

Argenta Cooperative Monitoring Group

Issue Resolution Documentation – Section 13.1 of Settlement Agreement

1. Brief Description of Situation

The BLM should not be averaging utilization across more than one key species or across key areas. A reading in excess of the 40% utilization standard should be considered a failure to meet the standard.

2. Issues among parties

Heavy utilization of more palatable species over time can result in reductions of these species. These processes can be accelerated during drought conditions.

- Idaho Fescue - Ratliff and Reppert (1974)¹ reported that continuous grazing unduly subjects the plants to heavy pressure during dry years.

The BLM must consider individual species as limiting factors to ensure against undue degradation of public resources. Averaging across species and key areas serves only to mask utilization on the limiting factor.

Some species measured were subject to 72% utilization. In some areas, like the North Fork Mill Creek, there were species that utilization exceeded the 40% threshold but, because the choice was made to average across species, standards were met for the use area.

At nearly every decision point, the NRST has biased their decisions to benefit the ranchers while the public interest has gotten short shrift.

3. Options for Resolution (Minimum of two)

Determine utilization for use areas based on the key species most used by livestock to ensure undue degradation of public resources.

4. NRST Recommendation to Field Manager –

Background

The NRST and the CMG have recommended the calculation of utilization on individual species, as well as using average utilization for the purpose of determining utilization at a key area or at a use area for the purpose of determining annual use as required in the Settlement Agreement. The approach used here is consistent with BLM practices described in various BLM technical references, environmental impact statements (EISs), standards and guidelines, and resource management plans (RMPs). In our recommended approach, the CMG collectively selected key species for each KMA prior to the collection of data; these species were selected because they

¹ Ratliff, R.D. & J.N. Reppert 1974. Vigor of Idaho fescue grazed under rest-rotation and continuous grazing. *J. Range Manage.* 27:447-449.

http://www.jstor.org/stable/3896719?seq=1#page_scan_tab_contents

met the definition and criteria of key species. Some of these key species had previously been selected by the Battle Mountain staff in past monitoring efforts. For the type of analysis required in the Settlement Agreement (i.e., determination of annual use by area), the WWP approach to select only the most utilized species and to omit the least utilized species after the data have been collected, analyzed, interpreted using an approach previously disclosed, displayed, and widely shared with the entire CMG introduces an obvious bias.

However, the NRST agrees with WWP that knowledge of use on individual key species can be useful in rangeland management, especially where there is a clear understanding of resource conditions and where there are species-specific management objectives, which are articulated in an allotment management plan, resource management plan, or other similar documents. For that reason, the NRST recommends adhering to the practices agreed to by the CMG during the end-of-season CMG meeting in November 2015 (CMG 2015b, p.5):

“The CMG also discussed data portrayal and agreed that utilization levels should be portrayed by individual species so as to determine the potential effects on individual species, and by the average of all key species at each KMA [or monitoring site if not a formal KMA], and finally by each use area. Confidence intervals should be included with all averages too.”

Explanation

1) **Averaging utilization is a common BLM practice**

WWP essentially asks the question, can and should utilization data be averaged? Specifically, WWP contends that:

“The BLM should not be averaging utilization across more than one key species or across key areas” and “The BLM must consider individual species as limiting factors to ensure [against -- Note missing word in WWP Options for Resolution] undue degradation of public resources.”

A broad variety of BLM technical references (e.g. Coulloudon et al. 1999), environmental impact statements (EISs), resource management plans (RMPs), rangeland standards and guidelines (e.g., BLM 1999a, 1999b, 2004), and anecdotal evidence provide evidence, and in some cases explicit instruction, on the practice of averaging utilization data. For example, in BLM technical references, including those in the TR 4400 series, and more recently the Interagency TR1734-3 (Utilization Studies and Residual Measurements, Coulloudon et al. 1999, p. 133) the definition of utilization includes the idea that it can be calculated as an average from a group of species or even an entire vegetation community:

“Utilization – the proportion or degree of the current year’s forage production that is consumed or destroyed by animals (including insects). The term may refer either to a single plant species, a group of species, or to the vegetation community as a whole. Utilization is synonymous with use”

Likewise, BLM standards and guidelines, EISs, and RMPs (e.g. BLM 1999a, 1999b, 2004), provide other examples where the approach to average utilization is quite explicitly stated in BLM documents, e.g.:

“Management changes will be implemented ... if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years.”

