

A. Actions Submitted for Formal Consultation

The Prineville District Bureau of Land Management (BLM) is submitting for formal consultation 12 allotments that include 14 pastures total because of potential effects to MCR summer steelhead and their designated critical habitat within the John Day Basin upstream of Kimberly. All of these allotments are grazed with cattle. The primary reason for adverse determinations is due to the potential interactions between grazing livestock and spawning/incubating steelhead, creating a potential for take.

These activities and associated decisions are proposed for Calendar year 2010 through 2020, BLM understands that the National Marine Fisheries Service (NMFS) will only issue a biological opinion (BO) for the first five years and that the BLM will have to resubmit this consultation package for the last five years. The BLM will notify NMFS if any of the grazing actions have been discontinued and no longer need coverage under ESA. Reinitiation of consultation will occur if any of the following conditions are met;

1. new information reveals effects of the action that may affect listed species or critical habitat in a manner or to extent not previously considered
2. the action is modified in a manner causing effects to listed species or critical habitat not previously considered
3. a new species is listed or critical habitat designated that may be affected by the action
4. the amount or extent of incidental take is exceeded

Scope

The John Day Basin encompasses about 5.1 million acres of an extensive interior plateau between the Cascade Range and the Blue Mountains in northeast-central Oregon. Most of the basin is privately owned (3.2 million acres). National Forest lands encompass about 1.53 million acres, and approximately 332,300 acres (about 7 percent) are managed by the BLM. Oregon Department of Fish and Wildlife (ODFW), National Park Service, Oregon State Land Board, Oregon Forestry Department, and the Corps of Engineers manage about 57,000 acres. Predominate management activities in this watershed are agriculture, grazing, timber, and recreation.

Within the John Day Basin are four 4th field Hydrologic Units (HU) or subbasins:

- Lower John Day #17070204
- Upper John Day #17070201
- North Fork John Day #17070202
- Middle Fork John Day #17070203

Table A 1 shows total acres, and Prineville District BLM managed lands within each 4th field Hydrologic Unit.

Due to the unique history of public lands and the origination of the BLM as a land management agency, public land ownership patterns in the John Day Basin are often scattered and irregularly shaped. During the 19th Century the United States Government, through the General Lands Office (GLO) initiated and encouraged land disposals or give-a-ways to raise funds to support

government functions and encourage settlement of the west. Programs such as the Homestead Act of 1862, Railroad Land Grants beginning in 1850, the Timber Culture Law of 1873, the Desert Land Law of 1877, the Timber and Stone Law of 1878, The Carey Land Act of 1894, the Reclamation Law of 1902, and the Stockraising Homestead Law of 1916, all led toward the fragmentation of public lands. Early settlers claimed the most favorable parcels - those adjacent to water and suitable for cultivation and/or other agricultural development. As demand grew, more marginal lands became settled. Many of the land disposal laws required settlers to ‘improve’ the land in some way (i.e., produce a crop, remove timber, or irrigate lands). Due to natural conditions of the ecosystem where these lands were located and variations in weather (i.e. drought) many of these lands were not ‘improved’ according to the stipulation of the law and ownership reverted back to the GLO. This subsequent disposal and reacquisition of scattered lands further fragmented the public lands. This land pattern carried through as the GLO became the BLM. This land pattern creates challenges in managing sensitive resources when public lands are surrounded by large expanses of private lands. Management of more scattered often less desirable, less productive tracts is constrained by resource concerns and access issues. Somewhat blocked and consolidated public lands lead to more opportunities and flexibility in management. The Prineville District has for many years carried out programs aimed at consolidating public lands. In the John Day Basin these consolidated areas are located along the lower John Day River corridor below Clarno (RM109-129), the Sutton Mountain area near Mitchell, Oregon, uplands west of Rudio Mountain, (RM185-207), and the South Fork of the John Day watershed (RM9-36) between the Ochoco and Malheur National Forests. In addition a project known as the North East Oregon Assembled Land Exchange has been completed and disposed of numerous “scattered tracts” in order to consolidate public lands along the North Fork of the John Day River and in the Rudio Mountain Area.

Table A 1. Subbasins in the John Day Basin.

Subbasin Name	Total Acres	Prineville District BLM Managed Acres
Lower John Day	2,011,000	242,618
Upper John Day	1,375,000	145,630
North Fork John Day	1,187,000	35,350
Middle Fork John Day	504,500	3,975

There are three broad goals for BLM managed lands within the project area and are listed below.

Protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values;

Preserve and protect certain public lands in their natural condition, provide food and habitat for fish and wildlife and domestic animals, and provide for outdoor recreation and human occupancy and use; and

Recognize the Nation’s need for domestic sources of minerals, food, timber, and fiber from the public lands including implementation of the Mining and Minerals Policy Act of 1970 (84 Stat. 1876, 30 U.S.C. 21a) as it pertains to public lands.

In conformity with FLPMA, the mission of the BLM is to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations.

B. Status of Species and Designated Habitat

Summer Steelhead

The Middle Columbia River (MCR) distinct population segment (DPS) of inland steelhead (*Onchorynchus mykiss*) is currently classified as threatened by the National Marine Fisheries Service (NMFS). Eleven out of the 15 steelhead DPS's are now listed as threatened or endangered. Steelhead inhabiting the Upper John Day basin, within the Central Oregon Resource Area of the Prineville District Bureau of Land Management, are part of the MCR steelhead DPS. The MCR steelhead DPS occupies the Columbia River Basin and tributaries from above (and excluding) the Wind River in Washington and the Hood River in Oregon, upstream to, and including, the Yakima River, in Washington. MCR summer steelhead were originally listed as threatened on March 25, 1999 (64 FR 14517). This listing was reaffirmed on January 5, 2006 (71 FR 834). Critical habitat was designated on September 2, 2005 (70 FR 2630) which included on lands managed by the Bureau of Land Management within its range.

In the John Day River basin, steelhead spawning occurs widely throughout the basin, primarily within tributary streams to the upper main river and its forks. The John Day River Basin contains approximately 1,800 miles of usable spawning/rearing habitat for steelhead trout, and the basin contains one of last remaining totally wild populations of steelhead trout in the Columbia River Basin. The John Day steelhead population has not been supplemented with hatchery fish.

C. Analysis of Effects

There are 12 allotments containing 14 pastures that will be analyzed because of their potential effects on MCR summer steelhead.

Although BLM does not control grazing on private land the District has created long term grazing strategies that include all private and public lands in each allotment (where practical, and upon coordination and agreement with grazing permit holders) that protect and allows recovery of the aquatic resources. BLM often is the minority land holder within pasture or allotment boundaries.

Direct and Indirect Grazing Impacts on Steelhead

Impacts on the steelhead resource can be grouped into two categories: 1) those actions which have a direct impact to steelhead and 2) those actions which have an indirect impact to steelhead through direct impacts to habitat conditions. Direct impacts involve actions which affect individuals of the species in such a way to constitute 'Take'. With regard to grazing this category includes livestock trampling of steelhead, eggs, and fry, and are typically discrete, short duration actions. Indirect impacts involve actions which lead to 'Take', typically concerns such as habitat alteration. These actions are usually additive, longer term, less intense actions which lead to significant changes in a species habitat, to the point that individuals of the species no longer function optimally when compared to more suitable conditions.

On the Prineville District in the early 1990's a large effort to review grazing management strategies and institute science based grazing systems in order to eliminate long-term habitat deterioration and promote riparian recovery was initiated. Season of use changes and restrictions were instituted, based on scientific knowledge which work with the phenology of key plant species in order to determine timing of grazing and lead to development of healthy riparian areas. Science based grazing strategies to promote riparian growth have been completed for most allotments within the John Day Basin. In general this was a shift from summer long hot season grazing to early spring grazing strategies.

However, while grazing strategies have been changed to provide for riparian growth, the shift to earlier season use primarily in March, April, May, and June has increased the perceived potential for direct impacts (i.e. trampling concerns). The spring season overlaps with steelhead spawning times within the John Day Basin and the concern becomes an issue of direct impacts from livestock on steelhead redds.

Ballard (Ballard, 1999) discusses the direct impacts of cattle on chinook salmon. The study was conducted to determine the impacts and interactions between the species. Based on the stocking rate, stream length, acres grazed and redd density the study area had impacts to two redds over the course of two years amounting to a 16.72% trampling rate for redds, and on average one redd per year would be impacted. This study was conducted in the late summer when spring chinook spawning and water levels are typically at their lowest, and off-stream water is least available, making the stream channel a more attractive area to cattle. Even during this time the study showed cattle actually spent less than 1% of their time in direct contact with the aquatic habitat.

Unauthorized Grazing

Unauthorized grazing is not part of the BLM action. An action is defined as “all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas”(50 CFR § 402.02). The following is for information only.

As set forth in 43 CFR § 4140.1 of the BLM grazing regulations certain acts are prohibited on public lands. Some of these prohibited acts include certain grazing stipulations such as:

Allowing livestock or other privately owned or controlled animals to graze or be driven across these lands:

- (i) without a permit or lease, and annual grazing authorization.
- (ii) in violation of the terms and conditions of a permit, lease, or other grazing use authorization including, but not limited to, livestock in excess of the number authorized;
- (iii) in an area or at a time different from that authorized.

Typically non-compliance with these regulations is termed unauthorized use. Unauthorized use is a prohibited act with regard to management of the public lands. Prohibited acts fall under certain civil and criminal guidelines as outlined in various regulatory documents. These guidelines for unauthorized use are listed in Appendix A. These guidelines outline the procedures and processes for correctly rectifying infractions of the unauthorized use guidelines. Unauthorized use cannot be predicted, expected or planned for. It is a violation of public land use guidelines. Monitoring of approved grazing guidelines and permit schedules, such as periodic allotment checks and that done under the Implementation Monitoring Module designed by the PACFISH Inter-agency Implementation Team, is meant to ascertain infractions of this type of prohibited act and begin the process of rectifying the infraction. These guidelines are national in scope and origin and are not the purview of this District.

In rare occasions infractions of these prohibitions do impact the relevant environmental indicators as noted for critical steelhead habitat as defined by the National Marine Fisheries Service. When this occurs the BLM will reinitiate consultation regarding specific action in areas where the critical environmental indicators have been altered.

Baseline Conditions and Potential Impacts to the Action

Previous biological assessments utilized the Matrix of Pathways and Indicators (MPI) to assess impacts to listed species and their habitat. Due to the fact that some of the indicators in the MPI are not scientifically based (width/depth ratios, riparian reserves, etc.), the impacts to the indicators were always “maintain”, and that it is difficult to rate the indicators on projects that are smaller than a 5th field HUC it was decided to no longer use this assessment.

The new format includes a header with the following;

Allotment: number and name

Pastures: names

Public Acres: total

Streams: names

Perennial: miles

Intermittent: miles

Steelhead Habitat: miles

Grazing Dates:

AUMs: animal unit months

Subwatersheds: numbers

County: name

This is followed by the current condition, potential impacts, monitoring, justification for the call, data sheets from the Properly Functioning Condition Assessment (PFC), Standards and Guides Assessment (if completed) and photos (from PFC assessments if available).

Proper Functioning Condition

Proper functioning condition (PFC) is a qualitative method for assessing the condition of riparian-wetland areas. The term PFC is used to describe both the assessment process, and a defined, on-the-ground condition of a riparian-wetland area.

The PFC assessment refers to a consistent approach for considering hydrology, vegetation, and erosion/deposition (soils) attributes and processes to assess the condition of riparian-wetland areas. A checklist is used for the PFC assessment which synthesizes information that is foundational to determining the overall health of a riparian-wetland system.

The on-the-ground condition termed PFC refers to how well the physical processes are functioning. PFC is a state of resiliency that will allow a riparian-wetland area to hold together during high-flow events with a high degree of reliability. This resiliency allows an area to then produce desired values, such as fish habitat, neotropical bird habitat, or forage, over time. Riparian-wetland areas that are not functioning properly cannot sustain these values.

PFC is a qualitative assessment based on quantitative science. The PFC assessment is intended to be performed by an interdisciplinary (ID) team with local, on-the-ground experience in the kind of quantitative sampling techniques that support the PFC checklist. These quantitative techniques are encouraged in conjunction with the PFC assessment for individual calibration, where answers are uncertain, or where experience is limited. PFC is also an appropriate starting point for determining and prioritizing the type and location of quantitative inventory or monitoring necessary.

Definitions

A riparian-wetland area is considered to be in proper functioning condition when adequate vegetation, landform, or large woody debris is present to:

- dissipate stream energy associated with high water flow, thereby reducing erosion and improving water quality;
- filter sediment, capture bedload, and aid floodplain development;
- improve flood-water retention and ground-water recharge;
- develop root masses that stabilize streambanks against cutting action;
- develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses;

- support greater biodiversity

The components of this definition are in order relative to how processes work on the ground.

If a riparian-wetland area is not in PFC, it is placed into one of three categories:

Functional-At Risk (FAR) – Riparian-wetland areas that are in functional condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation. For this category trend is assigned. None of the other categories assign trend.

Nonfunctional – Riparian-wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows, and thus are not reducing erosion, improving water quality, etc.

Unknown – Riparian-wetland areas that managers lack sufficient information on to make any form of determination.

PFC evaluates the current condition against the streams potential. The PFC information contained in this biological assessment describes the baseline conditions of these streams. Checklist items marked both yes and no are considered “liners” which means that the attribute is on the line whether it is functioning or not (i.e. A Rosgen C channel and the sinuosity was estimated to be around 1.2, if greater than that it would be a yes, if less than no, hence a liner).

Additional information on the PFC methodology can be found in BLM Technical Reference 1737-15 A User Guide to Assessing Proper Functioning Condition and the Supporting Science for Lotic Areas 1998.

Rangeland Health Assessment Protocol

The objectives of the rangeland health regulations are: "to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions"

To help meet these objectives, the regulations on rangeland health identify fundamental principles providing direction to the States, districts, and on-the-ground public land managers and users in the management and use of rangeland ecosystems.

A hierarchy, or order, of ecological function and process exists within each ecosystem. The rangeland ecosystem consists of four primary, interactive components: a physical component, a biological component, a social component, and an economic component. This perspective implies that the physical function of an ecosystem supports the biological health, diversity and productivity of that system. In turn, the interaction of the physical and biological components of the ecosystem provides the basic needs of society and supports economic use and potential.

The Fundamental of Rangeland Health stated in 43 CFR 4180 are:

1. Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil

and plant conditions support infiltration, soil moisture storage and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity and the timing and duration of flow.

2. Ecological processes, including the hydrological cycle, nutrient cycle and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
3. Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established Bureau of Land Management objectives such as meeting wildlife needs.
4. Habitats are or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

The fundamentals of rangeland health combine the basic precepts of physical function and biological health with elements of law relating to water quality, and plant and animal populations and communities. They provide direction in the development and implementation of the standards for rangeland health.

There are five Standards that are evaluated during the Rangeland Health assessment. They are:

1. Watershed Function – Uplands
2. Watershed Function – Riparian/Wetland Areas
3. Ecological Processes
4. Water Quality
5. Native, T&E, and Locally Important Species

The assessment determines whether the standards are being met, if not is progress being made and whether the current livestock use is contributing to not reaching the standard. BLM policy is to change grazing management within two years of the assessment if the current livestock use is contributing to standards not being met. This assessment has not been done on all of the allotments at this time. BLM will submit new assessments of allotments not previously covered as they are completed. For more information on the Rangeland Health assessment refer to BLM Technical Reference 1734-6 Interpreting Indicators of Rangeland Health.

Basic Assumptions and Observations on the Grazing Strategies

Winter (Dormant Season) Grazing

Winter grazing is the use of a pasture during the plants' dormant season. Dormant-season grazing provides total growing season rest every year. Though some browsing does occur on the riparian woody vegetation, such use is often minimal because drainages are colder than adjacent uplands. Also streambanks tend to be frozen so soil compaction and bank trampling are minimal. Fish-livestock interaction is usually minimal due to the unfavorable climate in the riparian area for livestock.

Spring Grazing

Spring grazing is the use of a pasture during the early growing period when upland vegetation is highly nutritious. It enables riparian areas to be largely ungrazed during a large portion of the critical growing period. The critical growing period is when the plant is developing seed. Repeated defoliation at this time can detrimentally affect plant vigor. The riparian vegetation at this time may or may not be growing (dependant on temperature) and in many cases maybe under water due to high flows. Fish-livestock interaction is usually minimal due to lack of palatable forage in the riparian areas.

Hot-Season Grazing

Hot season grazing is the use of the pasture during the critical growing season for riparian plants. Riparian herbaceous vegetation may be more palatable and nutritious than desiccated upland plants at this time. Streambanks are drier than in the spring which lessens the chance of bank compaction. There is frequently sufficient riparian soil moisture to allow for regrowth. With streams that have sufficient flow and temperature to support a fisheries at this time of year, fish-livestock interaction is at its greatest with this use.

Late-Season (Fall) Grazing

Late season grazing is after the plants have set seed. If a fall green up occurs in the uplands livestock generally will utilize the new forage in the uplands limiting their time in the riparian areas. With streams that have sufficient flow and temperature to support a fisheries at this time of year, fish-livestock interaction is generally limited to watering and crossing areas.

More information about riparian grazing strategies can be found in BLM technical Reference 1737-20 Grazing Management Processes and Strategies for Riparian-Wetland Areas 2006.

How Animal Unit Months (AUMs) are determined and adjusted

AUMs are determined by estimating the amount of forage in pounds that a pasture can produce and divided by the amount that a 1000 lb female with calf would consume which is about 790 lbs. Since the amount of forage can change from year to year due to temperature and precipitation the final calculated number of AUMs is conservative. Trend and utilization monitoring is used to validate the AUM calculation. Adjustments are made as needed.

In cases of severe drought BLM has regulations to reduce livestock impacts. Dependant on the type of allotment, season of use, etc, they are various guidelines to protect the resources. They include a requirement that;

Continued management/protection of riparian enhancement pastures/exclosures must not be compromised. Sensitivity to this issue is critical.

For a complete list of drought regulations see BLM Manual 4100.

Effects to MCR summer steelhead habitat which are common to all allotments and found to be insignificant and/or discountable.

The following definition is from the Consultation Handbook;

Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.

Below are the attributes that were found to be insignificant and/or discountable. The effects to these attributes are identical for all twelve allotments.

Water Temperature: The grazing systems implemented protect riparian vegetation. Although there is the possibility of a small reduction of the amount of shade due to plant removal and trampling, the amount that may be removed will be insignificant and should not be measurable in steelhead habitat. This is due to the fact that the riparian vegetation for the most part has low relative palatability when the livestock are in the pastures and the climate is more favorable on the hillsides so the livestock do not concentrate in the riparian areas.

Sediment/Turbidity: It is assumed that a small amount of sediment and a short term increase in turbidity occur when cattle cross or water in these creeks. There have been no observations of increased sediment deposits downstream of cattle crossing areas or water sights. The majority of livestock crossing sites are at the break between pool and riffle so they occur just downstream from where redds are typically constructed.

Chemical Contamination/Nutrients: There is a possibility of increased nutrients and bacteria counts due to grazing. Early season grazing will mitigate this element due to high flows diluting any bacteria that enters the system. Grazing that occurs later in the season potentially has a chance if deposited directly in the system. Cattle on average take 7 steps before defecating after ingesting water. Because of this most cow pies will be deposited outside of the stream and riparian area.

Physical Barriers: Livestock grazing will not cause physical barriers for MCR steelhead.

Substrate embeddeness: The amount of sediment entering the system due to livestock watering and crossing does not appear to increase embeddeness. Annual high flows are still able to move bedload and flush sediments.

Large Wood: Current grazing systems are established to protect riparian vegetation by utilizing the area at the time of year when woody vegetation is less palatable. Grazing will not limit development of future large wood to streams or affect current large wood sources potentially available to fall into streams.

Pool Frequency, Pool Quality, and Off-Channel Habitat: Grazing strategies were designed to allow near natural rates of recovery for pool frequency, pool quality and off-channel habitat.

Refugia: The grazing strategies were designed to protect riparian vegetation and bank stability and will not affect refugia.

Streambank Condition: Grazing strategies were designed to protect streambanks. With early season grazing strategies livestock do not generally hang in the riparian area due to temperature and the forage not being palatable at this time of year. The rotational strategies are designed so there is adequate rest to allow the riparian areas and streambanks to improve. The 5 pastures that were monitored in 2009 showed little to no bank alteration (<2% of the lines using MIMs).

Increases in Drainage Network: Trailing associated with water sites and stream crossings may increase the drainage network slightly but not to the point where take would occur.

Riparian Reserves: No assessment of riparian potential has occurred. However, grazing systems were designed to protect and improve the riparian areas (See Water Temperature).

Monitoring of Allotments in the John Day River Basin

The Prineville District BLM conducts a broad array of monitoring evaluations on a yearly basis. Given the sheer size of the district, the amount of acres covered and the number of stream miles present on public land within the district subsampling approaches are used.

Each individual allotment has established monitoring including:

- trend study plots – using a 3X3 photo plot with a line intercept
- utilization – visual estimate of how much forage and what species was utilized
- redd counts – one count a year on all allotments, biweekly counts on index reaches
- actual use – when and how many cows were turned in and out.
- photo points – some are done annually others as funding allows
- compliance – are the livestock there when they are supposed to be

District monitoring of grazing allotments focus on vegetation. This is based on how streams and riparian areas recover or degrade. Vegetation is the first thing to recover and is also the first thing to degrade. Attributes such as water quality and pool formation can take decades to show affects from changes in management while vegetation can show changes in just a couple of years (Cowley 1997) (see tables C1 and C2).

