

7/19/2000

JENNY CREEK PWA AREA
RANGELAND HEALTH STANDARDS ASSESSMENT
KLAMATH FALLS RESOURCE AREA - KLAMATH FALLS, OREGON

Introduction

The Jenny Creek Pilot Watershed Assessment and Analysis (JCPWA) area contains all or portions of 13 grazing allotments within 3 different BLM field offices - the Klamath Falls R.A. (KFRA - Lakeview District), Ashland R.A. (ARA - Medford District), and the Redding Field Office. Within the KFRA, there are all or portions of five livestock grazing allotments - all of the Johnson Prairie allotment (0105), a major portion of the Buck Mountain (0103) allotment, lesser portions of the Dixie (0107) and Buck Lake (0104) allotments, and a very small portion of the Edge Creek allotment (0102). ***This assessment will address the Buck Mountain and Johnson Prairie allotments*** (see attached map for locations). The Buck Lake allotment is being addressed in the currently pending Spencer Creek PWA (SCPWA) assessment; the Dixie and Edge Creek allotments will be addressed in their own individual assessments later in FY2000.

The 1994 Northwest Forest Plan (NFP) required the completion of watershed analysis reports for all watersheds within the scope of that Plan; an area which includes those portions of the Klamath Falls Resource Area (KFRA) west of highway 97 in southwestern Klamath County. Jenny Creek was one of the first of the watershed analyses to be required under the NFP - thus the "pilot" designation. In February of 1995, the JCPWA was completed and was designed to accomplish the following (quoted out of that analysis, page 1):

This document, "Jenny Creek Watershed Assessment and Analysis", has been prepared to meet the intent of the "Record of Decision", and follows the direction provided in the "Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl." The ROD defines Watershed Analysis as "a systematic procedure to characterize the aquatic, riparian, and terrestrial features within a watershed." It is an information gathering and analytical process, not a decision-making process. This information can be utilized during the National Environmental Policy Act (NEPA) process for any projects that may be planned for this watershed in the future. It provides the basis for project-specific proposals, and determines monitoring and restoration needs for the watershed.

The Jenny Creek Watershed Assessment and Analysis includes a description of the watershed, its natural and cultural features, and the beneficial uses and values found there. It then incorporates this data into a discussion of environmental processes and their relative importance in achieving future desired conditions.

The JCPWA was completed by the Ashland Resource Area (ARA) staff, with minor input from the KFRA staff; primarily providing information and review. Since the majority of the Jenny Creek watershed is in the ARA, that was appropriate. The JCPWA was based on the dimensions of a watershed - Jenny Creek. Thus, the JCPWA does not necessarily follow the precise boundaries of the allotments; boundaries which are based on a mix of topography, political boundaries, land ownership patterns, and/or area specific historic events. A significant (though minority) portion of the Buck Lake Allotment is included within the Jenny Creek watershed,

though was little addressed in the JCPWA. (As a side note, both of the assessed allotments were originally part of the Medford BLM District. During a reorganization of the KFRA in 1988, these allotments were transferred to KFRA administration just after the 1988 grazing season.)

Current BLM policy direction is to primarily address grazing use as it relates to the 5 Standards for Rangeland Health (W.O.I.M. #98-91 and I.B. #OR-98-315). If one or more of the Standards are not met and the cause is not grazing, solutions may be pursued through non-range related remedies. Although non-grazing causes may be identified if known, proposing non-range remedies is beyond the policy defined scope of Rangeland Health Standards assessments.

This assessment will begin with a brief overview of both allotments. (Note: since both allotments are fragmented and of low management priority, there is limited grazing related information on them.) Following that will be a Standard specific review of the pertinent information, by allotment for each of the 5 Standards. References to and quotes from the JCPWA - other documents - will be made as appropriate, since the JCPWA forms the primary basis for this assessment. However, the JCPWA is a large document and this assessment will only briefly summarize or condense some of the appropriate major points and/or conclusions. At the end of the assessment, a "call" will be made on whether the overall Standards are met or not being met, and if not met, whether significant progress is being made towards meeting. If not met, or significant progress towards meeting is not occurring, appropriate grazing management changes would be proposed to move the management towards meeting the Standards. Reference the JCPWA, or other noted documents, for more comprehensive information on the grazing, vegetation, and other resource uses and conditions for this area.

Please note that the JCPWA addressed the entire watershed regardless of ownership, though it did emphasize publicly administered lands. The 134,300 acres within the Jenny Creek watershed is comprised of 57% private lands, <1% National Forest lands, and 43% BLM administered lands. However, within the boundaries of the two allotments assessed here, the ownership pattern is 84% private lands and only 16% BLM. This assessment - analysis and recommendations - is only directed towards the management of BLM lands within the KFRA, where we have the authority and ability to effect change if needed. This assessment also covers the entire area of both allotments, which in the case of Buck Mountain, spreads out beyond the Jenny Creek watershed to some extent.