“The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met.”

(BLM 1999a, p. 7)

The same language is also incorporated in the grazing standards and guidelines for northeast California and northwest Nevada (BLM 1999b, p. 9):

“Management changes ... will be implemented if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years. ... The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met.”

The Central California Standards and Guidelines include other references to average utilization, e.g.:

“On the Beaver Dam Slope Allotment downward trends were recorded between 1970 and 1982 at average utilization levels of 36% (range 10-70%), while this same allotment showed an upward trend between 1981 and 1989 after utilization levels were adjusted to an average of 22% (range 11 to 34%).” (Hughes 1990, in BLM 1999a, p. 4)

Also, a review of the Black Rock-High Rock RMP indicates that the practices espoused in the NE CA and NW NV grazing standards and guidelines are being incorporated into Nevada RMPs:

“Management changes ... will be implemented if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years. ... Because of the potential long-term damage to perennial grass species associated with severe grazing, severe grazing use (>70% utilization) in any upland key area in any year will result in a management change the following year. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met.

(BLM 2004, pp. B-10 to B-11)

The determination of utilization as provided in various BLM Standards and Guidelines, EISs, and RMPs explicitly permits the use of averages from multiple species and from multiple sites. The approach cited in numerous BLM documents is similar to the situation envisioned in the Settlement Agreement, where the purpose is merely to determine what the annual use is at an area, not what the annual use is on a single species.

2) **Settlement Agreement direction on utilization data**

The Settlement Agreement provides limited direction on the issue of averaging utilization. Sections 3.6 and 3.18 of the Settlement Agreement explicitly state:

- **“All key herbaceous”** and ... **“all key woody species,”** which implies that there is no intention within the Settlement Agreement to manage for a single species, and
- **“[N]ot a combined average use of the two,”** meaning annual use should not be averaged between woody browse and herbaceous utilization. The fact that the Settlement Agreement makes this the only restriction on averaging reasonably implies that calculating an average utilization among all key herbaceous species separately from that of all key woody species at an area is permissible and is intended. For the record, the BLM and CMG never averaged between woody and herbaceous species and therefore complied with this explicit direction in the Settlement Agreement.

3) **Use of individual species data**

WWP states in this dispute:

“The BLM must consider individual species as limiting factors to ensure against undue degradation of public resources. Averaging across species and key areas serves only to mask utilization on the limiting factor.”

There is no evidence that the averaging of species has masked utilization on a limiting factor or that heavy use on an individual species is being ignored. The example WWP cites where a single species had an estimated use of 72% occurred in the Trout Creek use area. The NRST concluded that utilization in Trout Creek use area did not meet, and in fact exceeded, the permitted level; (2) the 2016 stockmanship plan was adjusted for this use area as a consequence of 2015 utilization levels (the adjustment followed the procedure in Appendix 1 of the Settlement Agreement); and (3) the monitoring site in Trout Creek will be subject to more frequent within-season monitoring and to more detailed monitoring and move triggers in 2016 as a consequence of 2015 utilization levels (see 2015 Argenta annual monitoring report and CMG March 2016 meeting notes).

The NRST agrees in general with the comment that information from individual species should be considered; and utilization data from individual species has been calculated and displayed in the draft 2015 Argenta annual monitoring report. However, a single, utilization measurement is most likely not the best, or even an appropriate, gauge of rangeland condition or a preferred means to determine “degradation of public resources.” Instead, a determination of rangeland condition is better determined through the collection and analysis of long-term indicator data. Why? Annual-use data are poor surrogates of resource conditions. Instead, NRST advocates for the collection and analysis of long-term indicator data, such as the information typically collected in a rangeland health assessment or at a riparian DMA using the long-term indicators of MIM to determine resource conditions. A direct measurement and analysis of long-term monitoring indicators provides better insight on the condition of rangeland resources that have developed over a number of years. In contrast, annual-use data are subject to large inter-annual variability, which correlates poorly to immeasurable annual changes in rangeland condition. The

BLM, CMG, and/or permit renewal team have calendared the collection of long-term indicator data for 2016.

