

**2001**  
**REPORT OF CATTLE GRAZING IN WARNER, LOST RIVER, and SHORTNOSE**  
**SUCKER HABITAT and BULL TROUT HABITAT ON THE**  
**FREMONT NATIONAL FOREST**

**I. Introduction**

This report will address the 2001 grazing season use of allotments under consultation with the U.S. Fish and Wildlife Service on the Lakeview, Paisley, Silver Lake, and Bly Ranger District of the Fremont National Forest in Southeastern Oregon. There are 19 allotments containing 48 pastures on the Lakeview RD, 7 allotments containing 11 pastures on the Paisley RD, 2 allotments containing 2 pastures on the Silver Lake RD, and 20 allotments with 53 pastures on the Bly RD. The special use pastures were incorporated into the appropriate allotments in 1999 and fall under the grazing standards of the biological opinion. These allotments are in the headwaters of Honey, Deep, and Twentymile Creeks which drain the Warner watershed, in the N.F. Willow, Strawberry, Pitchlog, Four Mile, Wildhorse Creeks and North Forks and South Fork of the Sprague River which drain the Lost and Sprague River watersheds, and also the Sycan River watershed. This is the fourth year of consultation covered by the Fremont Grazing Programmatic Biological Opinion issued by the U.S. Fish and Wildlife Service May 22, 1997. This consultation was amended in 1998 to include grazing activities within the range of bull trout. Based on direction found in BO#1-10-00-71-1-F, grazing was permitted in the Silver Creek Pasture of the Foster Butte Allotment, Silver Lake RD. A short reach of Coyote Creek runs through this unit. Livestock were managed in accordance with BO conditions and end of season monitoring show less than 5% use by livestock.

**II. 2001 Grazing Season Report**

**Weather Influences:**

Precipitation by turn-on was 60% of the yearly average with dryer than average conditions through the winter months of 2000 and 2001. *Letters were sent to permittees warning of the short precipitation and recommending nonuse when possible.* Range conditions were ready when livestock entered the forest. Grazing plans on several allotments were modified to start grazing the allotment earlier with the off date moved up accordingly. Between the first of June and the end of August 0.91 inches of precipitation were recorded at the Lakeview. With a few exceptions, the utilization standards were still being met as summer progressed. By the end of August cattle were being moved to later pastures or be removed from their allotments because of the increasing dryness of the forage and lack of potential regrowth. In the first week of September 0.8 inches of rain was recorded at Lakeview. This stimulated regrowth and softened the dry forage and mitigated somewhat the dryer than average conditions. Growth of forage plants was estimated at 60-80% of the annual average and regrowth on forage plants after the grazing season was limited to approximately 1-20% of normal regrowth.

**Wild Fire**

Two wildfires, the result of dry lightning, burned on the Fremont NF during the 2001 grazing season. One fire, the South Warner Fire, disrupted the permitted grazing on the Crane/Kelly and Crane Mt. Allotments by burning fences and scattering cattle outside authorized pastures. Permittees moved cattle when notified and for the most part there was no adverse impacts due to the fire. Some use outside the permitted pastures was observed and permittees were notified and instructed to correct the problem.

**Reasonable and Prudent Measures:**

The Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take authorized by this biological opinion.

The Forest Service shall minimize adverse impacts of grazing activities to riparian habitats that contribute to or provide for essential physical and biological components necessary for the conservation of the Shortnose, Lost River and Warner suckers and Bull Trout.

To implement the Reasonable and Prudent measure, the following terms and conditions shall be adhered to:

- a. Strict adherence to pasture use guidelines such as maximum utilization levels, stubble height, prescribed grazing system, or others, as stipulated in the biological opinion. Table (1a) provides a summary of the proposed versus actual use on consultation allotments for allotments on all Districts.
- b. Outside the authorized period of grazing use, each pasture (and exclosures within or adjacent to them) covered by this biological opinion will be monitored for unauthorized and excess livestock as often as necessary to ensure the above reasonable and prudent measure is met when cattle are in adjacent public or private pastures. Excess use must not result in more than a five percent noticeable use level, nor can it result in a failure to meet end of growing season utilization and/or stubble heights. Unauthorized livestock use will be reported to law enforcement for appropriate action.

