

Clean Water Act Compliance Field Review - Grazing Activities – Targhee NF

Allotment Name: Bootjack C&H **Forest:** Caribou-Targhee NF **District:** Island Park **Date:** 09/12/2006

Reviewers: Walt Grows (range), Kyle Moore (range), Kara Kleinschmidt (soils), Lee Mabey (aquatics), and Louis Wasniewski (hydrology)

Grazing System: Season Long

Unit(s) Reviewed: Bootjack Unit – added FS land of the Poison Knoll unit and adjusted length of use. **On Date(s):** July 11 **Off Date(s)** September 1

Note: Prior to 2006 the main unit dates were July 11 to August 21 then onto the Poison Knoll unit from August 20 to September 4

6TH Level HUB: 170402021002 (majority) **Stream Name(s):** Bootjack Creek and North Sawtell Creek
170402021201 Hope Creek
170402020903 Sawtell Creek
170402021001 (minor sliver)

Ecological Units (EUI): 1149-PSME/CARU Edgway, 15-40% slopes; 1150-ABLA/CARU Rhylow – ABLA/CARU, CARU Fitwil association, 4-40% slopes; 1315-ALBLA/OSCH, PAMY Edgway – ABLA/VAGL, PAMY Koffgo – PSME/Artrv Povey association, 15-50% slopes; and others

Community Types: Mixed confers with grass/forb open parks

Notes: The permittee installed a fence that includes the portion of FS lands from the Poison Knoll unit and is now operated as one unit. The FS change the time on the allotment to reflect additional acres. Normally 375 cow /calf pairs run on the allotment. Since cows were not removed until well after the off date in 2004 and 2005 a suspension notice was issued reducing the number to 281 for 2006 and 2007 grazing. The allotment is not NEPA sufficient, but it is on the Forest's schedule for AMP update/NEPA compliance in fall/winter 2006/2007. The AOI is annually updated (Kyle Moore updated this year). The permittee has used a rider in the past for distribution. However, there has not been a rider the last couple of years. This has led to some distribution problems and is still a concern.

The unit was historically grazed hard, but current management has produced improvements. The permittee has stayed in the Poison Knoll unit too long in previous years and the suspension of 94 c/c for 2006 and 2007 is hoped to correct this action.

The area experiences heavy recreation use due to it's proximity to Henry's Lake. Heavy dispersed camping occurs within the allotment and motorized recreation is also popular as noted in the 2004 BMP review and again during this review. The reviewers noted illegal motorized use of closed roads. The area also receives heavy snowmobile use in the winter.

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Improvements and Monitoring

Three areas were identified for potential improvements (1) Hardening of N. Sawtell pond outlet and (2) Improve bank & riparian conditions at illegally used non-motorized stream crossing on lower Bootjack near transfer station, and (3) Reduce channel incision in the vicinity of the illegal stream crossing.



Photo 1: Outlet of N. Sawtell used for watering that could be hardened with rock to improve conditions.

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Photo 2: Illegal motorized crossing that could be improved. Downstream end of crossing shows channel incision that also could be improved through aggregation structures.



Photo 3: Downstream of crossing shows channel incision and lack of riparian zone. Riparian zone could be increased by aggregation structures that would cause water levels to increase and be more connected to the floodplain.

It was also identified that this same area on lower Bootjack would also be a good location to add for a Multiple Indicator Monitoring (MIM) site. Stubble height was 6-8 inches but the bank alteration was high estimated at 30%+ therefore using the MIM the indicator should be evaluated for which one is appropriate to use in the future.

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The 2004 BMP review identified recommendations and in 2006 actions had been taken to deal with recommendation and associated issues. 2004 recommendation in italic with actions following in normal text:

- *The range conservationist position on the district is vacant. This is a full-time position and Bryan is covering it as he also performs his wildlife duties.* A full time Range Conservation, Kyle Moore was hired in 2005.
- *Poison Knoll is being overused this year. The unit is run with the State land, which is open sage brush country. The cattle tend to hang of the Forest portion because of the timbered vegetation and shading it provides. This unit needs to be fenced off from the state land or combined with the main unit.* The permittee installed a fence that includes the portion of FS lands from the Poison Knoll unit and is now operated as one unit (Bootjack Unit).
- *An allotment of this size consisting of a season long grazing system needs a full time rider to insure proper distribution of livestock is occurring.* This still seems to be a problem and needs to be addressed. Especially on lower Bootjack Creek where cattle are still being allowed to gather.
- *In 2004: Cows were still in both units during the review on 9/15. Cows should have been out of the main unit on 8/20 (recent weather probably pushed these animals down from higher elevations). Cows should be out of the Poison Knoll unit on 9/4. The permittee was previously warned of the conditions in the Poison Knoll unit and will receive another letter as a result of this review.* Since cows were not removed until well after the off date in 2004 and 2005 a suspension notice was issued reducing the number from 375 to 281 for 2006 and 2007 grazing.