Again, both average utilization and utilization on individual key species at each site have been calculated and displayed within the draft 2015 monitoring report. The NRST fully agrees with WWP that the BLM can analyze utilization on a species-specific basis. These data remain available for future use when rangeland condition data are collected and analyzed, and when the annual utilization data can be interpreted in a better, more informed context. Setting a threshold of annual use on a single species or group of species is a far different management action than striving to change or restore the vegetation composition and rangeland conditions at a site.

4) The intent to calculate mean utilization was consistently and repeatedly disclosed

Soon after the Settlement Agreement was signed in June 2015, the NRST and BM staff began work on refinement of the utilization methods (key species and height-weight methods) to create greater transparency on the monitoring process and to ensure a high standard of data collection and data analysis. NRST worked with Tim Burton to create a data entry and analysis module using Excel software to automate data collection. The “Key Species Utilization 2.xlsx” module was distributed by Steve Smith to Adam Cochran for review on July 23, 2015. The data summary table shows quite clearly the intent to calculate the mean utilization of key species as well as the utilization by individual species as well as the confidence interval of utilization data (See Figure 1). Additional edits were made to the prototype and were distributed to the entire CMG as the “KS + HW Utilization Module 8_18 Draft.xlsx.”

| | | | |
|---------------------------------------|---------------------------|------------------------|--|
| Summary Analysis - Key Species | | SITE = 0 | |
| | | Pasture = 0.00 | |
| | | Date = 1/0/1900 | |
| Percent Utilization | | | |
| | Herbaceous Species | Woody Species | |
| Mean | | | |
| n= | 0 | 0 | |
| 95% conf Int ¹ | | | |
| 95% CI² | 5.20 | 5.20 | |

¹ 95% conf Int: 95% confidence interval based on standard deviation from sample data

² 95% CI: the 95% confidence interval on observer variation

| Percent Utilization by Species | | |
|--------------------------------|---------|---|
| Key Species | Average | N |
| | | |
| | | |

Figure 1. Copy of the “Data Summary” spreadsheet from the file “KS + HW Utilization Module 8_18 Draft.xlsx.” This file was shared with the entire CMG.

The intent to both average utilization by key species and calculate utilization by individual species was initially put in writing and shared with the entire CMG on August 21, 2015 in the document “Refinement of Key Species and Height Weight Utilization Methods (CMG 2015a).” The averaging of utilization on key species was discussed on pp. 4, 7, 8, 10 and 12. For example, Section (g) of the “Refinement of Key Species and Height Weight Utilization Methods” makes reference to average utilization calculations in the utilization model by Burton:

“g Calculations *Refer to the data summary tab in the utilization module for automated data summary of average utilization for all key species and average utilization by species.”*

The written document and the Excel software module received close scrutiny, critical review, and multiple revisions by the CMG, including:

- Initial draft distributed to the CMG on 8/21/2015
- Responses submitted by B. Schweigert to the CMG on 8/25/2015
- Responses submitted by K. Cole to the CMG on 8/25/2015
- Revisions made by NRST and revised draft submitted to CMG on 8/27/2015
- Additional input submitted by B. Schweigert to the CMG on 9/28/2015
- Responses submitted by J. Alexander to the CMG on 9/28/2015
- Responses to comments received were distributed by NRST to the CMG on 10/2/2015
- A revised “KS and HW Utilization Module.xlsx” was distributed to CMG on 10/5/2015

Throughout this entire process, many suggestions were made to clarify language and to improve the data collection process. And throughout the process, no one ever formally disputed the use of confidence intervals or the calculation of average utilization of key species until after the 2015 monitoring report was drafted. To suggest after the data have been collected that a different approach should be used to determine utilization is to unfairly change the rules of a “contest” as the contest has approached or reached its conclusion.

5) WWP’s option for resolution constitutes a highly biased approach.

WWP’s suggested resolution is to: *“Determine utilization for use areas based on the key species most used by livestock to ensure undue degradation of public resources.”* This suggestion mixes the intent and purpose of the data. The NRST clearly reported and did use all the available data (average utilization and utilization values of individual species) when it came to making

adjustments to the 2016 stockmanship plans and for the purpose of prioritizing and intensifying with-season monitoring in 2016. The averaging approach was used only to make a conclusion regarding whether utilization levels met or did not meet the levels prescribed in the Settlement Agreement in a fashion that is widely used in the BLM and stated in numerous BLM documents (see discussion in 1 and 2 above).