There were 18 incidences of use exceeding the utilization standards. Letters were sent to permittees in noncompliance of utilization standards with warnings that repeated noncompliance in the 2002 grazing season would result in at least a 20% suspension of grazing the following year.

The following is the noncompliance of utilization standards, by allotment for the 2001 season.

<b>Allotment</b>	<b>Pasture</b>	<b>Allowable (S&amp;G)</b>	<b>Actual Use</b>
<u>Warner Sucker</u>			
Barley Camp	Deep Mosquito	45%(flood plain)	48%
Sage	L.Camas RIP	5% (rested)	27%
Honey Creek	Big Honey	4" (stubble)	3.5"
Crane/Kelly	Burnt Creek (RIP)	45% FP; 4"(stubble)	65% (2 inches)

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Allotment	Pasture	Allowable (S&G)	Actual Use
<u>Lost River/Shortnose sucker habitat</u>			
Arkansas	Creed	40% (flood plain)	65%
Yainax Butte	Vinson	4" (stubble)	3.25"
	Keno Res.	4" (stubble)	2.8"
Paradise Creek	Sprague RIP	6" (stubble)	5"
Five Mile	Swamp Creek RIP	6" (stubble)	4"
Sycan	T Springs	45% (flood plain)	60%
	Currier Springs	45% (flood plain)	55%
	Long Creek	45% (flood plain)	55%
Bear/Lakes	Bald Butte	4" (stubble)	2"

The following noncompliance to permit terms and conditions were reported in the 2001 grazing season and the corrective action taken:

*Barley Camp* – Utilization in the Deep Mosquito pasture was estimated at 48% at the end of the growing season. This exceeded the 45% that was allowed for the pasture. Lack of regrowth after the grazing season played a major role in this noncompliance. The permittee was notified in writing that noncompliance of the utilization standards or stubble height measurements during the 2002 season would result in a suspension of up to 20% of the permitted head months in the 2003 season.

*Sage* – Cattle grazed the Riparian area of Camas Creek for a short time in July, with use recorded at 27%. A fence to control access to this area was to be constructed by the permittee before grazing was not completed before turnout. The permittee was notified in writing that any use by cattle in this area during the 2002 season would result in a suspension of up to 20% of the permitted head months in the 2003 season.

*Honey Creek* – The stubble height standard of 4" was not met. The measured stubble was 3.5". Lack of regrowth after the grazing season played a major role in this noncompliance. The permittee received notice that noncompliance in the 2002 season would result in a suspension of up to 20% of the permitted head month in the 2003 season.

*Crane/Kelly Allotment* - permittee did not maintain a private/Forest boundary fence and allowed grazing in an FS enclosure. Use was measured at 2" on greenbelt stubble height, exceeding the standard of less than 5% incidental use. The permittee was notified in writing that all fences would be maintained before livestock turnout this season and any noncompliance could lead to a suspension of up to 20% of the permitted Head Months.

*Arkansas* – Creed Pasture is primarily a private land unit, managed by the Arkansas Allotment permittee with a 21 head "on-off" permit. This permit specifies a grazing standard that must be met on the Forest Service land fenced into the predominately private land pasture. The utilization standard of 40% was not met. The permittee received notice that noncompliance in the 2002 season would result in a suspension of up to 20% of the permitted head month in the 2003 season.

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*Yainax Butte Allotment*- permittee allowed unauthorized livestock on the permit, up to 300 head for one week in July, up to 20 head until October. Also exceeded use standards in Vinson Pasture. The District Ranger suspended 30% of the 2002 grazing season, requiring permittee to remove all livestock from the allotment on August 15 instead of September 30. The District Ranger also gave warning to the permittee that any use in excess of standards will result in cancellation of the suspended Head Months and an additional suspension in the 2003 season.

*Paradise Creek*- The stubble height standard for the Sprague Riparian Pasture is 6", due to the early season grazing schedule (July 1- July 15). The measured stubble height was 5". Lack of regrowth after the grazing season played a major role in this noncompliance. The permittee received notice that noncompliance in the 2002 season would result in a suspension of up to 20% of the permitted head month in the 2003 season.