Table C1 showing recovery rates from streams in southern Idaho. Note herbaceous vegetation and woody vegetation lines are switched on some streams depending on what plants show up first. WQS = Water Quality Standards, RMOs = Riparian Management Objectives

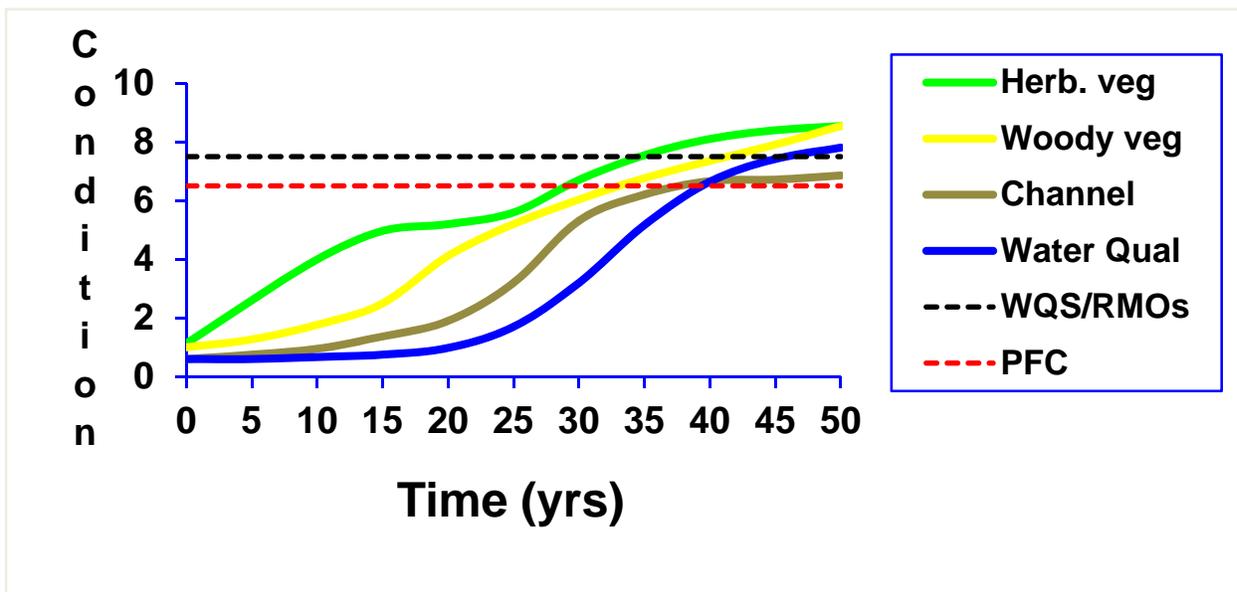
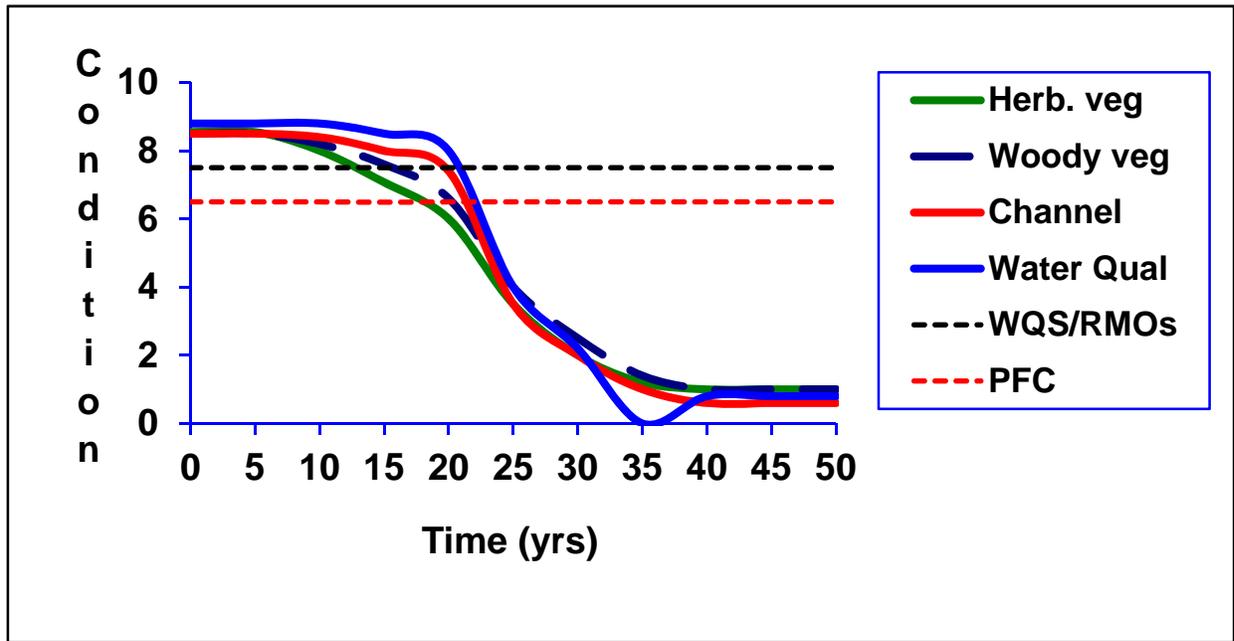


Table C2 showing degradation rates from streams in southern Idaho.



Many of the streams in the district are monitored for water quality such as temperature (approximately 50 sites throughout the district have been monitored since 1992), and other hydrologic parameters (cross section and flow has been measured in many areas). In addition many stream miles have been inventoried and monitored using riparian photos and used to establish qualitative trend in many areas. All monitoring is subject to the current year's budget and personal.

The District also is required to follow the monitoring requirements for the PACFISH Biological Opinion for all grazing allotment pastures that have not been permanently removed from grazing. The District is required to monitor using the three annual indicators in MIMs, 20% of category 1 pastures a year. For the effectiveness monitoring sites the District is currently required to collect bank alteration, residual stubble height, and at times woody browse at the end of the growing season the year before and the year scheduled to be monitored by the effectiveness monitoring team. Riparian Management Objectives have been set at a minimum of 4 inch residual stubble height, bank alteration of <40%, and woody browse <50%. These objectives will be changed by pasture if the trend information demonstrates that the minimums are not working. If objectives are not met the District will analyze why they were not met and whether this is detrimental to the function of the riparian area and if so what changes to management should be made. This monitoring schedule started in the fall of 2009.

The Level 1 Team met in the field on November 17, 2009 to observe fall conditions on allotments around Dayville and to discuss potential annual monitoring of spring use pastures that could be added to this biological assessment. After visiting some of the stream systems and discussing that flows were above bankfull and the riparian vegetation and streambanks were not accessible to livestock and that stubble height measurements in the fall range from 10 to 40 inches on similar used pastures it was decided that there was currently no appropriate

quantitative annual measurement and that photo points that are currently prescribed (adding Franks Creek) were adequate.

Monitoring of Projects for Take and Adverse Modification of Critical Habitat for MCR Steelhead

Potential take may occur from redds being trampled. BLM will monitor for take during annual spawning surveys. In areas where cattle have access to redds, BLM will randomly select index reaches that will be monitored bi-weekly until cattle are removed from the area to monitor if take is actually occurring. The reaches will be submitted to the Level 1 Team for approval.

D. Allotment Specific Information

As stated in Chapter A there are 12 allotments with 14 pastures for this consultation package. Table D.1. is a summary of the allotments and their respective PFC ratings.

Table D.1.

Allotment Name	Pasture Names	PFC Rating	Factors Contributing to Unacceptable Ratings
2558 Squaw Creek	No Name	Functional at Risk upward trend	Little herbaceous vegetation, no recruitment on the woodies
2662 Johnson Creek	No Name	PFC	Lacking diverse age class and composition on the of vegetation
4016 Dixie	Standard, Bear Creek	Dixie Creek Functional at Risk upward trend, Standard Creek PFC	W/D to large, excess sediment, riparian area may not be widening
4020 Murderers Creek	Cougar Gulch, River	PFC	Forms missing for SF John Day, the other streams have no concerns
4041 Franks Creek	South Pasture	Functional at Risk trend not apparent	Sinuosity limited by road, some downcutting, lack of woody recruitment
4042 Johnny Cake Mountain	Creek	Cabin Creek Upper Reach Functional at risk upward trend, lower reach PFC, NF John Day River PFC	Cabin Creek W/D, riparian area may not be widening. NF John Day W/D and vegetation issues
4052 Big Baldy	North	PFC	Forms missing for SF John Day, Deer Creek has no concerns
4103 Rockpile	No Name	PFC	Forms missing for SF John Day, Cougar Gulch and Frazier Creek have no concerns
4108 Little Wall Creek	No Name	Functional at Risk Upward Trend	W/D and adequate vegetation to dissipate energy
4145 Two County	No Name	Functional at Risk trend not apparent	Lack of the right types and amounts of vegetation
4151 Kinzua	Creek	Functional at Risk upward trend	Diverse age class and adequate vegetation
4163 Creek	No Name	Functional at Risk Upward Trend	Upland watershed is contributing to degradation

Allotment: 2558 Squaw Creek

Pastures: No Name

Public Acres: 5086

Streams: Squaw Creek, Frank Creek, Buckhorn Creek

Perennial: 2.5 miles

Intermittent: 6.4 miles

Steelhead Habitat: 2.1 miles

Grazing Dates: 4/1 -11/30 This is a rotational system with other (private) pastures. Livestock are in the pasture anywhere from 30 to 60 days depending on the year. The permittee decides when they turn out and monitors use (amount and types of forage utilized) on when to leave. Winter, spring, hot, or fall use depending on the year of the rotation.

AUMs: 301

Subwatershed: 1707020401

County: Grant and Wheeler

Current Condition

Squaw Creek provides spawning/rearing habitat for MCR summer steelhead. This stream was rated as Functional at Risk (FAR) with an upward trend using the PFC methodology. This system provides good amounts of spawning gravel and canopy cover. The stream banks are cobble dominated with most of the riparian area comprised of alder. A field review in 2008 showed some livestock use on the point bars but it appeared that herbaceous vegetation was increasing. There was little to no use elsewhere in the riparian area. The lack of diverse age class of the woodies, appears to be due to the current alder stand that shades out the majority of the riparian area. Implementation monitoring using the MIM protocol occurred September 23, 2009 with the following results;

Mean Stubble height = 21.6 inches

Bank Alteration = 0

Woody Use = 0- 20% Slight

Buckhorn Creek provides rearing habitat for MCR summer steelhead. This stream was rated as Functional at Risk (FAR) with an upward trend using the PFC methodology. This reach is cobble and boulder dominated and receives little to no livestock use due to the steep slopes and rock content of the stream banks. A field review in 2008 showed good vegetative diversity in the riparian area with some erosion issues along the road.

Frank Creek rated poor for fish habitat limited by low flows, poor pool conditions, siltation and lack of escape cover and spawning gravel. Rearing habitat for steelhead trout in Frank Creek limited to the lower 100 yards of stream on BLM, where a 6'headcut blocks upstream access. Overall due to the small size of Frank Creek there is limited potential to provide MCR summer steelhead habitat. Juvenile steelhead were observed immediately below barrier in 1999. Current livestock use is not impacting the habitat. No PFC assessment has been done due to the limited amount of public land.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. When livestock are in the pasture during winter or spring use, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage. The hot season and fall use livestock will spend more time in the riparian area. As stated above a field review in September of 2008 showed some use on the point bars but due to the recruitment of herbaceous and woodies it appears this allotment is on an upward trend.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Compliance(annually), Utilization (once every 5 years), trend(next reading will be in 2010), photo points (one annually, others when funding allows), residual stubble height(annually), redd counts, PACFISH Implementation Monitoring (bank alteration, stubble height, and woody browse at the end of the growing season in 2014) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Squaw, Frank and Buckhorn Creeks.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 16 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

Name of Riparian-Wetland Area:			Squaw Creek
Date:	9-25-2003	Segment/Reach ID:	Lowest BLM Section RM 1.5 to 2.25
ID Team Observers:		A. Smith, K. Primrose, J. Morris	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) No herbaceous – all shaded out, woody species lack young sprouts. Mostly mature age class
	X		7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> No herbaceous- mostly white alder, some mockorange and dead cottonwoods.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

		<input checked="" type="checkbox"/>	14) Point bars are revegetating with riparian-wetland vegetation
<input checked="" type="checkbox"/>		<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity
<input checked="" type="checkbox"/>		<input type="checkbox"/>	16) System is vertically stable <i>(not downcutting)</i>
<input checked="" type="checkbox"/>		<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

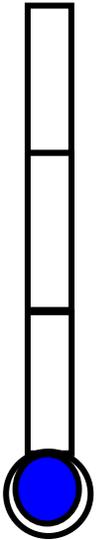
Remarks

Some braided channel. No or little macroinvertebrates. Unconsolidated.

Current road runs along the stream and an old road too

This channel has downcut as far as possible and is stable. This channel will not aggrade and redevelop a floodplain unless large debris jams develop and revegetate with herbaceous vegetation.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) livestock grazing upstream on private lands</p>
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Lotic Checklist

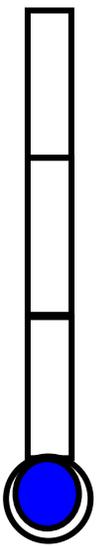
Name of Riparian-Wetland Area:			Buckhorn Creek
Date:	9-25-2003	Segment/Reach ID:	¼ mile above confluence with Indian Creek up to end of BLM lumped 2 BLM sections
ID Team Observers:		A. Smith, K. Primrose, J. Morris	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X	X		5) Upland watershed is not contributing to riparian-wetland degradation Liner upland adjacent to riparian areas are poorly vegetated (mainly cheatgrass) steeper slopes well vegetated
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Herbaceous veg is not diverse – only saw a few sedges, veg is mostly colonizers Cottonwood, alder, two willow species, mockorange, birch, stinkin current, rose, brookgrass, equisetium
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

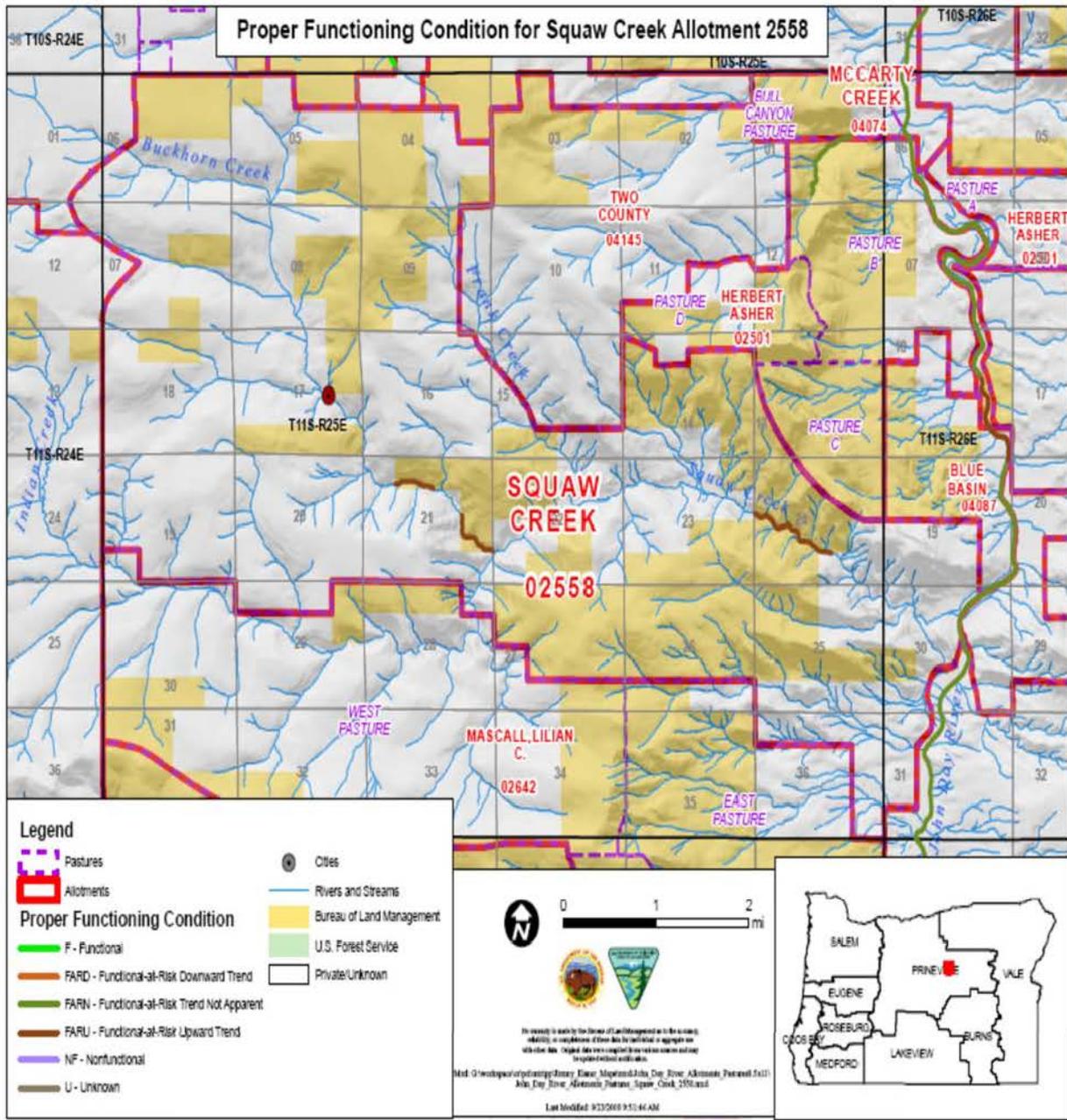
Yes	No	N/A	EROSION DEPOSITION
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy System appears to be moving a large bedload (large cobble). The living woody species providing roughness to dissipate energy. liner
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14) Point bars are revegetating with riparian-wetland vegetation
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16) System is vertically stable <i>(not downcutting)</i> Almost down to bedrock or large boulders
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Areas where the gradient decreases are braided or have mid channel bars. Livestock have been hedging young woody species and grazing back what few areas could support herbaceous sedges/rushes. **(Follow up field observations in 2008 and 2009 did not document hedging due to livestock.)**

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>	 <p>PFC</p> <p>FAR</p> <p>NF</p>	<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) livestock grazing upstream on private lands</p>
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Squaw Creek

Allotment: 2662 Johnson Creek
Pastures: No Name
Public Acres: 7698
Streams: Johnson Creek
Perennial: 2.0 miles
Intermittent: 11.5 miles
Steelhead Habitat: 1.6 miles
Grazing Dates: 4/15 – 7/15 (spring to early hot use)
AUMs: 436
Subwatersheds: 1717020401, 402, 115
County: Wheeler

Current Condition

The lower reach of Johnson Creek was rated at the lower end of PFC because the creek is still recovering from a sluice out that occurred 12 years ago. The course rock is protecting the channel from further erosion. The Middle reach is rated at PFC and appears to be at potential natural community. Both of these reaches provided spawning and rearing for MCR summer steelhead although spawning gravels are limited. Due to the rock content of the stream channel and banks, lack of fines, and the overstory of pine this system does not have the potential to grow very much riparian vegetation. Because of this livestock use consists of stream crossings and watering sites.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Compliance, trend(next reading 2012), utilization (every 5 years), redd counts (annually), PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2013) because of new requirements a new schedule for PACFISH monitoring

is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key for Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Johnson Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

Name of Riparian-Wetland Area:			Johnson Creek
Date:	8/27/01	Segment/Reach ID:	Lower BLM Reach
ID Team Observers:			Anderson, Kindsche
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events The stream is a Rosgen B3 or B4 channel. There are flood plains that are flooded in frequent events.
		X	2) Where beaver dams are present are they active and stable None present
X	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The stream is recovering from a sluice out that has braided the channel. It appears that the stream has re-adjusted and is nearing balance with the landscape setting. <i>Liner</i>
X			4) Riparian-wetland area is widening or has achieved potential extent Vegetation is sparse due to the overstory and lack of soil on the flood plain to grow plants. There are some riparian plants and upland plants on the flood plain and it is improving.
X	X		5) Upland watershed is not contributing to riparian-wetland degradation The private land areas have been logged. The sluice-out may have come from the disturbances they created. It is clear that something upstream disturbed the channel balance and may do so again. <i>Liner</i>
Yes	No	N/A	VEGETATION
X	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) <i>Liner</i> , A few old cottonwood are present but there is no reproduction. Red osier dogwood is the principal vegetation but only a scant stand. A minor component of alder and willow is present. No herbaceous vegetation due to the loss of soil.
	X		7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Very limited species diversity. Refer to 6.
X	X		8) Species present indicate maintenance of riparian-wetland soil moisture characteristics The species present indicate moisture is present but they are limited in abundance.
X	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Rock rubble stream bed assures stability with average flows. Conifers are a major contributor to the root mass.
X	X		10) Riparian-wetland plants exhibit high vigor Cottonwoods show decadency and little reproduction. Dogwood is a minor component with good vigor. The few willow populations look vigorous.
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Presently the limited riparian vegetation is contributing little to stream stability. The rock rubble stream bed does.

	X		12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Logged reaches upstream from this BLM tract, as well as below, provide little woody materials. This small quarter mile section may profit from litter produced upstream.
Yes	No	N/A	EROSION DEPOSITION
X	X	■	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy Much of the LWM has been washed away or removed by the road that was built up the stream bottom
X			14) Point bars are revegetating with riparian-wetland vegetation There is some vegetation on the point bars
X	X	■	15) Lateral stream movement is associated with natural sinuosity The stream is still adjusting and has some braiding that is outside the norm for this type of channel. liner
X		■	16) System is vertically stable (not downcutting) The stream is eroded to large boulder and cobble.
X		■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There is no evidence of excessive erosion or deposition. The sluice out occurred 12 years ago based on conifer growth in the channel.

Remarks

The Stream is recovering from a sluice out about 12 years ago. It appears to be functional but has lost much of its integrity to the torrent that swept through. This stream is a liner for functionality. The coarse rock protects the channel from further erosion. Therefore it is rated as PFC at the low end of the scale.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes ___</p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

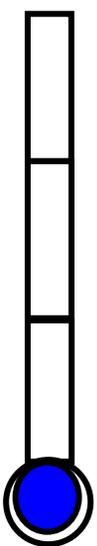
Name of Riparian-Wetland Area:			Johnson Creek
Date:	8/28/01	Segment/Reach ID:	Middle BLM Reach
ID Team Observers:			Anderson, Kindsche
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events The floodplain is composed of terraces created by log jams. The amount of small wood jams on the terraces show that they are frequently inundated
		X	2) Where beaver dams are present are they active and stable None present
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The channel is a steep Rosgen B type with boulders and LWM. It is in balance with the landscapes setting.
		X	4) Riparian-wetland area is widening or has achieved potential extent There is no real riparian vegetation only conifer forest.
X			5) Upland watershed is not contributing to riparian-wetland degradation The stream shows no signs of unusual erosion. It is very dynamic and moves as large trees fall into the channel
Yes	No	N/A	VEGETATION
X	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Liner, Although the stream is perennial in this area, little riparian vegetation is present in the rock rubble and cobble stream course
X	X		7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> .Stinging nettle with overstory of Douglas-fir, Grand fir and Ponderosa pine. Really not a site with the potential to produce riparian vegetation.
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> The massive amounts of coniferous forest is providing a wealth of material for woody debris blocking of stream discharge. The roots of these large trees are holding the flood plain together.
		X	10) Riparian-wetland plants exhibit high vigor The old-growth forest is very stable with all ages of trees that continue the cycle from seedlings to mature and dead
		X	11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> See comment #9
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) See comment #9

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There are lots of whole trees, LWM and boulders.
		X	14) Point bars are revegetating with riparian-wetland vegetation None present. The stream has a series of terraces that are not true point bars. The LWM is substituting for the point bars normally found in most streams with a Rosgen B channel gradient. This is a relatively steep B channel.
X			15) Lateral stream movement is associated with natural sinuosity Jams create lateral movement which is normal
X			16) System is vertically stable <i>(not downcutting)</i> The coarse boulder and cobble bottom is holding the system vertically stable
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) The jams and other roughness elements are trapping sediment. The stream is in balance with the water and sediment supply

Remarks

This reach is inhabited by large numbers of age 0 and 1+ steelhead. It is flowing about 2-3cfs and is in a stand of old-growth conifers. This reach is at PNC. Johnson Creek is an excellent example of an old-growth system that is relatively undisturbed. By contrast, the interspersed blocks of private land have been cut more than a decade or two ago. The channel stability on private land was lost when the wood was disturbed or removed. This system could be used as a text book example of why buffer strips should be left along coniferous streams that are logged. The upstream channel condition above each of the BLM Johnson Creek reaches could be considered as an adverse affect but the extent is usually limited to the first 300-500 feet of each BLM reach so it was decided to discount this situation.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition Near PNC</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward <input type="checkbox"/> Downward <input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes ___ No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations <input type="checkbox"/> Mining activities <input type="checkbox"/> Upstream channel conditions <input type="checkbox"/> Channelization <input type="checkbox"/> Road encroachment <input type="checkbox"/> Oil field water discharge <input type="checkbox"/> Augmented flows <input type="checkbox"/> Other (specify)</p>
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Johnson Creek

Allotment: 4016 Dixie

Pastures: Standard, Bear Creek

Public Acres: 2548

Streams: Dixie Creek, Standard Creek, West Fork Standard Creek, Comer Creek,

Perennial: 5.7 miles

Intermittent: 2.7 miles

Steelhead Habitat: 4.6

Grazing Dates: 6/1 – 7/15 first pasture, 7/16 – 10/15 second pasture. Livestock graze both pastures every year, the time of year that the pasture is grazed changes (spring to early hot first year and Hot to Fall second year)

