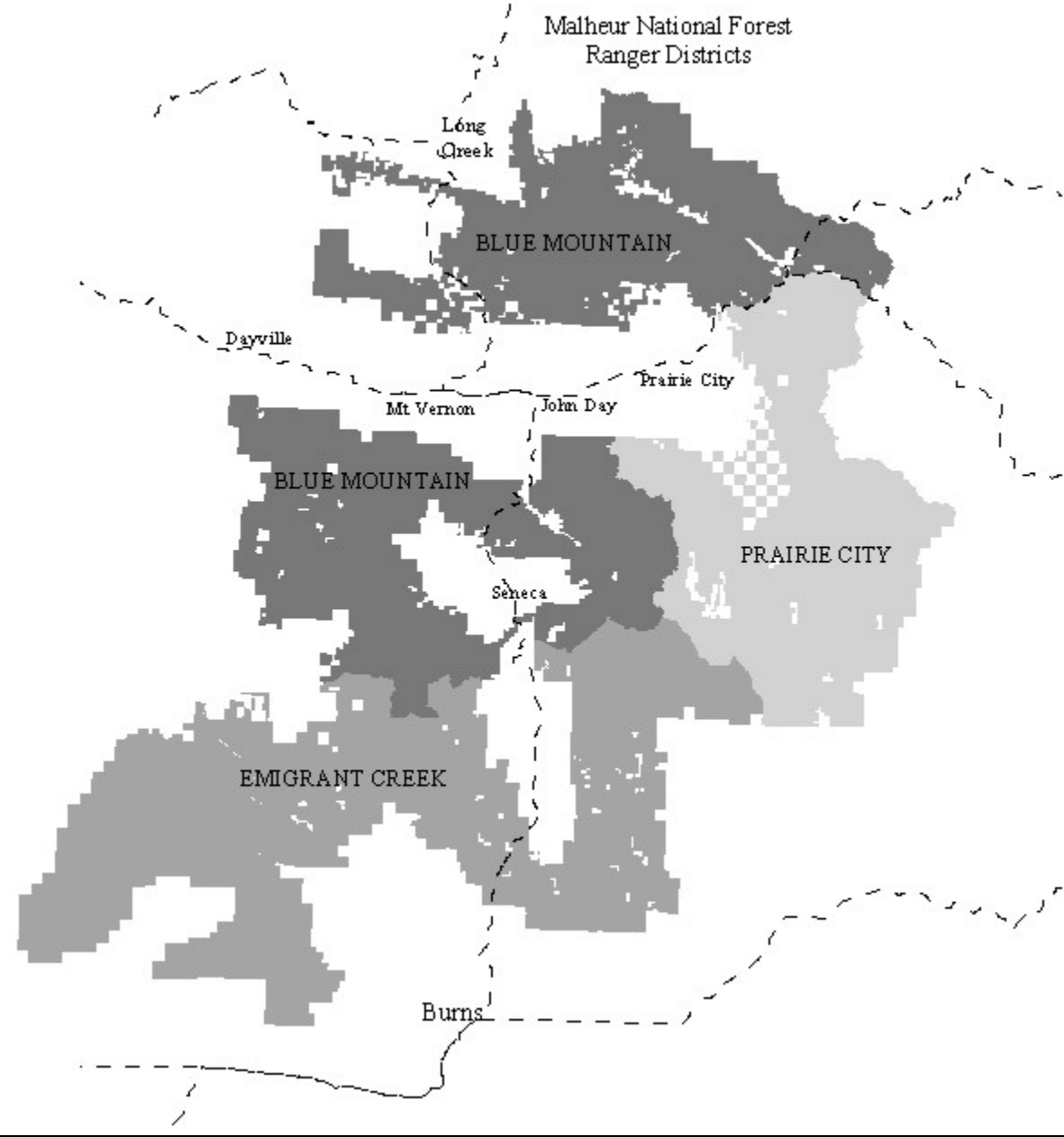
P.O. Box 909
431 Patterson Bridge Road
John Day, Oregon 97845
(541) 575-3000
Douglas Robin, District Ranger

EMIGRANT CREEK RANGER DISTRICT

HC74, Box 849
Hines, Oregon 97738
(541) 573-4300
Jim Keniston, District Ranger

PRAIRIE CITY RANGER DISTRICT

P.O. Box 337
327 West Front Street
Prairie City, Oregon 97869
(541) 820-3311
Richard Haines, District Ranger



SECTION M

Table of Contents

	<u>Page</u>
<u>MONITORING ITEMS NOT REPORTED THIS YEAR</u>	M- 4
<u>FOREST PLAN AMENDMENTS FOR FY2000</u>	M- 4
<u>SUMMARY OF RECOMMENDED ACTIONS</u>	M- 5
 FOREST PLAN MONITORING ITEMS	
<u>Item 1</u> Developed Recreation	M- 9
<u>Item 3</u> Trail System	M-10
<u>Item 6</u> Wilderness	M-11
<u>Item 10/11</u> Resident and Anadromous Fish Habitat.....	M-12
<u>Item 15</u> Proposed, Threatened, Endangered and Sensitive Plants	M-15
<u>Item 16</u> Raptor Nest Sites.....	M-16
<u>Item 30</u> Water Resources	M-17
<u>Item 32</u> Soil Resources.....	M-17
<u>Item 35</u> Administrative Facilities	M-17
 <u>ACCOMPLISHMENTS</u>	 M-18
 <u>SPECIAL REPORT ITEM</u> – SUMMIT FIRE RECOVERY PROJECT MONITORING	 M-19
 LIST OF TABLES AND FIGURES	
	<u>Page</u>
<u>Table M-1</u> Trail Maintenance	M-10
<u>Figure M-1</u> Range Conditions on the Devine Allotment.....	M-12
<u>Figure M-2</u> Shrub Utilization on the Devine Allotment	M-13
<u>Figure M-3</u> Emigrant Creek Redband Trout Monitoring Project.....	M-13
<u>Figure M-4</u> Calamity Creek within Calamity Livestock Breeding Pasture	M-14
<u>Table M-2</u> Forest Accomplishments – Fiscal Year 2000	M-18
<u>Table M-3</u> Summit Fire Recovery Project – Monitoring Data	M-20

MONITORING ITEMS NOT REPORTED FOR FY2000

A number of Monitoring Items from the Malheur Forest's 1995 Monitoring and Evaluation Plan were not reported in FY2000. Some items need only to be reported at predetermined intervals to detect trends; some were purposely deferred pending updated monitoring protocols or direction; while others were deferred due to lack of funding, personnel issues, or other work priorities.