Buck Mountain (0103)

The Buck Mountain allotment is located north of highway 66, west to Jenny Creek, east to approximately the Surveyor/Buck Mountain ridge and the west side of the Grub Spring allotment, and north to the southern boundary of the Buck Lake allotment. This allotment makes up almost all (98+%) of the area covered by this assessment (see attached allotment map). Approximately 75% of the Buck Mountain allotment total acres are in the Jenny Creek watershed, with the remainder in the Spencer Creek watershed or Topsy-Pokegama Landscape analysis area. The 8,142 acres of this allotment straddles two counties (and thus two BLM Resource Areas) as follows:

Klamath County - 7,022 acres (KFRA) and Jackson County - 1,120 acres (ARA).

There is currently no BLM grazing lessee for this allotment. The recognized base properties for the BLM grazing lease are the timber lands owned currently by U.S. Timberlands (UST - successor in the area to the Weyerhaeuser Company). The last year of licensed use was in 1993, after which Weyerhaeuser cancelled their grazing lease effectively cancelling the BLM lease. UST has continued that non-grazing course of action since purchasing these lands in 1996. There is no practical way for another applicant to graze the highly intermingled BLM lands without the corresponding UST grazing lease. Thus, the property has been not been leased the past 6 grazing seasons. UST has indicated that the area will also not be leased for livestock in 2000.

The last 4 years of cattle grazing use (1990-1993 inclusive) were as follows: 250 cattle from 5/15 to 10/1 for a total of 1151 AUMs. Of this, 203 AUMs were for the BLM leased lands and 948 AUMs for the private (Weyerhaeuser) lands. However, from at least as early as 1947 to 1989, a mix of sheep and cattle were grazed. Specifically, in the late 1980's, 30 head of cattle were grazed (150 AUMs) and an additional 2,300 AUMs of sheep use was allowed (i.e. 2300 sheep from 5/16 to 10/15). During that time, the BLM lease was for 204 head of these sheep (204 AUMs). Prior to the early 1980's a variable mix of sheep and cattle were grazed, or often, just sheep. The extensive sheep grazing was allowed and encouraged, at least at times, to control competitive undergrowth in the tree plantations throughout the area.

The 1995 KFRA ROD/RMP (page H-7) listed the approved grazing use for this allotment as follows: 204 AUMs with a season of use of 5/15 - 9/1 (this would allow for 56 head of cattle). That plan also identified several *Resources Conflicts/Concerns* for Buck Mountain, with related *Management Objectives* to direct resource management towards resolving the concern. They are as follows:

<i>Identified Resources Conflicts/Concerns</i>	<i>Management Objectives</i>
Under current management the range condition, level or pattern of utilization, and/or season-of-use may be unacceptable; or carrying capacity may be exceeded.	Maintain or improve rangeland condition and productivity through a change in grazing management, practices, timing, and/or level of active use.
No forage allocations for elk use in the allotment have been made.	Allocate forage to meet elk forage demands.
Riparian or aquatic habitat is in less than good habitat condition.	Maintain and improve riparian or aquatic habitat in good or better condition.
Potential for grazing/recreation conflicts within the allotment.	Grazing management should consider recreation concerns.

These *Conflicts/Concerns* were identified by an interdisciplinary team (IDT) early in the RMP process (1990-1991), based primarily on professional judgment. At that time grazing was occurring on the allotment, though no monitoring had been apparently done to affirm (or refute) the two primary resource related concerns (1st and 3rd *Conflicts/Concerns*). The first concern will be generally addressed under Standard 1

and the third under Standard 2. The second (elk forage) concern will be noted under Standard 5 and the fourth (recreation) will not be addressed, as there is no livestock in the area to conflict with recreation and the specifics of the “conflicts” are speculative. The IDT notes for this allotment (dated 12/15/90) only note that “there is a potential recreation site off of Highway 66, where the BLM may develop an interpretive facility” and that “potential recreation sites should be fenced off from livestock use...”. Neither of these “concerns” are relevant currently as there is no grazing. However, even when stated in 1990, the concerns were non-specific in nature.

Johnson Prairie (0105)

This 120 acre (BLM) allotment is located on the east side of Johnson Prairie and is included - via poor fencing - in a larger (400 acre) parcel of private land (see map). The BLM administered lands are just east of Johnson Creek and about 4 miles upstream from where it enters Jenny Creek. The BLM lands are split into two parcels - one of 40 acres and one of 80 acres - which touch on the corners. These two parcels were originally part of the Buck Mountain allotment, but were made into this allotment in 1967 when the private lands owned by Dan Adams were fenced, enclosing the 120 acres of BLM land.

This grazing allotment also does not have a current grazing lease. According to the files, the base properties (the surrounding 400 acres of private) were sold in September 1994 and since then, no new owner has made application for the grazing lease. Periodic field checks have shown little if any evidence of recent grazing use. The last year of licensed use was in 1994. The grazing use on this small parcel was always very limited with lease parameters as follows: 2 head of cattle for the period 5/1 to 10/31 (12 AUMs).

The KFRA ROD/RMP (p. H-9) listed the approved grazing use for the Johnson Prairie allotment as follows: 12 AUMs with a season of use of 5/1 - 10/1 (this would allow for 2 head of cattle). It did not identify any “Resources Conflicts/Concerns” for the allotment. The previously mentioned RMP IDT team process, on 12/18/1990, briefly addressed this allotment, affirming the existing season of use and suggesting that the 80 acre piece (south parcel) could be “entirely fenced”, though the notes don’t identify what problem would be cured by this fencing. It would be assumed, however, that the fencing would protect riparian/wetland values, that are known to exist within this parcel, from grazing use.

