

This Toolbox Fire Recovery Project specialist report was prepared during March, April and May of 2003. It will be used, along with specialist reports from multiple resource areas, to prepare a Draft Environmental Impact Statement (DEIS) for the Toolbox Fire Recovery project. This specialist report will become a part of the planning record for the project, filed under:

“Toolbx/ Planning Record/ E\_Specialists\_reports\_data\_inventory\_and\_collection”

This report will be filed both in the ‘hard-copy’ planning record binders, on file at the Silver Lake Ranger District, and on the Fremont National Forest “K-Drive”. In the interest of planning process efficiency, particularly in light of time and budget constraints, editing that occurs to the content of this report during the preparation of the DEIS will be reflected in the DEIS and will not necessarily be entered back into the content of this report. To insure the accuracy of such edits, I will review the content of both the DEIS and the (Final) FEIS and certify that their content is consistent with the analytical conclusions in this report. If during DEIS or FEIS editing, substantially different conclusions or interpretations are reached or substantial additional analysis is prepared from that displayed in this report, an addendum to this report will be prepared.

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## **RANGE - Permitted Livestock and Grazing Management**

### **Introduction**

Portions of four permitted livestock allotments on the Fremont/Winema National Forests (NF) are within the Toolbox Fire Salvage project analysis area. The decision to allow grazing in 2003 on all of the allotments within the project area was made with interdisciplinary input and included modifications to permitted use and/or specific mitigations where necessary. Modifications to permitted livestock grazing are outside the scope of this analysis. Any modifications to the Term Grazing and Term Private Land Permits within the analysis area were made in response to a change in resource condition and are in compliance with Part 1.3 of the Permits issued, 36 CFR 222.4 and within the direction of the Forest Wide Standards for Range Management in the Fremont National Forest Land and Resource Management Plan.

### **Analysis Area**

Analysis of the effects alternatives would have on permitted livestock grazing includes the four allotments that have portions within the project area.

### **Existing Conditions**

#### **Permitted Use**

The statutory authorities to protect, manage and administer the National Forests service and other lands under the Forest Service administration for range management purposes, as well as the regulatory authorities and administrative orders pertaining to range resources and permitted livestock grazing, are summarized in Forest Service Manual 2200 and are found at 36 CFR 222.1. Use as permitted through Term Grazing and Term Private Land Permits issued under these authorities, for allotments within the project area, is summarized in Table 3-1 Range.

Foster Butte is a 138,247-acre, 6-pasture allotment. Although permitted use dates are June 1 through September 30, the pastures are used in an early season grazing system. 4280 head months (HMs), 5681 animal unit months (AUMs), are permitted through a Term Grazing Permit and 1374 HMs, 1815 AUMs, through a Term Private Land Permit. It is managed at a C Forest Range Environmental Study (FRES) Management Level. The Foster Butte Allotment is included in the Upper Sycan Range Analysis for Permit Reissuance, scheduled for the next 2 years.

The Buck Creek Allotment permits 1003 HMs, 1331 AUMS through a Term Grazing Permit and 1005 HMs, 1336 AUMs, through a Term Private Land Permit. It is a 37,237-acre allotment that incorporates early season use, deferred use and

rotation through 10 pastures. Permitted use dates are from June 1 through September 30. It is managed at a C FRES Management Level. Range Analysis for Permit Reissuance is scheduled for 2007.

Table 3-1 Range. Permitted use on allotments within the project area.

Allotment	Size (acres)	Permitted Use							System
		Dates	Head Months			AUMs			
			USFS	PVT	TOTAL	USFS	PVT	TOTAL	
Buck Creek	37,237	6/1-9/30	1003	1005	<b>2008</b>	1331	1336	<b>2667</b>	Early Season/Deferred/Rotation
Foster Butte	138,247	6/1-9/30	4280	1931	<b>6211</b>	5681	2551	<b>8232</b>	Early Season
Winter Rim	12,191	6/25-9/24	853	0	<b>853</b>	1129	0	<b>1129</b>	Deferred Rotation
Yamsay Mt	11,719	7/16-9/31	309	0	<b>309</b>	405	0	<b>405</b>	Deferred

The Yamsay Mountain Allotment is an 11,719-acre allotment consisting of two pastures. One pasture is used early season and the other is managed in a deferred rotation system, using natural barriers to rotate use north to south and south to north every other year. 309 HMs, 405 AUMs are permitted under a Term Grazing Permit. Use dates are from July 16 through September 31. The FRES Management Level is C. Range Analysis for Permit Reissuance is scheduled for 2007.