Monitoring Items that were not reported are as follows:

- Item 9 Visual Resources
- Item 13 Big Game Habitat
- Item 23 Timber Suitability
- Item 24 Silvicultural Practices
- Item 25 Reforestation
- Item 26 Timber Harvest
- Item 27 Timber Offered
- Item 37 Program Budgets, Expenditures, and Accomplishments
- Item 38 Costs and Values

FOREST PLAN AMENDMENTS

There was one nonsignificant Forest Plan amendment prepared in FY2000.

<u>Amendment Number</u>	<u>Summary and Comments</u>
51	Dry Fork Analysis Area. Allowed a stand to move out of connectivity and adjusted the boundaries of Dedicated and Replacement Old Growth management area.

SUMMARY OF FINDINGS AND RECOMMENDED ACTIONS

The Summary of Recommended Actions, beginning on page M-6, lists all Malheur Monitoring Items and whether they were deferred, consolidated with the other Blue Mountain Forests (Section C), or reported in this section (M). The table summarizes the key findings and the recommended actions to be taken because of this year's monitoring for the Malheur National Forest. A more complete analysis of reported monitoring items can be found later in this section (M) or in the Coordinated Monitoring Section (C). All three Malheur National Forest ranger districts did not report on every monitoring item. Consequently, there are some monitoring items which could not be reported at the Forest level. The monitoring response for these items indicates which ranger districts provided information into this report.

Categories of recommended actions are identified in the table as follows:

Change Practices (CP) - Indicates that the results of current practices are outside the thresholds of variability and/or are not meeting specific direction set by the Forest Plan. A change in practice or procedure may be needed.

Further Evaluation (FE) - Indicates that results may or may not have exceeded the threshold of variability, but additional information or evaluation is needed to better identify the cause of the concern and/or determine future actions.

Amend Forest Plan (AP) - Indicates that results are inconsistent with the Forest Plan, or the Forest Plan direction was not clear. The Forest Plan may need to be changed or clarified through the amendment or revision process.

Continue Monitoring (CM) - Indicates we will continue with the current protocol.

Not Evaluated (NE) – The monitoring item was not evaluated this year.

Summary of Recommended Action

◆ 2000 Monitoring Report ◆ Malheur National Forest

Report Section*	MI#	Monitoring Item (MI)	1999 Action	2000 Recommended		Action Amend Forest Plan	Remarks**
				Change Practice	Further Eval.		
MAL	1	Developed Recreation	CP				Facilities generally meeting recreation demand. Work needed on deferred maintenance. Continue to monitor.
---	2	Dispersed Recreation	NE				Dropped in 95 Monitoring Plan.
MAL	3	Trail System	CM				Incomplete response. Over 600 miles of trail maintained. Backlog of reconstruction needs exists. Continue to monitor.
---	4	Semi-Primitive Recreation Setting	NE				Dropped in 95 Monitoring Plan.
COORD	5	Off-Highway Vehicle (OHV) Use	NE				Incomplete response. Continue to monitor.
MAL	6	Wilderness	CM				Complete the Levels of Acceptable Change and capacity study for determining outfitter guide needs. Emphasize hunting season wilderness patrols. Continue to monitor.
COORD	7	Wild and Scenic Rivers	FE				Most Wild and Scenic standards are being met. Continue to make range administration a high priority. Continue to monitor.
COORD	8	Cultural and Historic Site Protection	CM		X		16 of 116 monitored sites were impacted, with livestock grazing accounting for 9 impacted sites. Grazing impacts were associated with water developments.
DEF	9	Visual Resources	FE				Not evaluated in FY2000.
MAL	10/11	Resident and Anadromous Fish Habitat	CM		X		Incomplete response. Overutilization of riparian vegetation is degrading habitat in some drainages. Partnerships are expanding aquatic baseline data. Restoration efforts are ongoing.
COORD	12	Dead and Defective Tree Habitat	FE		X		Surveys indicate that standards are not met in some areas.

* Report section where additional information can be found: MAL = Malheur; COORD = Coordinated; ACCOM RPT = Accomplishment Report Table. DEF= Deferred (not evaluated for FY2000).

** Items in quotation marks note title of items in the Coordinated Section if different from the Forest monitoring title.

Report Section*	MI#	Monitoring Item (MI)	1999 Action	2000 Recommended Action			Remarks**
				Change Practice	Further Eval.	Amend Forest Plan	
DEF	13	Big Game Habitat	NE				"Elk/Deer Habitat". Not evaluated in FY2000.
COORD	14	Old Growth Habitat	FE				Incomplete response. Six designated old growth areas evaluated. While some standards were not met, overall habitat evaluation criteria were met. Continue to monitor.
MAL	15	Threatened, Endangered, and Sensitive Species	FE		X		Incomplete response. Aquatic TES species potentially affected by grazing and recreational activities. Terrestrial TES species successfully protected.
MAL	16	Raptor nests	FE				Incomplete response. Pre-implementation survey completed in Silvies Canyon watershed. Goshawk nest site protection measures monitored on one sale and were effective. Continue to monitor.
COORD	19	Range Allotment Status	FE		X		"Allotment Management Planning". Incomplete response. No Allotment Management Plans were completed in FY2000.
ACCOM RPT	20	Range Improvements	FE		X		22 structural improvements were done.
COORD & ACCOM RPT	21	Range AUMs, Utilization, and Condition	CM				"Forage Utilization". Incomplete response. 88% of monitored pastures met standards. Continue to monitor.
COORD	22	Managing Competing and Unwanted Vegetation	CM				"Vegetation Management and Noxious Weeds". 205 acres of noxious weeds were treated. Continue to monitor.
DEF	23	Timber Suitability	NE				Not evaluated in FY2000.
DEF	24	Silvicultural Practices	CM				"Reforestation". Not evaluated in FY2000.
DEF	25	Reforestation	CM				Not evaluated in FY2000.
DEF	26	Timber Harvest	FE AP				"Harvest Methods and Acres". Not evaluated in FY2000.
DEF	27	Timber Offered	FE AP				"Timber Offered for Sale". Not evaluated in FY2000.
---	28	Opening Size	NE				"Harvest Methods and Acres". Dropped in 1995 Monitoring Plan.