JCPWA Issues

The JCPWA was driven by five broad, publicly scoped issues (JCPWA, page 3). All five issues at least peripherally pertained to livestock grazing, with three of those issues being closely related to livestock grazing in the watershed (JCPWA, page 64). One (JCPWA Issue 3) dealt with the impact of management activities on riparian/wetland areas. This issue will be discussed under Standard 2. The second one (JCPWA Issue 1) dealt with rural interface concerns; specifically, BLM licensed livestock roaming onto the highly intermingled private land holdings - particularly where people live on small acreage relatively close together.

For Rural Interface, the JCPWA issue (p. 3) states the following:

Rural interface issues result from conflicts between rural residents and management practices on the adjoining public lands. Two principal issues arise: a.) Urbanization (i.e. houses, noise, roads, fences, etc.) and b.) Differences in people's aesthetic values. New rural residents usually place higher value on aesthetics, recreation, and wildlife than on commodity production (i.e., timber harvesting, grazing, etc.).

Rural interface is not considered a livestock grazing concern in the KFRA administered portion of the watershed for two reasons. One is because there is no current livestock grazing on either of the allotments. The other (and primary) reason is that the vast majority of the intermingled private lands in this area are unoccupied timber lands owned by UST. Thus, there are few people living in the KFRA portion of the watershed area. Further to the west, towards Hyatt Reservoir and Ashland (and in the ARA), there has been extensive land subdividing resulting in much higher levels of home building and subsequent "interface" issues.

The third issue pertinent to grazing (JCPWA Issue 2) was labeled "Livestock/Grazing" and will be addressed briefly within the discussion for Standard 1. The final two issues dealt with the broad subjects of watershed conditions and past impacts and were titled "Wildlife Habitat" and "Cumulative Effects of Management Practices". Though grazing has inevitably played some role in creating these issues, it is thought minimal - at least in the two assessed allotments. However, for consistency sake these two issues will be addressed to some degree in this assessment. "Wildlife Habitat" will be discussed in Standard 5 and "Cumulative Effects of Management Practices" will be addressed to some extent in Standards 2 and 3.

The JCPWA also included three general "Desired Future Condition" objectives in the livestock grazing portion of Chapter VII - "Resource Management Objectives/Desired Future Condition by Land Use Designations" (page 111). All correlate with one or two of the five Standards descriptions (noted parenthetically) and thus will be variably addressed in this assessment. These objectives are:

- a. *To provide healthy and productive riparian systems with diverse plant and wildlife species which purify water, and dissipate stream energy. (Standards 2 & 4)*
- b. *To provide suitable habitat conditions which ensure survival and perpetuation of special status species. (Standard 5)*
- c. *Manage for vigorous and healthy rangeland ecosystems which provide for watershed function and soil stability, and provide forage for existing livestock operations. (Standards 1 & 3)*

The JCPWA contained extensive discussions on past conditions and disturbance sources, described current conditions, and analyzed all this data relative to desired landscape/watershed conditions. This process culminated in an array of management recommendations to "fix" the problems described by the issue statements. A full reiteration of the information is not necessary in this assessment; the JCPWA can be referenced for more information. However, brief summaries would be useful and are found throughout this assessment. A summary of the management recommendations are found at the end of this assessment.

Note to readers:

Some of the information discussed under one Standard could be - and sometimes is - discussed under one (or more) of the other Standards. This is due to extensive crossover between the 5 Standards and the JCPWA "Issues" noted in the following discussion. An attempt has been made to properly stratify the discussion in an intuitively satisfying manner; however, that was not always possible or practical.

In addition, the brief description of the Standard in bold, is quoted from the approved "Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington - August 12, 1997". This assessment process is also in accordance with that direction and other related policy guidance.

With no grazing occurring currently (or since 1994) on either the Buck Mountain or Johnson Prairie allotments, the point of this assessment may appear moot. However, leases for either allotment could be requested in the future. The base property owner for Johnson Prairie could make application for that small BLM lease. In addition, UST has stated that they may reissue the cancelled Weyerhaeuser grazing leases if an appropriate lessee could be found. In either case, the BLM would have to decide if the commensurate BLM leases should be re-issued, and if so, with what grazing parameters. **This assessment assumes that the BLM leases will be re-issued with the grazing parameters as stated in Appendix H of the KFRA ROD/RMP (Buck Mountain on page H-7 and Johnson Prairie on page H-9).**

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STANDARD 1 - WATERSHED FUNCTION - UPLANDS (Upland soils exhibit infiltration and permeability rates, moisture storage and stability that are appropriate to soil, climate and land form.)

Though this Standard is currently not being totally met, BLM management (grazing and non-grazing) is making significant progress toward meeting it on the public portions of both allotments. BLM leased/licensed livestock use in recent years (i.e. early 1990's) was not considered a significant factor on either allotment. Future grazing use (as per KFRA ROD/RMP, Appendix H) would also not be expected to be a significant factor on either allotment.

The primary upland grazing pertinent issue (JCPWA Issue 2) was labeled "Livestock/Grazing" and was described as follows:

Commodity production in the form of livestock grazing is an authorized use of the public lands within the Jenny Creek watershed. An issue identified by the public is inappropriate grazing or poor grazing management which prevents attainment of management objectives.