What WWP is suggesting is to selectively pick which key species to use and which key species to omit after the data have been collected, analyzed, and published, and after a determination of utilization across the monitoring site has been made. This represents an extremely biased approach in which only the most-utilized species are selected and all of the lesser-utilized species are omitted from interpretation and when the approach to calculate an average utilization has already been shared with the entire CMG. The rangeland staff from the Battle Mountain office, either led the process to select key species in the field at the time of data collection, or identified key species years ago when KMAs were initially established (see the KMA site establishment forms distributed by Sam Ault to the CMG on January 19, 2016). And Battle Mountain staff have been collecting utilization data on key species at many of these sites in recent years. If these are not the correct key species, then that is a different matter than deciding which data to use and which data to ignore after the data are collected, analyzed, and interpreted.

6) Determine utilization for use areas based on the key species most used by livestock.

WWP implies or suggests that maybe some species used to determine utilization were not in fact key species or were not adequately used by livestock. The CMG either validated key species at existing KMAs or selected key species at newly established KMAs (or monitoring sites) in the field. Many of the key species have been in use by Battle Mountain staff in previous years. There is no record of any objections to the key species selected, and any objection should have been raised long ago before data collection commenced. Nevertheless, WWP does not specify which key species are disfavored by livestock. The CMG selected the following key species at one or more monitoring sites (summary by S. Ault in the Excel file

“Argenta_Upland_Summary.xlsx” and distributed to the CMG on January 11, 2016):

- a. ACLE9 -- Letterman’s needlegrass (1 site)
- b. BRMA4 – mountain brome (3 sites)
- c. ACTH7 – Thurber’s needlegrass (1 site)
- d. AGCR – crested wheatgrass (3 sites)
- e. FEID – Idaho fescue (2 sites)
- f. POSE – Sandberg’s bluegrass (11 sites)
- g. ELEM5 – bottlebrush squirreltail (7 sites)
- h. UNK1 – unknown species (1 site – not used due to uncertainty in plant identification)
- i. THIN6 – intermediate wheatgrass (1 site – not used yet due to lack of height-weight curve).

The question appears to be, “Which of these is not a key species?” Some members of the CMG have questioned whether crested wheatgrass (a non-native, seeded, forage plant that is highly tolerant of heavy use) serves as an appropriate gauge of use when the utilization threshold is

universally set at 40% at all key areas in all use areas in all herbaceous communities. Other members of the CMG have expressed concern that Sandberg's bluegrass is inappropriate because they perceive it as a species that is not used by livestock. This appears to be WWP's question too and deserves a measure of investigation.

Of the 11 sites where Sandberg's bluegrass (POSE) was measured as a key species, it is the only key species at 6 sites:

- AG-04 (18% +/- 8%)
- AG-10 (59% +/- 9% -- utilization on POSE exceeded threshold)
- AR-23 (48% +/- 15% -- utilization on POSE straddled the threshold)
- East Flat (30% +/- 15% -- utilization on POSE straddled the threshold)
- Harry Canyon (0%)
- Whirlwind 1 (26% +/- 13%)

Note that at three of the six sites where POSE was the single key species, utilization was high enough that it either exceeded the use level (AG-10) or straddled the use level set in the Settlement Agreement (AR-23, East Flat). Consequently, where POSE is the only key species for a KMA, the evidence of moderate to heavy utilization suggests that it is an appropriate selection as a key species. This species does reflect use by livestock; and it should reflect changes in management.

At 5 sites, POSE was one of two measured key species. The utilization on POSE was:

- 6% +/- 9% (AG-03), which is greater than utilization on ELEL5 (2% +/- 4%)
- 25% +/- 9% (AG-16), which is slightly less than use on ELEL5 (30% +/- 6%)
- 0% (Fire Creek), which equals use on ELEL5 (0%)
- 13% +/- 10% (Indian Creek), which is greater than use on ELEL5 (6% +/- 4%)
- 54% +/- 8% (Whirlwind 3), which is greater than use on ELEL5 (46% +/- 8%).

In 4 of the 5 sites where POSE is one of multiple key species, the utilization on POSE was equal to or greater than the utilization on the other key species. These observations should dispel the notion that POSE is not used or disfavored by livestock, or is not reflective of use, in the Argenta allotment.

