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April 14, 2016

AJ Flint, Rangeland Management Specialist Bureau of Land Management, Ely District Office 702 North Industrial Way HC 33 Box 33500 Ely, Nevada 89301-9408

Dear Mr. Flint:

SUBJECT: GRAZING PERMIT 2703280 [BASSETT CREEK (10114), MCCOY CREEK (10135), MEADOW CREEK (10113), AND TIPPETT PASS (20107) ALLOTMENTS]; RANCH ADVISORY PARTNERS FIELD SURVEYS (MAY 2014)

As an authorized grazing permit holder, Southern Nevada Water Authority (SNWA) respectfully submits the attached information related to rangeland health monitoring under permit number 2703280 (USDI 2012; dual use: USDI 2007 and SNWA 2007). In 2014, SNWA contracted Ranch Advisory Partners (Ranch Advisory) to conduct monitoring in the Bassett Creek, McCoy Creek, Meadow Creek, and Tippett Pass allotments. The purpose was to provide scientific data to assess current range conditions, track change over time in relation to climatic conditions and past range management, and inform future livestock management practices.

Summary of 2014 Rangeland Health Monitoring

In May 2014, Ranch Advisory collected rangeland health monitoring data for SNWA in four allotments where SNWA graze cattle and/or sheep per terms and conditions of permit 2703280 (USDI 2012; dual use: USDI 2007 and SNWA 2007). A total of 21 sites were surveyed, as shown in Table 1 (below) and summarized as follows:

- Bassett Creek Allotment (allotment #10114): 3 Sites
- McCoy Creek Allotment (allotment #10135): 3 Sites
- Meadow Creek Allotment (allotment #10113): 3 Sites
- Tippett Pass Allotment (allotment #20107): 12 Sites
 - o Dry Pasture Use Area: 4 Sites
 - o Glenco Pasture Use Area: 8 Sites

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The 2014 rangeland health data included vegetation cover and composition (line intercept and/or line-point intercept¹), gap intercept, vegetation height, species documented while walking a transect loop, qualitative observations of rangeland health indicators, and site photographs. The data were collected using standard protocols in accordance with interagency guidelines, and underwent rigorous Quality Assurance/Quality Control (QA/QC) by Ranch Advisory and SNWA to ensure accuracy, transparency, and reliability.

Four separate monitoring reports (one on each allotment) are enclosed (Ranch Advisory 2016a-d). They contain information about SNWA permitted use, recent grazing history and precipitation, general allotment and use area descriptions, maps of monitoring sites within the allotments and use areas, brief description of the monitoring methods, results of monitoring findings in great detail, and discussions about livestock management recommendations.

These surveys were part of a larger 2014 rangeland health monitoring effort at 88 sites across nine Bureau of Land Management (BLM) allotments. A document is enclosed that contains a summary of findings and livestock management recommendations for all nine allotments (Ranch Advisory 2016e). This summary provides the reader with a concise overview at the site, use area, allotment, and landscape scale. A separate methods document was also prepared to provide a comprehensive description of field survey methods (Ranch Advisory 2016f). A geodatabase of all transect begin and end points is enclosed on a Compact Disc (SNWA 2016).

When reviewing the data, it should be noted that the May 2014 surveys were conducted at a time when drought had impacted range condition. In response to drought conditions, SNWA employed an adaptive management approach. Measures taken on the range included conducting drought assessments of range condition, voluntarily placing animal unit months (AUM) in conservation, temporarily shortening seasons of use and reducing AUMs when needed, and changing water and livestock placement within the allotments and use areas.

SNWA Ranching Operations

SNWA extends great efforts to adhere to BLM permit conditions and conduct ranching operations a sustainable manner. Given historic use and drought conditions, we aim not only to operate sustainably on a year-to-year basis, but also help improve rangeland health over time. We employ monitoring and management techniques at the use area, allotment, and landscape scale. Maintaining AUMs and maintaining or increasing flexibility in seasons of use assist in these efforts. For example, flexible seasons of use allow for better livestock distribution, reduced utilization levels, dormant-season grazing, and increased opportunities to coordinate rotations across SNWA use areas and allotments and with fellow permittees. We request that BLM consider this aspect, and recognize our efforts as responsible ranch managers during the permit renewal process.