Grazing, at levels practiced in past years, probably contributed somewhat to the currently diminished upland conditions in the open (non-timbered) portions of the

assessment area. However, timber harvest activities, including road building, was the primary impact on the area's upland conditions. It is thought that most of the grazing use in the assessment area began in the early 1900's when logging activities increased, opening large portions of the area and allowing grasses and other forage species to dramatically increase. After WWII, logging activities greatly expanded from the pre-Depression levels. In some case, grass seeding was done after timber harvest specifically for livestock forage. As the tree regrowth density and cover increased, grasses became less abundant and the area less rangeland like. If grazing use were to be leased again in the area, it would be a fraction of what occurred in the area historically and it is thought it would not be a significant factor to overall watershed health. Since the majority of the area is private land, future grazing levels are largely out of BLM control.

The JCPWA (page 111-112) briefly analyzed grazing within the watershed and found that "...stocking rates within the watershed are believed to be within carrying capacity with two possible exceptions...". One of the exceptions was a suspicion that the Buck Mountain allotment may have a "...distribution or stocking rate problem." This same concern was expressed in the KFRA ROD/RMP and noted previously in this assessment. No monitoring or range survey information was noted that supported these contentions, nor is any evidence known to exist presently. Recent observations tend to conclude there would be few grazing problems if licensed again; observations are discussed later in this assessment.

Both the Buck Mountain and Johnson Prairie allotments were ranked as to management priority in 1982, with a re-ranking in 1987-88. Both these rankings were done by the Medford District prior to transfer to the KFRA. The rest of the discussion, by allotment, for this Standard begins with a summary of those categorization efforts. (See the KFRA ROD/RMP Appendix H, pages H-69-70 for further information and explanation of the allotment categorization - "selective management" - process.)

Buck Mountain Allotment

1982 categorization ranking:

- #1 - *Range Condition: Unsatisfactory & Not a factor ("I" and "C" ranking) - see note #1*
- #2 - *Forage Production Potential: Production is moderate to high & present production low to moderate. ("I" ranking)*
- #3 - *Resource Use Conflicts: Serious conflicts or controversy exist. ("I" ranking)*
- #4 - *Economic Returns: Opportunities exist for positive economic returns. ("I" ranking)*
- #5 - *Present Management: Unsatisfactory. ("I" ranking)*

Note #1 read as follows: *Most lands inside this allotment are transitory range. Another note expanded on this by adding: This allotment is almost entirely high intensive forest lands which necessitates placing it in the "I" category. At that time (1982) Medford apparently rated all grazing allotments in primary timber production lands as "I" category. However, during the re-evaluation in 1987-88, most of rankings in the 5 categories were changed or modified so that the final ranking was "C". The 1988 ranking also noted that the rangeland is transitory timber harvest ground, present management is satisfactory, and range condition unsatisfactory, though no reason was stated. This latter comment is thought to be a reflection of the areas transitory timber*

harvest status and its lack of permanent rangeland value. The “C” ranking was carried forward into the 1995 KFRA ROD/RMP.

Most of the BLM administered lands within the Buck Mountain allotment are located on the timbered slopes of Surveyor and Buck Mountains in the extreme eastern portions of the allotment. These areas probably received substantial sheep use in years past - after timber harvest opened up the canopy - but probably little cattle use except around the spring and meadow areas, of which there are few on BLM. (The gradual phasing out of sheep grazing in the 1980's is a possible reflection of the regrowth of the timber stands on BLM lands.) Most of the cattle use occurred on the extensively logged, intermingled private timber lands - with more gentle slopes - near Sheepy and Johnson Creeks (western and central portions of the allotment). However, if cattle use is licensed on this allotment again in the future, some monitoring observations should be made to ensure that the use is appropriate on BLM lands. (See the “Proposed Management Changes” section at the end of this assessment.)

Johnson Prairie allotment

1982 categorization ranking:

#1 - *Range Condition: Unsatisfactory (“I” ranking)*

#2 - *Forage Production Potential: Production is moderate to high & present production near potential. (“M” ranking)*

#3 - *Resource Use Conflicts: Limited conflicts or controversy may exist. (“C” ranking)*

#4 - *Economic Returns: No opportunities for positive economic returns. (“C” ranking)*

#5 - *Present Management: Satisfactory or is only logical practice. (C1” ranking)*

The final ranking was “C” (custodial) with the note that the allotment was a *small acreage allotment without significant conflicts or possibilities for positive economic return*. This category was carried forward during the Medford districts re-categorization in 1987-88 and into the 1995 KFRA RMP/ROD.

The 1987-8 revisions noted that *range condition unsatisfactory*, but gave no specifics. This comment, similar to Buck Mountain, may have been a reflection of the areas transitory timber harvest status and diminishing capabilities as useable rangeland.