*Five Mile* – Non-compliance to grazing standards in the Swamp Creek pasture in 2001 was largely due to the cutting of fences, allowing livestock in the adjacent pasture to re-enter the pasture after the scheduled grazing season. To eliminate this problem, forest roads 122 and 126 will be blocked to eliminate vehicular access to meadows where the fences were cut. In addition, District personnel and the permittee will patrol the area to assure fences remain in good working order. The permittee has agreed to non-use in 2002.

*Sycan* – This allotment is one pasture with several key areas (T Springs, Currier Springs, and Long Creek). The allotment is managed by moving cattle up in elevation as the grazing season progresses. All key areas did not meet utilization standards in the floodplain. T-Springs and Currier Springs are key areas in dry and moist meadows respectively and are not associated with perennial channels. Stubble ht. along the greenline is not measured. Generally 55-65% use equates to 2-4 inch stubble depending upon the species. At Long Creek use on the floodplain was over the standard but greenbelt stubble height met the standard. The permittee on this allotment were notified by the District that failure to comply with the standard in the 2002 season would result in a 20% suspension in the 2003 season.

*Bear/lakes* – The stubble height standard was not met at the headwater meadow of the Sycan. This area has historically met standards and lack of re-growth after cattle were moved contributed to the noncompliance. The permittees on this allotment were notified by the District that failure to comply with the standard in the 2002 season would result in a 20% suspension in the 2003 season.

*Sycan River* –Livestock belonging to the permittee on the Blackhills Allotment were seen in the area of the Sycan River bridge on FR 27. The permittee was contacted and the cattle were moved back to the allotment. Trespass cattle from private land east of the Sycan River bridge were seen along the river and FS law enforcement was notified. The owner was prompt in moving these cattle back to his ranch but late in the season these cattle were again observed in this area. The owner received a letter from the District with an empoundment warning. The owner identified a place in the fence between the Forest and private land that needed work and said he would work to keep his cattle off Forest.

### **III. 2001 Summary**

The grazing monitoring was conducted under the guidelines set forth in the programmatic Biological Opinion of May 22, 1997. The BO requires that both stubble height and utilization in the floodplain be collected at every key area. In a few instances this was not completed. District Rangers will remind their range staff that both measurements are required and assure data is collected in the up-coming grazing season.

### **IV. 2001 Range Improvement Projects**

On the Bly district the fence between the Pothole and Coleman Rim allotments was realligned.

One mile of boundary fence was replaced between the Bly RD/Meryl Creek Allotment and the Paisley RD/Currier Camp Allotment.

### **V. 2002 Grazing Changes**

On the Paisley and Silver Lake RD's, permittees on the Sycan and Winter Rim/Riverbeds Allotments traded grazing areas. Drought conditions prevented a fair assessment of the management of these allotments. As noted above, floodplain utilization was above the allowable on the 3 monitoring sites on the Sycan Allotment. There are no stubble height requirements at 2 of these sites and at Long Creek the stubble height requirement was met (although estimated utilization exceeded the 45% standard). The utilization measurements on the flood plain at T-Springs and Currier Springs were close enough to allowable to lead the District Range Specialists to believe with normal year regrowth, the use standards would have been met. Districts Rangers agreed to a 1 year extension of the trial to assess management and short term conditions before opening a NEPA exercise. These allotment are scheduled for reissuance under NEPA in 2002. This trial will aid in determining the value of assessing this alternative.

The 2002 grazing schedule is attached.

### **VI. Effects of non-compliance on the environmental baseline for Warner, Lost River, and Shortnose suckers.**

#### **Assumptions:**

Rosgen (1996) described sensitivity of stream channel type to management. Generally, C and E channel types are most vulnerable to livestock induced impact when over-grazing occurs. On these highly sensitive stream channel types 4-6 inch stubble height should be maintained along the green line to rebuild banks and minimize hoof shear (Clary and Webster 1989, Elmore and Kovalchik,1991). Utilization in the floodplain should not exceed 45% to maintain willow communities and keep graminoid communities in good ecological condition. Rosgen B channel type is less vulnerable to livestock induced alteration because they have a steeper gradient with banks primarily composed of

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coarse material (cobble, boulder, etc.). Greenline stubble heights of 3 inches should be maintained on Rosgen B channels to maintain plant vigor and minimize streambank alteration.