Seven graminoid species were used to calculate utilization. They all appear to be valid key species as they are abundant at KMAs (i.e., they occur in sufficient number to permit monitoring), palatable (i.e., show evidence of being favored by livestock at some time during the growing season), and should be responsive to management.

There is no evidence to support the claim by WWP that the CMG selected species that are not favored by livestock. The BM staff has used many of these sites for several years and they selected key species long ago. Furthermore, no objection was made in the field when key species were being selected. Nevertheless, the selection of key species can be reviewed during the week of May 9.

Summary

Section 6.9.2 of the Settlement Agreement assigns the NRST with the responsibility of reviewing and overseeing the collection, analysis, and interpretation of monitoring data during the interim

management period. The NRST recommendation is based on NRST's expertise, experience, and their knowledge and understanding of BLM guidance, protocols, and practices. The NRST recommends adherence to monitoring protocols, accepted statistical practices, and interpretations that are consistent with BLM technical references, EISs, RMPs, and standards and guidelines. In particular, the averaging of utilization data is a reasonable approach for determining compliance with the Settlement Agreement and derives from multiple lines of evidence, including:

- The BLM definition of utilization permits the use of a single species or a group of key species or even an entire vegetation community (Coulloudon et al. 1999).
- Multiple BLM sources, including grazing standards and guidelines, EISs, and RMPs explicitly reference an approach that averages utilization data among species and among sites within a pasture or allotment (e.g., BLM 1999a, 1999b, 2004).
- Personal communications with several rangeland experts confirmed that averaging utilization at a site is a common practice in Nevada among other states.
- The Settlement Agreement makes no species-specific management objective and no species-specific reference. To the contrary, the Settlement Agreement makes explicit the utilization on "ALL key herbaceous species" and "ALL key woody species." This language contrasts sharply with the idea to manage for a single species within the context of the Settlement Agreement.
- The approach to display both an average utilization and a species-specific utilization was explicitly discussed by the CMG (CMG 2015b, p. 5) and was used in the 2015 Argenta annual monitoring report. Both types of utilization data were available and used to inform 2016 stockmanship plans and monitoring plans. Both types of utilization data will continue to be available to the permit renewal team.
- The CMG had a well-chronicled, lengthy period to review documents describing explicitly the process of calculating average utilization on key species as well as the calculation of utilization on individual species. No CMG member made a single comment, recommendation, or suggestion to question, challenge, or alter the utilization calculations throughout a long and fair review process.

It is inappropriate to suggest that the process was rigged or unfair. It is inappropriate to change the approach by which utilization is calculated after the data have been collected, analyzed, displayed, interpreted, and distributed to various internal and external parties. To suggest after the data have been interpreted that a different approach should be used to determine utilization is to unfairly change the rules of a "contest" as the contest has approached or reached its conclusion.

More effort was made by numerous parties to change grazing practices, to initiate a process to improve resource conditions, and to intensify the within-season monitoring in the Argenta Allotment in 2015 than perhaps at any other time in recent memory. These efforts are carrying forward into 2016 with the anticipation of finding and refining practices that will lead to improved resource conditions. Many people have expended considerable energy, time, and money to implement new practices. But the desired changes in resource conditions require time and continued effort. . The only difference from these approaches is in the net effect on a 'pass/fail' scorecard.

Averaged utilization or not, the CMG examined the results of utilization calculations from both individual species as well as averages of key species to change stockmanship plans and to identify sites that will be subject to more intensive within-season monitoring in 2016. The same management result would occur with either approach. The team believes that this interpretation meets the spirit and intent of the settlement, which is less focused on keeping score and more focused on taking adaptive actions to improve resource conditions over time. Continued preoccupation with the different possible ways to derive different scores of passing or failing does nothing to change the proposed management or to improve the condition of the resources.

NRST Recommendation Regarding Averaging of Species

The NRST agrees with the WWP that knowledge of utilization by species is valuable. NRST agrees with WWP that there are many instances in rangeland management where species-specific data are required or desirable for compliance with species-specific management objectives or to ensure wise stewardship of resources. Fortunately, the 2015 utilization data have been calculated and displayed as both average utilization and utilization by individual species.