Report Section*	MI#	Monitoring Item (MI)	1999 Action	2000 Recommended Action			Remarks**
				Change Practice	Further Eval.	Amend Forest Plan	
COORD	29	Insects and Disease	CM				Western spruce budworm reappeared with light defoliation, monitor in FY2001. Armillaria, annosus in fir, and blackstain root diseases are intensifying. Continue to monitor.
MAL	30	Water Resources	FE				Incomplete response. Blue Mountain Ranger District followed Forest Plan standards for protection of water resources. Continue to Monitor.
COORD	31	Air Quality	CM				"Air Quality and Smoke Management". Forest Plan standards and MOU agreements were met. Continue to monitor.
MAL	32	Soils Resources	FE		X		Incomplete response. About one half of monitored timber sales did not meet Forest Plan standards.
COORD	33	Minerals	CM				112 claims on the Forest were inspected and met Forest Plan standards and guidelines. Continue to monitor.
COORD	34	Road Mileage and Open Road Density	FE				"Roads". 99.7 miles of roads were decommissioned or closed. 37.1 miles were reconstructed. Continue to monitor.
MAL	35	Administrative Facilities	NE		X		Incomplete response. Some Emigrant Creek Ranger District facilities are inadequate and there is a maintenance backlog.
COORD	36	Fire for Resource Benefits	CM			X	"Fire Managed for Resource Benefits". Fire Plan needs to be updated in the Forest Plan revision process.
DEF	37	Program Budgets, Expenditures, and Accomplishments	FE AP				"Socio-Economics". Not evaluated in FY2000.
DEF	38	Costs and Values	FE AP				"Socio-Economics". Not evaluated in FY2000.
COORD	39	Local Income	FE AP		X	X	"Socio-Economics".
COORD	40	Local Employment	FE AP		X	X	"Socio-Economics".
COORD	41	Payments to Counties	FE AP		X	X	"Socio-Economics".

Developed Recreation

Item 1

Questions: Are existing developed recreation facilities accommodating recreation demand? Are developed recreation facilities meeting customer expectations and desires?

Existing facilities are generally meeting current recreation demand. User information for occupancy rate was obtained by random sampling throughout the use period. Twenty-three campgrounds, four forest camps, and two recreation rentals were surveyed. Overall occupancy in the developed campgrounds was between 40 to 50 percent. Some areas were near capacity during high use times, such as occasional weekends, holidays, hunting seasons, and special events. The three most popular campgrounds, Magone Lake, Strawberry, and Big Creek, had an occupancy rate of 53 percent, which is similar to the rate in FY1999 for these three campgrounds. Magone Lake Campground, especially the beach area, is not meeting the demand during the peak summer season.

The four forest camps experienced a 49 percent occupancy rate. While demand is generally met, except for the peak times of holidays and hunting seasons, the Deerhorn Forest Camp on the Blue Mountain Ranger District had a 100 percent occupancy rate and was overused. High use in this camp may be related to the fact that it is a non-fee site and is within ½ mile of a fee campground.

The two recreational rental facilities were not rented out in FY2000. Prairie City Ranger District resources to prepare, supply, and oversee the rental program have not been available. These sites have the potential to be very popular during the fall hunting seasons.

Most customer demands are being met, especially at the non-fee campgrounds. As a group the campgrounds are rated high in terms of clean facilities, setting, and overall experience. Users of fee campgrounds expressed a desire for potable water and garbage service. Specific desires mentioned on comment cards include level campsites, more tent sites, paved paths to toilets designed for universal access, toilet upgrades, and pull through RV campsites.

Recommended Action:

- Continue to monitor.
- Work on major deferred maintenance, with priorities on upgrading water systems and replacing aging barriers.

Trail System

Item 3

Question: How many miles of trail were maintained, constructed, and reconstructed for each type of trail that exists on the Forest?

Only the Emigrant Creek and Prairie City Ranger Districts reported data for this item, consequently results are not Forest-wide.

On the Emigrant Creek Ranger District ten miles of the Craft Cabin Trail were reconstructed, thereby eliminating about nine unnecessary stream crossings and moving the trail away from the stream. About 1.5 miles of new trail was constructed over Thompson Mountain, connecting it to the south portion of the Craft Cabin Trail. A small trailhead with vehicle parking was constructed for the new section of trail.

All foot/horse and bicycle trails on the Prairie City Ranger District were cleared of down and hazardous logs. It is likely that standards for trail maintenance have not been met for District and wilderness trail systems. Backlog reconstruction needs are evident. A little more than half of the snowmobile trails were maintained due to groomer scheduling problems.

Table M-1
TRAIL MAINTENANCE
Malheur National Forest*

TYPE OF TRAIL	TOTAL MILES OF TRAIL	MILES MAINTAINED IN FY2000	MILES CONSTRUCTED/ RECONSTRUCTED IN FY2000
Wilderness	133.6	130.9	0
All-purpose (hiking, horse, mtn biking, and motorized use)	46.9	35.1	0.1
Non-motorized	95.9	95.1	1.5
Foot-only (non-wilderness)	10.9	10.9	0
Barrier-free (handicapped accessible)	2.5	0.6	0
Mountain bike	223.1	90.9	0
Snowmobile	502.5	237.7	0
Cross-country ski	17.0	17.0	0
TOTALS	1,032.4	618.2	1.6

* Emigrant Creek and Prairie City Ranger Districts.

Recommended Action:

- Inventory specific trail reconstruction needs. Establish priority and application for funding to accomplish identified needs.

Wilderness

Item 6

Question: What is the current level of public acceptance and expectations regarding the current wilderness conditions?

The sources of information about the current level of public acceptance and expectations regarding wilderness conditions include verbal comments made in the office and to wilderness rangers in the field, as well as letters and comments on Visitor Registration Cards.

Strawberry Mountain Wilderness

Physical and biological standards: Positive comments were received regarding the clarity of lakes and running water. There was some concern expressed about horse use near the lake edge, and thick lodgepole stands and accumulated dead material in the Lake Creek drainage. Some areas of the Wildcat fire are visited as a direct result of the fire. Visitors perceived a higher availability of wildflowers and better wildlife viewing opportunities. Fishing remains a favorite activity. There were some negative comments associated with the private logging and slash burning adjacent to the wilderness boundary near Graham and Roberts Creeks.

Social standards: Concerns were expressed over a wide range of topics, including pack/riding stock use, anglers, campers, hikers, unauthorized uses, and campsites.