AUMs: 319

Subwatersheds: 1707020110,

County: Grant

Current Condition

Dixie Creek was rated at Functional at Risk upward trend, and Standard Creek was rated at PFC using the PFC methodology. Comer Creek and West Fork Standard Creek have not been rated using the PFC methodology. These creeks provide spawning (Dixie and Standard) and rearing habitat (all four) for MCR summer steelhead. These four creeks provide cold and clear water with instream wood being common. These are forested system with rocky streambanks that are stable and well vegetated. Limiting factors to the fisheries include increased fine sediment from historic mining, and low summer flows in Dixie and Standard Creeks below irrigation diversions. Livestock use is generally limited to watering and crossing sites.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the spring to early hot grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage. Under the hot to fall grazing strategy the fry should be out of the gravel so redd trampling is not an issue.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. Due to the narrow rocky channels and the amount of hardwoods along the creeks livestock do not spend much time in the riparian areas. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Compliance (annually), utilization (every 5 years), photo points (yearly), trend (next read 2012), PIBO EM site #1015 Dixie (next reading 2011) PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2011 & 2012), redd counts (annually), residual stubble height (annually), and water temperature.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Dixie Creek, Standard Creek, West Fork Standard Creek, and Comer Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

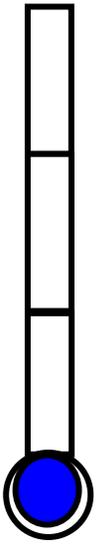
Lotic Checklist

Name of Riparian-Wetland Area:			Dixie Creek
Date:	Unknown		Segment/Reach ID: BLM Segment
ID Team Observers:			Unknown
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
	X		2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X	X		4) Riparian-wetland area is widening or has achieved potential extent Liner
	X		5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i>
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

X			14) Point bars are revegetating with riparian-wetland vegetation
X		■	15) Lateral stream movement is associated with natural sinuosity 3 terraces (lowest one is active floodplain)
X		■	16) System is vertically stable <i>(not downcutting)</i>
	X	■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input checked="" type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify) x</p>
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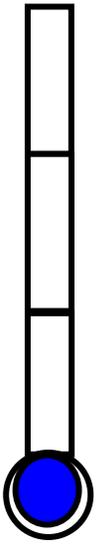
Lotic Checklist

Name of Riparian-Wetland Area:			Standard Creek
Date:	Unknown	Segment/Reach ID:	BLM Segment
ID Team Observers:		Unknown	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
	X		2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
	X		4) Riparian-wetland area is widening or has achieved potential extent Liner
	X		5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i>
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

X			14) Point bars are revegetating with riparian-wetland vegetation
X		■	15) Lateral stream movement is associated with natural sinuosity 3 terraces (lowest one is active floodplain)
X		■	16) System is vertically stable <i>(not downcutting)</i>
	X	■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input checked="" type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify) x</p>
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Dixie Creek

Allotment: 4020 Murderers Creek
Pastures: Cougar Gulch, River
Public Acres: 16004
Streams: South Fork John Day River, Cabin Creek, and Cougar Gulch.
Perennial: 7.6 miles
Intermittent: 48.0 miles
Steelhead Habitat: 5.9 miles
Grazing Dates: 5/1 – 6/30 Pastures are used for approximately 20 days 2 out of three years.
Spring use.
AUMs: 860
Subwatersheds: 1707020105, 112,
County: Grant

Current Condition

South Fork John Day River; this stream segment was rated as PFC, the actual field forms justifying the rating are missing at this time. This segment does provide limited spawning, and rearing habitat. Limiting factors for MCR steelhead are embedded substrate in spawning areas, low pool volume for rearing, and elevated water temperatures. The high sediment load coming from upstream sources appears to be a major reason for the limiting factors. Very little livestock use occurs along the river due to fencing and the time of year that livestock are in the pastures.

Cabin Creek: This creek section was rated at PFC and the observers thought it might be at potential natural community (PNC) and that the riparian area was a show case example. Cabin Creek provides spawning and rearing habitat. Due to the thick stand of woody vegetation there is little to no livestock use.

Cougar Gulch; this section of creek was rated as PFC and is in excellent condition. Livestock grazing does not appear to be affecting the riparian area or creek channel. Cougar Gulch has marginal spawning and rearing habitat due to its gradient and intermittent flows.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is

sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

A seasonal limitation to grazing should limit impacts to the South Fork John Day River. If stream flows at the USGS Service Creek gauging station drop below 2000 cfs than livestock will be restricted from the River. This will be accomplished by either removing livestock from the pasture or temporary fencing. This level was chosen because at 2000 cfs and higher, water covers much of the riparian vegetation, thereby protecting it from livestock grazing.

Monitoring

Compliance (annually), photo points(every 5 years), trend (next reading 2012), water temperature, redd counts (annually), and utilization (every 5 years). PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2013) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; South Fork John Day River, and Cougar Gulch.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to potential redd trampling.**

Lotic Checklist

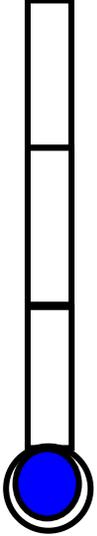
Name of Riparian-Wetland Area:			Cabin Creek
Date:	7/26/01	Segment/Reach ID:	BLM Reach
ID Team Observers:			Anderson, Kindsche
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events The stream bottom is flat and the stream can access its flood plain. The stream is approximately 5-8 feet wide, flows about 5 cfs today and has banks that are about 1-2 feet above the channel bottom.
		X	2) Where beaver dams are present are they active and stable No beaver are present
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) This is an A3 channel with limited sinuosity. The valley is narrow and the gradient is 6.0%.
X			4) Riparian-wetland area is widening or has achieved potential extent The riparian zone is mature and has achieved potential extent. The vegetation is comprised of a rich variety of plants that include old growth ponderosa pine.
X			5) Upland watershed is not contributing to riparian-wetland degradation There is no evidence of any erosion or deposition from the uplands.
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Excellent reproduction of all riparian species.
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Very diverse community of mountain alder, red osier dogwood, and cottonwood, wild rose, current service berry, elder berry, willow spp., rushes and sedges plus forbs such as monkey flower.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics An excellent stand of PNC species of riparian plants
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> All species present contribute to a maximum stability for this stream. Couldn't be better.
X			10) Riparian-wetland plants exhibit high vigor Excellent vigor of all species
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> A PNC riparian jungle which has no threat of disruption from high flows!
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Very much so... this dense stand of near climax woody vegetation is about as good as it can get.

Yes	No	N/A	EROSION DEPOSITION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There is a large amount of woody material in the channel and the banks are extremely stable. The roots of the riparian community and the coarse cobble have stabilized the banks and dissipate energy.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14) Point bars are revegetating with riparian-wetland vegetation This is an A3 channel that is relatively straight without point bars. The riparian zone is totally vegetated.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity The stream is very stable due to the mature riparian zone surrounding the stream. There is a predominance of basalt cobble and boulders buried throughout the bed of the stream that prevents lateral movement.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16) System is vertically stable <i>(not downcutting)</i> The stream is only 1-2 feet below the flood plain and has a coarse bottom and extensive wood accumulation that anchors the channel.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) The stream is very stable and the substrate is very clean. This indicates that all sediment is continually moving through the channel.

Remarks

This is a stream that is in fantastic condition. A Yellow-breasted chat (bird) was present in the riparian zone. This species frequents only the best riparian plant communities. This riparian zone is a show case example that is probably at PNC.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			Cougar Gulch
Date:	7/30/01	Segment/Reach ID:	Lower BLM Reach
ID Team Observers:		Anderson, Kindsche	
Yes	No	N/A	HYDROLOGICAL
		X	1) Floodplain above bank full is inundated in "relatively frequent" events This is a Rosgen A3 channel with no flood plain. The channel has a 7.3% gradient and is 4-8 feet wide.
		X	2) Where beaver dams are present are they active and stable No beaver present.
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The channel is in excellent condition and meets the criteria for an A3 channel that is stable. The coarse rock and boulders provide a great amount of stability.
X			4) Riparian-wetland area is widening or has achieved potential extent The riparian zone has achieved potential extent.
X			5) Upland watershed is not contributing to riparian-wetland degradation There is no evidence of the watershed causing any problem in channel. There is grazing but it appears to be very minimal.
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Excellent diversity of age classes for woody vegetation. There are a number of aspen and cottonwood that are quite old. They are being replaced through normal successional processes.
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> A great many woody species present. An exceptionally rich community of mountain alder, red osier dogwood, syringe, clematis, red willow, snowberry, and aspen. Very little herbaceous vegetation due to the complete cover of deciduous woodies.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics The species listed in item 7 indicate the presences of soil moisture.
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> The riparian plants present contribute to soil stability along the stream. No evidence of soil loss or movement.
X			10) Riparian-wetland plants exhibit high vigor All species with the exception of successional replacement of cottonwood and some aspen are in high vigor.
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> A super-abundance of vegetation to dissipate energy. This is a very healthy system.
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Stream bed well armored with both bedrock and abundant woody vegetation. Both

			riparian deciduous and adjacent pine, juniper on the uplands contribute to the LWM needed for maintenance.
Yes	No	N/A	EROSION DEPOSITION
X		<input type="checkbox"/>	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There are a lot of small boulders and small wood in the channel. There are some conifer logs in and across the channel too.
		X	14) Point bars are revegetating with riparian-wetland vegetation This type of channel does not have point bars.
X		<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity There appears to be no lateral stream movement.
X		<input type="checkbox"/>	16) System is vertically stable <i>(not downcutting)</i> The coarse boulder and cobble material prevents down cutting.
X		<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) The stream is in balance with the water and sediment. There is no erosion or deposition that could be noted.

Remarks

This reach is being grazed. The riparian community is very dense and the grazing is not adversely affecting the riparian vegetation. There are several fences that aid in grazing regulation. It appears the management is being affective in protecting the riparian zone.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			Cougar Gulch
Date:	7/30/01	Segment/Reach ID:	Middle Reach
ID Team Observers:			Anderson, Kindsche
Yes	No	N/A	HYDROLOGICAL
		X	1) Floodplain above bank full is inundated in "relatively frequent" events There is no flood plain. This is a Rosgen A3 channel with a 7.3% gradient. The flow stays within the narrow valley.
		X	2) Where beaver dams are present are they active and stable No beaver are present.
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The stream is in balance. There was little water. There are only intermittent pools at this time of year.
X			4) Riparian-wetland area is widening or has achieved potential extent It has achieved potential extent.
X			5) Upland watershed is not contributing to riparian-wetland degradation The upland watershed is in excellent condition and there is no evidence of sediment or other activities affecting the channel. There is an old road up the left slope but it is stable and shows no sign of eroding.
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Very good age class distribution of all species except cottonwood and some aspen which are passing out of the site due to successional advancement.
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Exceptional diversity of woody riparian species including the dominant mountain alder with understory red osier dogwood, at least 3 species of willow, syringe, currant species, and water birch.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics Site well protected by vegetation. No problems.
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Site in excellent vegetative condition with no threat of erosion.
X			10) Riparian-wetland plants exhibit high vigor Excellent vigor on all but decadent cottonwood and some aspen which are passing from the successional picture.
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Stream well armored by vegetation and associated roots and old woody materials

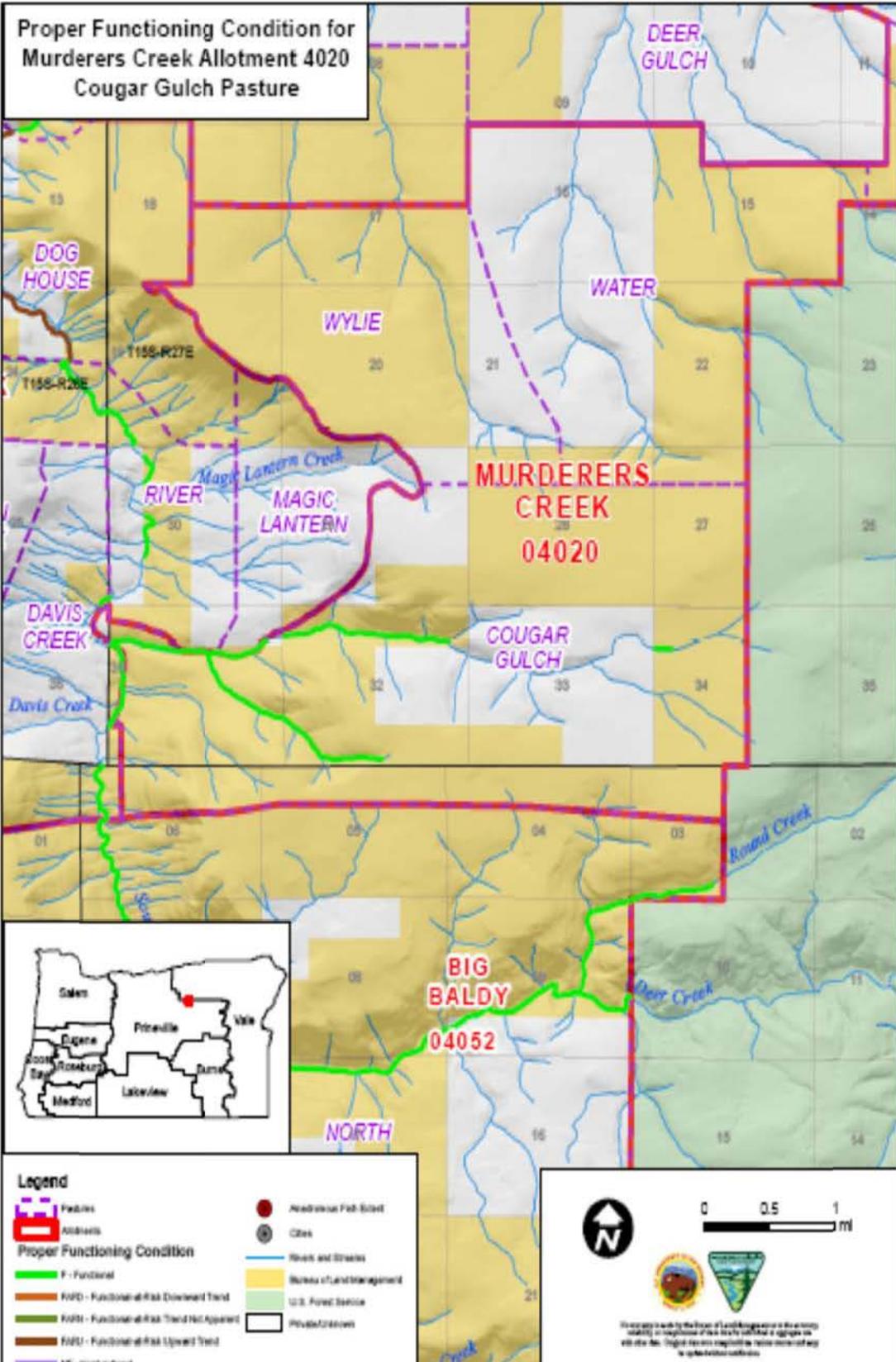
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) A good amount of woody material within the flow channel with vast quantities available for the future.
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy The channel has significant amounts of shrubs, rocks and large wood necessary to dissipate energy.
		X	14) Point bars are revegetating with riparian-wetland vegetation A Rosgen A channel does not have point bars.
X			15) Lateral stream movement is associated with natural sinuosity The heavy rock armor and riparian root system prevents the stream from moving.
X			16) System is vertically stable <i>(not downcutting)</i> The coarse boulder and cobble bottom prevents down cutting and the system does not appear to have moved in decades.
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) The stream is in balance with the water and sediment being supplied. This system does not appear to have very much sediment delivered to it. The watershed is in excellent condition.

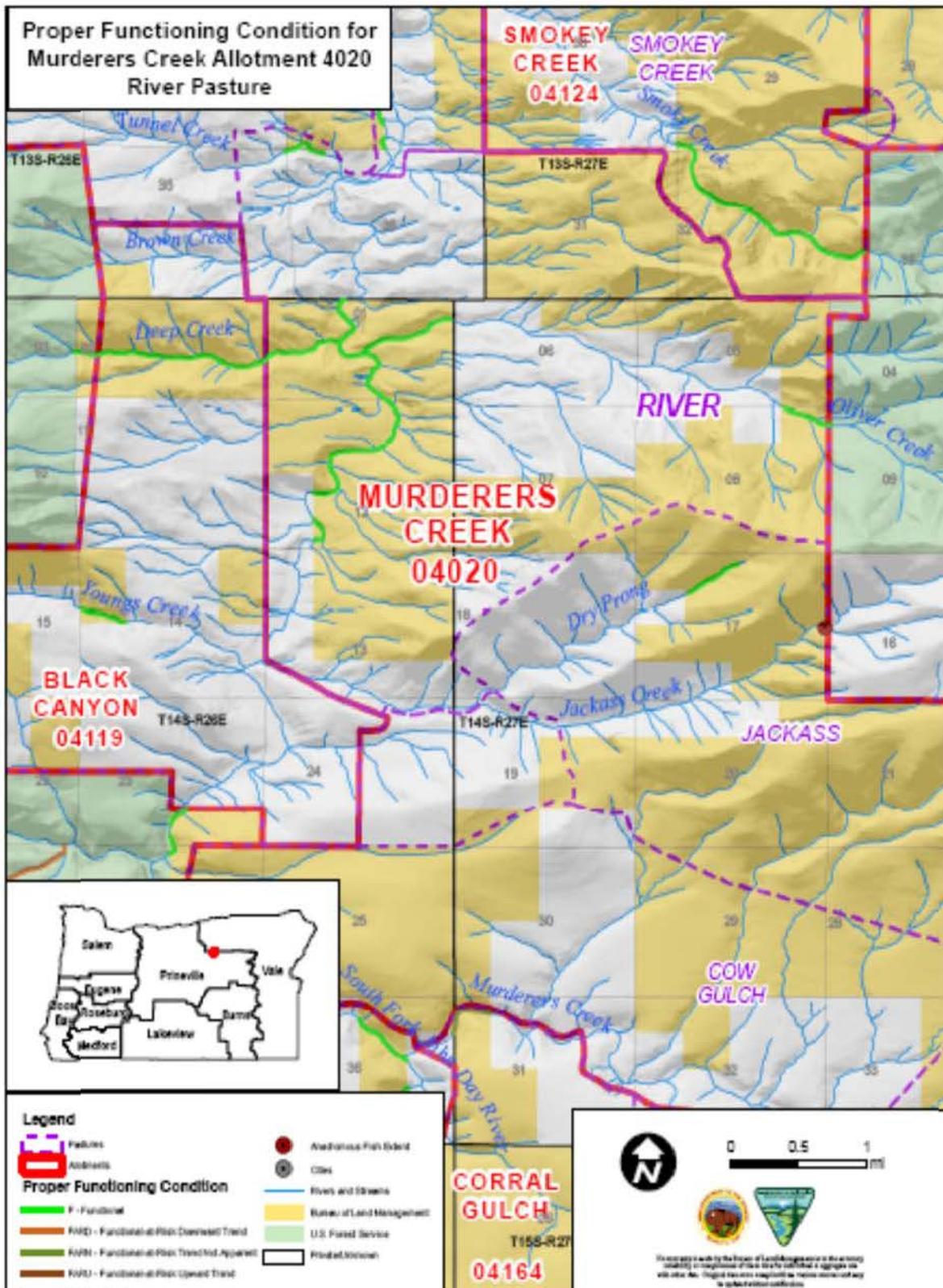
Remarks

This reach is in excellent condition. The upper half of the reach is in pristine condition. There has been no timber harvest in the upper half of the reach and it is at PNC. Grazing is present but does not affect the stream.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Cougar Gulch



Cabin Creek

Allotment: 4041 Franks Creek

Pastures: South Pasture

Public Acres: 2617

Streams: Franks Creek and Ferris Creek

Perennial: 1.7 miles

Intermittent: 5.8 miles

Steelhead Habitat: 0.9 miles

Grazing Dates: 4/1 – 5/31 Late winter to spring use. Note these dates were changed due to the results of the Rangeland Health Assessment in 2005 (see assessment below). This pasture was rested in 2009.

AUMs: 223

Subwatersheds: 1707020112, & 115

County: Grant

Current Condition

Franks Creek is intermittent and provides spawning and rearing habitat for MCR summer steelhead. Connection to the John Day River occurs about 2 years in five. Most early season flows go subsurface and connectivity only occurs in February and March. The public land portions of Franks Creek were rated as functional at risk trend not apparent using the PFC methodology. The Standards and Guides assessment conducted in 2005 failed Watershed Function – Riparian/Wetlands standard. Since this time the grazing season of use has been changed from April – November to April – May. This change should allow the riparian area to improve due to the fact that it will have most of the growing season to recover from any livestock impacts. This change in the season of use will have livestock in the pasture when the streambanks are under water and not accessible to livestock. Potential impacts should be limited to watering and crossing sites.

Ferris Creek is rated as functional at risk trend non apparent using the PFC methodology. This portion of Ferris Creek is not fish bearing. The changes in grazing management should allow this system to improve and is not expected to impact steelhead or their habitat downstream.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater

due to higher flows or under sediment. Livestock are moved out of the pasture when there is sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Compliance (annually), photo points (annually), redd counts (annually), and trend (next reading 2014). PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2010) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Franks Creek and Ferris Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

Name of Riparian-Wetland Area:			Franks Creek
Date:	5-26-05	Segment/Reach ID:	Lower BLM reach Franks Creek Allotment
ID Team Observers:		A. Smith, J. Morris, L. Andrews, S. Cooke	
Yes	No	N/A	HYDROLOGICAL
		X	1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Limited by road
X			4) Riparian-wetland area is widening or has achieved potential extent Limited by road Liner
			5) Upland watershed is not contributing to riparian-wetland degradation Not answered
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Recent young cottonwood
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i>
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics Woody species only – intermittent flow
	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Channel eroded down to large cobble and boulders
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X	X		12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Possibly historically old cottonwood plants Liner
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

X	X		14) Point bars are revegetating with riparian-wetland vegetation Liner
	X	■	15) Lateral stream movement is associated with natural sinuosity Due to road
X		■	16) System is vertically stable <i>(not downcutting)</i>
X		■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Decadent cottonwood resprouting mockorange, chokecherry tall wheatgrass, young coyote willow.

Ratings are due to road encroachment and lwd need

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input checked="" type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input checked="" type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) intermingled lands with various grazing and logging practices</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			Franks Creek
Date:	5-26-05	Segment/Reach ID:	Upper BLM reach Franks Creek Allotment
ID Team Observers:		A. Smith, J. Morris,	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events New flood plain is not yet vegetated fully with sedges and rushes, new young sedges and rushes are coming in
		X	2) Where beaver dams are present are they active and stable
X	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Not enough LWD and road limits sinuosity Liner
X			4) Riparian-wetland area is widening or has achieved potential extent Different sedges and rushes, one species of mature willow, snowberry, currant, aspen
X			5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i>
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Recent event resulted in moderately elevated erosion Liner
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X	X		12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Liner adequate growing source, but not enough currently in the channel
Yes	No	N/A	EROSION DEPOSITION
X	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy Needs LWD in channel

X			14) Point bars are revegetating with riparian-wetland vegetation
X	X	■	15) Lateral stream movement is associated with natural sinuosity Liner Road limits sinuosity energy dissipation
X		■	16) System is vertically stable <i>(not downcutting)</i>
X		■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Decadent cottonwood resprouting mockorange, chokecherry tall wheatgrass, young coyote willow.