- 1) NRST recommended in November 2015 and reaffirms now that utilization data should be calculated and displayed as recommended by the CMG (2015b, p.5) :
“The CMG also discussed data portrayal and agreed that utilization levels should be portrayed by individual species so as to determine the potential effects on individual species, and by the average of all key species at each KMA, and finally by each use area. Confidence intervals should be included with all averages too.”
- 2) NRST recommends that the determination of meeting or not meeting a utilization level for the purpose of administering the Settlement Agreement should be determined by the average utilization of key species at each area (provided that the average of key woody species is not combined with the average of key herbaceous species as mentioned in the Settlement Agreement). The approach of using averages is not novel, new or unique to the NRST. The use of averages is explicitly described in a variety of BLM rangeland standards and guidelines, EISs, and RMPs (e.g., BLM 1999a, 1999b, 2004).
- 3) The NRST and CMG agree that species-specific data can be informative. Although there is no current species-specific management objective, these data can inform future management actions, most likely during the permit renewal process where annual utilization data might help to interpret baseline or long-term condition data.
- 4) Key species can be reconfirmed for 2016 during the week of May 9th.
- 5) NRST’s recommendations apply only to implementation of the Argenta settlement agreement.

5. Field Manager – Acceptance with of NRST recommendation (yes X no _____).

Date Received 4/30/2016

Date of Decision 5/13/2016 Signature of FM *Gu A. Shene*

Comments:

After carefully considering the recommendations and rationale provided by the NRST on this dispute, and in careful coordination with the Regional Office of the Solicitor, National Upland Monitoring Lead, National Operations Center, and the Nevada State Office, I recommend to adopt the recommendations provided by the NRST pursuant to and in accordance with the MLFO responses to both NRST recommendations and the accompanying rationale provided in the attachment (see attachment “MLFO Response to Dispute Resolution: Averaging Species and Sites”).

6. District Manager – Acceptance of NRST recommendation (yes _____ no _____)

Date Received _____

Date of Decision _____ Signature of DM _____

Comments:

7. State Director – Final Determination

Acceptance of NRST recommendation (yes _____ no _____)

Date Received _____

Date of Decision _____ Signature of SD _____

Comments:

Instructions/intent for Issue Resolution Document

Purpose of Document – This tool is intended to provide a record of how decisions are made on various issues that might arise within the CMG, including how and at what level those issues are resolved. This tool will provide transparency to options and possible consequences, including the rationales for which choices are made, and specific record of the timing and outcomes of issue resolution. It will also establish a record and help create consistency in the face of changing players over time. Close communications and an environment for resolving issues at the lowest level is encouraged. Minor issues/disagreements that are easily handled in the normal team situation will not be documented in this manner; this is intended for substantive issues that affect intended outcomes under the settlement agreement.

1. Document the situation surrounding CMG disagreement on a given issue, including if possible, the location, essential time frames, background (including reference to Settlement Agreement section if applicable), and potential scope of consequences.

2. Who are the parties in disagreement; what are the differing positions and the basis for each differing side?

3. At least two options for resolution must be described, even if one is “no action”. The CMG will be expected to problem solve and raise other possible solutions to the issue to assist the parties in disagreement. Each option will be briefly documented.

4. Following the problem solving activity (where needed), the NRST will select, document and provide rationale for a recommendation to the Field Manager.

5. If accepted, this will end the issue resolution process; if not, the NRST recommendation will be forwarded to the DM promptly, accompanied by written rationale by the FM for not agreeing to the NRST recommendation.

6. The DM will review the recommendation by the NRST along with the rationale statement by the FM for his/her disagreement. The DM will accept or reject the NRST recommendation; again, discussion between NRST and DM is strongly encouraged prior to determination. If the DM disagrees with the NRST, rationale should be documented and provided to the State Director along with resolution deemed more suitable by the DM.

7. The State Director will review the recommendation by the NRST and information in support of the differing position of the DM, and promptly render a final determination.

Other – At each step in the process, the parties will be provided electronic copies of the various documents and determinations. The BLM Battle Mountain District Office will maintain the official record of transactions for the issue resolution process.