Observations made during special status plant surveys (1997-1998) and a recent field check (4/12/00), found the vegetation conditions within the Johnson Prairie allotment to be excellent, though the allotment's two parcels are different vegetation types. The south 80 acre (southern) parcel is a lodgepole pine/aspen “vernal bog”, with a healthy under story of shrubs (spirea, wild rose, serviceberry, and honeysuckle) and a mix of mesic grasses and forbs. This parcel is largely impassable to livestock due to the extensive downfall (great elk habitat however). The 40 acre (northern) parcel has an upland character and is dominated by an open ponderosa pine stand, and a sparsely scattered under story of manzanita, snowberry, and a shrubby goldenweed (*Happlopappus*) intermingled with more dryland dependent grasses (bottlebrush squirreltail, Lemmon's needlegrass, Ross sedge) and forbs. Both parcels are in excellent condition according to observers, and if they were in unsatisfactory condition before (which is not thought likely), they are in good condition now. (See the “Proposed Management Changes” section at the end of this assessment.)

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In summary, the monitoring information collected to date indicates that upland conditions on both the Buck Mountain and Johnson Prairie allotments have been relatively unaffected by livestock grazing in the recent past. The current non-attainment of this Standard is related to past forest harvest activities and not to grazing as licensed (BLM and private) the last few years of use. As stated in the JCPWA, "logging has been a major impact to the landscape pattern of the Jenny Creek Watershed. Approximately 40-50 percent...has been clearcut since World War II."

It is thought that current overall (non-grazing) related BLM management activities, as directed by the NFP and JCPWA and related policy and guidance, appear to be moving conditions towards future attainment of this Standard. If the grazing leases were to be reissued on either allotment in the future, it is thought that the effects on watershed health would be negligible. UST has been exploring the possibility of reissuing their grazing lease for the Buck Mountain allotment the past few years. They have indicated that if their lease is reissued, the grazing would be about half of what the last Weyerhaeuser lease allowed, which was less than half of the grazing use in the 1980's. However, there appears to be only limited interest in grazing the area - by both UST and several potential lessees.

STANDARD 2 - WATERSHED FUNCTION - RIPARIAN/WETLAND AREAS
(Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and land form.)

This Standard is currently thought to be met, or if not totally met, overall BLM management (grazing and non-grazing) is making significant progress toward meeting it on the public portions of both allotments. BLM leased/licensed livestock use in recent years (i.e. early 1990's) was not considered a significant factor on either allotment. Future grazing use (as per KFRA ROD/RMP, Appendix H) would also not be expected to be a significant factor for watershed health on either allotment.

Two issues from the JCPWA are pertinent to this Standard and will be generally discussed here. One was "Aquatic Resources" and was described as follows (JCPWA page 3):

The topic "Aquatic Resources" is listed as an issue in this document since the watershed includes two species of fish and several mollusks that are on the BLM's list of "Special Status Species". The Jenny Creek sucker and redband trout are sensitive indicators of the general health of the watershed. Watershed protection and restoration will continue to be a strong emphasis for the Ashland Resource Area in order to protect these species.

The other issue - "Cumulative Effects of Management Practices" - was stated as follows in the JCPWA (page 3):

Cumulative effects measure past and current land use activity impacts through time on the watershed. There is a concern that human activities may be cumulatively degrading the quality of aquatic and riparian habitat and causing the decline of several Category 2 species that are totally or partially dependent on these habitats. Effects of future management actions can be predicted as well.

In addition, during the RMP process the IDT identified - in notes dated 12/15/90 - the following:

Watershed: Miners's Creek and Cold Creek are being impacted by livestock that gravitate to the streams in late summer and do not leave. These are streams that run throughout the year.

The upper portion (ephemeral/intermittent) of Miner's Creek is located in the Buck Mountain allotment. The lower (more perennial) portion of the creek is located in the Grub Spring allotment and is addressed in the Spencer Creek PWA assessment. However, some of the information about Miner's Creek will be reiterated here.

The primary information source for the condition of riparian/wetland sites within the assessment area are the "Proper Functioning Condition" (PFC) surveys. These were performed for all the major creeks within this area during the summer of 1997. A summary of these follow by allotment:

Buck Mountain Allotment: Five creeks/drainages were surveyed in or near this allotment, as follows:

Johnson Creek: 2.2 miles of Johnson Creek lies on BLM administered lands and was found to have 2.0 miles in PFC and 0.2 miles in "Functional-at Risk" (FAR) with "upward trend". Though much of Johnson Creek runs through this allotment, it is all on privately owned lands. All of the BLM portion of this creek is in the neighboring Buck Lake allotment and addressed by the Spencer Creek PWA assessment.

Sheepy Creek: A short stretch of Sheepy Creek lies on a portion of the BLM lands in the Puckett Glade area (center of allotment). This 0.3 mile reach was rated as "FAR" with an "upward trend". The PFC form had an extensive remarks section, which will be reiterated below as it provides a good description of the rationales behind the rating:

Width to depth ratio too high in upper end of the reach, and meanders are too tortuous in lower reach (rate of migration too high). Roads in this stream's watershed are concentrating flows & routing water out of the watershed in earlier, higher peak flows. Roads are also contributing some sediment to the system. The stream is recovering from past heavy grazing. Poas and other shallow-rooted grasses, still dominate, which limits bank stability. Some bank erosion is still occurring. The stream had downcut in the past but is not stable vertically. The intermittent nature of this stream will make recovery a bit slower. A large wet meadow is associated with this intermittent stream.

Under the PFC form section on "Are factors contributing to unacceptable conditions outside of BLM's control or management?", the "yes" block is checked and the following note was made:

Potentially, roads are contributing sediment and are affecting water yield timing and amounts.