Managerial standards: Users expressed desires for more on the ground signing, specifically those that show distances to destination areas. Comments about trail condition, length, number, and destination were generally favorable. There were requests for more facilities at trailheads, such as toilets, parking, and water. Most users favor a Forest Service “presence” and practice some form of satisfactory wilderness ethics. Many of the wilderness violations tend to occur during hunting season when contact with wilderness rangers is low.

Monument Rock Wilderness

Physical and biological standards: Users generally accepted fencing and grazing practices. There were concerns with the sheep use around Rock Springs, and hunters putting stock in the Bull Run Spring enclosure. Concerns were also expressed about fuel loads in the Little Malheur River drainage and the high risk of catastrophic fire.

Social standards: Concerns over pack/riding stock grazing in small meadows, and unauthorized ATV use along the eastern wilderness boundary.

Managerial standards: Users request trail names on maps, and signs with distances to destination areas. Comments on trail conditions were generally favorable with the exception of concerns over stock use (tread broken and manure on trail). Most users favor a Forest Service “presence” and practice some form of satisfactory wilderness ethics. Many of the wilderness violations tend to occur during hunting season when contact with wilderness rangers is low.

Recommended Actions:

- Complete the Levels of Acceptable Change (LAC) and the capacity study for determining the need for Outfitters and Guides.
- Emphasize having wilderness patrols during the hunting season.
- Provide information on low impact wilderness use and expand Internet information.

Resident and Anadromous Fish Habitat Items 10/11

Questions: Are Standards and Guidelines for Inland and Anadromous Riparian Areas and related BMPs being applied in MA 3A, 3B, and MA 14 as directed by the Forest Plan? Is the base line data being collected and analyzed for all proposed projects in MA 3A and MA 3B? Are site-specific desired future conditions being established for fish habitat?

The Blue Mountain and Emigrant Creek Ranger Districts provided monitoring responses.

On the Blue Mountain Ranger District all activities had appropriate buffers implemented on all streams and wetlands per PACFISH direction. On the Emigrant Creek Ranger District, standards and guidelines were met for specific timber projects, including thinning and harvest. However, the guidelines for grazing in riparian areas were not fully met (24 percent of monitored pastures exceeded standards). This was probably related to drought conditions and other reasons such as lack of funding to complete scheduled Allotment Management Plans, fence maintenance, and adequate monitoring of riparian area grazing.

Incidences of overutilization of riparian vegetation are resulting in slow degradation of several components of fisheries habitat in selected drainages, and effecting the overall quality of aquatic ecosystems. This includes negative effects on bank stability and angle, water temperature, woody debris, and width depth ratios; all of which are preventing the attainment of INFISH and PACFISH riparian management objectives. Figures M-1 and M-2 show some isolated range conditions in the Devine Allotment. They represent particular situations and are not representative of the overall condition of the allotment. The comparative photos were taken of the same soil/vegetation site, about 100 feet apart but in different pastures in the allotment

Figure M-1
RANGE CONDITIONS ON THE DEVINE ALLOTMENT



In Figure M-1 the golf balls are next to the last remaining fragments of grass. Additional comparative photos of the Devine Allotment, Figure M-2, demonstrate the difference in shrub utilization by livestock between pastures. Five plus years of overgrazing portions of this pasture has resulted in a downward trend. An upland Proper Functioning Condition evaluation would rate this site as dysfunctional, since several species of noxious plants are replacing the native vegetation.

Figure M-2
SHRUB UTILIZATION ON THE DEVINE ALLOTMENT



Baseline data is being collected and used on the Blue Mountain Ranger District. All projects with FY2000 decision documents used existing Forest Service Level II stream survey data collected from 1991 to 1998. Baseline surveys for bull trout spawning habitat were completed in 1998 and 1999. On the Emigrant Creek Ranger District a partnership was developed with Oregon Department of Fish and Wildlife, the Burns Paiute Tribe, and the Central Oregon Flyfishers. This allowed additional data collection from about 20 streams; characterizing 50 miles of aquatic habitat, water temperature, and fish populations on the District. Forest Service and ODFW fisheries biologists, volunteers, and private landowners also collected baseline fish population data on Emigrant Creek as part of a Redband trout monitoring project (Figure M-3).

Figure M-3
EMIGRANT CREEK REDBAND TROUT MONITORING PROJECT



On both Districts, desired future conditions have been established with the riparian management objectives associated with INFISH and PACFISH. On the Blue Mountain District, few projects had site specific recommendations for fish habitat. One major success on the Emigrant Creek District was the change in grazing management on a portion of the Calamity Allotment near the confluence of Beaverdam, McBride, and Calamity Creeks. Livestock were removed from about 300 acres of the allotment which were rated as dysfunctional according to Proper Functioning Condition evaluations. Figure M-4 shows a reach of Calamity Creek within the Calamity Livestock Branding pasture facility where bank damage and channel widening occurred. The permittee has agreed to brand cattle off-Forest which will allow this area to recover. This area was restored in FY2000 with willow plantings and bank stabilization.

Figure M-4
CALAMITY CREEK WITHIN CALAMITY LIVESTOCK BREEDING PASTURE



Recommended Actions:

- During drought years, range monitoring should be conducted earlier in the grazing season.
- Fund range program at appropriate levels that will allow compliance with Forest Plan standards and guidelines.

Proposed, Threatened, Endangered and Sensitive Species

Item 15

Questions: Are protection and enhancement measures for proposed, threatened and endangered species prescribed in site-specific planning efforts implemented as described? Is management of proposed, threatened and endangered species across the Forest meeting Forest Plan Standards and Goals and objectives of recovery plans? What are the population and distribution status and trend for these species? Are Biological Evaluations (BEs) being prepared and are prescribed protection and enhancement numbers being implemented?

On the Blue Mountain Ranger District protection is being applied based on site-specific planning. Timing restrictions are applied as necessary to protect all proposed, threatened, and endangered species present in the affected area. Forest Plan standards, goals, and objectives are being met with the management of all proposed, threatened, and endangered species. All District projects requiring a BE are being appropriately addressed, and included protection and enhancement measures are implemented as described.