MLFO Response to Dispute Resolution

| Averaging Species and Sites | |
|---|---|
| <p>Summary of WWP Dispute: The BLM should not be averaging utilization across more than one key species or across key areas. A reading in excess of the 40% utilization standard should be considered a failure to meet the standard.</p> | |
| <p>MLFO Response Coordination: The MLFO response was developed in coordination with the Regional Office of the Solicitor, the National Rangeland Inventory and Monitoring Lead, the National Operations Center and the Nevada State Office.</p> | |
| NRST Recommendations | MLFO Response to NRST Recommendations |
| <p>1) NRST recommended in November 2015 and reaffirms now that utilization data should be calculated and displayed as recommended by the CMG (2015b, p.5) :</p> <p style="padding-left: 40px;"><i>“The CMG also discussed data portrayal and agreed that utilization levels should be portrayed by individual species so as to determine the potential effects on individual species, and by the average of all key species at each KMA, and finally by each use area. Confidence intervals should be included with all averages too.”</i></p> | <p>The MLFO agrees. However, it appears to be the recommendation of the NRST and some CMG members, rather than a consensus position of the entire CMG. MLFO agrees that it is important to provide the monitoring data information broken out by each key species, even if an average across key species is also presented, and further cautions that averaging utilization across key species can mask overgrazing concerns if not developed properly.</p> |
| <p>2) NRST recommends that the determination of meeting or not meeting a utilization level for the purpose of administering the Settlement Agreement should be determined by the average utilization of key species at each area (provided that the average of key woody species is not combined with the average of key herbaceous species as mentioned in the Settlement Agreement). The approach of using averages is not novel, new or unique to the NRST. The use of averages is explicitly described in a variety of BLM rangeland standards and guidelines, EISs, and RMPs (e.g., BLM 1999a, 1999b, 2004).</p> | <p>Averaging key species for purposes of grazing management is not an appropriate across-the-board practice as NRST’s discussion could be read to imply. While there are situations where averaging may be used and would be an appropriate approach, the MLFO does not believe it is appropriate to do so in the Argenta Allotment for general grazing management purposes – outside the context of short-term interim management under the settlement agreement -- given the risk that such an approach can mask over-grazing of the more desirable and/or palatable key species that are important components of the vegetative community. Therefore it is my decision that for purposes of determining the success of the grazing management system, caution is necessary if an average of utilization across key species is presented for purposes of grazing management, and if done must consider the site specific species palatability. Where this has not been done it is inappropriate. Generally, it will be most appropriate to consider utilization by individual key species, not whether the average of all key species meets utilization objectives.</p> |

| | |
|--|---|
| | <p>Averaging utilization at different key monitoring sites within a use area can mask over-utilization if a key monitoring areas is receiving heavier grazing use (e.g., because it is more accessible or has more desirable plant species) than another key monitoring area (e.g., that may be at a higher elevation or farther from water and therefore receiving less grazing use) within the same pasture.</p> |
| <p>3) The NRST and CMG agree that species-specific data can be informative. Although there is no current species-specific management objective, these data can inform future management actions, most likely during the permit renewal process where annual utilization data might help to interpret baseline or long-term condition data.</p> | <p>The MLFO Agrees</p> |
| <p>4) Key species can be reconfirmed for 2016 during the week of May 9th.</p> | <p>The MLFO agrees, and in light of more recent conversations that have occurred within the CMG, the MLFO reiterates its intent with respect to seeded species as this reconsideration and reconfirmation of key species moves forward. Seeded plants represent a financial investment made by the public and other organizations such as NDOW. Seeding projects were undertaken for multiple reasons, and to benefit multiple resources, which includes but is not limited to forage for livestock grazing. For this reason, seeded areas are equally important to monitor and to protect the public's investment by ensuring the health of seeded vegetative communities.</p> |
| <p>5) NRST's recommendations apply only to implementation of the Argenta settlement agreement.</p> | <p>The MLFO agrees however their remains a nexus to the upcoming permit renewal where the possibility exists for the same issues to resurface. MLFO agrees that averaging across key species is not an appropriate approach for grazing management decision in general (as distinct from the more limited purposes of the settlement agreement) absent sufficient information or circumstances to ensure that overgrazing of more desirable or palatable key species will not be masked.</p> |