Ratings are due to road encroachment and lwd need

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input checked="" type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) historic logging</p>
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Results of Assessment/Establishment of Cause

Achieving Standards for Rangeland Health Conforming with Guidelines for Livestock Grazing Management

Resource Area: Central Oregon Resource Area
Geographic Area of Assessment: Rudio Mountain
Allotment Areas Assessed: Frank's Creek Allotment #4041
Period Assessment Conducted: 2005

Assessment determination:

Standard 1	Not Meeting	Not making progress towards meeting	Livestock not contributing
Standard 2	Not Meeting	Not making progress towards meeting	Livestock not contributing
Standard 3	Not Meeting	Not making progress towards meeting	Livestock are contributing
Standard 4	Meeting		
Standard 5	Not Meeting	Not making progress towards meeting	Livestock not contributing

Guidelines for Livestock Grazing Management Does Not Conform

Assessment Benchmark: Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington. Approved on August 12, 1997 by the Secretary of the Interior.

Assessment Objectives: Per USDI/USDA Tech Reference 1734-6 of 2000: Provide preliminary assessment of soil/site stability, hydrologic function, biological integrity. Help land managers identify areas that are potentially at risk for degradation. Provide early warnings of potential problems and opportunities. Provide capability to communicate fundamental ecological concepts to a variety of audiences. Improve communications among interest groups. Provide capability to select monitoring sites for future monitoring programs. Help understand and communicate rangeland health issues.

Per BLM, Oregon State Office IB No. OR-98-315 of 7/24/98: Assess rangeland condition relative to Rangeland Health Standards; determine cause in those cases where standards are not being met; and take action that will result in progress toward standards attainment where these are not being met.

Assessment Preparers:

_____ Wildlife Biologist	_____ Date
_____ Fisheries Biologist	_____ Date
_____ Hydrologist	_____ Date
_____ Rangeland Management Specialist	_____ Date

Assessment Approval:

_____ Field Manager	_____ Date
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Appendices:

Due to the exaggerated file size of this document. Appendices C and D are contained in a separate electronic file.

- A. Allotment Assessment Findings
- B. Map
- C. Field Data Worksheets
- D. Pictures

Appendix A Allotment Assessment Findings

Notes:

1. This information applies only to BLM-administered lands within the allotment.
2. Where Allotment Monitoring Sites are referenced, information from these sites will include photographs, vegetation data, trend rating forms, cover worksheets, and/or Rangeland Health Evaluation Summary Worksheets (all located in the respective allotment's monitoring files).

Allotment:

Public Land Upland Acres: 2,111
 Public Land AUMs: 223
 Public Land Riparian/Wetland Acres: not determined
 Public Land Stream Miles: 1.5 miles of perennial streams

Allotment Name	Ownership	Condition	Dominant Vegetation	ACRES
Franks Creek				2111
	BLM			2111
		<i>Fair</i>		230
			big sagebrush / bluebunch wheatgrass	171
			bluebunch wheatgrass	0
			stiff sagebrush / Sandberg bluegrass	21
			No Data	39
		<i>Good</i>		1555
			big sagebrush+bitterbrush / bluebunch wheatgrass	961
			Idaho fescue	241
			ponderosa pine / douglas fir/ bitterbrush / elk sedge	353
		<i>Poor</i>		267
			Idaho fescue	216
			Idaho fescue / bluebunch wheatgrass	52
		<i>No Data</i>		58
			bitterbrush / bluebunch wheatgrass	54
			No Data	4

I. Standard 1 (Watershed Function - Uplands)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress towards Standard
- Not Meeting the Standard; Not Making Significant Progress towards Standard

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site off-site

C. Rationale/Evidence

The South Pasture contains Thurber's needlegrass and bluebunch wheatgrass which are increasing in density, shows good vigor, and seedling establishment. Indicators of plant and litter cover, soil compaction, erosion and overland flow are close to what is expected on the historical ecological sites for this area. Also, the plant community composition and distribution relative to infiltration and runoff are good. Part of reason for the good condition is the majority of the public land in this pasture is steep and rocky which discourages cattle use.

The North Pasture contains approximately 250 acres of Ponderosa pine which is also meeting this standard. Indicators in the stand of plant and litter cover, soil compaction, erosion and overland flow are good. However, the majority of the North Pasture is failing this standard due to a high density of western juniper which is increasing. The surface indicators still show a functioning system, but the shrub component is greatly reduced or eliminated and the herbaceous component is on the threshold of losing vigor and density. As the canopy closes and the herbaceous component diminishes surface erosion will increase. The extent of these stands was not mapped.

Overall, this standard is not being met and is not making significant progress towards obtaining this standard due to increasing juniper invasion.

Vegetation Monitoring

This allotment contains one trend study which is located in the North Pasture. TP-1 was established in 1988 as a 3ftx3ft photo plot and a Daubenmire study was added in 2004. Additional data was collected in 1993, 1999, and 2004. The number of bluebunch wheatgrass plants, *Agropyron spicatum* (new nomenclature *Pseudoroegneria spicata*), increased from seven in 1988 to fifteen in 2004; however, the area cover by bluebunch, estimated from the photos, decrease from approximately 45% to 25%.

II. Standard 2 (Watershed Function - Riparian/Wetland Areas)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress towards Standard
- Not Meeting the Standard; Not Making Significant Progress towards Standard
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site off-site
- Not Applicable

C. Rationale/Evidence

In May 2005, an interdisciplinary team conducted a Properly Functioning Condition Assessment on 1.5 miles of Franks Creek in this allotment. Franks Creek was rated as Functional-At Risk with a downward trend, as appended in August. The "at risk" and trend ratings were due to hot season grazing, incision, lack of large wood and sediment due to the road. Summer grazing of the riparian areas resulted in stubble heights of less than a half inch along Franks Creek riparian areas. Off site factors that contributed to the ratings include private grazing and logging practices.

This standard fails and is not making progress towards meeting the standard due primarily to livestock grazing. This is resulting from the continued hot season grazing and extremely high utilization levels on riparian vegetation.

III. Standard 3 (Ecological Processes)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress towards Standard
- Not Meeting the Standard; Not Making Significant Progress towards Standard
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site off-site

C. Rationale/Evidence

The South Pasture is meeting this standard. It has good plant composition, community structure, and litter layer which is promoting nutrient cycling and energy flow.

The North Pasture is failing this standard due to an increasingly dense juniper stand. The stand has reached a point where over 90% of the shrubs are gone, the grass component is starting to diminish, and the herbaceous plants have been greatly reduced. These stands will continue to evolve into a monoculture with increasing levels of soil loss. The previous levels of nutrient cycling and energy flow of the ecosystem have been compromised and will continue to be altered as the juniper stands increase. The 250 acres of Ponderosa pine is presently meeting this standard although it appears there is a high density of over mature trees. Additional rationale is provided under standard 1.

Overall, this standard is not being met and is not making significant progress towards obtaining this standard due to a dominance of juniper.

IV. Standard 4 (Water Quality)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress towards Standard
- Not Meeting the Standard; Not Making Significant Progress towards Standard
- Standard Does Not Apply

B. Establishment of Cause (if applicable)

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: on-site off-site
- Not Applicable

C. Rationale/Evidence

The perennial streams on this allotment are not listed as water quality impaired on the Clean Water Act 303d list, and BLM does not have evidence to indicate that it is water quality impaired.

V. Standard 5 (Habitat for Native, T&E and Locally Important Species)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress towards Standard
- Not Meeting the Standard; Not Making Significant Progress towards Standard
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site off-site

C. Rationale/Evidence:

Some upland habitats support healthy, productive and diverse communities of native plants and animals appropriate to soil, climate, and landform. An exception to this is areas where increased juniper occupation has altered the habitat function of many upland sites. In these cases juniper is out-competing (or has already out-competed) many significant plant and shrub species making those sites less diverse and productive habitats for wildlife species. Big game winter range is also being negatively impacted as many shrub species are disappearing from these juniper dominated shrub-steppe ecosystems.

Western Juniper can be an important element in the habitat for many wildlife species, but at densities that allow a healthy understory of shrubs and grasses (Miller 2001). Miller et al. (2005) states that “there is no known data that suggest there are juniper-obligate species, or species that require dense, closed western juniper woodlands. Maintaining low densities of western juniper on portions of the landscape increases the abundance, diversity, and richness of avian and small mammal populations in the shrub-steppe. However, as western juniper dominance increases, wildlife abundance, species richness, and diversity decline. This will also occur as the proportion of area dominated by western juniper at the landscape level increases.”

Desirable wildlife cover and structure conditions in rangelands currently dominated by annual grass species (cheat grass and medusahead rye), and juniper may be difficult to obtain in the short or long term without rehabilitation efforts, regardless of the grazing system.

Summer steelhead/Redband trout *Oncorhynchus mykiss* have been identified in Franks Creek including BLM lands in T.12 S., R. 27 E., Sec 30 SE (1 mile.), Other BLM lands within this allotment along Franks Creek are in T.12 S., R. 27 E., Sec 5 E1/2 NW1/4 and NW1/4SE1/4. This northern segment is non fish bearing due to a passage barrier in Sec. 20 SE1/4SE1/4. Franks Creek is typically intermittent with short spring fed segments perennial. Oregon Department of Fish and Wildlife and a BLM biologist confirmed *O. mykiss* just downstream of the passage barrier in 2002. Steelhead, the anadromous form of rainbow trout have not been confirmed below this location so it is not known if the *O. mykiss* are native residents or steelhead that periodically exhibit the anadromous life form when water conditions are favorable for adult upstream spawning migrations and/or downstream smolt migrations. Franks Creek is typically intermittent with short spring fed segments perennial. Research has shown generations of the anadromous vs resident life history may alter between the resident and anadromous life histories depending on water availability among other unknown factors. Oregon Department of Fish and Wildlife did not attempt to differentiate between the two forms when they surveyed for fish bearing streams. Mid-Columbia ESU (ecological significant unit) steelhead is listed as threatened under the Endangered Species Act.

Approximately 2.75 mile of Franks Creek is within this allotment; however, 1 mile is fish bearing in the lower segment and all of the .75 miles of stream in the upper segment on public land within the allotment is non fish bearing. The BLM does not have authority to manage grazing on private lands within the allotment.

See Standard 3 for additional comments.

Overall, this standard is not being met and is not making significant progress towards obtaining this standard due to a dominance of juniper.

VI. Guidelines for Livestock Grazing Management:

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management, Guideline No(s)

Recommendations:

The timing, frequency, duration, and intensity of livestock grazing on the upland areas allows for adequate soil cover in the form of vegetation and letter. Also, adequate water infiltration is occurring. However, this same grazing system is not conducive to good riparian management or improvement on Frank's Creek. It is causing standard 2 to fail and continue a downward trend as described in the rational section of the standard.

It is recommended that the grazing system be changed to one that allows only spring grazing for a shortened time period in the North Pasture (**This has been implemented**). The system should be designed to reduce the utilization level on the riparian vegetation on Frank's Creek and allow ample time for it to grow back. The development of upland water sources in the North Pasture would improve livestock distribution. Without the implementation of a riparian grazing system (**a riparian grazing system has been implemented**), Frank's Creek should be fenced and livestock grazing excluded from the creek for a number of years.

It is recommended that as funds become available the dense juniper stands in the North Pasture be thinned. These areas will continue to lose functionality and top soil unless treated. (**not done to date**)



Franks Creek July 2009



Franks Creek July 2009

Allotment: 4042 Johnny Cake Mountain
Pastures: Creek
Public Acres: 280
Streams: Cabin Creek, North Fork John Day River
Perennial: 1.2 miles
Intermittent: 0.6 miles
Steelhead Habitat: 1.8 miles
Grazing Dates: 4/15 – 5/31 late winter to spring use
AUMs: 30
Subwatersheds: 1707020210
County: Grant

Current Condition

Cabin Creek; the lower reach of creek was rated at PFC and the upper reach was rated as functional at risk with an upward trend. Cabin Creek provides spawning and rearing habitat for MCR summer steelhead with approximately 0.3 miles on BLM. Livestock impacts should be limited to watering and crossing sites due to high flows when the livestock are in the pasture.

North Fork John Day River; this reach of river was rated as PFC at the low end of the scale. The channel is wide and shallow and limited in vegetation diversity and amount. This reach is improving but is subject to periodic ice and high flows that can retard recovery. This reach of river is winter rearing habitat for juvenile MCR summer steelhead. Livestock impacts should be limited to watering sites due to high flows when the livestock are in the pasture.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Compliance (annually), photo points (every 5 years), redd counts(annually), and PIBO EM Site #1088 Cabin (next reading 2013) PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2012 & 2013)

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Cabin Creek, and North Fork John Day River.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

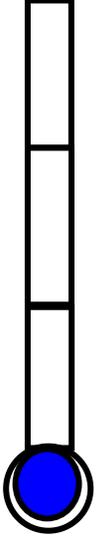
Name of Riparian-Wetland Area:			Cabin Creek
Date:	June 14, 2004	Segment/Reach ID:	Lower BLM Johnny Cake Mtn. Allot.
ID Team Observers:			MN, JE
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events Debris in floodplain, some vegetation laid down
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) For the most part all 3 were in balance. In some places the channel appeared to be straight where there was sufficient floodplain for the channel to meander
X			4) Riparian-wetland area is widening or has achieved potential extent In many area, floodplain is widening & encroaching into channel. In other areas, it has reached potential extent.
X			5) Upland watershed is not contributing to riparian-wetland degradation No excessive sediment or flow alteration
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Multiple willow age classes and rush (thicker areas)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Multiple species of rush, equisetum, and willow
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics Species present are either FACW or OBL
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Multiple stabilizer species present
X			10) Riparian-wetland plants exhibit high vigor Plants appear healthy, have new growth and flowering
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> There are a lot of stabilizer species covering entire bank. <5% of bank was bare
		X	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy Overall, the floodplain will dissipate energy. The channel has cobbly substrate with some larger boulders. Only a small section of channel was constricted with little floodplain.
X			14) Point bars are revegetating with riparian-wetland vegetation Rush species and some willows present on point bars. Note: There were not many noticeable point bars
X			15) Lateral stream movement is associated with natural sinuosity Banks heavily vegetated with stabilizers. Sinuosity isn't very high- but probably a F(x)al potential
X			16) System is vertically stable <i>(not downcutting)</i> No headcuts present
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There wasn't any excessive sediment in channel nor were the banks eroding

Remarks

A lot of vegetation in lower portion of channel. Fairly high flow (close to bank full) at time of assessment. Two road crossings (one just below reach start). At property boundary there is a definite change in the channel

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes ___</p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

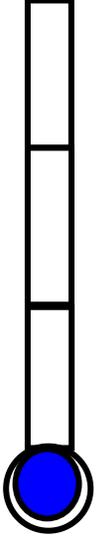
Name of Riparian-Wetland Area:			Cabin Creek
Date:	June 17, 2004	Segment/Reach ID:	Upper Reach Johnny Cake Mtn. Allot.;
ID Team Observers:			JE, MN
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events There was staining of rock in the floodplain, which is evidence of high flows reaching the floodplain
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The sinuosity and gradient appear to be appropriate for the landscape setting, but the width is too wide
	X		4) Riparian-wetland area is widening or has achieved potential extent The riparian-wetland area doesn't appear to be changing. There wasn't very many young willows nor thick bunches of stabilizers.
X			5) Upland watershed is not contributing to riparian-wetland degradation No upland activities appear to be resulting in excessive sediment deposition in the stream, nor is there excessive erosion as a result of altered flows.
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) There was at least 2 age classes of willow
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> There are multiple willow species and a couple of rush species
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics There doesn't appear to be upland species encroaching into the riparian-wetland area.
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> There are late seral willows with root masses capable of withstanding high flows
X			10) Riparian-wetland plants exhibit high vigor The willows are large and are not clubbed. Some willows are heavily impacted by bugs.
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Most of the streambanks have herbaceous colonizers.
		X	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X		<input type="checkbox"/>	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy The substrate and available floodplain are adequate to dissipate energy.
X		<input type="checkbox"/>	14) Point bars are revegetating with riparian-wetland vegetation The point bars are revegetating with colonizers and herbaceous species. There is a lack of woody stabilizing species.
X		<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity It appears as though the channel is doing what it can with the amount of water it is getting. There is no accelerated movement.
X		<input type="checkbox"/>	16) System is vertically stable <i>(not downcutting)</i> No headcuts are present.
X		<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There is no excessive erosion or deposition within the reach.

Remarks

There is a split channel at the beginning of the reach. Overall the reach is over widened. It is not quite PFC yet, but it appears to be getting better. Colonizers are inhabiting the streambanks.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			North Fork John Day River
Date:	August 8, 2001	Segment/Reach ID:	Johnny Cake Mountain Allotment
ID Team Observers:		A. Smith, John Morris, Shelley Ellis	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X	X		5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Mostly Young
	X		7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Woody veg is coyote willow, maybe potential, but we would expect more.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Bank rock content holds stream together, bedrock controlled.
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
	X		12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Wouldn't expect birch, cottonwood and alder to grow in these soil conditions.

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable <i>(not downcutting)</i>
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Wide shallow channels. Low end of PFC

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input checked="" type="checkbox"/> Mining activities (historic)</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) private land management</p>
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Cabin Creek

Allotment: 4052 Big Baldy

Pastures: North

Public Acres: 12726

Streams: Deer Creek, South Fork John Day River,

Perennial: 11.8 miles

Intermittent: 19.0 miles

Steelhead Habitat: 4.4 miles

Grazing Dates: 4/15 – 5/31 every other year (odd number years) spring use

AUMs: 600

Subwatersheds: 1707020105 & 112

County: Grant

Current Condition

South Fork John Day River; this stream segment was rated as PFC, the actual field forms justifying the rating are missing at this time. This segment does provide spawning and rearing habitat. Limiting factors for MCR steelhead are embedded substrate in spawning areas, low pool volume for rearing, and elevated water temperatures. The high sediment load coming from upstream sources appears to be a major reason for the limiting factors. Due to high flows when livestock are in the pasture access to streambanks and riparian vegetation are limited.

Deer Creek; this stream segment was rated as PFC. The riparian vegetation is extremely thick in most areas and poses a significant barrier to livestock; in addition the large boulder substrate and steep gradient of most stretches of the creek further discourage livestock entry. It is unlikely that livestock can access most of the potential spawning and rearing habitats along Deer Creek.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

A seasonal limitation to grazing should limit impacts to the South Fork John Day River. If stream flows at the USGS Service Creek gauging station drop below 2000 cfs than livestock will be restricted from the River. This will be accomplished by either removing livestock from the pasture or temporary fencing. This level was chosen because at 2000 cfs and higher, water covers much of the riparian vegetation, thereby protecting it from livestock grazing.

Monitoring

Compliance (annually), photo points (every 5 years), utilization (every 5 years), trend (next reading 2009), PIBO EM Site #1035 Deer (next reading 2013), PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2012 & 2013), redd counts (annually), and water temperature

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Deer Creek, and South Fork John Day River.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

Name of Riparian-Wetland Area:			Deer Creek trib to SFJD
Date:	August 13, 2004	Segment/Reach ID:	Mouth to USFS Boundary
ID Team Observers:		A. Smith, S. Cooke, K. Primrose	
Yes	No	N/A	HYDROLOGICAL
	X		1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i>
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable <i>(not downcutting)</i>
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

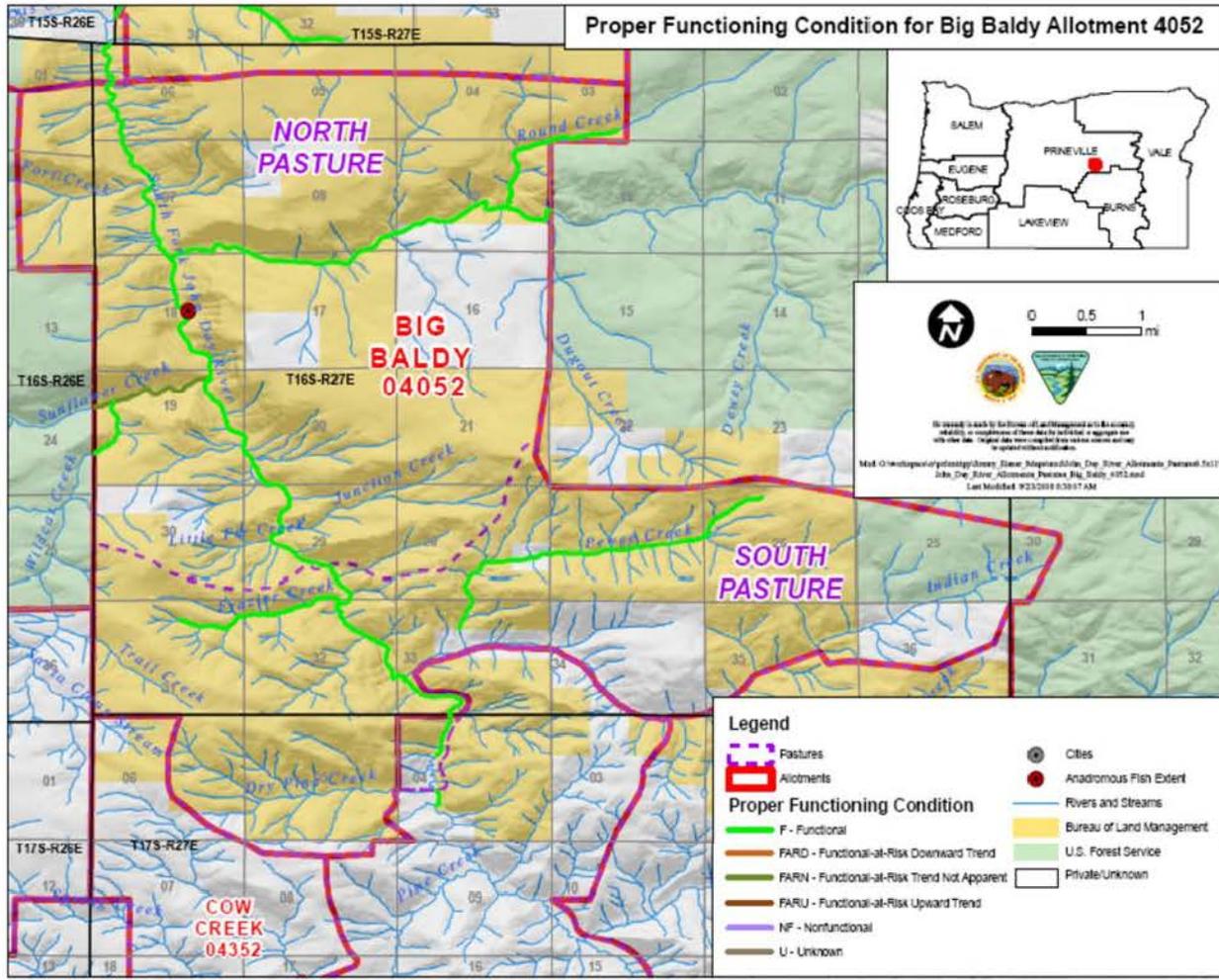
Remarks

Mock orange, choke cherry, red osier dogwood, coyote willow, cottonwood, willow sp., alder, wild rose, service berry.

Log structures instream seem to be functioning for the purposes they were installed.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Deer Creek 2008 PIBO site

Allotment: 4103 Rockpile
Pastures: No Name
Public Acres: 4918
Streams: South Fork John Day River, Cougar Gulch, Frazier Creek
Perennial: 10.8 miles
Intermittent: 7.5 miles
Steelhead Habitat: 7.6 miles
Grazing Dates: 4/1 – 5/30 Late winter and spring use
AUMs: 928
Subwatersheds: 1707020105 & 112
County: Grant

Current Condition

South Fork John Day River; this stream segment was rated as PFC, the actual field forms justifying the rating are missing at this time. Most of the stream within the allotment boundary has been excluded. This segment does provide spawning and rearing habitat. Limiting factors for MCR steelhead are embedded substrate in spawning areas, low pool volume for rearing, and elevated water temperatures. The high sediment load coming from upstream sources appears to be a major reason for the limiting factors. Due to high flows when livestock are in the pasture access to streambanks and riparian vegetation are limited.