Aquatic proposed, threatened, and endangered species are protected on the Emigrant Creek Ranger District by implementing INFISH and PACFISH guidelines on all projects. There are however some ongoing projects which may have an affect on proposed, threatened, and endangered species. Unauthorized livestock grazing in the riparian areas associated with the Central Malheur Allotment may have an effect on bull trout habitat. And some recreation activities (ATV use at streamside camps) are affecting riparian vegetation and water quality on the South Fork of the John Day River and its tributaries (potentially affecting Mid Columbia Steelhead populations). The District and the Burns Paiute Tribe are collecting specific population and trend data for bull trout. Recent radio telemetry data had indicated bull trout using a reach of the Malheur River as migration and holding habitat. Biological Evaluations are prepared for all site-specific projects.

Terrestrial proposed, threatened, and endangered species occurring on the Emigrant Creek Ranger District include bald eagle, and possibly some limited lynx habitat. Project design and mitigation measures were developed to protect or enhance bald eagle nesting and winter roosting habitat. Vegetation treatments (noncommercial thinning) occurred in one active winter roost area and within the bald eagle management area established around the only active bald eagle nest on the Malheur National Forest. Proposed treatments are ongoing and should be completed in FY2001. Initial monitoring indicates no adverse affects to winter roost use or nesting area. Long-term benefits should occur as these areas become more resilient to environmental changes. Occupancy and possible incubation was determined in May 2000 during a site visit to the nest site, with a follow-up visit in June. A feathered nestling was observed perched in the nest tree. Based on these observations this breeding pair was considered successful in 2000. Biological Evaluations are prepared for terrestrial species for all site-specific projects.

Raptor Nest Sites

Item 16

Questions: Are prescriptions for raptors nest site protection and associated fledgling areas or similar measures identified in site-specific planning efforts and are these measures implemented as described following management activities? Were the protection measures implemented successful in meeting Forest Plan Objectives?

The Regional Forester's Forest Plan Amendment #2, June 1995, was followed.

On the Blue Mountain Ranger District nest sites were monitored for occupancy and productivity for all raptors on the south half; and goshawk, great-gray owl, and osprey nests were monitored on the north half. No monitoring was done to determine success of implementing protection measures.

A pre-implementation survey of goshawk nests in the Silvies Canyon Watershed on the Emigrant Creek Ranger District was conducted. There are over 59 documented sightings in and adjacent to the watershed, and 7 historically used or active nests in the watershed. Two of the nests were used in FY2000. There are an additional three "old" territories identified in the area, but these are not considered historical or active. These old nest sites will be monitored for use during future project planning. Nest core areas and post-fledging areas were established for all known nest sites found in the watershed. Vegetation treatments in nest areas will be deferred until comprehensive management plans are developed. Mitigation measures, such as seasonal and spatial restrictions, for management activities adjacent to nest core areas will be included in project design.

Goshawk nest site protection measures were properly implemented during timber harvest within the Badger Timber Sale on the Emigrant Creek Ranger District. Seasonal restrictions and protective buffers were applied during sale activities, which were completed in FY2000. Three nest sites were monitored. Two of the sites had single bird activity but a nest or young were not located. One site, located in a RHCA, had documented reproduction in June 2000, one year after completion of the harvest in the adjacent unit.

Recommended Actions:

- Continue to monitor known nest sites for continued use.

Water Resources

Item 30

Question: Is the Forest complying with the Clean Water Act and the MOU with the State of Oregon by properly implementing Forest Plan Standards for the protection of water resources? (Forest-wide Standards 117-120 and applicable Management Area specific standards)

All Federal actions on the Blue Mountain Ranger District have followed Forest Plan standards for the protection of water resources. These standards comply with the Clean Water Act and the MOU with the State of Oregon. Specifically, project area culvert removals, forest road water bars, and forest road stream crossing culvert condition were visually monitored. Also, long standing water quality (temperature), riparian planting, and riparian hardwood protection sites were monitored.

Soil Resources

Item 32

Question: Is the Forest complying with Regional guidelines for the protection of soil resources by properly implementing Forest Plan Standards for the protection of soil resources? (Forest-wide standards 125-129)

All the Blue Mountain Ranger District timber sale analysis files contain elements that the soil specialist believes will meet Forest Plan standards for the protection of soil resources, if implemented properly. Soil condition following harvest was monitored for several timber sales, with about half not meeting Forest Plan standards due to levels of compaction. Those sale areas not meeting standards will be addressed in FY2001.

Recommended Actions:

- Design and implement rehabilitation measures on harvest areas not meeting Forest Plan standards for soil conditions.

Administrative Facilities

Item 35

Questions: Is the facility space adequate to recruit and retain the workforce needed to implement the Forest Plan? Is the facility space adequate to serve the public? Is facility maintenance adequate to curtail the deterioration of an inventory of aging structures?

The Emigrant Creek Ranger District provided a response. The District reported that facility space is not adequate to recruit and retain the workforce needed to implement the Forest Plan. Environmental and legal considerations would necessitate a larger workforce than could be accommodated in the current structures. Burns Interagency Fire personnel occupy all under-utilized offices. There are inadequate facilities to house temporary employees, and inadequate conference room and office space. Facility maintenance is inadequate to curtail deterioration of existing structures. Housing and off-compound structures are badly deteriorating. Permanent office structures require maintenance, specifically the main office needs a new roof.

Recommended Actions:

- Prioritize maintenance and repair of facilities and include in District's urgent work needs.

Table M-2
FOREST ACCOMPLISHMENTS – FISCAL YEAR 2000
 Malheur National Forest

The following table provides a summary of selected Forest accomplishments and resource outputs for FY2000 from all funding sources, including trust funds and partnership efforts. Where possible, these are compared to Forest Plan estimates, but in some cases the unit of measure has changed since the Forest Plan was completed and direct comparison is no longer possible.