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Use the Following Rating Guide and Definitions to Score Each Practice

Implemented	Score
Exceeds objective of practice	5
Meets objective of practice	4
Minor departure from practice	3
Major departure from practice	2
Gross neglect of practice	1

Effective	Score
Improved protection of soil and water over pre-project conditions	5
Adequate protection of soil and water	4
Minor and temporary impacts on soil and water	3
Major and temporary, or minor and prolonged impacts on soil and water	2
Major and prolonged impacts on soil and water	1

Term	Definition
Adequate	Small amount of material eroded; material does not reach ephemeral draws, intermittent and perennial streams, or wetlands
Minor	Erosion and delivery of material to ephemeral draws but not intermittent and perennial streams, or wetlands
Major	Erosion and subsequent delivery of sediment to ephemeral draws, intermittent and perennial streams, or wetlands
Temporary	Impacts expected to last one year or less or no more than one runoff season
Prolonged	Impacts expected to last more than one year or one runoff season

R1/R4 FSH 2509.22, Chapter10 - Soil and Water Conservation Practices

Practice	Objective and Implementation	Applicable	Implemented	Effective	Notes
17.01 – Range Analysis, Allotment Management Plan, Grazing Permit System, and Permittee Operating Plan	<p>To maintain and protect soil and water resources through sustained forage production and managed multiple use of range forage.</p> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> • Allotment is NEPA sufficient (if yes, give date) and AMP is sufficient (if yes, give date) • Preparation and approval of AMP • Revise AMP as needed • AOI prepared or revised (as needed) annually to adjust for current allotment conditions and trends and to incorporate special instructions • Permittee carries out the plan • Corrective action is taken if permittee does not comply with permit conditions designed to protect soil and water resources. 	Y	4	4	Not NEPA sufficient, but it is currently in progress. Current AOI is in place and annually updated.
17.02 – Controlling Livestock Numbers and Season of Use	<p>To maintain and protect soil and water resources through management of livestock numbers and season of use.</p> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> • Proper stocking rates and season of use specified in the grazing permit. • Annual field checks are made to identify needed adjustments: range readiness evaluations, livestock counts, forage & browse utilization, and periodic assessments of rangelands (soil and veg. trends) • Permit is modified, cancelled, or suspended if needed. 	Y	4	4	Since cows were not removed until well after the off date in 2004 and 2005 a suspension notice was issued reducing the number from 375 to 281 for 2006 and 2007 grazing.

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R1/R4 FSH 2509.22, Chapter10 - Soil and Water Conservation Practices

Practice	Objective and Implementation	Applicable	Implemented	Effective	Notes
17.03 – Controlling Livestock Distribution	<p>To maintain and protect soil and water resources, including riparian areas through controlling livestock distribution.</p> <p><u>Implementation:</u> Proper techniques are used to reduce the impact on sensitive or naturally overused areas. Techniques may include:</p> <ul style="list-style-type: none"> • Fence construction and use of seasonal or pasture system management • Water developments in areas that receive little use and closures of water developments when proper use is achieved. • Other Range improvements. • Riding & herding to shift livestock locations • Placing salt or supplements away from water in forage areas with light grazing use to attract livestock • Moving livestock when prescribed utilization levels are reached. • Goats and sheep – open herding, limited trailing, and use of new bed grounds nightly. <p>Direction is incorporated into the AMP and AOI. The AOI reflects current allotment conditions and vegetative trends.</p>	Y	4	4	<p>There are localized areas of disturbance (bank trampling) along lower unconfined portions of Bootjack Creek. Bank trampling is occurring where the stream is accessible, but accessible areas are not common.</p> <p>The permittee may need a rider to aid in distribution.</p>
17.04 – Rangeland Improvements	<p>To maintain and protect soil and water resources the use of rangeland improvements.</p> <p><u>Implementation:</u> Improvements are recognized in the allotment planning process. Improvements are used to improve management and restore or improve forage quality, quantity, or availability. Improvements may include:</p> <ul style="list-style-type: none"> • Rest and/or deferment through rotation grazing, fencing, or lighter grazing use by changing the grazing season, kind, class, or permitted number of livestock. • Stream stabilization projects • Reseeding, fertilization, and/or other non-structural improvements • Water developments • ID teams provide consultation on improvements and they are constructed in manner that protects surface and ground water quality 		N/A	N/A	<p>There currently are not many identified improvements in this allotment. The areas along Bootjack Creek that we visited behind the transfer station have a spur road stream crossing that could be repaired in addition to the incised channel and a 3-4 foot headcut downstream of crossing.</p> <p>The fisheries program and partners installed a fence around N. Sawtell pond and a headgate structure in fall 2005. Efforts need to be made to keep water levels constant to get maximum riparian and wetland benefit.</p>

