

Pass Creek C&H Allotment

2013 Implementation Monitoring Evaluation

Summary

The Pass Creek Allotment Management Plan (2000-2005) was developed by a team consisting of representatives of the Forest Service, the Pass Creek Association, and the Natural Resource Conservation Service to improve resource conditions on the Pass Creek Allotment. This plan requires that participants meet annually to 1) evaluate the success in implementing the plan, 2) identify actions to improve the management of the allotment, and 3) develop a grazing strategy for the following season. This report follows these guidelines and summarizes the results of this effort for the 2013 grazing season.

TERM GRAZING PERMIT				AUTHORIZED USE				ACTUAL USE			
NO.	ON DATE	OFF DATE	HM	NO.	ON DATE	OFF DATE	HM	NO.	ON DATE	OFF DATE	HM
1,660	7/15	10/1	4,312	1,471	7/15	10/1	3,821	1,471	7/15	8/30	2,273

Actual use was 53% of full permitted head months, and 89% of full permitted cattle.

Table 1. Summary of the 2013 grazing season. (Total of 47 days actual use)

Order of Use	Unit Name	Number of Head	On Date	Off Date	AUM's Permitted 5691	End of Growing Season Stubble Height Indicator/Streambank Alteration/Woody Browse	Trigger Stubble Height	Actual End of Season Stubble Height/streambank Alteration/Woody Browse	Use Exceeded
1	Lower Big Creek		7/15	7/27		4/NA/30%	5	6"/21%alt/25%Brws	No
1	Upper Big Creek		7/15	7/27		4/NA/30%	5	5"/22%alt/37%Brws	Yes, Browse Use
1	Sands/Coal Creek		7/15	7/27		4/NA/50%	5	5"/NA/18%Brws	No
2/Trail	Pine Creek		Trail 7/26	Trail 7/30		Wet Creek 6/20%/30% Pine Creek 6/20%/30%	7	REST 8"/22%alt/ N-Slight Brws	Yes, Alteration
3	North Wet Creek Basin		7/28	8/11		4/NA/50%	5	4"/33%alt/58%Brws	Yes, Browse Use
3	South Wet Creek Basin		7/28	8/11		4/NA/50%	5	6"/60%alt/NA Brws	No
4	Southeast Pass Creek		8/12	8/30		4/NA/50%	5	5"/NA/64%Brws	Yes, Browse Use
4	Twin Lakes		8/12	8/30		4/NA/50%	5	5"/NA/NA	No
4	North Pass Creek		8/12	8/30		4/NA/50%	5	4"/NA/23%Brws	No
4	South Pass Creek		8/12	8/30		4/NA/50%	5	5"/NA/15%Brws	No
REST	Wet Creek					REST		REST	No
	Total			47					

Information: The precipitation for the Hilts Creek Snotel site on the allotment was below average for the precipitation year of October 2012 through September 2013. The growing season precipitation for the months of April through September was also below average at 85% of the 32 year average for the site. This is the third year in a row where the growing season precipitation was at or below 85% of the 32 year average. The precipitation information for the Hilts Creek Snotel site is included in the table below. The totals for 2013 are compared to the average total precipitation by month for the Hilts Creek Snotel site from 1982-2013.

Month	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Year Total	Growing Season Total
2013 Precip. (in inches)	1.5	2.6	4.9	1.3	0.5	0.8	0.8	1.9	0.6	1.6	1.6	2.3	20.40	8.8
Average Precip. 1982-2013	1.8	2.1	2.4	2.1	1.9	2.7	2.0	2.1	2.1	1.3	1.5	1.4	23.54	10.4

The temperature for the growing season as measured at the Hilts Creek Snotel site shows a much warmer growing season than average at 1.8 degrees F warmer than the 25 year average as indicated in the table below. The 6 month growing season temperature is the 4th warmest out of the 25 year record for the Hilts Creek Snotel site. The warm temperature and limited moisture during the growing season greatly limited vegetation growth on the District early in the season. The late season precipitation and warm temperatures allowed for some regrowth of grass and grass like species into September.

Month	Apr	May	Jun	Jul	Aug	Sept	Apr-Sept Total
2013 Temperature (°F)	33.8	42.8	51.8	62.6	62.6	50.0	50.6
Average Temp. 1982-2013	33.2	41.4	49.6	59.9	58.8	50.2	48.8

Utilization: Standards were not met on Upper Big Creek (37% browse instead of 30%), North Wet Creek Basin (58% browse instead of 50% browse), and Southeast Pass Creek (64% browse instead of 50% browse). The end of season alteration indicator was set at 20% for the entire Pine Creek Unit in 2013. The unnamed tributary to Wet Creek had 22% alteration which slightly exceeded the 20% indicator for this site. All other standards were met. Upland utilization was light to moderate on grasses throughout much of the allotment with moderate to somewhat higher utilization of grasses observed in the Lower Big Creek, North and South Wet Creek Basin, and Southeast Pass Creek Units. The Upper Big Creek and Sands/Coal units were grazed to a 3 inch stubble height during the grazing season. Each of these sites regrew 2 inches by the end of the season.