RESOURCE ACTIVITY/OUTPUT	UNIT OF MEASURE	FOREST PLAN PROJECTION (avg/year)	ACTUAL FY2000 FOREST OUTPUT	% ACTUAL TO FOREST PLAN
<u>FIRE</u>				
Natural Fuel Treatment	Acres	2,000	3,708	185
Activity Fuel Treatment	Acres	10,000	4,051	40
<u>FISH</u>				
Anadromous Stream Restored/Enhanced	Miles	Not Specified	11.1	NA
Inland Stream Restored/Enhanced	Miles	Not Specified	8	NA
<u>RANGE</u>				
Permitted Grazing	AUMs	110,000	17,047	16
Non-structural Improvements	Acres	4,800	0	0
Structural Improvements	Structures	250	22	9
Noxious Weed Treatment	Acres	200	205	103
<u>RECREATION</u>				
Trail Construction/Reconstruction	Miles	50	3	6
Developed Recreation Capacity	PAOTs	371,000	432,800	117
<u>ROADS</u>				
Construction	Miles	220	0	0
Reconstruction	Miles	Not Specified	37.1	NA
Decommissioned	Miles	Not Specified	61.7	NA
Closed	Miles	Not Specified	38.0	NA
<u>THREATENED, ENDANGERED, and SENSITIVE SPECIES</u>				
Aquatic Habitat Restored/Enhanced	Miles	Not Specified	2	NA
Terrestrial Habitat Restored/Enhanced	Acres	4	55	1375
<u>TIMBER</u>				
Total Program Sale Quantity	MMBF	211	--	--
Reforestation	Acres	12,672	7,620	60
Timber Stand Improvement	Acres	10,800	4,313	40
<u>WILDLIFE</u>				
Habitat Restored/Enhanced	Acres	750	135	18
Habitat Structures	Structures	300	8	3
<u>WATER</u>				
Watershed Improvements	Acres	172	400	2326

SPECIAL REPORT ITEM SUMMIT FIRE RECOVERY PROJECT MONITORING

Background

The Summit Fire burned over 37,000 acres during August and September of 1996. Of this, 28,286 acres burned on the Long Creek Ranger District (now part of the Blue Mountain Ranger District) of the Malheur National Forest. The affected area is approximately 25 air miles northeast of John Day, Oregon and lies within the Upper Middle Fork of the John Day Watershed. After the fire, the Malheur National Forest identified a number of opportunities for accelerating recovery of the fire area. The Summit Fire Recovery Project EIS was prepared to analyze the environmental effects of implementing these opportunities. It was designed to meet two identified needs: to accelerate ecosystem restoration and to provide commodity extraction (timber salvage) where it could be done consistently with ecosystem restoration.

Monitoring Plan

Monitoring of the Summit Fire Recovery Project is designed to accomplish three purposes:

1. Assure that all aspects of the project are implemented as intended.
2. Determine, for certain critical activities, that the effects of the activities are consistent with the intent.
3. Allow adaptation if it is found that activities are not being implemented correctly or are not having the desired effect.

Monitoring items and priorities which were identified can be found in the Summit Fire Recovery Project ROD (pp. R-25 to R-26), the Final Supplement EIS (pp. 2-23 to 2-24), the Final Supplement EIS Summary (p. S-6), and the Final EIS (pp. 2-34 to 2-36). A "Monitoring Forum" was also established to provide an avenue for involvement to anyone interested in the project and willing to help monitor its implementation.

Monitoring Results

Table M-3 lists the monitoring items identified for the Summit Fire Recovery Project and their current status. Some of the items have been completed, while others are ongoing. Narratives for some of the monitoring items follow the table.

Table M-3

**Summit Fire Recovery Project
Monitoring Data Table
Malheur National Forest**

	Item	Reference	Responsibility	Amount	Attainment	Comments
1	Snag Retention>21"	ROD p. R-5, R-25	Wildlife / SA	All marked	1998 to present	Replacements marked for hazard trees.
2	Decommission roads with appropriated funds	ROD p. RA-3	Access Mgmt	22 miles	100% Completed	Planned and done before the FSEIS.
3	Decommission roads with appropriated funds	ROD p. RA-3	Access Mgmt	48 miles	100% Completed	
4	Decommission roads with timber sales	ROD p. RA-3	Access Mgmt	55 miles	52 miles	2 miles in 98, 50 miles in 1999.
5	Repair Road 4500-522	ROD p. RA-3	Access Mgmt	300 feet	Done 10/2000	At Bear Paw Meadow. Road left open for dispersed camping.
6	Gravel on primary roads	FSEIS p S-6	Engineering	26 miles	10 miles in 2000	Was 46 miles but reduced to only what was needed. No funding available to complete.
7	Improve drainage on roads	FSEIS p S-6	Engineering	82 miles	100% completed in 99	Total miles to be adjusted to actual available.
8	Dispersed rec sites - Big Ck	FSEIS p 2-23	Fisheries / Rec	All		To check for adverse effects on fish.
9	Plant hardwoods in RHCA's	ROD p. RA-3, FSEIS S-6	Watershed	30 miles	12 miles as of 9/3/00. 3 miles planted spring 2001 but not yet protected by cages.	Were 35 but reduced to 30 miles of actual need. To be done by 2003. Mostly alder planted with some cottonwood. Additional species including dogwood will be interplanted in 2002. Summit Riparian CE which covers 16 miles is a similar project and is listed below in item #62.
10	Cage/ fence hardwood sprouts	ROD p. RA-3, FSEIS S-6	Watershed	30 miles	23 miles by 9/3/00	Was 50 miles but reduced to 30 miles of actual need. To be done by 2003.
11	Survival of hardwood planting	FSEIS p 2-23	Watershed	1st & 3rd Yrs	Scheduled for 2001	Will follow planting scheduled in 2000.
12	Stream bank cover & stability	ROD p. R-20 & 25	Fish	Sample		
13	Water temperature	ROD p. R-20 & 25	Watershed	Sample	98, 99, 00, scheduled for 01	On-going. To be analyzed by winter 2001-2002.
14	Rehab landings in RHCA's	ROD p. RA-3, FSEIS S-6	Watershed	20 landings	12 done by 9/3/00. Four landings scheduled for 2001.	Were 50 landings but reduced to 20 that actually need work. To be done by 2003. These are old landings created prior to the fire.