Frazier Creek; this creek provides 0.2 miles of spawning and rearing habitat for MCR summer steelhead. It is rated at PFC. The PFC survey stated the riparian area has probably reached its potential extent. The steep terrain and woody vegetation limit the amount of livestock use.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

A seasonal limitation to grazing should limit impacts to the South Fork John Day River. If stream flows at the USGS Service Creek gauging station drop below 2000 cfs than livestock will be restricted from the River. This will be accomplished by either removing livestock from the pasture or temporary fencing. This level was chosen because at 2000 cfs and higher, water covers much of the riparian vegetation, thereby protecting it from livestock grazing.

Monitoring

Utilization (every 5 years), photo points (annually), trend(next reading 2014), water temperature, compliance (annually), redd counts (annually) and PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2011) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; South Fork John Day River, Cougar Gulch, and Frazier Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

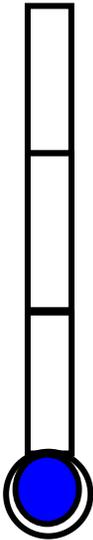
Name of Riparian-Wetland Area:			Frasier Creek
Date:	7/29/01	Segment/Reach ID:	Rockpile Allotment
ID Team Observers:		Anderson, Kindshe	
Yes	No	N/A	HYDROLOGICAL
		X	1) Floodplain above bank full is inundated in "relatively frequent" events This is a Rosgen A3 channel that does not have a flood plain.
		X	2) Where beaver dams are present are they active and stable No beaver Present
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The stream is about 1-2 feet wide when it is flowing. It is currently intermittent. The banks are stable and the bed is stable.
X			4) Riparian-wetland area is widening or has achieved potential extent The riparian area has probably achieved its potential extent.
X			5) Upland watershed is not contributing to riparian-wetland degradation There is no evidence of the watershed causing problems. There is a very old road on the right slope that has healed and does not appear to be causing problems.
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) All woody species are represented and have a range of age classes. See #7 for species
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Many riparian species are present. Red osier dogwood, mountain alder and currant form a dense vegetation. Water birch and a few cottonwood are also present. The plant community is quite diverse for this ephemeral site.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics Water birch, sedges, cottonwood and osier indicate the presence of soil moisture.
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> The riparian woody species present can well control flood events. The banks are well vegetated and the root mass has stabilized the banks.
X			10) Riparian-wetland plants exhibit high vigor Good riparian plant vigor is exhibited by plants the length of the reach
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Very adequate for the limited flows at this ephemeral site.
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) This is a site that, on some years, experiences a flow. The present vegetation can well cope with such flows.

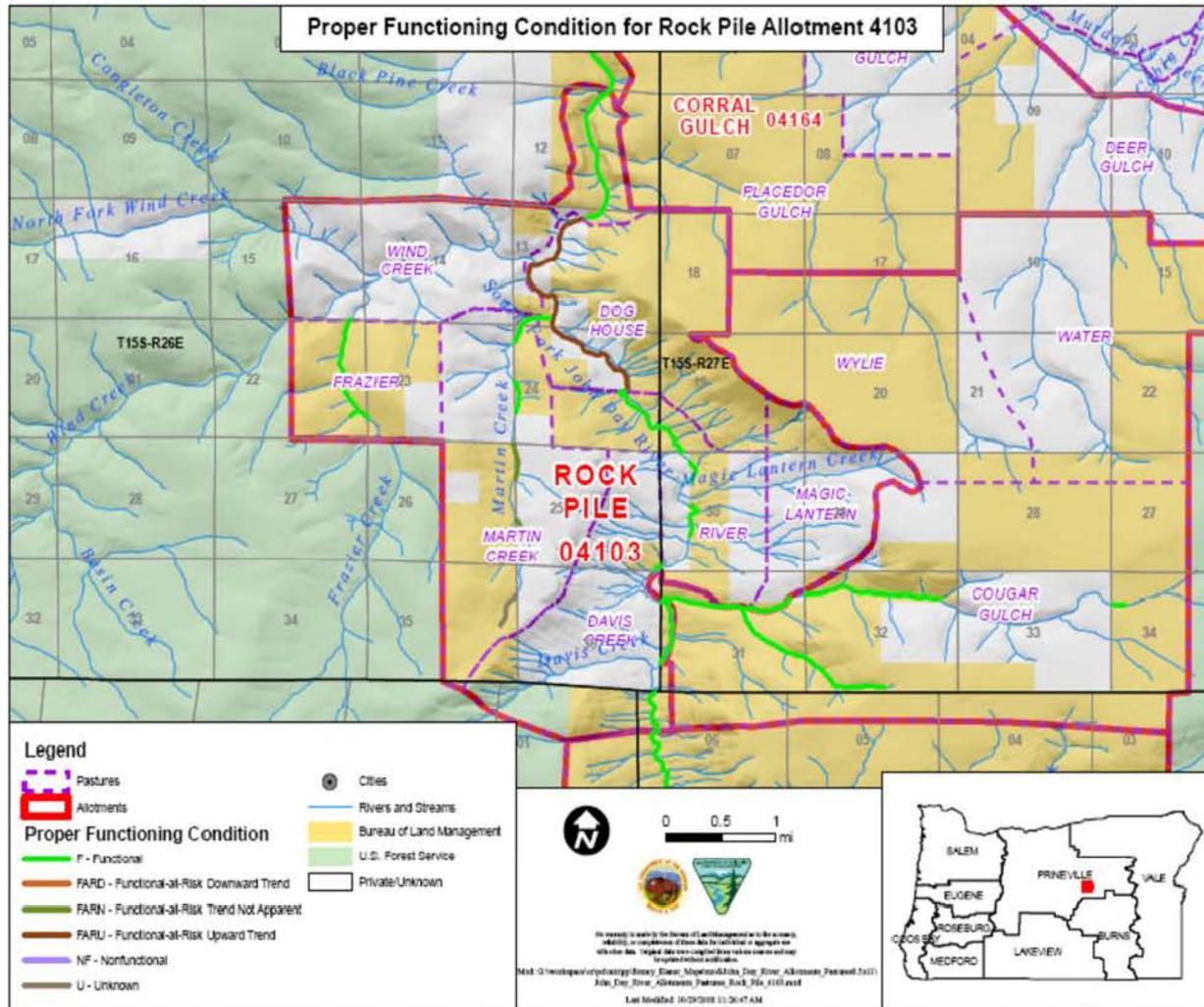
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There is large and small wood in the channel that acts to dissipate energy. There are woody plants that also break up the flow. Some sections have patches of small boulders that aid energy dissipation.
		X	14) Point bars are revegetating with riparian-wetland vegetation There are no point bars.
X			15) Lateral stream movement is associated with natural sinuosity There is very little lateral movement. The banks are stabilized by rocks and plants.
X			16) System is vertically stable <i>(not downcutting)</i> There is some head cutting in limited sections but it is natural. The woody material piles in the channel are accumulating fine sediment. Periodically these woody materials rot out and there is a release of sediment that leaves a V notch channel.
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There is no erosion or deposition that is excessive. The sediment is being passed through the channel. The stream is in balance with the landscape production of water and sediment.

Remarks

This stream looks good. The area is lightly grazed. The steep nature of the terrain and the brush along the creek limit livestock use. The ponderosa pine forest is in near natural condition. The road constructed up the right side of the stream has healed into the slope and is not causing degradation. The original harvest of timber several decades ago removed very few trees from the watershed. The upper channel and tributaries are filled with fine sediment that is lodged behind niche points of woody material. This material periodically moves but there is no evidence that the channel has any problem moving this fine material on to the South Fork John Day during flow events.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input checked="" type="checkbox"/> Proper Functioning Condition</p> <p><input type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Fraizier Creek July 29, 2001



South Fork John Day River May 19, 2008. River flows are dropping and the riparian vegetation is starting to emerge.



South Fork John Day River July 10, 1997 riparian vegetation has emerged post grazing

Allotment: 4108 Little Wall Creek
Pastures: No Name
Public Acres: 320
Streams: Little Wall Creek, Bacon Creek
Perennial: 0.7 miles
Intermittent: 0.3 miles
Steelhead Habitat: 0.7 miles
Grazing Dates: 4/1 -5/30 Late winter and spring use
AUMs: 53
Subwatershed: 1707020210
County: Grant

Current Condition

The PFC inventories noted livestock in the pasture on July 9th. The current grazing strategy calls for cattle to be removed by May 30th. This earlier move date should prevent livestock from damaging the streambanks due to high flows at this time of year that covers these banks. The earlier move date will also allow the riparian vegetation to recover.

Bacon Creek; this creek provides approximately 0.3 miles of spawning and rearing for MCR summer steelhead. This reach within the allotment boundary was rated as functional at risk (FAR) with an upward trend using the PFC methodology. The justification for the FAR determination was that the channel was too wide and not enough riparian vegetation to protect the banks.

Little Wall Creek; this creek provides approximately 0.4 miles of spawning and rearing for MCR summer steelhead. This section of creek was divided into two PFC reaches with both reaches rated as functional at risk (FAR) upward trend using the PFC methodology. The inventory noted the channel is too wide but appears to be narrowing.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is

sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Photo Points (as funding allows), Compliance (annually), redd counts (annually) and PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2010) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Little Wall Creek, and Bacon Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

Name of Riparian-Wetland Area:			Little Wall Creek
Date:	7/9/04	Segment/Reach ID:	Lower BLM piece
ID Team Observers:		JE, MN	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events The upper portion of the reach is too wide for regular inundation the floodplain. There is no evidence of flood flows reaching the floodplain.
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The upper portion of the channel is too wide. The sinuosity and gradient appear to be good. There is a lot of wetness outside of the channel in the lower portion of the reach. There are a few side channels.
X			4) Riparian-wetland area is widening or has achieved potential extent The riparian-wetland area appears to be widening. We saw places where the riparian wetland vegetation was in the channel and seemingly narrowing the channel up.
X			5) Upland watershed is not contributing to riparian-wetland degradation No excessive sediment was observed in the reach.
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) The sedge and rush stands were thick and full
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> There were multiple rush/sedge species. There is a lack of shrubby species though
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics There are a lot of sedge/rush. No upland plant species appeared to be encroaching the riparian-wetland area.
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Sedge/rush stabilizers
X			10) Riparian-wetland plants exhibit high vigor Although heavily grazed the plants have thick blades and are present in thick mats (communities)
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Banks appear to be comprised of mostly sedge and rush species.

X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) There are nearby trees that could become LWM in the channel. We did not see any LWM in the channel.
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There is a large floodplain and there are large boulders in the reach.
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity The stream appears to move naturally. There is no excessive erosion or deposition
X			16) System is vertically stable <i>(not downcutting)</i> No headcuts were observed
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There is no excessive erosion or deposition

Remarks

This reach is grazed. Cattle were present when we were there. The lower portion and middle portion appear to have a lot of wet areas outside the main channel – may indicate historic braiding. The upward trend was attributed to evidence of channel narrowing and a widening riparian-wetland areas.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			Little Wall Creek
Date:	7/29/04	Segment/Reach ID:	Upper BLM reach
ID Team Observers:		JE, MN	
Yes	No	N/A	HYDROLOGICAL
	X		1) Floodplain above bank full is inundated in "relatively frequent" events The lower portion of the reach is over widened, so the floodplain is not likely to be inundated frequently. There was no evidence (debris or laid vegetation) in the floodplain.
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The lower portion appears to be too wide. The sinuosity and gradient appear to be appropriate. The channel is narrower in the upper portion of the reach.
X			4) Riparian-wetland area is widening or has achieved potential extent There are sedges/rushes growing in channel, which indicate expansion of the riparian-wetland area.
X			5) Upland watershed is not contributing to riparian-wetland degradation There is no evidence of excessive erosion or deposition
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) There are thick mats of sedge/rush
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> There are multiple sedge and rush species, and there are a couple of willows.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics There doesn't appear to be upland plant encroachment. The floodplain and channel vegetative communities are comprised of sedge/rush
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> There are sedge and rush species present and a couple of willows
X			10) Riparian-wetland plants exhibit high vigor The blades on the sedges are thick, and the sedge/rush are present in thick mats. However, there grazing is evident in the reach.
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Due to grazing, it is difficult to be sure of the vegetative cover on the banks. As a result, we decided to remain conservative because some of the species present may not have sufficient root masses for bank stabilization

<input checked="" type="checkbox"/>			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) There are a lot of trees nearby and woody debris would be beneficial in this system. There wasn't any woody material in this reach.
Yes	No	N/A	EROSION DEPOSITION
<input checked="" type="checkbox"/>		<input type="checkbox"/>	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There is a large floodplain that could be accessible during high flows. This would aid in energy dissipation
		<input checked="" type="checkbox"/>	14) Point bars are revegetating with riparian-wetland vegetation
<input checked="" type="checkbox"/>		<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity There is no excessive lateral movement, nor is there multiple channels. The channel is capable of moving and it is not incised. Sinuosity appears to be natural
<input checked="" type="checkbox"/>		<input type="checkbox"/>	16) System is vertically stable <i>(not downcutting)</i> No headcuts were observed.
<input checked="" type="checkbox"/>		<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There is no excessive erosion or deposition

Remarks

This reach is grazed. The vegetation doesn't seem to be at potential – there could be many more woody species. The bank full width was difficult to see. There are some jagged banks and pugging from cattle.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			Bacon Creek
Date:	July 9, 2004	Segment/Reach ID:	Little Wall Creek Allotment
ID Team Observers:		JE, MN	
Yes	No	N/A	HYDROLOGICAL
	X		1) Floodplain above bank full is inundated in "relatively frequent" events There was no evidence that the floodplain was inundated frequently. The channel is over widened.
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) The channel is too wide in most places. Overall, the sinuosity and gradient appear to be in balance with the landscape.
X			4) Riparian-wetland area is widening or has achieved potential extent It appears as though the riparian wetland area is widening; however, expansion of the riparian wetland area does not appear to be happening quickly. Rush and sedge species are growing along the streambanks and in the channel.
X			5) Upland watershed is not contributing to riparian-wetland degradation There doesn't appear to be any evidence of upland activities impacting this reach
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) There are thick bunches of sedge and rush
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> There were multiple rush and sedge species. There is a lack of the woody component, although this system would probably function without woody species.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics There was no encroachment of upland species in the riparian-wetland area. There were a lot of sedge/rush present.
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> There are stabilizing sedge/rush species
X			10) Riparian-wetland plants exhibit high vigor The herbaceous cover (sedge/rush were discernable in many places) is present in dense mats (communities); however, the vegetation has been heavily grazed.
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> There were a lot of bare banks and we weren't able to tell some of the plant community due to the grazing impacts

X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) There was some woody debris in the channel and there are plenty of trees nearby
Yes	No	N/A	EROSION DEPOSITION
X		<input type="checkbox"/>	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy There is a large floodplain, and it would be accessible in very high flows (the channel is a bit over widened, so the floodplain may not always be reached).
		X	14) Point bars are revegetating with riparian-wetland vegetation
X		<input type="checkbox"/>	15) Lateral stream movement is associated with natural sinuosity There were a few eroding banks and some had vegetation establishing at the bottom of the bank. No excessive sediment was observed in the reach.
X		<input type="checkbox"/>	16) System is vertically stable (not downcutting) No headcuts were observed
X		<input type="checkbox"/>	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) There is no excessive erosion or deposition.

Remarks

There was a road crossing near the reach beginning; however we didn't break the reach b/c that would have resulted in as extremely short section (not realistic from a management stand perspective). Furthermore, the channel upstream and downstream of the road crossing were behaving similarly. There is constructed bank stabilization (a chain log) upstream of the road. Cattle grazing is evident. The streambanks are jagged and the channel is too wide. There is a slight upward trend due to the sedge/rush at base of most eroding banks.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Little Wall Creek



Bacon Creek

Allotment: 4145 Two County

Pastures: No Name

Public Acres: 13796

MCR Steelhead Streams: Burnt Corral Creek, Holmes Creek

Perennial: 7.9 miles

Intermittent: 30.8 miles

Steelhead Habitat: 3.1 miles

Grazing Dates: 4/15 – 6/30 Late winter and spring use (note these dates are different than when the PFC and rangeland health assessment was done)

AUMs: 1105

Subwatersheds: 1707020401, & 115

County: Grant

Current Condition

Both Burnt Corral Creek and Holmes Creek were rated as Functional at Risk, trend not apparent using the PFC methodology. The Standards and Guides assessment determined that the current livestock management was not contributing to degraded conditions and that water quality was making significant progress. Both of these creeks are in steep canyons. The stream and banks are made up of boulders. Livestock observations in 2009 showed cattle up on the hill sides with little to no use in the canyon bottoms. Both of these creeks have the potential to provide spawning and rearing habitat for MCR summer steelhead. The current grazing strategy is allowing these systems to improve.

Potential Impacts

Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur. Under the current grazing strategy, livestock spend most of their time in the uplands which are warmer at this time of year and also provide the most palatable forage.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Due to the limited time that livestock spend in the riparian areas this time of year disturbance should be of short duration and fish that are disrupted will usually find adequate cover close by.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. For most of the grazing season riparian vegetation is usually underwater due to higher flows or under sediment. Livestock are moved out of the pasture when there is sufficient moisture and most of the growing season for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Compliance (annually), Photo points (as funding allows), Trend (next reading 2012) PACFISH Implementation (bank alteration, stubble height, redd counts, and woody browse at the end of the growing season in 2011) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key For Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Burnt Corral Creek, and Holmes Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

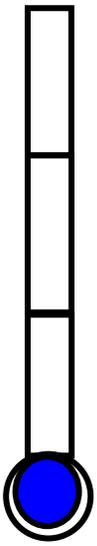
Name of Riparian-Wetland Area:			Burnt Corral
Date:	8-15-01	Segment/Reach ID:	BLM Reach
ID Team Observers:			LC Thomas, Ed Horn, M. McSwain Don Z.
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Generally in balance but localized areas of increased width & down cutting. Liner
	X		4) Riparian-wetland area is widening or has achieved potential extent Appears static.
X			5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) Young alder severely hedged
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Alder, sedges, rushes, willow
	X		8) Species present indicate maintenance of riparian-wetland soil moisture characteristics Not in amount or extent should be.
	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i> Mostly grasses on banks and pioneer spps (brookgrass)
	X		10) Riparian-wetland plants exhibit high vigor Exhibit low vigor from grazing.
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i> Not enough woody vegetation and herbaceous
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)
Yes	No	N/A	EROSION DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

			Dissipaters present but not adequate.
X			14) Point bars are revegetating with riparian-wetland vegetation
	X		15) Lateral stream movement is associated with natural sinuosity
X	X		16) System is vertically stable <i>(not downcutting)</i>
			Two small head cuts, but downcutting restricted by bedrock. Liner
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
			No excessive erosion but more than natural.

Remarks

2% gradient, w/d = 12 entrenchment = 2.1, Channel between B & C. Moving downstream below the burnt springs confluence, the channel becomes more entrenched. 68F @ 11:20 AM.

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input checked="" type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify)</p>
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Lotic Checklist

Name of Riparian-Wetland Area:			Holmes Creek
Date:	4-12-2005	Segment/Reach ID:	lowest BLM Reach
ID Team Observers:			S. Cooke, J. Morris, A. Smith, C. Obermiller
Yes	No	N/A	HYDROLOGICAL
	X		1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Liner
	X		4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X	X		7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> Liner
	X		8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
			10) Riparian-wetland plants exhibit high vigor Not Answered
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
	X		12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

	X		14) Point bars are revegetating with riparian-wetland vegetation
X		■	15) Lateral stream movement is associated with natural sinuosity
X		■	16) System is vertically stable <i>(not downcutting)</i>
X		■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Vegetation; oceanspray, choke cherry, elder berry, nettle, rose, mockorange, goose berry

Browsed woody species

Floodplain has bulbous bluegrass and some cheat grass. Floodplain has been logged historically

Mid-channel bars from 1964 flood

Road limits sinuosity

May need more herbaceous vegetation

Fairly rocky channel – rock armored bank Rosgen B2

Needs Large wood

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input checked="" type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) upstream & historic logging</p>
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Results of Assessment/Establishment of Cause Achieving Standards for Rangeland Health Conforming with Guidelines for Livestock Grazing Management

Resource Area: Central Oregon Resource Area
Geographic Area of Assessment: Rudio Mountain
Allotment Areas Assessed: Two County Allotment #4145
Period Assessment Conducted: 2005

Assessment determination:

Standard 1 Meeting
Standard 2 Meeting
Standard 3 Meeting
Standard 4 Not Meeting Making progress toward meeting Livestock not contributing
Standard 5 Meeting
Guidelines for Livestock Grazing Management Conforms

Assessment Benchmark: Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington. Approved August 12, 1997 by the Secretary of the Interior.

Assessment Objectives: Per USDI/USDA Tech Reference 1734-6 of 2000: Provide preliminary assessment of soil/site stability, hydrologic function, biological integrity. Help land managers identify areas that are potentially at risk for degradation. Provide early warnings of potential problems and opportunities. Provide capability to communicate fundamental ecological concepts to a variety of audiences. Improve communications among interest groups. Provide capability to select monitoring sites for future monitoring programs. Help understand and communicate rangeland health issues.

Per BLM, Oregon State Office IB No. OR-98-315 of 7/24/98: Assess rangeland condition relative to Rangeland Health Standards; determine cause in those cases where standards are not being met; and take action that will result in progress toward standards attainment where these are not being met.

Assessment Preparers

Wildlife Biologist	Date
Fisheries Biologist	Date
Rangeland Management Specialist	Date
Hydrologist	Date

Assessment Approval

Field Manager	Date
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Appendices:

- A Allotment Assessment Findings
- B Maps

Appendix A Allotment Assessment Findings

Notes:

1. This information applies only to BLM-administered lands within the allotment.
2. Where Allotment Monitoring Sites are referenced, information from these sites will include photographs, vegetation data, trend rating forms, cover worksheets, and/or Rangeland Health Evaluation Summary Worksheets (all located in the respective allotment's monitoring files).

Allotment:

Public Land Upland Acres: 13,796

Public Land AUMs: 1,105

Public Land Stream Miles: 9 miles of perennial streams

Table 1

PERENNIAL STREAM NAME	BLM MILES	PFC ASSESSMENT
BONE CREEK	0.5	None
BRANSON CREEK & TRIB	0.8	2005 At Risk and with Downward Trend
DEEP CREEK	0.5	None
HOLMES CREEK	0.9	1995 Non-Functioning 2005 Barely Functioning at Risk No Trend
JOHN DAY RIVER	1.6	1995 Functioning at Risk
MCGINNIS CREEK	0.9	None
ROSE CREEK	0.4	None
RUDIO CREEK	2.9	2005 Properly Functioning
SPRING CREEK	0.4	None
UNNAMED	0.5	None

Allotment Name	Ownership	Condition	Dominant Vegetation	ACRES
Two County				14016
	BLM			14016
		<i>Mid Seral</i>		4874
			big sagebrush / bluebunch wheatgrass	1405
			bluebunch wheatgrass	229
			ponderosa pine / bitterbrush / snowberry / elk sedge / Idaho fescue	1555
			stiff sagebrush / Sandberg bluegrass	0
			western juniper / Idaho fescue	1191
			No Data	494
		<i>Late Seral</i>		1473
			big sagebrush+bitterbrush / bluebunch wheatgrass	187

	Idaho fescue	1176
	ponderosa pine / douglas fir/ bitterbrush / elk sedge	110
Early Seral		546
	Idaho fescue	305
	Idaho fescue / bluebunch wheatgrass	25
	Sandberg bluegrass	216
No Data		7123
	big sagebrush / bluebunch wheatgrass	1068
	bitterbrush / big sagebrush / Idaho fescue	876
	bitterbrush / bluebunch wheatgrass	4149
	stiff sagebrush	2
	No Data	1027

I. Standard 1 (Watershed Function - Uplands)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: ___on-site ___off-site

C. Rationale/Evidence

An interdisciplinary tour on 12, 13, and 14 April 2005 revealed two major watershed concerns. Wild horses are year round residents of the allotment. Branson Creek, in particular, shows evidence of erosion due to the preference horses show for the area. Juniper invasion is impairing watershed function in drainages; especially Holmes Creek, Burnt Coral Creek, and the slopes between John Day River and the rim of the allotment. Young juniper trees were evident on upland flats, but are not yet contributing to watershed degradation.