Cattle were found on the allotment in the Big Creek and Pine Creek Units for over a month prior to the on date of July 15th. Cattle were also found in the North and South Wet Creek Basin Units while they were scheduled to be in the Pass Creek Units. Back riding needs to be improved upon to ensure that all cattle are in their scheduled unit. Continue to move cattle away from high concentrated use areas adjacent to roads and streams.

Browse standards of 30% in Big Creek and 50% on all other units in the allotment are included in your permit and should be watched carefully. While this standard has not been focused on by range specialists in the past because minimal use of woody browse by livestock was observed, browse on willows, aspen, and riparian shrubs is an important consideration especially in dry years. Generally speaking, cattle begin to shift to woody browse species as the four inch stubble height on grasses and sedges was met which could be used as an indicator for riders/ permittees to move cattle in the future. Using this tool to adjust movement dates could avoid overuse or missing end of season standards for herbaceous and woody species in these riparian areas during years of low precipitation. This was noticed this year

as the three end of season indicators that were missed were all browse use on willows where the stubble height was grazed down to 4 or less inches during the grazing season. The late season rain allowed for regrowth of the sedges along the greenline, but the willows did not recover from the browsing.

The following actions are required of you during the 2014 and 2015 grazing seasons to remedy the non-compliance:

1. All livestock are to be kept in the scheduled pasture according to the AOI or direction from myself or a rangeland management specialist as adjustments are made throughout the season.
2. End of season indicators are not exceeded.
3. Cattle are kept out of exclosures.

Prepare for another hot and dry season. The precipitation from this winter will prove insignificant to forage production if we do not get any moisture during the spring and active growing season. In preparing, thoughts of running fewer cattle, less time in each unit and lighter use will reduce the chances of long lasting impacts to the forage species on the allotment.

Table 2. Evaluation of livestock operations for the 2013 grazing season and recommended improvements for 2014 grazing season.

Order of Use	Unit Name	Amount of Available Forage Left Unused	Priority for Providing for Better Livestock Distribution	Things That Worked/Did Not Work	Recommended Improvements to Better Protect Resource, Utilize Forage, etc.
1	Lower Big Creek	Low	High	<ul style="list-style-type: none"> • End of season allowable uses were met. • Livestock were found in the unit from 6/21 through 7/14 prior to the on date to the Forest. • Allotment boundary fence between Lower Big Creek and the BLM was found in disrepair due to jack posts for barbed wire and needs replaced. • Cattle were cleaned from unit very efficiently following scheduled use. 	<ul style="list-style-type: none"> • Reconstruct fence between BLM/Forest Service boundary to prevent early use on Forest Service. • Monitor Lower Big Creek occasionally throughout the season to ensure no cattle have drifted into the unit. • Back riding to ensure unit is clean
1	Upper Big Creek	Low	High	<ul style="list-style-type: none"> • Browse use of 30% was exceeded. Other EOS indicators were met. The unit had 3 inch stubble height during grazing period likely leading to the higher browse use levels. • Livestock were found in the unit from 7/9 through 7/14 prior to the on date to the Forest. • The Forest Service decided not to have the Upper Big Creek enclosure fence put up. There was a 9 inch stubble height and 23% browse measured within this area. • Cattle were cleaned from unit very efficiently following scheduled use. • Salt was found within ¼ mile of Upper Big Creek in two separate locations. 	<ul style="list-style-type: none"> • Reconstruct fence between BLM/Forest Service boundary to prevent early use on Forest Service. • Monitor Upper Big Creek occasionally throughout the season to ensure no cattle have drifted into the unit. • Back riding to ensure unit is clean • Monitor use in Upper Big Creek at site of old enclosure. • Ensure better salting practices to encourage livestock to move further away from riparian areas.
1	Sands/Coal Creek	Moderate	Moderate	<ul style="list-style-type: none"> • End of season allowable uses were met. • Grazing this unit with the Big Creek Units created an early move to the Wet Creek Basin Units. • Cattle were cleaned from unit very efficiently following scheduled use. 	<ul style="list-style-type: none"> • Use the small holding pasture with water trough in the future if trailing livestock across Wet Creek. Otherwise use it as a water source for Sands/Coal Creek during grazing period. • Use Wet Creek water gap below the enclosure for a water source.
Trail	Pine Creek	High	Low	<ul style="list-style-type: none"> • Livestock were trailed through the Pine Creek Unit on June 1 and met expectations of trailing event. • Livestock were trailed across Wet Creek in the Pine Creek Unit on July 16 and again from July 26-30. Trailing was within impacts outlined in the Section 7(d) letter. 	<ul style="list-style-type: none"> • Water trough in the upper portion of the unit needs reset to keep from overflowing and causing soil erosion. • Fence between South Wet Creek Basin and Pine Creek should be maintained to keep cattle from drifting between pastures. • Carefully monitor Pine Creek. If cattle drift into this unit please remove immediately. • Put fence back up around aspen on upper unnamed tributary to Wet Creek i.e. Pine Creek.