The Winter Rim Allotment is a two pasture, 12,192-acre allotment. The grazing system is deferred rotation. Permitted use dates are from June 25 through September 24. It is a C FRES Management Level allotment. The Winter Rim Allotment is included in the Upper Sycan Grazing Permit Analysis.

### Current Management

All of the allotments were used during the 2003-grazing season. One allotment was used as permitted. Modifications were made from use permitted on three allotments. In addition, specific mitigation measures were in place on one allotment. Modifications and specific mitigations to permitted head months, season of use and grazing systems are detailed in Table 3-2 Range. Modifications to the Term Grazing and Term Private Land Permits within the analysis area were made in response to a change in resource condition and are in compliance with Part 1.3 of the Permits issued and 36 CFR 222.4 and within the direction of the Forest Wide Standards for Range Management in the Fremont National Forest Land and Resource Management Plan.

Table 3-2 Range. 2003 Authorized use for allotments within the project area

Allotment	2003		Mitigations 2003
	Head Months	AUMs	
Buck Creek	1078*	1423*	HM/AUM reduction
Foster Butte	4368*	5766*	HM/AUM reduction Site Specific -Use herding to decrease utilization
Winter Rim	853	1129	
Yamsay Mt	155*	205*	HM/AUM reduction

\* Modification in response to change in resource condition

### Grazing Permit Analysis

The purpose of this project, as described in the purpose and need statement, does not include analysis or decisions related to permitted livestock grazing. Modifications necessary as a result of change in resource condition have been made as described in the Current Management section. The schedule for completion of Grazing Permit Analysis is in compliance with The Rescission Bill, HR 1994 June 30, 1995 (Rescission Bill of 1995). Analysis, which results in the development of Allotment Management Plans, is scheduled for all of the allotments within the project area.

## **Burned Acres**

Approximately 1,557 acres in the Winter Rim Allotment, 380 acres in the Buck Creek Allotment and 428 acres in the Yamsay Mountain Allotments are outside the project area but within the boundaries of a 2002 fire. These acreages are not part of direct effect analysis in the Permitted Livestock section, as they are outside the project area being analyzed and no activities related to this project will be occurring there. However, data on these acres was made available for cumulative effects analysis as well as for decisions made outside this analysis on grazing for the 2003 season.

Acreages within each allotment that are within the boundary of a 2002 fire and in the project area are listed in Table 3-3 Range. Although included within a fire boundary, not all of the acres burned. Fire intensity mapping was completed as part of the Burned Area Emergency Rehabilitation efforts in the project area. There were three intensities mapped, low, moderate and high. Areas mapped as low intensity sites included understory burn and un-burned areas (BAER report). 86% of the Toolbox Complex area was mapped at low intensity. BAER fire intensity mapping does not reflect conifer mortality as represented in the September 2002 mortality mapping completed for this project.

Table 3-3 Range. Allotment Acres within the Project Area

<b>Allotment</b>	<b>Total Allotment Acres</b>	<b>Acres within the Project Area</b>
Buck Creek	37,237	613
Foster Butte	138,247	60,297
Winter Rim	12,191	1,783
Yamsay Mt	11,719	8,688

## **Compliance Checks and Monitoring**

To ensure management direction as outlined in the Annual Operating Instructions (AOI) is followed, range management staff conducts use supervision throughout the grazing season. This supervision allows for verification that the instructions are being adhered to. Allotment resource condition monitoring takes place throughout the grazing season. This day-to-day monitoring allows for adjustments to the instructions, if necessary, as a response to a change in resource conditions. End of season monitoring is completed on allotments as a measure of compliance with the allowable forage use standards set and is also an indicator of successful management. Use supervision, resource condition and end of season monitoring will be conducted on the allotments/pastures included in the analysis area at the end of the 2003 grazing season.

## **Environmental Consequences**

### **All Alternatives**

None of the proposed alternatives would affect permitted use for the allotments within the project area. Modifications to permits in response to a change in resource condition could still be made in accordance with Part 1.3 of the Term Grazing and Term Private Land Permits, if necessary. Permanent changes to the Term Grazing and Term Private Land Permits could be made during the scheduled Grazing Permit Analyses.