Onion Spring drainage: The 1.0 mile of the Onion Spring drainage on BLM lands was rated as “PFC” with no trend noted. The “remarks” block had the following:

Future LWD (large woody debris) requirement potential is lacking in areas. Old roads along stream should not be used.

Miners Creek: Approximately 1.2 miles of this creek are on BLM administered lands within the Buck Mountain allotment. This stretch lies between the “pond” that is just on UST lands (T39,R6,S.6,SESE), downstream to a point just above the Keno Road. This stretch has been sporadically grazed in recent years as part of the neighboring Grub Spring allotment use, via a small temporary non-renewable (TNR) authorization to that allotments grazing lease. The PFC rating, done 5/27/97, rated this stretch as “FAR” with a portion (0.8 mi.) with “upward” trend and the rest (0.4 mi.) with “downward” trend. The upward trend portion was noted this way due to “vegetation characteristics”; the downward trend portion was ascribed this rating due to “channel downcuts, lack of large woody debris”. The “remarks” for this rating are as follows:

Creek parallels roadway. Sections have been channelized. Large conifers have been harvested with no chance for future recruitment. Old wood seems to be holding the stream together in several places. Failure of this wood will and has resulted in headcuts and sediment overload in sections below. Creek is ponded on private land just above this segment.

Under the PFC form section on “Are factors contributing to unacceptable conditions outside of BLM’s control or management?”, the “yes” and “no” blocks were both checked and the following “factors” noted: *Augmented flows, Road encroachment, Upstream channel conditions, and Culverts*. This apparently implies that the factors are present on both the BLM lands and the highly intermingled private timber lands. Livestock grazing was not identified as a contributing factor in non-attainment of PFC, but rather, the impacts were timber and road building activities.

Cold Creek: This creek has 0.7 miles on BLM lands and was broken into two portions of rating. The rating for both was “PFC” with no trend noted. The “remarks” for the upper “headwaters” portion was as follows:

Very springy w/lots of wet meadow areas along this stretch. Small section of private has been logged in past. One stream crossing area likely contributing to stream going subsurface.

For the lower “below road” portion, the following remarks were made:

Stream goes through lava flows in several locations - subterr. Fluminicola species present above the subterranean section.

To summarize for the Buck Mountain allotment, it appears that past grazing use had little long term effects on the riparian/wetland areas on BLM administered lands, with the possible exception of the 0.3 mile of Sheepy Creek. Even there the problems noted were mostly attributable to other causes, particularly roads.

Johnson Creek Allotment: Within this allotment (south 80 acre portion) there is a small

creek, which is unnamed on the 7 ½" topographic maps. It was called Johnson Prairie Creek during the PFC rating survey in August of 1997. This 0.1 mile of creek on BLM was rated as "PFC" with no trend noted. The following "remarks" were made during the 8/10/97 survey:

Some bank damage is occurring from elk and (possibly) cattle. A large lodgepole pine wetland is associated with this stream. Peak flows probably are moderated, due to the contribution of groundwater as the main flow source (spring-type stream). Some standing water in pools is currently present.

No cattle grazing use has been licensed (or apparently made) since 1994 on this small allotment, so the "bank damage" was attributed to elk use. Elk are increasing in numbers in the area and are known to concentrate in the Johnson Prairie area. In any event, the creek was in PFC, even after being grazed for many years prior to 1994. There is no water on the north 40 acre parcel.

* * *

As reflected by the recent PFC information, it appears that past livestock use - at least in recent years - was not a significant resource concern on most of the BLM portions of the major drainages in the assessment area. This is especially true when compared to the other ground impacting events that occurred in the area (timber harvest, road building). All of the drainages were either in PFC or in FAR, with upward trend; both ratings indicate that irreversible long term damage was not inflicted when grazing use occurred. Only on Sheepy Creek (0.3 mile in FAR) was past livestock use noted as a likely current condition factor, though the drainage was noted to have an upward trend.

In summary, the monitoring information collected to date seems to indicate that livestock grazing use on both allotments, as practiced in recent years, was not contributing to non-attainment of this Standard. If grazing were to resume in the future, both allotments would need some level of field monitoring - and possible management changes - to ensure that irreversible riparian/wetland problems do not occur. In addition, the current overall non-grazing program related BLM management activities, as directed by the NFP and JCPWA and related policy and guidance, are moving conditions towards future attainment of the Standard.

STANDARD 3 - ECOLOGICAL PROCESSES (Healthy, productive and diverse plant and animal populations and communities appropriate to soil, climate and land form are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.)

This Standard is thought to be met for the Johnson Prairie allotment. Though this Standard is probably not being totally met on the Buck Mountain allotment, overall BLM management (grazing and non-grazing) is making significant progress toward meeting it on the public portions of the allotment. BLM leased/licensed livestock use in recent years (i.e. early 1990's) was not considered a significant factor on either allotment. Future grazing use (as per

KFRA ROD/RMP, Appendix H) would also not be expected to be a significant factor on either allotment.