	Item	Reference	Responsibility	Amount	Attainment	Comments
15	Stream temp, Big Ck Wshd	ROD R-25, FSEIS 2-23	Watershed	4 locations	98, 99, 00, scheduled for 01	On-going. To be analyzed by winter 2001-2002.
16a	Stream cross sections with Wolman pebble counts.	ROD R-25	Watershed	Sample	Started fall 97 and ongoing	For Big Boulder, Coyote, Elk and Deadwood Creeks.
16b	Turbidity and suspended sediment (done with item #16a)	ROD R-25	Watershed	Sample	Ongoing	Peak flows 98, 99, 00, and 01. 98 and 99 data processed. Preliminary report scheduled for winter 2001-2002.
17	Wolman pebble counts (H-R surveys)	FSEIS 3-36	Fisheries/Wshd	10 locations	Done in 98, 99	Elk, Myrtle, Big Boulder, Wray, and Beaver.
18	Hankin and Reeves (H-R) Surveys	FSEIS 3-36	Fisheries	6.76 miles	Done in 98	Elk, Myrtle, Big Boulder, Wray, and Beaver.
19	Fish distribution recovery	ROD R-25	Fisheries	Sample	Done 98, ongoing 99	Bull Trout surveys done in Big Ck & G. Boulder.
20	Sediment fences/ erosion pins	ROD p. R-20 & 25	Watershed	Sample	Ongoing	Installed 98, 99 after harvest of selected units. Preliminary report scheduled for winter 2001-2002.
21	Large wood in wet areas at Bear Paw Mdws	ROD p. RA-3, FSEIS S-6	Watershed	120 pieces	80 acres by 2000	Was 200 acres but reduced to 120 acres of actual need. Ongoing, to be done by 2003.
22	Photo points for scenery	ROD R-25	Landscape Arch	4 points	Done in 97	Photograph every 5 years.
23	R-6 photo points	ROD R-25	Fire	6 points		Relocate and take new photos.
24	Raptor nests are protected	ROD R-25	Wildlife	Those found	Done Sept, 98	Nests found to be protected.
25	Snag use & fall down rate	ROD R-25	Wildlife	Sample	Ongoing	Part of study on line 28.
26	Marking & unit location	ROD R-25	Silv/Wildlife/Sale Admin	All units	Done in 98	
27	Cultural sites are protected	ROD R-25	Heritage/Sale Admin	Found sites	Ongoing	
28	Establish / monitor study units	ROD R-19	Silviculture	12 units	Established in 97 & 98	In cooperation with BMNRI.
29	Riparian recovery to allow grazing	ROD R-20, FSEIS 2-36	Fisheries/Watershed/Range	Sample		Proper Functioning Condition surveys on going. Reviewed 7/99 by National Team (NRST).
30	Remove slash at landings	FSEIS p S-6	Sale Admin	Along 4 roads		Roads 45 and 4550 completed, 4560 & 4500537 are ongoing.
31	New road construction	FSEIS p S-6	Sale Admin	6 miles	2.5 miles	No more needed.
32	Temporary Road Construction	FSEIS p S-6	Sale Admin	3 miles	1.4 miles	No more needed.

	Item	Reference	Responsibility	Amount	Attainment	Comments
33	Salvage Units	FSEIS p S-6	Sale Admin	109 units		Harvest completed.
34	Estimated volume	FSEIS p S-6	Sale Admin	48 MMBF	40.5 MMBF	8-12" dbh material optional. Shortfall due mostly to no removal of most optional material and deterioration.
35	Total harvest area	FSEIS p S-6	Sale Admin	6,700 acres		Completed.
36	Helicopter Yarding	FSEIS p S-6	Sale Admin	2,400 acres		Completed.
37	Skyline yarding	FSEIS p S-6	Sale Admin	1,300 acres		Completed.
38	Tractor yarding	FSEIS p S-6	Sale Admin	3,000 acres		Completed.
39	Roadless area harvested	FSEIS p S-6	Sale Admin	1,940 acres		Completed.
40	Noxious weeds treated non-chemical	FSEIS p S-6	Range	17 sites	Ongoing	
41	Noxious weeds treated chemically	FSEIS p S-6	Range	30 sites	None to date	
42	Noxious weeds treated chemically	FSEIS p S-6	Range	3 acres	None to date	
43	Hand treat fuels in RHCA's	ROD p. R-17	Fire	150 acres	None to date	Waiting until standing material falls down.
44	Fuel load surveys	ROD p. R-25	Fire	12 units	Plots done in 98	In cool dry & cool moist environments.
45	Fuel load surveys w/in units	FSEIS p 2-36	Fire	5 units /sale	Plots done in 98	Plan to visit plots again in 2001.
46	Reforest survival 1st yr exams	ROD p. R-25	Silviculture	12,900 acres	7307 acres (57%)	2,345 in 97, 4,962 in 98.
47	Tree survival 3rd yr exams	ROD p. R-25	Silviculture	12,900 acres	1,165 acres (9%)	833 in 99, 332 in 2000.
48	Reforest w/in salv units	FSEIS p S-6	Silviculture	7,300 acres	6,833 acres (94%)	2,105 in 98, 3,833 in 99, 895 in 2000.
49	Reforest outside salv units	FSEIS p S-6	Silviculture	5,600 acres	5,743 acres (102%)	2,345 in 97, 3,176 in 98, 222 in 99.
50	Netting for seedling protection	FSEIS p S-6	Silviculture	1,600 acres	435 acres (27%)	435 in 99.
51	Gopher control for reforest	FSEIS p S-6, Rod R-25	Silviculture	4,200 acres	357 acres (8%)	357 in 99.
52	Chem treat of veg for reforest	ROD p. R-8	Silviculture	1,800 acres	300 acres (16%)	300 in 99.
53	Water samples for herbicide	FSEIS p 2-35	Silviculture			Before and after application.
54	Pre-plant surveys	FSEIS p 2-35	Silviculture	12,900 acres	2,345 in 97, 5,281 in 98	About 150 ac planned in 99.
55	CVS remeasurement	FSEIS p 2-35	SO	18 plots		
56	Revisit Charlie Johnson plots	FSEIS p 2-36	Ecologist	10 plots		Remeasurement planned in 2002.
57	Plots for scorched trees	ROD p. R-25	Entomologist	10 plots	Done	Established in 97, measured in 98 and 99.
58	Subsoil 9 units for soil restore	ROD p. RA-1	Silviculture	615 acres	Not Needed	Field review determined no need to do.
59	Annual report on livestock use for USFWS	BA	Range/Botany	Restoration area	Done in 98, ongoing for 99.	Also includes actions taken and recovery progress of area.

	Item	Reference	Responsibility	Amount	Attainment	Comments
60	Full suspension over perennial streams	FEIS 2-31	Sale Admin	All	Yes	All work done.
61	Partial Suspension over intermittent streams	FEIS 2-31	Sale Admin	All	Yes	All work done.
62	Plant Hardwoods in RHCA's	Summit Riparian Planting Categorical Exclusion	Watershed	16 miles	16 miles in Spring 97 (100% done)	This was planned prior to the FSEIS with a CE.
63	Survival of hardwoods in item #62	Same as item #62	Botany	1st and 3rd year surveys	1st year done in 98 (50% done)	1st year survival ranged from 81% to 98%.



Item 1 – Snag Retention: Monitor the level of snag retention.