¹ Line intercept data were collected on previously-established (30 m) transects (see Table 1), so that quantitative comparisons could more appropriately be made across years. The 30 m transects were then extended to 50 m to match the newly-established transects, and line-point intercept data were collected on all (50 m) transects. It is anticipated that line-point intercept will be the cover and composition method used going forward.

Table 1. SNWA Rangeland Monitoring Sites, Surveyed by Ranch Advisory (May 2014). Permit 2703280.

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Allotment	Use Area	SNWA Site Name	UTM_N ^a	UTM_E	Yearb	Associated BLM Site ^c	SNWA GPd
Bassett Creek		BACR20	4368041	712943	2010, 2014		BACR20-GP
Bassett Creek		BACR25	4368134	716986	2010, 2014		10 0010
Bassett Creek		BACR31	4369153	712958	2014		
McCoy Creek		MCOY06	4364655	713683	2010, 2014		MCOV06-GP
McCoy Creek		MCOY09	4359635	715139	2010, 2014		MCOY09-GP
McCoy Creek		MCOY30	4360991	714446	2014	Key Area MCCR 02	MCOY30-GP
Meadow Creek		MECR02	4379813	714531	2009, 2014		MECR02-GP
Meadow Creek		MECR19	4376198	711807	2010, 2014		MECR19-GP
Meadow Creek		MECR30	4378541	711791	2014	Key Area ME 02 (aka MDC SS 01)	MECR30-GP
Tippett Pass	Dry Pasture	TIPP01	4405458	721954	2008, 2014		TIPP01-GP
Tippett Pass	Dry Pasture	TIPP100B	4402222	722895	2014	Possible Key Area, name unknown	TIPP100-GP*
Tippett Pass	Dry Pasture	TIPP200B	4403634	723419	2014	Old BLM site, name unknown	TIPP200-GP*
Tippett Pass	Dry Pasture	TPR01	4402341	721773	2014	Key Area TPR 01	TPR01-GP
Tippett Pass	Glenco Pasture	ESA11	4396566	726723	2014	Elk Study Area ESA11	ESA11-GP
Tippett Pass	Glenco Pasture	TIPP06	4399585	729093	2008, 2014		TIPP06-GP
Tippett Pass	Glenco Pasture	TIPP09	4403283	724366	2008, 2014		TIPP09-GP
Tippett Pass	Glenco Pasture	TIPP10	4397754	726161	2008, 2014		TIPP10-GP
Tippett Pass	Glenco Pasture	TIPP11	4393023	735557	2008, 2014		TIPP11-GP
Tippett Pass	Glenco Pasture	TIPP12	4402120	727629	2008, 2014		TIPP12-GP
Tippett Pass	Glenco Pasture	TIPP20B	4398762	729523	2010°, 2014		TIPP20-GP*
Tippett Pass	Glenco Pasture	TPR03	4399870	725880	2014	Key Area TPR 03	TPR03-GP

^a UTMs denote vegetation cover and composition transect start point and photographic station. NAD 83 Zone 11N.

^b On behalf of SNWA: 2008-2010 field work by ENLC (data sent to BLM 5/30/2013 & 6/18/2015); 2014 field work, reports by Ranch Advisory.

^e SNWA site in close vicinity of or at BLM site. Ranch Advisory navigated to general BLM coordinates and set transect in the area.

^d SNWA ground photography is conducted on a regular basis at transect begin point; or very near (*). TPR01, TPR03, and ESA11 follow an existing 50m BLM transect line (using BLM field markers).

e 2014 transect line approx. 100m from 2008-2010 line (field error). "B" added to 2014 transect name, general comparisons made across years.

Table 2 briefly describes the efforts SNWA has made to operate sustainably and help improve rangeland health on the Bassett Creek, McCoy Creek, Meadow Creek, and Tippett Pass allotments. Additional information can be found in the enclosed monitoring reports (Ranch Advisory 2016ad), which present details on SNWA's permitted AUMs and seasons of use, grazing history (actual AUMs used, grazing timing and duration per year), and recommended livestock management moving forward.

Table 2. SNWA Efforts to Operate Sustainably and Help Improve Rangeland Health.

Permit 2703280.