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R4 Soil Management Handbook, FSH 2509.18 – Chapter 2 – Soil Quality Monitoring

Practice	Objective and Implementation	Applicable	Implemented	Effective	Notes
Detrimental Soil Disturbance ¹	No more than 15% of an activity area should have detrimentally disturbed soil after the completion of all management activities. In other words, at least 85% of an activity area should be in a non-detrimentally disturbed condition.	Y	4	4	A nested frequency is located near N. Sawtell pond. In 2005 measured 90% groundcover and in 2006 ocular estimated it at 80% mid serial. It was estimated that very little detrimentally disturbed soil existed near this site. 20-25% sage canopy. At greater than 30% sage starts to have problems.
Effective Ground Cover	The minimum effective ground cover, following the cessation of disturbance in an activity area, should be sufficient to prevent detrimental erosion. Detrimental erosion includes erosion rates that cause long-term productivity losses from an activity area or soil losses that are beyond those acceptable for the activity area. Minimum amounts of ground cover necessary to protect a soil from erosion are a function of soil properties, slope gradient and length, and erosivity (precipitation factor).	Y	4	4	See above.

¹ Discuss the proper scale of the activity area (e.g. allotment, pasture, riparian areas). Activity Area is define in the handbooks as “an area impacted by a land management activity, excluding specified transportation facilities, dedicated trails, and mining excavations and dumps. Activity areas include such areas as: harvest units within timber sale areas and prescribed burn areas. Riparian and other environmentally sensitive areas may be monitored and evaluated as individual activity areas within larger management areas. It is recommended to describe the Activity Area for soil resources within planning and project implementation documents.”

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Targhee National Forest – Forest Wide Standards and Guidelines