Order of Use	Unit Name	Amount of Available Forage Left Unused	Priority for Providing for Better Livestock Distribution	Things That Worked/Did Not Work	Recommended Improvements to Better Protect Resource, Utilize Forage, etc.
Trail	Pine Creek; continued	High	Low	<ul style="list-style-type: none"> • The ¼ mile portion of Wet Creek that received trailing had 20% streambank alteration as measured along the entire ¼ mile reach. There was 18% alteration on the right bank with 78% bank stability and 85% covered bank. The left bank had 21% alteration, 79% bank stability, and 85% covered banks. • End of season allowable uses were met except for the 22% alteration on the unnamed tributary to Wet Creek. • Cattle were found on this unit prior to the on date to the Forest. They were promptly removed. • Cattle were entering the upper portion of the unit while in South Wet Creek Basin. 	<ul style="list-style-type: none"> • Look at potential to build fence to divide the Pine Creek Unit and decrease use on Wet Creek in the Pine Creek Unit.
2	North Wet Creek Basin	Low	Moderate	<ul style="list-style-type: none"> • Temporary water pump was not used due to lack of water in Basin Creek. • There was limited water in the unit increasing localized use at any water sources. This increased stream bank alteration at all stream water locations. • The fence charger was removed too early from the Basin Creek allowing livestock to enter and graze the enclosure. • Cattle were not cleaned from the unit in timely manner. • Browse use of 50% was exceeded. Other EOS indicators were met. The high browse use likely occurred as the stubble height approached 4 inches during the grazing period. 	<ul style="list-style-type: none"> • Continue to maintain temporary water pump, pipeline and trough to water cattle away from the Basin Creek enclosure. • Keep livestock out of enclosures. Keep fence charger up and charged for a few days following livestock move to next unit. Check the enclosure periodically even when cattle are not in the pasture to ensure no cattle are there, especially since the fence is often down due to ATV use. • Potentially replace some of the enclosure fence with jack and rail to reduce likelihood of cattle pushing through the electric fence. • Look at potential gate in SE corner of Basin enclosure to allow permittees to remove livestock without letting fence down. • Potentially put storage tank above enclosure for trough.
2	South Wet Creek Basin	Low	Moderate	<ul style="list-style-type: none"> • Unit met end of season allowable uses. • Little Basin spring enclosure was grazed by cattle early in the grazing period. • Notified permittees that fence needed fixed and it was repaired to exclude livestock. • Cattle got into the Pine Creek Unit and North Pass Creek Unit a couple of times while in the South Wet Creek Basin Unit. 	<ul style="list-style-type: none"> • Little Basin troughs are next to each other – should move second trough down slope as originally planned. • Look into some jack fence on enclosures. • Keep livestock out of enclosures. • Limit use in Basin Creek Units when there is low water years to decrease impacts to seeps, springs, and limited water channels. • Blacktail pipeline and headbox may need replaced.