For the purposes of this analysis, significant deviation from the above standards would result in bank alteration and decrease the riparian vegetation condition. Weakened streambanks from livestock trampling could potentially experience increase bank scour during spring high flows, setting the stream recovery back one or more years.

### **Analysis:**

Not meeting the grazing standards on Barley Camp, Sage, Honey Creek, Arkansas (Creed), Bear/Lakes, Sycan and Paradise Creek Allotments will not result in reduce riparian vegetation conditions or increased bank alteration. Rationale for this determination is as follows:

- While technically a violation to the BO, stubble heights that dropped below the recommended four inch stubble for Rosgen C and E channel types or utilization exceeding the 45% utilization in the floodplain, has a short term effect on plant vigor but should not have lasting effects to plant density, effective ground cover parameters, or plant species composition. Generally 55-65% use equates to 2-4 inch stubble, depending upon the species.
- Proper functioning Condition Assessments (PFC) completed on these reaches are as follows:

<u>Pasture</u>	<u>Stream Name</u>	<u>PFC determination</u>
Deep Mosquito	N.F. Twelvemile	Functional-at-risk with an upward trend
Lower Camas	Camas Creek	Functional-at-risk with an upward trend
Big Honey	Big Honey Creek	PFC
Sprague River (RIP)	N.F. Sprague River	PFC
Creed	Fishhole Creek/Sprague R.	???
Bald Butte	Sycan River	PFC
T springs	Sycan River	PFC
Currier Springs	Sycan River	PFC
Long Creek	Sycan River	PFC

All of these streams are either at PFC or functional at risk with a clear upward trend. Functional at risk streams have improved sufficiently so that minor deviations from grazing standards will not result in a impact to stream channel or riparian vegetation conditions for more than one season. Spring high flows will not adversely affect channel stability or riparian vegetative conditions.

Not meeting grazing standards on Vinson, Keno Springs, Burnt Creek RIP and Swamp Creek RIP may have an adverse impact to riparian vegetation and stream channel morphology for more than a single season. Rationale for this determination are as follows:

- Stubble heights and/or utilization did significantly deviate from recommended use levels which could result in adverse changes to riparian vegetation conditions or channel morphology. These changes are expected to last longer than a single season.

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- Proper functioning Condition Assessments (PFC) completed on these reaches are as follows:

<u>Pasture</u>	<u>Stream Name</u>	<u>PFC determination</u>
Swamp Creek RIP	Swamp Creek	Functional-at-risk with a non-apparent trend
Vinson	Horse Canyon Creek	PFC
Keno Springs	Keno Spring	NA
Burnt Creek RIP	Burnt Creek	Functional-at-risk with an upward trend

Swamp Creek RIP was constructed in 2000/01 to provide better control of livestock along Swamp Creek. Proper Functioning Condition assessments indicate that Swamp Creek is in poor condition, dominated by early seral vegetation and more than 20% altered streambank. The pasture was scheduled for short-term, early season flash grazing in 2001. The 4" stubble remaining at the end of the season as opposed to the 6" standard will slow the rate of recovery, keeping the stream at high risk of modification during spring high flows. These impacts are expected to last more than a season. The pasture will be rested in 2002.

Vinson and Keno Springs pastures are within the Yainax allotment. The Keno Springs key area is located on a spring with no active channel present below the spring site. The spring did receive extensive hoof damage. The Vinson pasture (Horse Canyon Creek) has steadily improved over the past several years. Horse Canyon Creek at the location of the key area is a highly sensitive stream channel type (Rosgen C). Field review of the key area in fall 2001 found stream banks with hoof damage in sufficient quantities that at least some of the banks will fail during spring high flows (Speas, pers. obs.). Riparian vegetation was not grazed sufficiently to reduce its vigor. The permittee and the District are evaluating a plan for constructing a fence that would exclude the highly sensitive part of the channel from cattle.