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Allotment	Use Area	SNWA Efforts
Bassett Creek		2009-2014 efforts included resting the allotment twice, reducing AUM use and grazing durations below permitted levels, and altering the
		timing of use to include dormant-season grazing.
M.G. G. 1		2011-2014 efforts included resting the allotment twice, reducing AUM
McCoy Creek		use and grazing durations below permitted levels, and altering the
		timing of use to include dormant-season grazing.
Meadow Creek		2008-2014 efforts included resting the allotment twice, reducing AUM
		use and grazing durations below permitted levels, and conducting
		dormant-season grazing.
		2008-2014 efforts included resting the use area three times, reducing
		AUM use and grazing durations below permitted levels, altering the
	Dry Pasture	timing of use to include dormant-season grazing, and strategically
Tippett Pass ^a		placing water haul locations. The water haul efforts were aimed to
		reduce conflicts with the co-permittee's sheep, and to broadly distribute
		SNWA cattle, including areas where forage is plentiful.
	Glenco Pasture	2008-2014 efforts included resting the use area twice, reducing AUM
		use and grazing durations below permitted levels, altering the timing of
		use to include dormant-season grazing, pursuing an intra-use area
		rotation, and strategically placing water haul locations. The water haul
		efforts were aimed to avoid heavy use on the winterfat flats, and to
		place cattle in areas that historically have received little use. SNWA
		also did not trail sheep through the use area for a number of years.

^a Cattle are permitted in two use areas, and sheep are permitted for the Spring Valley portion of the allotment (spanning North Spring Valley Use Area and the southern 1/3 of Glenco Pasture Use Area).

SNWA respectfully submits this information and requests that the BLM include the reports in the range case files, and consider the information along with the other data collected when evaluating the rangeland health conditions of Bassett Creek, McCoy Creek, Meadow Creek, and Tippett Pass Allotments. Please note that SNWA also conducts regular ground photography at many of the sites included in these reports. SNWA ground photography reports are, and will continue to be, provided to BLM separately.

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If we can be of further assistance, please contact myself at (775) 591-0403, or Kimberly Reinhart at (702) 862-3457.

Sincerely,

Kunbuly Reinhaut for Bernard Petersen

Ranch & Resource Manager

BP:KR:NB:dg

Enclosures

cc: Chris Mayer

References Cited

- Ranch Advisory [Ranch Advisory Partners]. 2016a. Southern Nevada Water Authority Great Basin Ranch, Bassett Creek Allotment #10114: Rangeland health monitoring 2014.
- Ranch Advisory. 2016b. Southern Nevada Water Authority Great Basin Ranch, McCoy Creek Allotment #10135: Rangeland health monitoring 2014.
- Ranch Advisory. 2016c. Southern Nevada Water Authority Great Basin Ranch, Meadow Creek Allotment #10113: Rangeland health monitoring 2014.
- Ranch Advisory. 2016d. Southern Nevada Water Authority Great Basin Ranch, Tippett Pass Allotment #20107: Rangeland health monitoring 2014.
- Ranch Advisory. 2016e. Southern Nevada Water Authority Great Basin Ranch, Rangeland health monitoring 2014 of selected Bureau of Land Management allotments: Summary document.
- Ranch Advisory. 2016f. Southern Nevada Water Authority Great Basin Ranch, monitoring methods implemented on Bureau of Land Management allotments: Rangeland health monitoring 2014. Final draft *in progress*.
- Southern Nevada Water Authority [SNWA]. 2007. Acceptance of terms and conditions and request for grazing permit for Meadow Creek, Bassett Creek, McCoy Creek, and Tippett Pass Allotments. Signed by SNWA and received by BLM on October 16, 2007.
- SNWA. 2016. GIS database of 88 rangeland health monitoring sites on BLM allotments surveyed by Ranch Advisory Partners on behalf of SNWA in 2014.
- USDI [United States Department of the Interior, Bureau of Land Management]. 2007. Letter in response to request for information concerning Tippett Pass, Meadow Creek, Bassett Creek and McCoy Creek Allotments. Signed by BLM-Ely Field Office and received by SNWA in March 2007.
- USDI. 2012. SNWA grazing permit for the Meadow Creek, Bassett Creek, McCoy Creek, and Tippett Pass Allotments (Term 03/01/2012 to 02/28/2017). Authorization number 2703280. March.