Overall, however, the soils look fairly intact. Pedestals are due to frost heaving rather than erosion. While there are indicators of erosion, such as litter movement, water flow patterns and some soil loss, these indicators are not present in sufficient quantity to be of concern.

Overall, this standard is being met. See the recommendations section for concerns for those areas not meeting this standard.

II. Standard 2 (Watershed Function - Riparian/Wetland Areas)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: ___on-site; ___off-site
- Not Applicable

C. Rationale/Evidence

In April 2005, an interdisciplinary team conducted a Properly Functioning Condition Assessment on Holmes Creek, Holmes Creek tributaries and Branson Creek. The upper 1 mile of Branson Creek headwaters was rated as Properly Functioning, although some trespass horses were impacting a pond in the upper reach. Two ½ mile segments with a lower gradient support decadent cottonwood, pine, alder, willow and a few sedge species. These segments were rated as Functioning at Risk with a Downward trend. Season long grazing by either horses, cattle, or a combination thereof is removing riparian vegetation and inhibiting the ability of the riparian are to recover. The lowest 1 mile of BLM land on Branson Creek was rated as Functioning at Risk with Trend Not Apparent.

BLM owns two miles of Holmes Creek. The downstream mile runs water perennially. The upper reaches run water in the spring, but dries up in late summer. The presence of a cattle watering trough in the main channel would suggest that the grazing system on this reach is not oriented toward riparian restoration. In 1995, an interdisciplinary team rated Holmes Creek as Non-Functioning. In 2005, an interdisciplinary team rated Holmes Creek as Functioning at Risk with No Apparent Trend. Several factors beyond the control of BLM management are contributing to non-attainment. Upstream logging and historic logging near the channel have removed large wood from the system. Road encroachment also limits the ability of the channel to access its floodplain and distribute energy with sinuosity. Riparian vegetation included choke cherry, ocean spray, elder berry, nettle, rose, mock orange, goose berry. Some bushes were browsed, and the floodplain contained mostly short bulbous bluegrass and cheat grass. The rocky substrate of this

channel limits the amount of degradation or aggradation the channel will exhibit. However, large wood would allow the channel to redevelop a system of pools and capture sediment to build a small floodplain.

An interdisciplinary team assessed the main stem John Day River in 1995. The one and a half miles of the John Day River on BLM land in the Two County Allotment was rated as Functioning at Risk with a slightly upward trend.

The three miles of Rudio Creek on this allotment is down in the bottom of a steep walled canyon. The floodplain is densely forested with fir, pine and infrequent hardwoods. Grazing is not likely to be an influence in this stream reach because of its inaccessibility. In 2005, an interdisciplinary team rated Rudio Creek as Properly Functioning.

Overall, this allotment is meeting the standard, but Holmes Creek (3/4 mile) and Branson Creek (1 mile) are not meeting the standard. Livestock or trespass horses may be contributing to not meeting the standard on Branson Creek. See recommendations.

III. Standard 3 (Ecological Processes)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site; off-site

C. Rationale/Evidence

Forest stocking levels have created forest health issues such as disease and stunted tree growth. The rangeland is fairly intact. Some areas have plant communities that have been altered from what would be expected under pristine conditions. Several plant communities have desirable perennial grasses only growing in protected areas, such as under shrubs. Some rangelands, especially Holmes Creek, Burnt Coral Creek, and the slopes between John Day River and the rim of the allotment, are not meeting standards because juniper has encroached and shrub and grass functional groups have been reduced. The majority of the allotment, however, has enough diversity in vegetation to warrant a passing standard.

A trend plot (3x3 photo plot) in the Branson Creek pasture was established in 1988 and re-measured in 1993 and 1998. The plot diagrams show a decrease in *Agropyron spicata* and *Festuca idahoensis* between 1988 and 1993 and an increase in *Poa secunda*. From 1993 to 1998 the plot diagrams show a rebound in *Festuca idahoensis*, an increase in *Poa secunda*, and both death and recruitment of *Agropyron spicata*.

Overall, this standard is being met. See the recommendations section for concerns for those areas not meeting this standard.

IV. Standard 4 (Water Quality)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause (if applicable)

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site; x off-site
- Not Applicable

C. Rationale/Evidence

Approximately one and a half miles of the John Day River is on BLM land within the Two County Allotment. The John Day River is listed as water quality limited on the 303d list for the parameter of temperature for the beneficial use of salmonid fish rearing and anadromous fish passage. This standard is not being met.

Standards one and two are being met for the majority of BLM lands. On less than half the BLM land, standards one and two are not being met and livestock are significantly contributing to failure to meet these standards. Current BLM management in this allotment is not contributing to non-attainment of the water quality standard. The inventoried riparian areas on Branson Creek were in a downward or static trend. However, the entire Branson Creek watershed is only a fraction of a percent of the contributing water for the 303d listed reach of the John Day River. There was no indication that grazing on BLM land is significantly contributing to water quality degradation at a watershed scale.

V. Standard 5 (Habitat for Native, T&E and Locally Important Species)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site; off-site

C. Rationale/Evidence:

Most upland habitats support healthy, productive and diverse communities of native plants and animals appropriate to soil, climate, and landform. An exception to this is areas where increased juniper occupation has altered the habitat function of many upland sites. In these cases juniper is out-competing (or has already out-competed) many significant plant and shrub species making those sites less diverse and productive habitats for wildlife species. Big game winter range is also being negatively impacted as many shrub species are disappearing from these juniper dominated shrub-steppe ecosystems.

Western Juniper can be an important element in the habitat for many wildlife species, but at densities that allow a healthy understory of shrubs and grasses (Miller, R.F. 2001. Managing western juniper for wildlife. Woodland Fish and Wildlife MISC 0286 Washington State University Cooperative Extension, Pullman WA). Biology, Ecology and Management of Western Juniper (Miller, R.F., J.D. Bates, T.J. Svejcar, F.B. Pierson, L.E. Eddleman. 2005. Technical Bulletin 152, Oregon State University, Corvallis OR) states that “there is no known data that suggest there are juniper-obligate species, or species that require dense, closed western juniper woodlands. Maintaining low densities of western juniper on portions of the landscape increases the abundance, diversity, and richness of avian and small mammal populations in the shrub-steppe. However, as western juniper dominance increases, wildlife abundance, species richness, and diversity decline. This will also occur as the proportion of area dominated by western juniper at the landscape level increases.”

Desirable wildlife cover and structure conditions in rangelands currently dominated by annual grass species (cheat grass and medusahead rye), and juniper may be difficult to obtain in the short or long term without rehabilitation efforts, regardless of the grazing system.

Summer steelhead/Redband trout Oncorhynchus mykiss have been identified in Holmes Creek including BLM lands in T.10 S., R. 26 E., Sec 5 NW1/4SE1/4 (.1 mile.), Sec. 9 SW1/4NE1/4 and E1/2SE1/4 (.75 mile). Burnt Corral Creek, a tributary to Holmes Creek also is fish bearing in Sec. 15 SW1/4NW1/4 and NE1/4SW1/4 (.5 mile). Other BLM lands within this allotment along Holmes Creek are in, Sections 21 NE1/4SW1/4 (.1). Holmes Creek is non fish bearing above the confluence of Burnt Corral Creek. Steelhead, the anadromous form of rainbow trout have not been confirmed at this location so it is not known if the O. mykiss are native residents or steelhead that periodically exhibit the anadromous life form when water conditions are favorable for adult upstream spawning migrations and/or downstream smolt migrations. Research has shown generations of the anadromous vs resident life history may alter between the resident and anadromous life histories depending on water availability among other unknown factors. Oregon Department of Fish and Wildlife did not attempt to differentiate between the two forms when they surveyed for fish bearing streams. Mid-Columbia ESU (ecological significant unit) steelhead is listed as threatened under the Endangered Species Act.

Approximately 3.25 mile of Holmes Creek and 1.2 miles of Burnt Corral Creek is within this allotment with 3.1 miles being private land.. There is approximately 4.5 total miles of stream in the Holmes Creek subwatershed. No other fish bearing streams have been identified in this allotment. The BLM does not have authority to manage grazing on private lands within the allotment.

The majority of the channel along both Holmes Creek and Burnt Corral is shaded by mature alder. These streams are fairly steep but appear to be quite stable. The public road adjacent to the stream confines the floodplain in several locations.

Overall, this standard is being met. See the recommendations section for concerns for those areas not meeting this standard.

VI. Guidelines for Livestock Grazing Management:

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management, Guideline No(s)

Recommendation:

The grazing allocation from the John Day RMP is for 1105 AUMs from 4/1 to 11/30. This is 12.5 acres per AUM. The grazing preference needs to be adjusted to reflect the current actual use. The current actual use is approximately ___ AUMs from ___ to _____. This current use is ___ acres per AUM. The RMP also classifies this allotment as a Custodial (C) allotment. This classification should be reconsidered to reflect the importance of the anadromous fish habitat on the allotment, amount of public land and recreation potential.

The juniper encroachment needs to be treated with juniper cutting and prescribed fire. The over stocked timber stands need to be evaluated and treated to improve forest health. Trespass horses need to be removed. Further monitoring of livestock use patterns needs to be conducted to verify that livestock are not contributing to the degradation of Holmes Creek and Branson Creek (**This has been done**). The in-channel watering trough needs to be moved off-channel (**trough not needed with current prescribed use**). Pasture fences need to be mapped. BLM needs to pursue defining a grazing management system with the lessee by creating an Allotment Management Plan (**No formal AMP but grazing strategy has been changed**).



Holmes Creek July 2009



Burnt Corral Creek July 2009

Allotment: 4151 Kinzua
Pastures: Creek
Public Acres: 9463
Streams: Squaw Creek,
Perennial: 4.8 miles
Intermittent: 15.4 miles
Steelhead Habitat: 2.7 miles
Grazing Dates: 5/1 – 10/31 Spring, hot, or fall use
AUMs: 1170
Subwatershed: 1707020112, 115, 210, & 401
County: Grant

Current Condition

The Creek pasture is part of a rotational grazing strategy and is grazed sometime between 5/1 and 10/31 depending on that year's rotation. The ranch manager is trying to manage his pastures so that he can rest at least one pasture a year. Movement of livestock from pasture to pasture is dependent on the amount and type of forage being utilized. Assessments of the Creek pasture have documented an upward trend.

Squaw Creek provides spawning and rearing habitat for MCR steelhead within the allotment. A PFC assessment conducted on Squaw Creek rated it functional at risk with an upward trend using the PFC methodology. The riparian community is comprised of alder, dogwood, and willow species. Removal of large woody material and skid trails across the creek were listed as factors for the rating.

A Rangeland Health assessment was conducted in 2005. The current livestock use was found to not be contributing to degradation of the attributes evaluated.

Potential Impacts: Redd trampling, harassment of juveniles, and impacts to critical habitat are the identified potential impacts to MCR summer steelhead. These three potential impacts are addressed below.

The Prineville District has conducted spawning surveys yearly for the past 15 years and has not observed a redd that has been trampled. Although there is potential for a redd to be trampled by livestock it appears highly unlikely to occur.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Because the creek is on an upward trend which will increase the amount of cover available, fish that are disturbed should be able to find suitable cover within the general vicinity which will limit the opportunity for predation to occur.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. In most years livestock are moved out of the pasture when there is sufficient moisture for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring

Utilization(every 5 years), Trend (next reading 2014), redd counts(annually), residual stubble height (annually), and PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2011) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key for Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Squaw Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

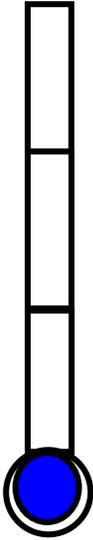
Lotic Checklist

Name of Riparian-Wetland Area:			Squaw Creek
Date:	June 8, 2005	Segment/Reach ID:	T11S R28E Sec 30&31
ID Team Observers:		A. Smith, S. Cooke, J. Morris, K. Primrose	
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Lack of LWD – Historic logging caused incision and LWD jam blowout Liner
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation
Yes	No	N/A	VEGETATION
	X		6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i>
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) Large pine trees were cut out and young and med. Ace conifers are regenerating
Yes	No	N/A	EROSION DEPOSITION
x	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

			Lacks LWD Liner
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (not downcutting)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input checked="" type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input checked="" type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input checked="" type="checkbox"/> Other (specify) Historic logging removed LWD, skid trails across creek</p>
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Results of Assessment/Establishment of Cause Achieving Standards for Rangeland Health Conforming with Guidelines for Livestock Grazing Management

Resource Area: Central Oregon Resource Area

Geographic Area of Assessment: Rudio Mountain

Allotment Areas Assessed: Kinzua Allotment #4151

Period Assessment Conducted:

Assessment determination:

Standard One Meeting the standard

Standard Two Not meeting the standard Making significant progress toward Livestock not contributing

Standard Three Not meeting the standard Making significant progress toward Livestock not contributing

Standard Four Meeting the standard

Standard Five Not meeting the standard Not making significant progress toward Livestock not contributing

Guidelines for Livestock Grazing Management Conforms

Assessment Benchmark: Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington. Approved August 12, 1997 by the Secretary of the Interior.

Assessment Objectives:

Per USDI/USDA Tech Reference 1734-6 of 2000: Provide preliminary assessment of soil/site stability, hydrologic function, biological integrity. Help land managers identify areas that are potentially at risk for degradation. Provide early warnings of potential problems and opportunities. Provide capability to communicate fundamental ecological concepts to a variety of audiences. Improve communications among interest groups. Provide capability to select monitoring sites for future monitoring programs. Help understand and communicate rangeland health issues.

Per BLM, Oregon State Office IB No. OR-98-315 of 7/24/98: Assess rangeland condition relative to Rangeland Health Standards; determine cause in those cases where standards are not being met; and take action that will result in progress toward standards attainment where these are not being met.

Assessment Preparers

_____ Wildlife Biologist	_____ Date
_____ Fisheries Biologist	_____ Date
_____ Rangeland Management Specialist	_____ Date
_____ Hydrologist	_____ Date

Assessment Approval

Field Manager

Date

Appendices:

- A Allotment Assessment Findings
- B. Maps

Appendix A Allotment Assessment Findings

Notes:

1. This information applies only to BLM-administered lands within the allotment.
2. Where Allotment Monitoring Sites are referenced, information from these sites will include photographs, vegetation data, trend rating forms, cover worksheets, and/or Rangeland Health Evaluation Summary Worksheets (all located in the respective allotment's monitoring files).

Allotment:

Public Land Upland Acres: 8,533 acres
 Public Land Riparian/Wetland Acres: 36 acres
 Public Land Stream Miles: 6 miles of perennial streams

Allotment Name	Ownership	Condition	Dominant Vegetation	ACRES
Kinzua	BLM	<i>Mid Seral</i>	ponderosa pine / bitterbrush / snowberry / elk sedge / Idaho fescue	84
			stiff sagebrush / Sandberg bluegrass	9
			western juniper / Idaho fescue	41
			No Data	32
				2
			<i>Late Seral</i>	44
				1
<i>No Data</i>		big sagebrush+bitterbrush / bluebunch wheatgrass	44	
		ponderosa pine / douglas fir/ bitterbrush / elk sedge	7883	
		No Data	7883	

I. Standard 1 (Watershed Function - Uplands)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Towards Standard

Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: ___on-site ___off-site

C. Rationale/Evidence

Monitoring shows a slight increase in perennial grass species and perennial grass cover. Monitoring indicates an upward trend in resource condition, a good accumulation of plant litter, little or no evidence of wind or soil erosion taking place, and no evidence of soil deposition. An interdisciplinary team confirmed these observations in summer 2005.

In November 2004, the three year old Timber Basin burn area was observed by an interdisciplinary team. The native and the seeded areas in the burn area looked good. The seeded grass had germinated and was waist high with good seed head development. The ground cover was 70%. It appears that the rhizomatous species were germinating instead of the seeded grasses especially on the north aspect.

Evidence:

Three range study sites are located within the allotment. Study site number one is located at T11S R27E Sec 32 in a forest opening. Study Number One, also labeled TP-1, was established in 1989 consisting of a 3 ft. X 3 ft. photo plot with photographs and a line intercept study. In the photoplot were several wheatgrass plants and three Junegrass plants, *Koeleria sp.* The line intercept study showed the foliar cover for the wheatgrass plants and the Junegrass plants was 0.25%. The plot was re-photographed and the plot diagramed in 1995 and 2000. The line intercept study was also re-read in 1995 and 2000. In 1995 the photo plot was diagramed and showed seven wheatgrass plants, one needlegrass plant, *Stipa sp.*, and 21 Kentucky bluegrass plants, *Poa pratensis*. A line intercept form was completed and showed 0.2 % foliar cover for Junegrass plants and 1.8 % foliar cover for the wheatgrass plants. In 2000 the photo plot was diagramed and showed two wheatgrass plants, seven Kentucky bluegrass plants, and 15 Thurber needlegrass plants, *Stipa thurberiana*. The line intercept study was completed which showed 2.3% foliar cover for wheatgrass plants and 1.45% foliar cover for Junegrass plants. There was a net loss of wheatgrass plants, increase in Kentucky bluegrass plants, and a significant gain in Thurber needlegrass plants (15). There an increase in wheatgrass plant cover (increase of 2.05 %) and an increase in Junegrass cover (increase of 1.20%).

Study Number Two is located at T12S R28E Sec 9 NW1/4 in a forested site. Study Number Two, also labeled TP-2, was established in 1989 consisting of a 3 ft. X 3 ft. photo plot with photographs and a line intercept study. In the photoplot were several intermediate wheatgrass plants, *Agropyron intermedium*). The line intercept study showed 1 % cover for intermediate wheatgrass plants. In 1995 it was re-photographed and diagramed. The results showed several intermediate wheatgrass plants and one Thurber needlegrass plant, *Stipa thurberiana*. The line intercept study was completed. The results showed 5.2% foliar cover for intermediate wheatgrass and .003 % foliar cover for Thurber needlegrass. The plot diagrams show very little difference in the number of intermediate wheatgrass plants

and a significant increase in the number of Thurber needlegrass plants. There was an increase in foliar cover for intermediate wheatgrass (4.1%) and an increase in the foliar cover for Thurber needlegrass plants.

Study Number Three is located at T11S R27E Sec 30 SE1/4 in an upland forested area. Study Number Three, also TP-3 was established in 1993 consisting of a 3 ft. X 3 ft. photoplot with photographs. In the photoplot were 16 bluebunch wheatgrass plants, *Agrophron spicatum* (new nomenclature *Pseudoroegneria spicata*), 19 Idaho fescue plants, *Festuca idahoensis*, 1 bottlebrush squirreltail plant, *Sitannion hystrix*, and 4 yarrow plants, *Achillea millefolium*. In 1998 it was re-photographed and diagrammed. The results showed 3 bluebunch wheatgrass plants, 9 Idaho fescue plants, 6 bottlebrush squirreltail plants, and 3 yarrow plants. In 2001 a wildland fire burned the study plot.

A Daubenmire study plot was established in 2003 at the Study Number Three location. In the study plot were 25 bluebunch wheatgrass plants, 1 Idaho fescue plant, no bottlebrush squirreltail plants but there were 1 Thurber needlegrass plant, *Stipa thurberiana*, and 9 Kentucky bluegrass plants, *Poa pratensis*.

When the wildland fire burned the Timber Basin area seven sites consisting of ten, one meter photo plots, were established and photographed. Five sites were located in intensely burned areas and two were located on cat trails.

April 22-24, 2002, the burn area was helicopter seeded with untreated Bruehl Club White wheat. The wheat seeding was more effective on the north aspect than the south.

The burn area was also aerially seeded with native and non-native perennial grasses on November 12-13, 2002. This grass seeding occurred one year after the burn.

An interdisciplinary team visited the site on the second week of June, 2005. The team evaluated the rangeland health according to the Standards and Guides.

II. Standard 2 (Watershed Function - Riparian/Wetland Areas)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: _x_on-site; _x_off-site
- Not Applicable

C. Rationale/Evidence

Evidence:

In 2005, an interdisciplinary team conducted a Properly Functioning Condition Assessment of Marks Creek, a Marks Creek tributary, Cold Springs, McGarr Meadows, Squaw Creek, a Squaw Creek Tributary, Rudio Creek, and Franks Creek. Marks Creek, Marks Creek tributary, Cold Springs, McGarr Meadows, Rudio Creek and part of Franks Creek were found to be in Properly Functioning Condition. Marks Creek was at Potential Natural Condition. Squaw creek and the lower portion of Franks Creek were found to be Functioning-at-risk with trend not apparent. These sections lacked large wood, but the current grazing system is not degrading the riparian area. Conifer

encroachment into the stream channels is limiting the ability of woody riparian species to establish. Also, upstream private log landings appeared to be contributing excess sediment to Squaw Creek. Franks Creek has been rested from grazing for several years due to the fire rehabilitation efforts, and the grazing schedule may need to be re-considered in order to create and maintain an upward trend on Franks Creek.

III. Standard 3 (Ecological Processes)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: x on-site; off-site

C. Rationale/Evidence

The majority of the rangeland areas are meeting the standards. In the southeast corner of the allotment, some rangelands are not meeting standards because juniper has encroached and shrub and grass functional groups have been reduced. A section of Miller Flat had a high level of annual/early seral grass component and bare ground. These areas on Miller Flat are not meeting the standard, but current grazing is helping make significant progress toward meeting the standard. Timbered areas are frequently overstocked and pine forests are being invaded by fir. Human disruption of the historic fire regime has created this scenario and current grazing is not contributing to not meeting the standard. Fuels/Healthy Forest treatments are needed.

Evidence:

An interdisciplinary team visited the site on the second week of June, 2005. The team evaluated the rangeland health according to the Standards and Guides.

IV. Standard 4 (Water Quality)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward Standard
- Not Meeting the Standard; Not Making Significant Progress Toward Standard
- Standard Does Not Apply

B. Establishment of Cause (if applicable)

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: on-site; off-site
- Not Applicable

C. Rationale/Evidence

BLM land on this allotment does not have water that has been identified as water quality impaired. Some of the inventoried riparian areas were functioning at risk with no apparent trend, but there was no indication that grazing on BLM land is contributing to water quality degradation at a watershed scale.

Overall, this allotment is meeting the standard.

Evidence:

V. Standard 5 (Habitat for Native, T&E and Locally Important Species)

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: X on-site; off-site

C. Rationale/Evidence:

Most upland habitats support healthy, productive and diverse communities of native plants and animals appropriate to soil, climate, and landform. An exception to this is areas where increased juniper occupation has altered the habitat function of many upland sites. In these cases juniper is out-competing (or has already out-competed) many significant plant and shrub species making those sites less diverse and productive habitats for wildlife species. Big game winter range is also being negatively impacted as many shrub species are disappearing from these juniper dominated shrub-steppe ecosystems.

Western Juniper can be an important element in the habitat for many wildlife species, but at densities that allow a healthy understory of shrubs and grasses (Miller 2001). Miller et al. (2005) states that “there is no known data that suggest there are juniper-obligate species, or species that require dense, closed western juniper woodlands. Maintaining low densities of western juniper on portions of the landscape increases the abundance, diversity, and richness of avian and small mammal populations in the shrub-steppe. However, as western juniper dominance increases, wildlife abundance, species richness, and diversity decline. This will also occur as the proportion of area dominated by western juniper at the landscape level increases.”