Burnt Creek RIP has been fenced from the allotment for a number of years, however monitoring and documentation has been negligent for the last few years. The high level of use compounded by the drought conditions on the allotment in the 2001 season led to disturbance levels that could impact the creek beyond the short term. This fence will be monitored and cattle will not be allowed on the allotment before the required fence maintenance is completed.

### **Changes in the baseline established in the 1997 BA**

In 1997 and 1998, the Fremont National Forest completed a Biological Assessment (BA) addressing the effects of grazing activities in 4 Basins in the Warner and Upper Klamath River areas of Oregon (USDA 1997, 1998). The BA provided baseline information about the occurrence of Warner sucker, Lost River and shortnose suckers on the Forest or downstream of the forest boundary. The documents also describe the environmental baseline in terms of watershed, stream channel and riparian vegetation conditions within the affected basins. The

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following discussion will examine any changes that have occurred in that environmental baseline since 1997/98 and what affect, if any, non-compliance to grazing standards has on this baseline.

### Stream Reach Scale

Since 1997, streams within these pastures have been on an improving trend. This trend will continue in the 2002 grazing season on Barley Camp, Big Honey, Sage, Creed, Bear/Lakes, Sycan and Sprague River RIP pastures since the amount of over-use did not result in resource impact that would last more than a single season. Swamp Creek RIP, Vinson, Keno Springs, and Burnt Creek RIP may have impacts that last more than a single season. These impacts include potential increases in bank erosion and subsequent filling of pools, increased fine sediment in spawning gravels, and reduced riparian vegetation resiliency. However, these impacts are difficult to quantify.

### Watershed Scale

Table 1 describes the pasture, stream and sixth field watershed affected by the non-compliance of grazing standards.

Table 1.

<b>Pasture</b>	<b>Stream Name</b>	<b>Sixth Field Watershed</b>	<b>Overall stream channel conditions in the watershed</b>	<b>Watershed Risk from upland sources</b>	<b>Overall Risk of Cumulative Effects</b>
Burnt Creek RIP	Burnt Creek	Burnt Creek	FAR	FAR	FAR
Swamp Creek RIP	Swamp Creek	Fivemile Creek	FAR	FI	FAR
Keno Springs, Vinson	Keno springs, Horse Canyon Creek	Horse Canyon	FI	FAR	FI

FI = Functioning Inappropriately      FA = Functioning Appropriately

FAR = Functioning Appropriately but-at-risk

Watershed risk ratings described in the 1997 Biological Assessment as compared to functionality ratings described above:

High = FI

Moderate = FAR

Low = FA

### Burnt Creek sub-watershed

A complete description of watershed and stream channel conditions for Burnt Creek have previously be provided in the South Warner Fire Salvage BA (January 4, 2002). These data

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indicate that large wood and deep pools are lacking on most of Burnt Creek. Riparian vegetation and associated streambank stability are meeting objectives in the first 4000 feet upstream from Big Valley. Areas of Burnt Creek not meeting grazing standards in 2001 have riparian vegetation dominated by early-seral species and bank stability at 75% in fall 2001 (Reach 3). Much of the bank instability was livestock induced as evidenced by hoof shear and the trampling of streamside vegetation.

The Warner Mountains are currently at approximately 100% of average precipitation for the water year. As of the writing of this report, bankfull flows have already occurred twice in the basin and additional high flow are expected before summer arrives. Excessive bank damage will result in increased streambank erosion, lateral migration of the channel and the filling of pools downstream. However, most of the sediment produced from these unstable banks will drop out in Big Valley with only minor amounts being transported downstream into Deep Creek.

### Fivemile Creek sub-watershed

Since 1997 pastures within the Fivemile creek sub-watershed that have not met compliance standards are Five Mile RIP (1997) and Riverbed Butte in 1997. Fivemile RIP was scheduled to be rested and was grazed, exceeding the 5% noticeable use standard in the BO. The Key area on Riverbed Butte not meeting standards was on Swamp Creek. The corrective action described for this area was to establish a 300 acre riparian pasture which was completed in 2001 and became the Swamp Creek RIP.