This standard is largely addressed by the data, analysis, and discussions for the other Standards. All five of the JCPWA “Public Issues and Concerns” in some way pertain to this broad ecosystem function Standard. However, one is the most pertinent to this Standard on Ecological Processes - Issue 5 on “Cumulative Effects of Management Practices” - which reads as follows:

Cumulative effects measure past and current land use activity impacts through time on the watershed. There is a concern that human activities may be cumulatively degrading the quality of aquatic and riparian habitat and causing the decline of several Category 2 species that are totally or partially dependent on these habitats. Effects of future management actions can be predicted as well.

The concept of functioning ecological processes, as reflected by overall watershed health, is a common thread that drove the preparation of the JCPWA. The JCPWA contains exhaustive information and analysis directly pertinent to the addressing of the Standard on ecological processes - terrestrial, riparian, and aquatic. Reference the JCPWA, particularly “Part II - Analysis” on pages 79-113, for specific information. A full summation of that documents analysis, in this assessment for this Standard, is not really necessary.

As noted earlier, the JCPWA determined that the vegetation and soil conditions have been altered significantly during historic times; to the point that the watershed is not thought to be functioning as it should or used to be. This includes the uplands, riparian/wetland, and aquatic ecosystems where these alterations have lead to diminished capabilities for many of the major attributes of a fully functioning ecosystem. However, management activities on BLM administered lands, both grazing and non-grazing, are required by the NFP - as refined by the JCPWA - to enhance and restore ecosystem function. Recent management changes include elaborate riparian buffering schemes within timber treatment areas, road restoration efforts, lighter impacting timber harvest techniques, special status species inventories and subsequent protective buffering, and other restorative activities. In addition, a host of similar activities have been implemented on the extensively intermingled private lands - including the cancellation of the UST grazing lease, which caused a similar cancellation for the BLM lands. In summary, all BLM management activities are directed towards the eventual meeting of this Standard - to the extent BLM management activities can effect change.

On the small Johnson Prairie allotment, it is believed that ecological processes are functioning adequately. All monitoring observations made in recent years have recorded and described the parcels as having good vegetation conditions; a fact which strongly implies proper ecological functioning - especially for the south 80 acre parcel. The north 40 acre parcel has more evidence of past timber harvest, though it is still thought to be in a proper ecological functioning condition as it has an adequate vegetative community composed of native perennial species. This parcel also has had no BLM management related impacts occurring on it in recent years. (See

management recommendations section at the end of this assessment.)

STANDARD 4 - WATER QUALITY (Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.)

This standard is not being met. BLM leased/licensed livestock use in recent years (i.e. early 1990's) was not considered a significant factor on either allotment. Future grazing use (as per KFRA ROD/RMP, Appendix H) would also not be expected to be a significant factor on either allotment.

Water quality was largely addressed in the Spencer Creek PWA (SCPWA, pages 4-139 through 4-170) for the two 303(d) listed streams that lie on the edges of the Buck Mountain allotment - Miners Creek and Johnson Creek. Miners Creek is listed due to "sediment" and Johnson Creek due to "summer temperatures". Jenny Creek is also 303(d) listed for "summer temperatures", but lies largely outside of our administrative control. The previously completed SCPWA Standards assessment adequately covers the BLM administered portions of Miners and Johnson Creeks. The other drainages within the JCPWA assessment area have no known water quality problems (see PFC summary discussion under Standard 2).

As noted throughout this assessment, management activities on BLM administered lands, both grazing and non-grazing, are required by the NFP - as refined by the JCPWA - to enhance and restore ecosystem function. This should lead to better water quality over time. Recent management changes include riparian fencing (on Jenny Creek downstream from the KFRA administration area), elaborate riparian buffering schemes within timber treatment areas, road restoration efforts, lighter impacting timber harvest techniques, special status species inventories and subsequent protective buffering, and other restorative activities. In addition, a host of similar activities have been implemented on the extensively intermingled private lands. In summary, all BLM management activities lands are directed towards the eventual meeting of this Standard - to the extent BLM management activities can effect change via their minority land ownership in the area. (See management recommendations section at the end of this assessment.)

STANDARD 5 - NATIVE, T&E, and LOCALLY IMPORTANT SPECIES (Habitats support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and land form.)

This Standard is thought to be met on the Johnson Prairie allotment. Though not totally met on the Buck Mountain allotment, significant progress is being made towards meeting this Standard. BLM leased/licensed livestock use in recent years (i.e. early 1990's) was not considered a significant factor on either allotment. Future grazing use (as per KFRA ROD/RMP, Appendix H) would also not be expected to be a significant factor on either allotment.

Wildlife issues were a primary component of the JCPWA, because wildlife was a driving reason behind the preparation of the NFP (i.e. spotted owls and their old growth forest habitat requirements.) The JCPWA issue specific to this Standard was titled “Wildlife Habitat”. The issue was described as follows (JCPWA, page 3):

Wildlife habitat is an issue primarily because of the depletion of one component of overall wildlife habitat - the coniferous forest mature/old-growth stand condition. This habitat component is being depleted at a rate that is likely irreplaceable over time. As this habitat component is depleted those wildlife species that prefer or are dependent upon it concomitantly undergo population declines. Although the depletion of mature/old-growth habitat is the focal point of wildlife habitat issues, other habitats are also at risk due to various reasons, e.g. exclusion of fire.