The Summit Fire Recovery Project FSEIS requires that an average of at least 7 large snags per acre (if available) be left, averaged over 40-acre areas, with small clumps of snags in the units. Marking guides for harvest units which included a snag prescription were developed and implemented. Biologists worked with the marking crews in implementing the marking guides and spot-checked the completed work. Completed work was very satisfactory and the intent of the FSEIS snag requirements was met.

Recommended Action: Monitor units after harvest to check on retention of marked snags. Randomly choose 5 percent of units to field check compliance with snag retention and integrity of snag clumps.

Item 9 – Plant Hardwoods in RHCA’s

Three areas of hardwood planting were monitored in the fall of 1998. These areas were planted in 1997 with rooted alder nursery stock grown from local seed.

Site	Plants Inspected	Caged	Survival (%)
Big Boulder Creek	22	Yes	90
Myrtle Creek	53	Yes	98
Dry Creek	58	Some	81

At the Big Boulder and Myrtle Creeks locations, native alder burned during the fire was resprouting very well from the roots.

Item 24 – Raptor Nests are Protected: Monitor to assure that raptor nest buffers are correctly applied.

Initial monitoring of raptor nests indicated that buffers were being correctly applied. In September 1998, four great gray owl nest sites within the Summit Fire area were visited. These sites were protected and marked with tree marking paint and area boundary tags.

Item 26 – Marking and Unit Location: Monitor tree marking to ensure compliance with Silvicultural prescriptions and marking guides.

Tree marking within units of the Coyote Timber Sale were monitored in November 1996. Monitoring initially revealed difficulty in applying the marking guidelines in terms of trees expected to live. Tree survival predictions were based on live crown and bole scorch percentages. Some trees which upon further inspection, primarily by chopping into the cambium layer, were not expected to survive were not being selected for harvest. This information was provided to the marking crew supervisor and follow-up monitoring indicated marking then complied with the guidelines.

In August 1997 several units in the Coyote and Badge Timber Sales were visited to sample marking consistency with the marking guide (as revised in July 1997), and to identify needs for further revisions. Overall marking quality was high and was consistent with the guide. Results indicated that Douglas-fir and grand fir could tolerate more bole scorch than allowed in the marking guide. Based on this the marking guide was revised to allow for more bole scorch in these two species, with the recommendation that borderline trees with sufficient live crowns be checked for depth of scorch by chopping into the cambium layer.

Units in the Big, Dead, and Wide Timber Sales were monitored in October 1997 to check marking guide consistency and evaluate tree survival. Overall marking was consistent with the marking guide. Several units were noted as having some trees which met the guidelines for trees

expected to survive, but were marked for harvest. Adjustments to meet marking guidelines in these units were passed along to the marking crew supervisor.

Item 28 – Establish/Monitor Study Units

Managers need better information on how timber harvest and rehabilitation of burned sites add to the environmental consequences of the wildfire itself. There is very little good scientific information on the environmental consequences of harvesting fire-killed timber. In order to help expand this knowledge base, the Summit Fire Recovery Project ROD identified 12 units, of about 20 acres each, to evaluate the long term impacts of various levels of salvage.

The Summit Fire Salvage Operations Study was designed to improve the understanding of the site-specific environmental effects of the timber harvest (recovery) component of overall management response to wildfire. Three treatments (full salvage, partial salvage, no salvage) were selected to represent viable management options. Response variables to be measured include soil disturbance, vegetation, and fuel.

Data has been collected for the study since 1996 and continues to be collected. Although no formal report has been issued, there is enough information to conduct a preliminary analysis which will begin in 2001. Results of this analysis will appear in future monitoring reports.

Item 46, 47 – Reforestation Survival (1st and 3rd year)

The survival and growth report for the then Long Creek Ranger District, which includes the Summit Fire area, showed a survival rate of 68.7 percent for both 1st (1999 plant) and 3rd (1997 plant) years. Lower than expected survival rates for the first year are attributed to poor weather conditions, an early cool dry spring followed by a prolonged drought. Even so, no replanting was proposed as reforestation objectives were being met. A trend on the planted areas within the Summit Fire is that trees are doing better in terms of survival and growth than was expected.

A considerable amount of the 2000 planting program for the Blue Mountain Ranger District was on areas burned in the Summit Fire. First year survival (2000 plant) was 69 percent for six species of trees planted and 77 percent for ponderosa pine. This level of survival probably reflects the length of time since the 1996 fire, allowing competing vegetation to become established as well as the re-establishment of gopher populations. Third year survival (1998 plant) was 64 percent overall, with ponderosa pine survival at 76 percent.

Item 59 – Annual Report on Livestock Use for USFWS

Portions of the Susanville and Granite Boulders units of the Lower Middle Fork Grazing Allotment were burned in the Summit Fire. The Summit Fire Recovery Project ROD determined that the burned portions of the allotment would be closed to grazing until high intensity burned riparian areas are at least functioning “at risk but in an upward trend” and monitoring results indicate the area is able to withstand livestock use without reducing the rate of recovery.

Mitigation measures associated with the 1999 Bull Trout Range Biological Assessment require an annual monitoring report for the Lower Middle Fork Allotment. Use of the allotment was monitored in 1998 and utilization standards were met. There were some concerns with incidental unauthorized livestock use which will be addressed by an emphasis on fence maintenance requirements. Cattle were kept out of the Summit Fire area by a combination of electric fencing and salting the higher country.

Monitoring Forum Field Trips

An objective for the forum field trips is verification that the Forest Service is meeting commitments during implementation of the Summit Project. With a range of interests represented, discussions

can occur on the expectations of the Project, with the establishment of a more common vision for the outcome of the Project. Objectives also include providing a venue for feedback on what does and does not work, and providing an opportunity to build relationships which will enable groups to work together on achieving sound resource management on this and other projects.

Two monitoring forum field trips have been held, in September 1998 and October 1999. These trips were attended by members of the wood products industry, Oregon Department of Forestry, Warm Springs Indian Reservation, Monument Soil and Water Conservation District, Grant County Conservationists, North Fork John Day Watershed Council Oregon, Watershed Resources District, Forest Service, and the public. The following topics were reviewed during the trips: snags, buffers, fuel reduction, riparian habitat, skidding patterns, Beaver Creek blowout, post fire mortality due to insects, road closures, research study, and alder planting. Discussions on these topics gave the forum participants an opportunity to share ideas on specific project design and objectives.