Desirable wildlife cover and structure conditions in rangelands currently dominated by annual grass species (cheat grass and medusahead rye), and juniper may be difficult to obtain in the short or long term without rehabilitation efforts, regardless of the grazing system.

Summer steelhead/Redband trout Oncorhynchus mykiss have been identified in Straight Creek, a tributary to Gilmore Creek, including BLM lands in T.10 S., R. 27 E., Sec 28 NW1/4NE1/4 (.1 mile.), Other BLM lands within this allotment along Straight Creek are in T.10 S., R. 27 E., Sec 28 SE1/4 NE1/4 (.1 mile), Sec27 SW1/4NW1/4 and NW1/4SW1/4 (.25 mile), Sec. 33 E1/2SE1/4 and T.11 S. R.27 E. Sec.4 NE1/4NE1/4. These southern segments are non fish bearing. Steelhead, the anadromous form of rainbow trout have not been confirmed at this location so it is not known if the O. mykiss are native residents or steelhead that periodically exhibit the anadromous life form when water conditions are favorable for adult upstream spawning migrations and/or downstream smolt migrations. Research has shown generations of the anadromous vs resident life history may alter between the resident and anadromous life histories depending on water availability among other unknown factors. Oregon Department of Fish and Wildlife did not attempt to differentiate between the two forms when they surveyed for fish bearing streams. Straight Creek is typically perennial in these headwater areas. Mid-Columbia ESU (ecological significant unit) steelhead is listed as threatened under the Endangered Species Act.

Approximately 3.65 miles of Straight Creek is within this allotment; however, 1 mile is fish bearing in the lower segment and all of the 1.65 miles of stream in the upper segment on public land within the allotment is non fish bearing. The BLM does not have authority to manage grazing on private lands within the allotment.

Gilmore Creek is another non fish bearing stream within this allotment but no BLM lands are along the stream.

Squaw Creek, a tributary to Cottonwood Creek is a fish bearing stream including BLM land in T. 11 S., R. 28 E., Sec. 30 SW1/4SW1/4 and Sec. 31 W1/2NW1/4 (.75 mile). Another BLM segment in T. 12 s., R. 28 E., Sec. 6 (.25 mile) and Sec. 5 NE1/4SW1/4 (.25 mile) is non fish bearing.

Cougar Creek, a tributary to Squaw Creek also has approximately 1 mile of fish bearing stream but no BLM lands in this lower segment. BLM land in T. 11 S., R. 27 E., Sec. 22 and 23 (.5 mile and .25 mile respectively) are non fish bearing headwater streams.

See Standard 3 for additional comments.

Overall, this standard is being met.

VI. Guidelines for Livestock Grazing Management:

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management, Guideline No(s)

Recommendation:

The grazing allocation from the John Day RMP is for 1170 AUMs from 5/1 to 10/31. This is 8 acres per AUM. The grazing preference needs to be adjusted to reflect the current actual use. The current actual use is approximately 540 AUMs from 5/1 to 10/31. This current use is 16 acres per AUM. Dispersing the livestock through riding is essential for distributing the livestock across the allotment (**permittee uses herding to move livestock to different areas in the pasture until fencing is constructed**). Pasture fences need to be mapped. New pasture fences are in the process of being built and the BLM needs to pursue defining a grazing management system with the lessee (**permittee and BLM are currently working on fencing requirements**).

The juniper encroachment needs to be treated with juniper cutting. The over stocked timber stands need to be evaluated and treated to improve forest health.



Squaw Creek July 2009



Squaw Creek July 2009

Allotment: 4163 Creek
Pastures: No Name
Public Acres: 706
Streams: Cottonwood Creek
Perennial: 0.7 miles
Intermittent: 3.0 miles
Steelhead Habitat: 0.7 miles
Grazing Dates: 4/15-5/15 or 10/15-10/30 spring or fall use
AUMs: 63
Subwatershed: 1707020115
County: Grant

Current Condition

Using the PFC methodology the section of Cottonwood Creek was rated functional at risk upward trend. The riparian area contains a diversity of shrubs, willows, birch, alder, and cottonwood which is providing good streambank stability. The only “no” on the PFC checklist indicates that there are issues either upstream or in the uplands that appear to be affecting this reach. This creek provides spawning and rearing for MCR summer steelhead. This allotment has not been through the Standards and Guides evaluation at this time. Implementation monitoring using the MIM protocol occurred September 23, 2009 with the following results;

Mean Stubble height = 13.6 inches
Bank Alteration = 2% of the plot lines
Woody Use = 0- 20% Slight

Potential Impacts

Potential impacts during the 4/15-5/15 grazing strategy are limited due to cold temperatures in the riparian area, above bank full stream flows, and palatable forage in the uplands. Livestock generally trail down to water once or twice a day then head back upslope where the temperatures are warmer and forage more palatable. Although never observed on the Prineville District there is the opportunity for redd trampling when livestock water or cross the stream. Impacts to streambank stability and herbaceous riparian vegetation are not expected due to the fact that livestock spend very little time in the riparian areas this time of year and the stream banks are under water.

Harassment of juveniles has the potential for fish to move to areas with less cover when disturbed which could increase predation. Because the creek is on an upward trend which will increase the amount of cover available, fish that are disturbed should be able to find suitable cover within the general vicinity which will limit the opportunity for predation to occur.

Impacts to critical habitat should be limited to a short term impact from vegetation being consumed or trampled. In most years livestock are moved out of the pasture when there is sufficient moisture for the vegetation to recover. The limited amount of trailing in the riparian area at watering and crossing sites does not appear to be affecting MCR summer steelhead or their habitat.

Monitoring Information

Water temperature data, peak crest gauge (annually), utilization (every 5 years), redd counts (annually), and trend (next reading in 2014). PACFISH Implementation (bank alteration, stubble height, and woody browse at the end of the growing season in 2014) because of new requirements a new schedule for PACFISH monitoring is being developed for all category one pastures. BLM will notify NMFS if the monitoring year changes.

Answers to the Dichotomous Key for Making ESA Determination of Effects for Range Allotments for the Following Tributaries; Cottonwood Creek.

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?

Yes Summer Steelhead

2. Does the proposed action(s) have the potential to hinder attainment of relevant properly functioning indicators?

No, the current grazing management strategies were designed to attain or protect the relevant properly functioning indicators.

3. Does the proposed action(s) have the potential to result in take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat?

There is the potential that redds could be trampled due to the fact that cattle have access to the river during spawning season. In 15 years of spawning surveys no observations of redd trampling have been made. Impacts to designated critical habitat are expected to be insignificant. **Likely to adversely affect due to the potential for redd trampling.**

Lotic Checklist

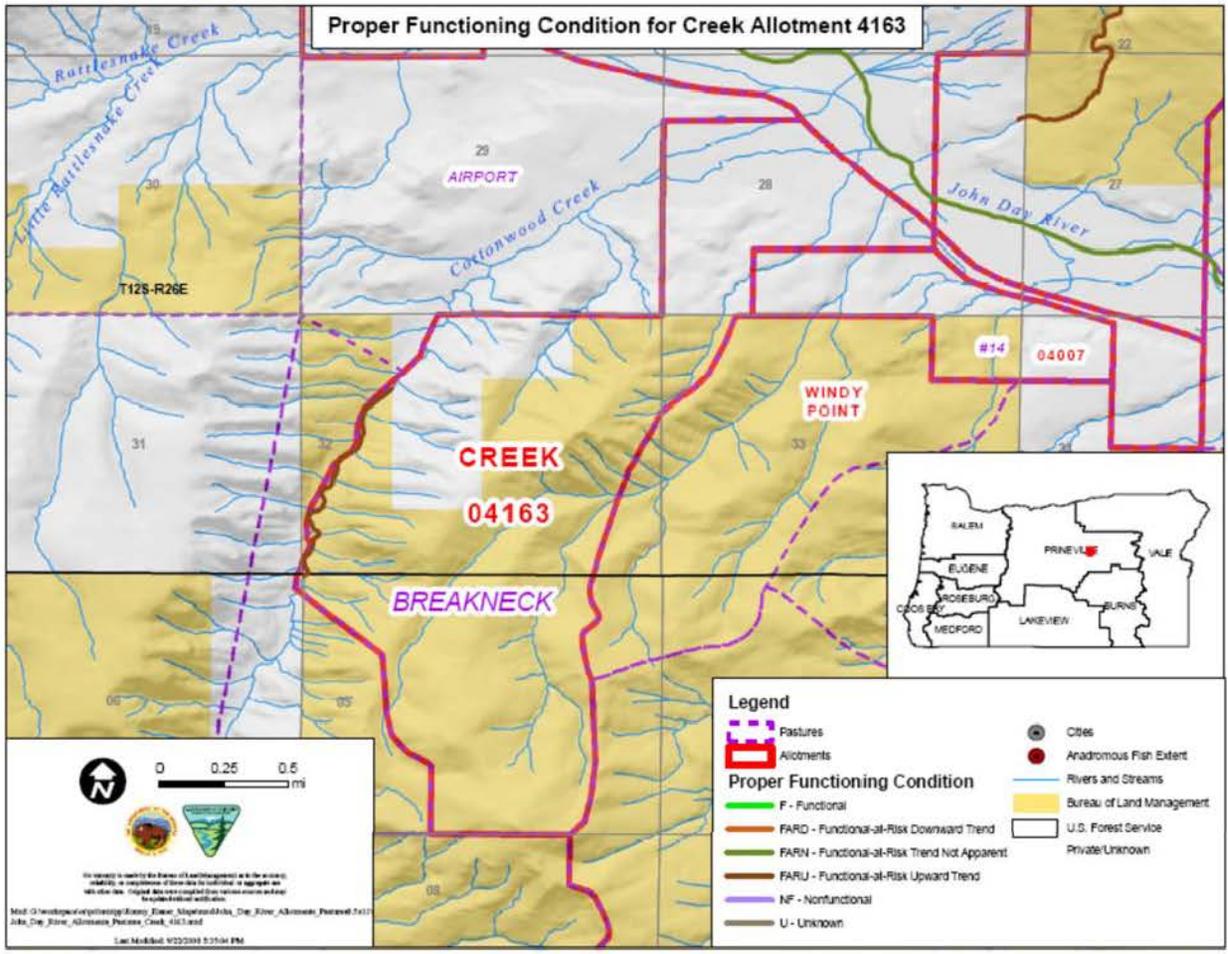
Name of Riparian-Wetland Area:			Cottonwood Creek
Date:	10-23-2003	Segment/Reach ID:	Creek Allotment
ID Team Observers:			A. Smith, K. Primrose, J. Morris
Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bank full is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Hard to tell because of series of log structures perpendicular to flow and a series of log deflectors
X			4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation Channel does have excess fines in the pools. Intermittent and ephemeral channels are gullied
Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) <i>(species present)</i> .Willow (<i>lasiocandra?</i>), cottonwood, equisetium, mockorange, alder, wide leaf sedges, reed canary grass patch, birch.
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high stream flow events <i>(community types present)</i>
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows <i>(enough)</i>
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)
Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy

X			14) Point bars are revegetating with riparian-wetland vegetation
X		■	15) Lateral stream movement is associated with natural sinuosity 3 terraces (lowest one is active floodplain)
X	X	■	16) System is vertically stable <i>(not downcutting)</i> Not apparent – lower reach has downcut slightly – upper enclosure is vertically stable Liner
X		■	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

SUMMARY DETERMINATION

<p>Functional Rating</p> <p><input type="checkbox"/> Proper Functioning Condition</p> <p><input checked="" type="checkbox"/> Functional - At Risk</p> <p><input type="checkbox"/> Nonfunctional</p> <p><input type="checkbox"/> Unknown</p> <p>Trend for Functional - At Risk:</p> <p><input checked="" type="checkbox"/> Upward</p> <p><input type="checkbox"/> Downward</p> <p><input type="checkbox"/> Not Apparent</p>		<p>Are factors contributing to unacceptable conditions outside the control of the manager?</p> <p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p> <p>If yes, what are those factors?</p> <p><input type="checkbox"/> Flow regulations</p> <p><input type="checkbox"/> Mining activities</p> <p><input type="checkbox"/> Upstream channel conditions</p> <p><input type="checkbox"/> Channelization</p> <p><input type="checkbox"/> Road encroachment</p> <p><input type="checkbox"/> Oil field water discharge</p> <p><input type="checkbox"/> Augmented flows</p> <p><input type="checkbox"/> Other (specify) x</p>
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Cottonwood Creek July 2009



Cottonwood Creek July 2009

E. Critical Habitat and Cumulative Effects

Critical Habitat Analysis for Grazing Actions in the Upper John Day River Basin

On September 5, 2005 the National Marine Fisheries Services posted their final rule for Critical habitat for 19 ESU's in the Federal Register (70 FR 52360 9/2/05). The mid-Columbia summer steelhead ESU was one of the 19 listed with public lands within the lower Deschutes River basin being designated as Critical Habitat. Due to this listing BLM is required under ESA to analysis the effects of projects to Critical Habitat. Following is an analysis of affects for the LAA grazing allotments.

There are three Primary Constituent Elements of Critical Habitat that apply to lands within the Upper John Day River basin. They are;

1. Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development.
2. Freshwater rearing sites with: (i) Water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; (ii) Water quality and forage supporting juvenile development; and (iii) Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.
3. Freshwater migration corridors free of obstruction and excessive predation with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

None of the Primary Constituent Elements of Critical Habitat will be degraded with the proposed grazing actions but there will be minor affects. In Chapter D effects to water quality, substrate, etc. are discussed.

Cumulative Effects

Cumulative effects are expected to occur at the same levels throughout the project period. BLM does not collect specific information on projects/land management on non BLM lands. BLM is unaware of any specific projects that would impact MCR steelhead and/or their habitat. Potential impacts could occur from timber management, agriculture, road maintenance, recreation etc.

F. Effective Fish Habitat (EFH)

The grazing allotments in this proposed action covered in the Biological Assessment (BA) occur within the area designated as EFH for spring chinook salmon, which were deemed "not

warranted” for listing under the Endangered Species Act on March 9, 1998 (63 FR 11482). EFH for spring chinook salmon is considered to be those habitats occupied at present and those historic habitats in the John Day Basin. This includes the mainstem John Day, Middle fork John Day, North Fork John Day, South Fork John Day and most tributaries below natural barriers to upstream migration. The proposed actions on grazing allotments in this BA are unlikely to adversely affect chinook salmon EFH based on the following rationale: Although livestock grazing may impact habitat for spring chinook salmon by bank trampling, vegetative utilization, and channel disturbances, the overall amount of these disturbance is fragmented along the stream. Spawning usually occurs upstream of any of the BLM grazing allotments so redd trampling is unlikely to occur. Some rearing may occur in the lower reaches of the larger tributary streams, however, most of these lower reaches are on private land and not subject to control of the grazing permit.

Literature Cited

- Ballard, T.M. 1999. Interaction of cattle and chinook salmon. MS Thesis, Oregon State University, Corvallis, Oregon.
- Collette, C. and J. Harrison (editors), 1992. Columbia River Basin Fish and Wildlife Program - Strategy for Salmon, Vol. I & II. Northwest Power Planning Council.
- Cowley, E.R. 1997. Idaho riparian proper functioning condition (PFC) assessment training material. Unpublished data.
- Federal Register 1999. Final Rule; notice of determination. Endangered and threatened species: threatened status for two ESUs of steelhead in Washington and Oregon. Vol. 64, No. 5, March 25, 1999.
- Muhn, J. and H.R. Stuart, 1988. Opportunity and challenge the story of the BLM. US Department of the Interior, Bureau of Land Management, Washington, D.C.
- Pellant, M., P. Shaver, D.A. Pyke, and J.E. Herrick. 2005. Interpreting indicators of rangeland health, version 4. Technical Reference 1734-6. U.S. Department of the Interior, Bureau of Land Management, National Science and Technology Center, Denver, CO. BLM/WO/ST-00/001+1734/REV05. 122 pp.
- Prichard, D. J. Anderson, C. Correll, J. Fogg, K. Gebhardt, R. Krapf, S. Leonard, B. Mitchell, and J. Staats. 1998. A user guide to assessing proper functioning condition and the supporting science for lotic areas. Technical Reference 1737-15. U.S. Department of the Interior, Bureau of Land Management, National Science and Technology Center, Denver, CO. BLM/RS/ST-98/001+1737. 126 pp.
- Unterwegner, T., ODFW John Day District Fish Biologist. 1999. Personal Communication.
- USDI, Bureau of Land Management. 1985. Two Rivers Resource Management Plan, Record of Decision, Rangeland Program Summary (RPS). Prineville District, BLM. Prineville, OR.
- USFWS and NMFS 1998. Endangered species act consultation handbook, procedures for conducting section 7 consultations and conferences. U.S. Government Printing Office. Washington, D.C.
- Wyman, S., D. Bailey, M. Borman, S. Cote, J. Eisner, W. Elmore, B. Leinard, S. Leonard, F. Reed, S. Swanson, L. Van Riper, T. Westfall, R. Wiley, and A. Winward. 2006. Riparian area management: Grazing management processes and strategies for riparian-wetland areas. Technical Reference 1737-20. BLM/ST/ST-06/002+1737. U.S. Department of the Interior, Bureau of Land Management, National Science and Technology Center, Denver, CO. 105 pp.

Appendix A. Summer Steelhead Information

General Information

MCR summer steelhead occur throughout the John Day Basin where habitat conditions are suitable, and accessible. Accessibility to habitat in the tributaries is flow dependant so during high runoff years more habitat is available.

John Day River summer steelhead are currently classified as a wild population on Oregon's Wild Fish Management Policy Provisional Wild Fish Population List [OAR 635-07-529(3)]. A population meets ODFW's definition of a wild population if it is an indigenous species, naturally reproducing within its native range, and descended from a population that is believed to have been present in the same geographical area prior to the year 1800. Human caused genetic changes, either from interbreeding with hatchery origin fish or habitat modification, do not disqualify a population from the wild classification under this definition.

Life History and Population Characteristics

Adult steelhead on their spawning migration enter the Columbia River in mid-May, pass over Bonneville Dam July-August, and enter the John Day River (JDR) as early as September, and as late as March. Emigration into the John Day Basin is dependent upon water temperatures and flows, and usually peaks in October (Unterwegner, 1999, personal communication). Steelhead will likely hold in the Columbia or the lower Deschutes Rivers until water temperatures in the JDR are suitable.

Wild summer steelhead spawn in the basin from March to mid June. A majority of steelhead spawn in tributaries that enter the John Day River ranging from as low in the basin as Rock Creek, which is located near Condon, to those streams entering the upper main forks. About 20 percent may spawn in the upper main forks of the river, depending on spring runoff conditions. Typically the earliest spawning occurs in tributaries in the lower basin.

Wild summer steelhead juveniles rear in the John Day basin for two to three years before migrating to the ocean as smolts.

Smolt migration out of the John Day Basin is staggered over several months (April to July), with peak timing in April and May (Unterwegner, 1999, personal communication). Smolt size varies by stream depending on food abundance and rearing water temperatures. Generally, healthy wild smolts average 7 inches in length. Some may be as large as 10 inches in some streams (Beech Creek, for example).

Downstream smolt movement is quite rapid, taking 45 days or less for smolts to reach the ocean from upstream rearing areas. Smolts migrate to the ocean with very determined swimming and feeding along the way. While in the migration corridor habitat of the lower John Day River (Below Kimberly, RM 185), smolts generally stay within the river thalweg, using water depth and turbidity for cover (Unterwegner, 1999, personal communication). Smolts may stop and feed along backwaters and edges occasionally, or feed in the main current. Most smolts will reach the ocean by May, June, or July depending on the time of migration.

John Day summer steelhead typically return after one or two years in the Pacific ocean (termed 1-salt or 2-salt steelhead). About 80 percent of the John Day steelhead run are 2-salt fish. Typical of other summer steelhead stocks, very few steelhead return to spawn a second time in the John Day River Basin.

Table B1. John Day River Segments and habitat utilization by steelhead trout*

River Segment	Steelhead Habitat Use
John Day River, Mouth (RM 0.0) to Kimberly (RM 185.0)	Migratory Corridor (No Rearing Habitat)
John Day River, RM 185.0 to RM 240.0 (Mount Vernon)	Juvenile Winter Rearing Habitat
John Day River, Mount Vernon (RM 240) to City of John Day (RM 248)	Juvenile Summer Rearing Habitat
John Day River, City of John Day (RM 248 to Headwaters)	Adult Spawning, Juvenile Rearing Habitat
South Fork John Day River, Mouth (RM 0.0) to Izee Falls (RM28.5)	Adult Spawning, Juvenile Rearing Habitat. No steelhead access above falls.
North Fork John Day River, Mouth (RM 0.0) to Camas Creek (RM 57.0)	Juvenile Winter Rearing Habitat. No Prineville BLM lands above RM 50.5
Middle Fork John Day River, Mouth (RM 0.0) to Highway 395 (RM 24.0)	Juvenile Winter Rearing Habitat
Middle Fork John Day River, Highway 395 (RM 24.0) to Headwaters	Adult Spawning, Juvenile Rearing Habitat

*Source: Unterwegner, Personal Communication

Spawning Areas

Summer steelhead spawning areas on public lands cover much of the basin. Some streams with documented spawning include tributaries of the upper mainstem John Day River (Dixie, Standard, Indian, Canyon, and Cottonwood Creeks), the South Fork John Day River (Deer and Murderers Creeks), the North Fork John Day River (Rudio Creek).

Habitat Conditions and Trends

Conditions of the mainstem John Day River, its forks and its tributaries are in various stages of recovery and trends for all life stages of summer steelhead. Fish habitat condition, and trend surveys were conducted in 1980-81 on most perennial and fish bearing streams in the basin. Some surveys were repeated in 1989-1990. Proper Functioning Condition (PFC) surveys were conducted in the late 1990's and early 2000's on all streams within this consultation package. The results of these surveys can be found in the baseline conditions for each allotment.

Steelhead Distribution and BLM Ownership in the Upper John Day Subbasin 17070201.

The Upper John Day watershed encompasses 1.37 million acres from the headwaters of the John Day River upstream of Prairie City to the mouth of the North Fork John Day River at Kimberly, at River Mile 185. BLM manages about 145,635 acres within the subbasin. Major tributaries within the subbasin include Canyon, Beech, Rock, and Johnson Creeks and the South Fork John

Day River. Streams on this list generally carry perennial flows, based on U.S.G.S. Quadrangle maps or direct observations. (See Table B3).

Table B2. Streams with BLM ownership, total number of stream segments on BLM parcels, what it flows into, and current steelhead status.