Non-compliance at three locations in the Fivemile sub-watershed since 1997 does not significantly change the environmental baseline established in the Biological Assessment. Swamp Creek is degraded and has not changed since grazing standards were implemented. Establishment of the Swamp Creek RIP will bring about recovery of the area as long as fences are maintained and grazing standards are consistently achieved.

### Horse Canyon sub-watershed

All monitored key areas within the Horse Canyon sub-watershed have been in compliance with grazing standards since 1997. However, both Keno Springs and Horse Canyon Creek Key areas did not meet standards in 2001. Observations of Horse Canyon Creek in 1998 and 2000 indicated that the stream channel and riparian vegetation was on a steep rate of recovery (Speas, pers. Obs.) As described previously, non-compliance on Horse Canyon in 2001 did set back recovery and impacts are expected to last more than a single grazing season.

On a watershed scale, non-compliance in 2001 on the Keno Springs key area and Horse Canyon key area does not significantly change the environmental baseline established in 1997 for the watershed. In 2002, long-term monitoring sites established in 1998 will be re-evaluated to determine changes in stream channel and riparian vegetation conditions. Any changes to

grazing systems, stocking levels, or seasons of use will be evaluated in the winter of 2002/2003 prior to the 2003 grazing season.

In 2002, streams in the Upper Sycan River sub-watershed are being evaluated for critical habitat designation for bull trout. If this designation occurs, recovery rates and habitat objectives for bull trout will need to be determined.

## **Effects Determination**

### Technical Violations

Non-compliance on Barley Camp, Sage, Big Honey, Bear/Lakes, Sycan, Creed, and Sprague River pastures did not result in a change in riparian vegetation or stream channel morphology that is expected to last past fall 2001. Therefore, while still a technical violation under the BO, non-compliance will not result in a detectible change in recovery rates nor do they alter the environmental baseline established in 1997.

### Substantive Violations

Non-compliance on Swamp Creek RIP, Vinson, Keno Springs, and Burnt Creek RIP will result in changes in riparian vegetation and/or stream channel morphology that is expected to last past fall of 2001. Streamside vegetation and streambanks were altered to such a degree that spring bankfull stream flows will further alter already unstable banks washing vegetation and sediment to downstream areas.

Minor increases in sediment transport will be undetectible and insignificant downstream where Lost River, Shortnose or Warner sucker reside. The nearest known occupied sucker habitat and/or proposed Critical Habitat in the Sprague River is near the town of Beauty, Oregon which is approximately 16 miles downstream of the closest non-compliance pasture (Swamp Creek). Between the National Forest and occupied habitat, Fivemile Creek flows 12 miles through private land where the water is extensively used for irrigation and the stream has been ditched. In the Warner Basin, Burnt Creek flows into Big Valley where again its water is used for irrigation and that channel has been ditched.

Minor increases in sediment loading in the Upper Sycan River sub-watershed will also be undetectible and insignificant to known occupied bull trout habitat downstream in the Sycan Marsh. Bull trout are only known to reside on the western side of the Sycan Marsh in the Long Creek and Coyote Creek sub-watersheds. The Sycan River enters the Marsh from the east where it is diverted down a series of canals to numerous locations. Sediment from upstream sources would have to travel through this maze of ditches and diversions to reach occupied habitat which is highly improbable.

Lastly, the consultation completed in 1997 and 1998 addressed the effects of the entire Fremont National Forest grazing program in the Upper Klamath and Warner Basins of Oregon.

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Currently the Forest has 111 pastures covering approximately 600,000 acres of National Forest and private land covered in this BO. Eighty-nine percent of the pastures were in compliance.

### Determination Statement

A specific determination on the effects of non-compliance to grazing standards for 12 pastures on the Fremont National Forest was made by the Level I Team on April 10, 2002. The Team concluded that the deviation from the grazing standards would result in a **“May affect, but is not likely to adversely affect” Lost River, shortnose, and Warner suckers and Klamath Basin bull trout**. The Team also concluded that there **would not be an adverse modification of designated or proposed critical habitat for suckers** in the Sprague River, Sycan River and Deep Creek watersheds.

### References

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