Because of the importance of this issue, a large amount of the JCPWA was devoted to wildlife and wildlife habitat. In particular, this issue was covered on pages 33-53 (Section IV - “Natural and Cultural Features and Assessment) and scattered through pages 86-113 (Section VII - “Resource Management Objectives/Desired Future Condition by Land Use Designations”). Consult those portions of the JCPWA for more information and analysis.

The KFRA ROD/RMP noted in Appendix H (page H-7), that a *Conflict/Concern* for the Buck Mountain allotment was that “No forage allocations for elk use in the allotment have been made”. The commensurate *Management Objective* to solve this concern was to “Allocate forage to meet elk forage demands”. According to some RMP IDT members, at the time of the IDT discussions leading up to the preparation of the RMP, this elk forage *Conflict/Concern* was expressed for areas where elk were currently (1990) either not present or in very low numbers - but the potential for increase was high. That included the Buck Mountain allotment. The rationale for this RMP objective was that the area was expected to have increasing elk numbers and was intended as a “notification” of sorts, to future managers, that at some point forage may need to be allocated for elk. Since 1990, elk numbers have significantly increased in the area. However, no forage competition problems are currently thought to exist. If and when livestock are again licensed in the area (i.e. UST reissues their lease), the issue would be investigated and monitored and appropriate action taken to allocate forage taken as necessary.

To summarize the findings of the JCPWA pertinent to this assessment, the current non-attainment of this Standard has little to do with the limited (past) livestock grazing on the KFRA administered portions of the watershed. Instead, it is a function of the past timber harvest practices, particularly on private lands, and possibly to a small degree, grazing on the Medford BLM administered lands. As already noted, the NFP - as refined by the JCPWA - directs all management activities on BLM administered lands towards restoring ecosystem functionality. One of the primary yardsticks of progress in doing this, is the health of the various wildlife populations.

Current Management and Recent Management Changes

As previously noted, there has been no cattle grazing on either allotment since at least

1994. Future grazing use can not be predicted. All management changes in the area in recent years have been related to the requirements of the NFP and beyond the nominal scope of this assessment.

Proposed Management Changes

The JCPWA proposed or suggested an extensive array of Objectives, Recommendations, and Monitoring covering a wide array of resources and concerns - for both public and private lands. Of course, the BLM can only effect direct change on lands under their administration. See pages 86-125 of the JCPWA for a complete listing of this information. Pertinent grazing management related proposals from the JCPWA, relevant to the KFRA administered lands, are brought forward into this document and summarized below. (There are also dozens of non-grazing related management recommendations that are not noted.) Some additional thoughts have been added based on more recent information as analyzed by this assessment.

1. Monitoring - Upland: If grazing is again leased and licensed on either of the assessed allotments, cursory rangeland monitoring studies - reflecting these allotments low management priority - should be undertaken to ensure that the sustainable grazing capacities of the BLM administered lands are not exceeded. This would primarily entail grazing use supervision and utilization checks. Since the Buck Mountain allotment was initially identified as having a potential "distribution or stocking rate" problem in the JCPWA, efforts would probably be concentrated on it. If grazed, this allotment could also experience elk/cattle forage competition problems, depending on the level of livestock use leased by UST and the size of the elk herd. In any event, if future overgrazing occurs on either allotment, changes in livestock management would be implemented via the grazing monitoring and evaluation (or assessment) process.
2. Monitoring - Riparian: Of particular importance if grazing resumes, would be the monitoring of the riparian areas. Only the 0.3 mile of Sheepy Creek was noted to have definitive evidence of past grazing impacts, though the 1990 pre-RMP IDT noted possible grazing problems with both Miner's Creek and Cold Creek. Riparian photo points and/or other riparian vegetation or aquatic related studies may be implemented and read as needed. Riparian fencing and/or elimination of grazing may be needed if undesirable resource impacts occur.
3. Northwest Forest Plan Implementation: Continued implementation of the requirements of the NFP is expected to gradually improve watershed health over time. Implementation will continue, of course, whether livestock are licensed or not and deals with primarily non-grazing management issues.
4. Rangeland Improvement Projects: The KFRA ROD/RMP, table on "Potential Range Improvements by Allotment" (appendix H, page H-65), identified 3 miles of fencing for the Buck Mountain allotment and 0.5 mile for the Johnson Prairie allotment. These projects may be implemented if grazing were to resume and resource problems occur which could be rectified by fencing. The most likely

fencing would be riparian related. A drawback to fencing in the area is winter snow loads making the maintenance of fencing a chronic problem and/or ineffective.

5. Activity Plans: The JCPWA recommended that if needed a "...site specific allotment management plan for those allotments within the watershed which require improved management to meet land use plan objectives..." should be developed. Since there is no current grazing on either of the assessed areas, AMP's would be of no value. In the future, if grazing re-commences, AMP's could be of value. However, these allotments are of a relatively low priority and would have AMP's developed only after other higher priority allotments are completed.

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Determination

- (X) Existing grazing management practices and/or levels of grazing use (i.e. potential grazing use as per RMP) on the Jenny Creek PWA allotments promote achievement or significant progress towards the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.
- () Existing grazing management practices and/or levels of grazing use (i.e. potential grazing use as per RMP) on the Jenny Creek PWA allotments will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

/s/ Teresa A. Raml
Manager, Klamath Falls Resource Area

7/19/00
Date