Element	Standards and Guidelines	Applicable	Implemented	Effective	Notes																			
Fisheries & Other Aquatic Resources	<p>1. New special use permits (SUPs) or new FS projects involving instream facilities (exclusive of facilities retrofitted to existing dams) must maintain minimum instream flows as specified by Forest or State and, on fish-bearing streams provide for fish passage and include screening devices to prevent accidental loss of fish. (S)</p> <p>2. When reauthorizing existing SUPs or existing FS projects involving instream facilities (exclusive of facilities retrofitted to existing dams), where feasible, provide for minimum instream flows as specified by Forest or State and, on fish-bearing streams, where feasible, provide for fish passage and include screening devices to prevent accidental loss of fish. (S)</p>	Y	4	4	The fisheries program and partners installed a fence around N. Sawtell pond and a headgate structure in fall 2005. Efforts need to be made to keep water levels constant to get maximum riparian and wetland benefit.																			
Range – Upland Forage Utilization	<p>Apply upland forage utilization levels to all allotments and/or management areas as shown below, unless determined otherwise through the IDT process. These guidelines apply to native and desirable non-native vegetation as recorded at the end of the growing season. (G)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2" style="text-align: center;">Season-Long Grazing</th> <th colspan="2" style="text-align: center;">Rotation Grazing</th> </tr> <tr> <th style="text-align: center;">Unsatisfact. Range</th> <th style="text-align: center;">Satisfact. Range</th> <th style="text-align: center;">Unsatisfact. Range</th> <th style="text-align: center;">Satisfact. Range</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Grass Herb</td> <td style="text-align: center;">35%</td> <td style="text-align: center;">45%</td> <td style="text-align: center;">45%</td> <td style="text-align: center;">55%</td> </tr> <tr> <td style="text-align: center;">Shrubs</td> <td style="text-align: center;">25%</td> <td style="text-align: center;">35%</td> <td style="text-align: center;">35%</td> <td style="text-align: center;">35%</td> </tr> </tbody> </table>		Season-Long Grazing		Rotation Grazing		Unsatisfact. Range	Satisfact. Range	Unsatisfact. Range	Satisfact. Range	Grass Herb	35%	45%	45%	55%	Shrubs	25%	35%	35%	35%	Y	5	4	Ocular use estimate of 25-30%.
	Season-Long Grazing		Rotation Grazing																					
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Range - Riparian Forage Utilization - Woody Plant Utilization	Not more than 30% use on riparian woody plant species (current year's growth) is allowed. 30% is the maximum allowed use as recorded at the end of the grazing period. (S)	Y	5	4																				
Range - Riparian Forage Utilization – Riparian Vegetation Stubble Height Standard (these apply to all grazing systems)	<p>1. At the hydric green-line (HGL), there will be at least 4 inches of stubble height remaining on key species at the end of the grazing period, unless determined otherwise through the IDT process. This standard applies to key species of native and desirable non-native hydric vegetation. (S)</p> <p>2. Away from the HGL, at least 3 inches of stubble height will be left on the remainder of the key riparian species at the end of the grazing period, unless determined otherwise through the IDT process. (S)</p>	Y	4	4	<p>This standard is in the AOI.</p> <p>The areas along Bootjack Creek that we visited behind the transfer station had 6-8 inch stubble with estimated 20 percent utilization. Mid to low serial. This area high bank alteration (30%+). This area would to be a good location for a Multiple Indicator Monitoring (MIM) site.</p>																			
Range – Allotment Management Planning (AMP)	Salt should be placed greater than a ¼ mile from water, or as far from water as practicable. Salting should be designed to avoid conflicts with aspen regeneration, conifer plantations, and system trails. (G)	Y	4	4	Not a ¼ mile away from Bootjack Creek, but as far practicable - good salt placement on the ridge top above Bootjack Creek.																			

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Range – (AMP)	Allow no livestock grazing before seed set of the second growing season after prescribe or natural fires and rangeland planting or seeding. (G)	N/A			
Range – (AMP)	FS administrative site livestock pastures will comply with the Forest wide standards and guidelines for forage utilization and riparian management. (S)	N/A			
Range – (AMP)	Permittees are allowed motorized access to maintain facilities. AMPs and AOIs will include direction that motorized access must be less than 2 vehicles per week (This permitted access is not included in the OROMTRD). (S)	Y	4	4	
Range – (AMP) and Fisheries & Other Aquatic Resources	<p>Within subwatersheds occupied by native cutthroat trout or designated as vital to meeting recovery goals, identify areas where livestock grazing is causing fisheries habitat conditions to fall below or retard the rate of recovery toward the values described in the “Expected values for healthy fish habitat conditions” (listed below). Include specific remedial actions in the AMP or AOI. Progress toward meeting these expected values should be monitored and grazing systems adjusted, as necessary. (G)</p> <p>Expected Values for Healthy Fish Habitat Conditions:</p> <ul style="list-style-type: none"> • Pool frequency – at least 1 pool per length of stream equal to 5-7 times the channel width. • Water Temp. – 13° C or less with a max daily average no greater than 9 in spawning habitats or 16° C with a max daily average no greater than 12 in adult holding habitats. • LWD – Greater than 20 pieces/mile. • Bank stability – Greater than 80% <p>Lower bank angle (non-forested systems) – Greater than 75% of banks with less than 90° angle. Width/depth ratio – suitable for Rosgen stream type.</p>	N			Bootjack Creek does not contain fish. North Sawtell Creek is not impeded by livestock and does not presently contain native fish.
Aquatic Influence Zone (AIZ) – Range	Incorporate into AMPs, objectives for attainment of desired vegetation conditions for riparian plant community seral stage development and stream channel condition. (G)	Y	3	4	AMP update needed and this allotment is on the schedule. Currently the AOI is all that is being used. Desired conditions will be defined during AMP revision.
Aquatic Influence Zone (AIZ) – Range	<p>Proposed livestock watering facilities, corrals, and holding pastures within these lands are allowed only if appropriate mitigation measures are implemented to reduce negative effects. (S)</p> <p>Existing livestock watering facilities, corrals, and holding pastures within these lands are allowed at permit issuance only if mitigation measures are implemented to reduce negative effects. (G)</p>	N/A			