Order of Use	Unit Name	Amount of Available Forage Left Unused	Priority for Providing for Better Livestock Distribution	Things That Worked/Did Not Work	Recommended Improvements to Better Protect Resource, Utilize Forage, etc.
2	South Wet Creek Basin; continued	Low	Moderate	<ul style="list-style-type: none"> There is not an end of season allowable use for stream bank alteration. The key area M156 had 43% alteration as cattle entered the unit on 8/1/13 and then it was measured at 60% on 8/16 following removal of most of the cattle. The other key area had 27% bank alteration prior to livestock grazing and 69% alteration at the end of the grazing period. This demonstrates the high impact of limited water sources in the Basin Creek Units. 	<ul style="list-style-type: none"> We may want to put a spring box in the Upper South Wet Creek Basin pond and fence pond to provide water to an off-site trough. The trough holds good water and would provide better water quality this way. There is some old pipe on the ground indicating that a trough once existed.
3	Southeast Pass Creek	Low	Moderate	<ul style="list-style-type: none"> Electric fence was put up to standard. By the end of the season the fence was down in some locations. Cattle pushed the fence at the bottom of Mud Lake drainage creating some impacts to the riparian area near electric fence. Small bunches of cattle were seen in the unit prior to grazing period coming over from South Wet Creek Basin. End of season allowable use was exceeded as 64% brose use was measured – allowable use is 50% browse use. 	<ul style="list-style-type: none"> Looking to modify fencing at lower Mud Lake to improve livestock movement reduce bottle neck and resource impacts on riparian area. Do not put up electric fence at bottom of Southeast Pass Creek and Twin Lakes and monitor livestock movement along road and between units. Monitor number of cattle in Twin Lakes and Southeast Pass Creek pastures closely and begin to move cattle into next unit when needed.
3	Twin Lakes	Moderate	Moderate	<ul style="list-style-type: none"> Met end of season allowable uses. The inlet pipe to the lower trough was broken while cattle were in the unit. The pipe did not get fixed and water was running out on the ground. 	<ul style="list-style-type: none"> Ensure pastures are cleaned so that cattle do not get in spring exclosures later in the year. Fix inlet pipe to lower trough and fix turnoff for both troughs so that water and be turned away from the troughs when needed.
3	South Pass Creek	Moderate	Moderate	<ul style="list-style-type: none"> Small exclosure on Pass Creek just above the narrows was re-constructed to standard in 2013. Forest Service replaced cattle guards at the top of the narrows and no cattle were stuck in the cattle guard following this. End of season allowable uses were met. 	<ul style="list-style-type: none"> Evaluate removing the fence along Cave Gulch to Mud Lake by not putting up electric fence next year and evaluating livestock movement between units.

Order of Use	Unit Name	Amount of Available Forage Left Unused	Priority for Providing for Better Livestock Distribution	Things That Worked/Did Not Work	Recommended Improvements to Better Protect Resource, Utilize Forage, etc.
3	North Pass Creek	Moderate	Moderate	<ul style="list-style-type: none"> • End of season allowable uses were met. • Cattle were seen in the unit prior to scheduled use. • Wagon Box trough was not flowing into the trough but water was coming from the ground next to the trough. 	<ul style="list-style-type: none"> • Repair Wagon Box water trough pipe.
Rest	Wet Creek	High	High	<ul style="list-style-type: none"> • Very few cattle got into the Wet Creek Unit during the grazing season. • A few cattle got in the Wet Creek enclosure prior to leaving the Sands/Coal Creek Unit. The cattle were removed promptly and the Forest Service inspected the area and found no impacts to fish habitat. • There was no resource impacts documented in the Wet Creek Unit or the Wet Creek enclosure from livestock grazing in 2013. • Forest Service repaired and reconstructed portions of the Wet Creek enclosure fence. 	<ul style="list-style-type: none"> • Limit number of cattle to go through Wet Creek pasture to around 200 in years that it is grazed. • Monitor while in Sands/Coal Creek, and Big Creek to ensure no drift into unit. • Permittees are expected to maintain the Wet Creek enclosure fence since Forest Service repaired the fence to standard in 2013. • Closely monitor enclosure and maintain to ensure cattle don't get in. If cattle do drift in remove them immediately.

Table 3. Summary of implementation review and management action being taken in units where end of season indicator was exceeded.

Unit	Was the indicator exceeded?	Why was the indicator exceeded?	How will the plan be revised to ensure the indicator is not exceeded?	What was the extent of the overuse?	How can the resource impacts caused by the overuse be restored?
Lower Big Creek	No				
Upper Big Creek	Yes	Sedges were grazed to below 4 inches resulting in change of preference to willows.	Move cattle from Upper Big Creek at 5 inch stubble height trigger to ensure grazing preference does not switch to willows.	Low	Ensure the browse is not exceeded in 2014.
Sands/Coal Creek	No				
Wet Creek	No				
Pine Creek	Yes	Alteration was exceeded due to entire herd trailing through this area to avoid grazing Wet Creek within the unit.	Take cattle two separate ways when trailing through the unit.	Low	Ensure the alteration for the site is not exceeded in 2014.
South Pass Creek	No				
North Pass Creek	No				
Southeast Pass Creek	Yes	There was limited riparian vegetation leading to a grazing preference for willows.	Improve management of pasture and ensure cattle are moved based on triggers.	Moderate	Ensure the browse is not exceeded in 2014.
Twin Lakes	No				
North Wet Creek Basin	Yes	Sedges were grazed to below 4 inches resulting in change of preference to willows.	Move cattle from North Wet Creek Basin at 5 inch stubble height trigger to ensure grazing preference does not switch to willows.	Low	Ensure the browse is not exceeded in 2014.
South Wet Creek Basin	No				