Regardless of the alternative chosen, an increase in transitory range is expected as result from a decrease in canopy cover and early seral conditions in forested plant communities post fire. This availability would be a combination of existing graminoid plants becoming more palatable post-fire and new plants become established. There could be an increase in available forage for livestock; however, no increase in capacity has been granted. The temporary increase in forage is expected to decline in approximately 10-20 years, as young trees become established and shade out ground vegetation (FSM - 2200). It should be noted that the total amount of transitory range resulting from any of the alternatives will be limited in its availability to livestock depending on other factors such as slope and distance to water.

### **Alternative A**

It is expected this alternative would make the least amount of transitory range available. This would be mainly due to the limited distribution caused by the accumulation of dead down trees associated with no commercial salvage or fuels treatment and reduction. An increase in effort on the part of the permittees may be required to manage the allotments with

the accumulation of down dead trees. This would be minimal and is not expected to impact the proper range management of the allotments. The increased production expected in non-forested plant communities could be diminished if dead down trees are allowed to accumulate.

No mitigation measures would be required specific to this alternative.

### **All Salvage Alternatives**

An increase in transitory range could result in increased livestock distribution through natural movement of the animals, especially when used early season. A more open structure in forested vegetation communities could also increase distribution. With increased salvage, the natural movement of livestock could increase. Increased distribution into forested plant communities also has the potential to relieve livestock grazing pressure from historic pre-fire use areas, mainly non-forested plant communities. A slight increase in production in non-forested plant communities may occur post fire, and could relieve grazing pressure on non-forested plant communities in the future. This increase could be due to an opening in canopy cover where tree mortality has occurred on encroaching conifers or where shrub cover and decadent plant material has been removed. Salvage restrictions in RHCAs could impede movement with the accumulation of down, dead material. Large accumulations of down dead material have led to decreased natural distribution in other allotments on the forest. Mitigation measures for the salvage alternatives are in response to deciduous plantings and reforestation. These mitigations would not effect permitted grazing, but could increase management necessary in the allotments. The increase in management is not expected to be extreme and in both cases will be temporary.

## **Definitions**

1. Grazing Systems:
  - a. Early Season –Livestock grazing occurs in the spring of the year following green up and continues to mid-summer. May 1 through July 15.
  - b. Deferred - A delay of livestock grazing on an area for an adequate period of time to provide for plant reproduction, establishment of new plants, or restoration of vigor. July 15 through October 15
  - c. Rotation - A grazing scheme where animals are moved from one grazing unit in the same group of grazing units to another without regard to specific graze: rest periods or levels of plant defoliation. No specific dates
  - d. Deferred Rotation - A grazing system that provides for a systematic rotation of the deferment among pastures. July 15 – October 15
2. Animal Unit (AU)– Defines forage consumption on the basis of one standard mature 1,000-pound cow, either dry or with calf up to 6 months old; all other classes and kinds of animals can be related to this standard, e.g. a bull equals 1.25 AU, a yearling steer equals 0.6 AU.
3. Animal Unit Month (AUM) - The amount (780 pounds) of air-dry forage calculated to meet one animal unit's requirement for one animal unit for one month.
4. Head Month (HM) - One month's use and occupancy of the range by one animal. For grazing fee purposes, it is a month's use and occupancy of range by one weaned or adult cow with or without calf, bull, steer, heifer, horse, burro, or mule, or 5 sheep or goats.
5. Forest Range Environmental Study (FRES) Management Level: A level assigned to an allotment that reflects the management practices currently in place. These management levels are used to set allowable use of forage within an allotment and/or a pasture.

Level C - Livestock are managed to achieve full utilization of allocated forage. Management systems are designed to obtain distribution and maintain plant vigor. Riding, herding, salting, fencing and water developments are part of the management on these allotments.
6. Transitory Range. Land which produces forage or has inherent forage producing capabilities and can become available on a temporary basis as a result of partial or complete removal of the vegetation through fire, logging, or other events.

## **References**

Forest Service. 1989. Land and Resource Management Plan for the Fremont National Forest, Lake and Klamath Counties, Oregon. USDA Forest Service, Pacific Northwest Region, Portland, Oregon.

Forest Service Staff, 2002. Toolbox Complex BEAR Report, FS2500-8 Burned Area Report 8/14/2002. USDA Forest Service, Fremont National Forest, Lakeview, Oregon.