Stream Name	Public (BLM) Miles	# Of Stream Segments	Tributary to	Steelhead Waters
John Day River	2.6	6	Columbia River	Winter Juvenile Rearing
Dads Creek	0.3	1	John Day River	Spawning and Rearing
Dixie Creek	2.4	3	John Day River	Spawning and Rearing
Standard Creek	1.1	3	Dixie Creek	Spawning and Rearing
West Fork Standard Cr.	0.9	1	Standard Creek	Spawning and Rearing
Comer Creek	0.2	2	Dixie Creek	Spawning and Rearing
Bull Run Creek	0.8	1	Dixie Creek	No
Indian Creek	0.4	1	John Day River	Spawning and Rearing
W. Fk. Little Indian Cr.	0.2	2	Indian Creek	No
Pine Creek	0.3	2	John Day River	Spawning and Rearing
Bear Gulch	0.3	1	Pine Creek	No
Little Pine Creek	1.6	2	John Day River	Spawning and Rearing
Canyon Creek	1.4	3	John Day River	Spawning and Rearing
Sheep Gulch	1.0	1	Canyon Creek	No
Capsuttle Creek	0.4	1	Riley Creek	No
McClellan Creek	0.1	1	John Day River	Spawning and Rearing
Big Canyon	0.9	1	Fields Creek	No
Marks Creek	0.4	1	John Day River	No
Flat Creek	0.5	1	John Day River	Spawning and Rearing
Franks Creek	5.1	3	John Day River	1.5 miles Spawning and Rearing, 3.6 miles No (barrier)
Ferris Creek	1.2	3	John Day River	No
Sheep Gulch	4.0	1	John Day River	No
Battle Creek and tribs	5.2	3	John Day River	No
Cottonwood Creek	1.4	4	John Day River	Spawning and Rearing
Dyke Creek	0.4	1	Cottonwood Cr.	No
Day Creek	0.6	2	Cottonwood Cr.	No, blocked on private land
S. Fk. John Day River	10.2	9	John Day River	Spawning and Rearing
S. Fk. John Day River	5.2	12	John Day River	No, access blocked by falls
Johnson Creek	0.5	1	SFJDR	No
Smoky Creek	1.6	2	SFJDR	No, access blocked by culvert
Tunnel Creek	0.2	1	SFJDR	No
Oliver Creek	1.1	1	SFJDR	No
Youngs Creek	0.6	2	SFJDR	No
Murderers Creek	0.4	1	SFJDR	Spawning and Rearing
Cabin Creek	0.6	1	Murderers Cr.	Spawning and Rearing
Frazier Creek	1.2	1	Wind Creek	0.2 miles Spawning and Rearing, 1.0 blocked by falls
Martin Creek	1.6	3	SFJDR	No
Cougar Gulch	2.0	3	SFJDR	Spawning and Rearing
Deer Creek	3.0	1	SFJDR	Spawning and Rearing
Round Creek	1.4	1	Deer Creek	No
Dugout Creek	0.6	1	Deer Creek	No
Sunflower Creek	1.0	1	Deer Creek	No
Wildcat Creek	0.5	1	Sunflower Cr.	No

Indian Creek	1.3	3	SFJDR	No
Sock Hollow	0.7	3	SFJDR	No
Dry Soda Creek	0.6	2	SFJDR	No
Poison Creek	0.3	1	SFJDR	No
Flat Creek	1.2	2	SFJDR	No
Rock Creek	0.4	1	John Day River	Migration Corridor
Unnamed trib	1.2	1	Rock Creek	No
Birch Creek	0.3	1	Rock Creek	No access – Barrier falls ¼ mi. from mouth
West Birch Creek	2.0	3	Birch Creek	No access-blocked by falls near mouth of Birch Creek
West Birch Creek trib.	0.7	1	W. Birch Creek	No access
East Birch Creek	0.2	2	Birch Creek	No access
Squaw Creek	1.0	2	John Day River	Spawning and Rearing
Indian Creek	0.2	1	Squaw Creek	Spawning and Rearing
Frank Creek	0.6	2	Squaw Creek	No
Buckhorn Creek	1.0	3	Squaw Creek	Potential Spawning and Rearing
Willow Creek	0.7	1	Rock Creek	Spawning and Rearing
Fopiano Creek	0.4	2	Willow Creek	Spawning and Rearing
Dick Creek	0.8	2	John Day River	No
Johnny Creek	2.0	2	John Day River	No
Bull Canyon	1.1	1	John Day River	No
Deep Creek	0.5	1	John Day River	No
Harry Creek	0.9	4	John Day River	No
McGinnis Creek	1.6	1	John Day River	No
Branson Creek	3.8	2	John Day River	Potential Spawning and Rearing
Bone Creek	0.5	1	John Day River	No
Rose Creek	0.4	1	John Day River	No
Spring Creek	0.3	1	John Day River	No
Holmes Creek	1.7	4	John Day River	1.0 mi. Spawning and Rearing, 0.8 No.
Burnt Corral Creek	1.0	2	Holmes Creek	0.7 mi. Spawning and Rearing, 0.3 mi. No
Johnson Creek	1.4	5	John Day River	1.3 mi. Spawning and Rearing
Hide and Seek Creek	0.7	2	Johnson Creek	No
Unnamed Trib.	0.6	1	Johnson Creek	No
China Hat Creek	0.3	1	Johnson Creek	No

**Steelhead Distribution and BLM Ownership in the North Fork John Day Subbasin
#17070202**

The North Fork John Day subbasin encompasses about 1.18 million acres. Prineville District BLM manages about 35,350 acres within the subbasin, from the mouth to the Umatilla/Grant County line (RM 51.4). Major tributaries within the subbasin include Granite, Desolation, Camas, Potamus, Big Wall, Cottonwood, and Rudio Creeks, and the Middle Fork John Day River. Streams on this list generally carry perennial flows, based on U.S.G.S. Quadrangle maps or direct observations. (See Table 2).

Table B3. Streams with BLM ownership, total number of stream segments on BLM parcels, what it flows into, and current steelhead status.

Stream Name	Public Miles	# Of Stream Segments	Tributary to	Steelhead Waters
North Fork John Day	15.0	20	John Day River	Winter Rearing
Sulphur Gulch	1.1	2	NFJDR	No
Hunter Creek	0.1	1	NFJDR	Spawning and Rearing
Potamus Creek	0.2	1	NFJDR	Spawning and Rearing
Mallory Creek	0.1	1	NFJDR	Spawning and Rearing
Graves Creek	0.1	1	Mallory Creek	Spawning and Rearing
Squaw Creek	0.3	1	NFJDR	No
Cabin Creek	0.3	1	NFJDR	Spawning and Rearing
Little Wall Creek	0.2	1	Big Wall Creek	Spawning and Rearing
Bacon Creek	0.3	1	Little Wall Creek	Spawning and Rearing
Three-Trough Creek	0.1	1	Little Wall Creek	Spawning and Rearing
Cottonwood Creek	1.7	5	NFJDR	Spawning and Rearing
E. F. Cottonwood Creek	0.7	2	Cottonwood Creek	No
Board Creek	0.4	1	Cottonwood Creek	No
Cougar Creek	0.2	1	Cottonwood Creek	No
Cougar Creek trib	0.5	2	Cougar Creek	No
Squaw Creek	1.7	3	Cottonwood Creek	Spawning and Rearing
W. Fork Cochran Creek	0.6	1	Cochran Creek	No
Rudio Creek	3.2	5	NFJDR	Spawning and Rearing
Gilmore Creek	0.6	1	Rudio Creek	Spawning and Rearing
Straight Creek	0.4	1	Gilmore Creek	Spawning and Rearing
Birch Creek	1.4	2	NFJDR	No

Steelhead Distribution and BLM Ownership in the Middle Fork John Day River Subbasin #17070203

The Middle Fork John Day subbasin encompasses about 504,500 acres. Prineville District BLM manages about 3,975 acres within the subbasin, from the river mouth to the Malheur National Forest boundary (RM 43.1). Of this approximately 2.1 miles of the river is BLM in 6 parcels. Major tributaries within the subbasin include Clear, Granite Boulder, Camp, Big, and Long Creeks. Streams on this list generally carry perennial flows, based on U.S.G.S. Quadrangle maps or direct observations. (See Table 3).

Table B4. Streams with BLM ownership, total number of stream segments on BLM parcels, what it flows into, and current steelhead status.

Stream Name	Public Miles	# Of Stream Segments	Tributary to	Steelhead Waters
MF John Day R. (below HWY 395)	1.3	5	NFJDR	Winter Rearing
MF John Day R. (Above HWY 395)	0.8	5	NFJDR	Spawning and Rearing
Huckleberry Creek	0.4	1	MFJDR	Spawning and Rearing
Cole Canyon	0.8	3	MFJDR	Spawning and Rearing
Troff Canyon	0.3	1	Cole Canyon	No
Threemile Creek	0.1	1	MFJDR	No

Appendix B. Unauthorized Use of Public Lands

Subpart 4140-Prohibited Acts

Sec. 4140.1 Acts prohibited on public lands.

The following acts are prohibited on public lands and other lands administered by the Bureau of Land Management:

- (a) Grazing permittees or lessees performing the following prohibited acts may be subject to civil penalties under Sec. 4170.1:
 - (1) Violating special terms and conditions incorporated in permits or lease,
 - (2) Failing to make substantial grazing use as authorized for 2 consecutive fee years, but not including approved temporary nonuse, conservation use, or use temporarily suspended by the authorized officer,
 - (3) Placing supplemental food on these lands without authorization.
 - (4) Failing to comply with the terms, conditions, and stipulations of range improvement cooperative agreements or range improvement permits;
 - (5) Refusing to install, maintain, modify, or remove range improvements when so directed by the authorized officer.
 - (6) Unauthorized leasing or subleasing as defined in this part.
- (b) Persons performing the following prohibited acts related to rangelands to civil and criminal penalties set forth at §§ 4170.1 and 4170.2:
 - (1) Allowing livestock or other privately owned or controlled animals to graze an or be driven across these lands:
 - (i) Without a permit or lease, and annual grazing authorization. For the purposes of this paragraph, grazing bills for which payment has not been received do not constitute grazing authorization.
 - (ii) In violation of the terms and conditions of a permit, lease, or other grazing use authorization including, but not limited to, livestock in excess of the number authorized;
 - (iii) In an area or at a time different from that authorized: or
 - (iv) Failing to comply with a requirement under Sec. 4130.5(c) of this title.
 - (2) Installing, using, maintaining, modifying, and/or removing range improvements without authorization:
 - (3) Cutting, burning, spraying, destroying, or removing vegetation without authorization;
 - (4) Damaging or removing U.S. property without authorization;
 - (5) Molesting, harassing, injuring, poisoning, or causing death of livestock authorized to graze on these lands and removing authorized livestock without the owner's consent;
 - (6) Littering;
 - (7) Interfering with lawful uses or users including obstructing free transit through or over public lands by force, threat, intimidation, signs, barrier or locked gates;
 - (8) Knowingly or willfully making a false statement or representation in base property certifications, grazing applications, range improvement permit applications, cooperative agreements, actual use reports and/or amendments thereto;
 - (9) Failing to pay any fee required by the authorized officer pursuant to this part, or making payment for grazing use of public lands with insufficiently funded checks on a repeated and willful basis:

- (10) Failing to reclaim and repair any lands, property, or resources when required by the authorized officer;
- (11) Failing to reclose any gate or other entry during periods of livestock use.
- (c) Performance of an act listed in paragraphs (c)(1), (c)(2) or (c)(3) at this section where Public land administered by the Bureau of Land Management is involved or affected, the violation is related to grazing use authorized by a permit or lease issued by the Bureau of Land Management, and the permittee or lessee has been convicted or otherwise found to be in violation of any of these laws or regulations by a court or by final determination of an agency charged with the administration of these laws or regulations, and no further appeals are outstanding, constitutes a prohibited act that may be subject to the civil penalties set forth at § 4170.1-1.
 - (1) violation of Federal or State laws or regulations pertaining to the:
 - (i) placement of poisonous bait or hazardous devices designed for the destruction of wildlife;
 - (ii) application or storage of pesticides, herbicides, or other hazardous materials;
 - (iii) alteration or destruction of natural stream courses without authorization,
 - (iv) pollution of water sources;
 - (v) illegal take, destruction or harassment, or aiding and abetting in the illegal take, destruction or harassment of fish and wildlife resources; and
 - (vi) illegal removal or destruction of archeological or cultural resources;
 - (2) violation of the Bald Eagle Protection Act (16 U.S.C. 668 et. seq.), Endangered Species Act (16 U.S.C. 1531 et. seq. or any provision of part 4700 of this title concerning the protection and management of wild free-roaming horses and burros; or
 - (3) violation of State live-stock laws or regulations relating to the branding of livestock: breed, grade, and number of bulls; health and sanitation requirements, and violating State, county, or local laws regarding the stray of livestock from permitted public land grazing areas onto areas that have been formally closed to open range grazing.

Subpart 4150-Unauthorized Grazing Use

Sec. 4150.1 Violations.

Violation of Sec. 4140.1 (b)(1) constitutes unauthorized grazing use.

- (a) The authorized officer shall determine whether a violation is nonwillful, willful, or repeated willful.
- (b) Violators shall be liable in damages to the United States for the forage consumed by their livestock, for injury to Federal property caused by their unauthorized grazing use, and for expenses incurred in impoundment and disposal of their livestock, and may be subject to civil penalties or criminal sanction for such unlawful acts.

Sec. 41 50.2 Notice and order to remove.

- (a) Whenever it appears that a violation exists and the owner of the unauthorized livestock is known, written notice of unauthorized use and order to remove livestock by a specified date shall be served upon the alleged violator or the agent of record, or both, by certified mail or personal delivery. The written notice shall also allow a specified time from receipt of notice

for the alleged violator to show that there has been no violation or to make settlement under Sec. 4150.3.

- (b) Whenever a violation has been determined to be nonwillful and incidental, the authorized officer shall notify the alleged violator that the violation must be corrected, and how it can be settled, based upon the discretion of the authorized officer.
- (c) When neither the owner of the unauthorized livestock nor his agent is known, the authorized officer may proceed to impound the livestock under Sec. 4150.4.
- (d) The authorized officer may temporarily close areas to grazing by specified kinds or class of livestock for a period not to exceed 12 months when necessary to abate unauthorized grazing use. Such notices of closure may be issued as final decisions effective upon issuance or on the date specified in the decision and shall remain in effect pending the decision on appeal unless a stay is granted by the Office of Hearings and Appeals in accordance with 43 CFR 4.21.

Sec. 4150.3 Settlement.

The amount due for settlement shall include the value of forage consumed as determined in accordance with paragraph (a), (b), or (c) of this section. Where violations are repeated willful, the authorized officer shall take action under Sec. 4170. 1 -1 (b) of this title. The amount due for all settlements shall include the value of forage consumed as determined by paragraph (a), (b), or (c) of this section. Settlement for willful and repeated willful violations shall also include the full value for all damages to the public lands and other property of the United States; and all reasonable expenses incurred by the United States in detecting, investigating, resolving violations, and livestock impoundment costs.

- (a) For nonwillful violations: The value of forage consumed as determined by the average monthly rate per AUM for pasturing livestock on privately owned land (excluding irrigated land) in each State as published annually by the Department of Agriculture. The authorized officer may approve nonmonetary settlement of unauthorized use only when the authorized officer determines that each of the following conditions is satisfied:
 - (1) evidence shows that the unauthorized use occurred through no fault of the livestock operator;
 - (2) the forage use is insignificant;
 - (3) the public lands have not been damaged; and
 - (4) nonmonetary settlement is in the best interest of the United States.
- (b) For willful violations: Twice the value of forage consumed as determined in paragraph (a) of this section.
- (c) For repeated willful violations: Three times the value of the forage consumed as determined in paragraph (a) of this section.
- (d) Payment made under this section does not relieve the alleged violator of any criminal liability under Federal or State law.
- (e) Violators shall not be authorized to make grazing use on the public lands administered by the Bureau of Land Management until any amount found to be due the United States under this section has been paid. The authorized officer may take action under Sec. 4180. 1-2 of this title to cancel or suspend grazing authorizations or to deny approval of applications for grazing use until such amounts have been paid. The proposed decision shall include a demand for payment.

Sec. 4150.4 Impoundment and disposal.

Unauthorized livestock remaining on the public lands or other lands under Bureau of Land Management control, or both, at the date set forth in the notice and order to remove sent under Sec. 4150.2 may be impounded and disposed of by the authorized officer as provided herein.

Sec. 4150.4-1 Notice of intent to impound.

- (a) A written notice of intent to impound shall be sent by certified mail or personally delivered to the owner or his agent, or both. The written notice shall indicate that unauthorized livestock on the specified public lands or other lands under Bureau of Land Management control, or both, may be impounded any time after 5 days from delivery of the notice.
- (b) Where the owner and his agent are unknown, or where both a known owner and his agent refuses to accept delivery, a notice of intent to impound shall be published in a local newspaper and posted at the county courthouse and a post office near the public land involved. The notice shall indicate that unauthorized livestock on the specified public lands or other lands under, Bureau of Land Management control, or both, may be impounded any time after 5 days from publishing and posting the notice.

Sec. 4150.4-2 Impoundment.

After 5 days from delivery of the notice under Sec. 4150.4-1 (a) of this title or any time after 5 days from publishing and posting the notice under Sec. 4150.4-1 (b) of this title, unauthorized livestock may be impounded without further notice any time within the 12-month period following the effective date of the notice.

Sec. 4150.4-3 Notice of public sale.

Following the impoundment of livestock under this subpart the livestock may be disposed of by the authorized officer under these regulations or, if a suitable agreement is in effect, they may be turned over to the State for disposal. Any known owners or agents, or both, shall be notified in writing by certified mail or by personal delivery of the sale and the procedure by which the impounded livestock may be redeemed prior to the sale.

Sec. 4150.4-4 Redemption.

Any owner or his agent, or both, or lien-holder of record of the impounded livestock may redeem them under these regulations or, if a suitable agreement is in effect, in accordance with State law, prior to the time of sale upon settlement with the United States under Sec. 4150.3 or adequate showing that there has been no violation.

Sec. 4150.4-5 Sale.

If the livestock are not redeemed on or before the date and time fixed for their sale, they shall be offered at public sale to the highest bidder by the authorized officer under these regulations or, if a suitable agreement is in effect, by the State. If a satisfactory bid is not received, the livestock may be reoffered for sale, condemned and destroyed or otherwise disposed of under these regulations, or if a suitable agreement is in effect, in accordance with State Law.

Subpart 4160-Administrative Remedies

Sec. 4160.1 Proposed decisions.

- (a) Proposed decisions shall be served on any affected applicant, permittee or lessee, and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modifications relating to applications, permits and agreements (including range improvement permits) or losses, by certified mail or personal delivery. Copies of proposed decisions shall also be sent to the interested public.
- (b) Proposed decisions shall state the reasons for the action and shall reference the pertinent terms, conditions and the provisions of applicable regulations. As appropriate, decisions shall state the alleged violations of specific terms and conditions and provisions of these regulations alleged to have been violated, and shall state the amount due under §§ 4130.8 and 4150.3 and the action to be taken under § 4170.1.
- (c) The authorized officer may elect not to issue a proposed decision prior to a final decision where the authorized officer has made a determination in accordance with § 4110.3-3(b) or § 4150.2(d) of this part.

Sec. 4160.2 Protests.

Any applicant, permittee, lessee or other affected interests may protest the proposed decision under Sec. 4160.1 of this title in person or in writing to the authorized officer within 15 days after receipt of such decision.

Sec. 4160.3 Final decisions.

- (a) In the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.
- (b) Upon the timely filing of a protest, the authorized officer shall reconsider his proposed decision in light of the protestant's statement of reasons for protest and in light of other information pertinent to the case. At the conclusion to his review of the protest the authorized officer shall serve his final decision on the protestant or his agent, or both, and the interested public.
- (c) A period at 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final as provided in paragraph (a) of this section, is provided for filing an appeal and petition for stay of the decision pending final determination an appeal. A decision will not be effective during the 30-day appeal period, except as provided in paragraph (f) of this section. See §§ 4.21 and 4.470 of this title for general provisions of the appeal and stay process.

- (d) When the Office of Hearings and Appeals stays a final decision of the authorized officer regarding an application for grazing authorization, an applicant who was granted grazing use in the preceding year may continue at that level of authorized grazing use during the time the decision is stayed, except where grazing use in the preceding year was authorized on a temporary basis under §§ 4110.3-1 (a). Where an applicant had no authorized grazing use during the previous year, or the application is for designated ephemeral or annual rangeland grazing use, the authorized grazing use shall be consistent with the decision pending the Office of Hearings and Appeals final determination on the appeal.
- (a) When the Office of Hearings and Appeals stays a final decision of the authorized officer to change the authorized grazing use, the grazing use authorized to the permittee or lessee during the time that the decision is stayed shall not exceed the permittee's or lessee's authorized use in the last year during which any use was authorized.
- (f) Notwithstanding the provisions of § 4.21 (a) of this title, the authorized officer may provide that the final decision shall be effective upon issuance or on a date established in the decision and shall remain in effect pending the decision on appeal unless a stay is granted by the Office of Hearings and Appeals when the authorized officer has made a determination in accordance with § 4110.3-3(b) or § 4150.2(d) of this part. Nothing in this section shall affect the authority of the Director of the Office of Hearings and Appeals or the Interior Board of Land Appeals to place decisions in full force and effect as provided in § 4.21 (a)(1) of this title.

Sec. 4160.4 Appeals.

Any person whose interest is adversely affected by a final decision of the authorized officer may appeal the decision for the purpose of a hearing before an administrative law judge by following the requirements set out in § 4.470 of this title. As stated in that part, the decision must be filed within 30 days after the receipt of the decision or within 30 days after the date the proposed decision becomes final as provided in 4160.3(a). Appeals and petitions for a stay of the decision shall be filed at the office of the authorized officer. The authorized Officer shall promptly transmit the appeal and petition for stay to ensure their timely arrival at the appropriate Office of Hearings and Appeals.

Subpart 4170-Penalties

Sec. 4170.1 Civil penalties.

Sec. 4170.1 -1 Penalty for violations.

- (a) The authorized officer may withhold issuance of a grazing permit or lease, or suspend the grazing use authorized under a grazing permit or lease, in whole or in part, or cancel a grazing permit or lease and grazing preference, or a free use grazing permit or other grazing authorization, in whole or in part, under Subpart 4160 of this title, for violation by a permittee or lessee of any of the provisions of this part.
- (b) The authorized officer shall suspend the grazing use authorized under a grazing permit, in whole or in part, or shall cancel a grazing permit or lease and grazing preference, in whole or

in part. under Subpart 4160 of this title for repeated willful violation by a permittee or losses of Sec. 4140.1 (b)(1) of this title.

- (c) Whenever a nonpermittee or nonlessee violates Sec. 4140.1(b) of this title and has not made satisfactory settlement under Sec. 4150.3 of this title the authorized officer shall refer the matter to proper authorities for appropriate legal action by the United States against the violator.
- (d) Any person who is found to have violated the provisions of Sec. 4140.1 (a)(6) after August 21, 1995, shall be required to pay twice the value of forage consumed as determined by the average monthly rate per AUM for pasturing livestock on privately owned land (excluding irrigated land) in each State as supplied annually by the National Agricultural Statistics Service, and all reasonable expenses incurred by the United States in detecting, investigating, and resolving violations. If the dollar equivalent value is not received by the authorized officer within 30 days of receipt of the final decision, the grazing permit or lease shall be cancelled. Such payment shall be in addition to any other penalties the authorized officer may impose under paragraph (a) of this section.

Sec. 4170. 1 -2 Failure to use.

If a permittee or lessee has, for 2 consecutive grazing fee years, failed to make substantial use as authorized in the lease or permit, or has failed to maintain or use water bass property in the grazing operation, the authorized officer, after consultation, coordination and cooperation with the permittee or losses and any lien holder of record, may cancel whatever amount of permitted use the permittee or lessee has failed to use .

Sec. 4170.2 Penal provisions.

Sec. 4170.2-1 Penal provisions under the Taylor Grazing Act.

Under section 2 of the Act any person who willfully commits an act prohibited under § 4140.1 (b), or who willfully violates approved special rules and regulations is punishable by a fine of not more than \$500

Sec. 4170.2-2 Penal provisions under the Federal Land Policy and Management Act.

Under section 303(a) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), any person who knowingly and willfully commits an act prohibited under § 4140.1 (b) or who knowingly and willfully violates approved special rules and regulations may be brought before a designated U.S. magistrate and is punishable by a fine in accordance with the applicable provisions of Title 18 of the United States Code, or imprisonment for no more than 12 months or both.