| NRST Rationale for Recommendations | MLFO Response to NRST Rationale |
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| <p>Averaging utilization is a common BLM practice</p> <ul style="list-style-type: none"> • The BLM definition of utilization permits the use of a single species or a group of key species or even an entire vegetative community (Coulloudon et al 1999) • Multiple BLM sources, including grazing standards and guidelines, EISs, RMPs, and personal communications with rangeland experts explicitly reference an approach that averages utilization data among species and among sites within a pasture (documented in response). | <p>Although the averaging of species may be used in some situations, it is not a “common BLM practice” or appropriate as an across-the-board practice, since without the proper rationale for averaging applied on a case-by-case basis, there is an inherent risk to this practice. As John Willoughby (co-author of the Elzinga TR) testified in the <u>Talancon</u> case , Talencon v. BLM, 174 IBLA 152 (2008), there is an inherent risk in averaging species that the more palatable species is at risk of overutilization and this is often times the species you are most interested in. Mr. Willoughby explained that, “. . . without information, site specific information on... palatability of... these various species, it is also inappropriate to... average across them”. <u>Talencon v. BLM</u>, N2-2005-02 & N2-2005-03, Judge James H. Heffernan Decision dated January 25, 2007 at page 23. DOI Washington Office-IM 85-151 states that Field Offices should consider the legal implications of selecting or developing their own monitoring procedures”. So when consideration is given to when averaging might occur it is important for the Field Office to make sure it is appropriate for that situation.</p> |
| <p>Settlement Agreement direction on utilization data</p> <ul style="list-style-type: none"> • Reference is made to “all key herbaceous” and “all key woody species,” which implies that there is no intention within the settlement to manage for a single species. • The only restriction is that annual use should not be averaged between woody browse and herbaceous utilization (complied). | <p>The settlement agreement is not as clear on this issue as it could have been, and BLM agrees that that there could be some ambiguity in the interpretation of this language, regardless of whether an average across key species (instead of averaging each key species only) is used for purposes of interim management under the settlement agreement, the MLFO would generally not average across key species for purposes of livestock grazing management, absent the availability of data and information that would support the appropriateness of such averaging. For example, when <i>Festuca idahoensis</i> and <i>Achnatherum hymenoides</i> (both a deep rooted perennial grasses) are determined to be key species and through site specific information there palatability is shown to be comparable, then it may be appropriate to average in such a situation. Such situations are often the exception, rather than the norm when managing native vegetative or seeded communities with a variety of key species.</p> |
| <p>Use of individual species data</p> <ul style="list-style-type: none"> • There is no evidence that the averaging | <p>The evidence of whether masking of overgrazing occurred as a result of averaging is unclear given</p> |

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| <p>of species has masked utilization on a limiting factor or that heavy use on an individual species is being ignored. In the instance where a single species had an estimated use of 72% (Trout Creek, per WWP dispute), the average utilization exceeded as well. In all areas where utilization definitively exceeded or was unknown, management and monitoring adjustments were made.</p> <ul style="list-style-type: none"> • NRST agrees that information from individual species should be considered when rangeland health data are collected and analyzed, and resource specific objectives are established. Single species use data has been calculated and displayed in the draft year-end monitoring report, and remains available for future use. • Setting a threshold of annual use on a single species or group of species is a far different management action that striving to change or restore the vegetative composition and rangeland conditions at a site. No BLM objectives have been established in this regard, nor is it required by the settlement. | <p>the related issues of how confidence intervals were characterized for purposes of the end-of-year objectives. In general, as discussed in the <u>Talancon</u> case, there is an inherent risk to averaging key species as it may mask the overutilization of the more palatable species, thereby risking the extirpation of those species from the vegetative community if their utilization is averaged with that of less palatable and less utilized key species. For this reason, the MLFO in managing grazing would take a more cautious approach to avoid over-utilization of the range and to ensure rangeland health as required by law and regulation. The need to take a more cautious approach increases in cases where specific objectives are absent or short term management is in place, since the ability to assess and address long-term trends is more limited.</p> |
| <p>The Intent to calculate mean utilization was consistently and repeatedly disclosed.</p> <ul style="list-style-type: none"> • The CMG has a well-chronicled, lengthy period to review documents explicitly describing the process of calculating average utilization on key species, as well as the calculation of utilization on individual species. No CMG member disputed this agreement until after the 2015 year-end monitoring report was drafted. (documented in response) • WWP's suggestion that a different approach be used to determine utilization, after data has been collected, analyzed, and published, unfairly changes the 'rules' of the game after the fact. | <p>Although there may have been some discussion in the CMG meeting, it may be an over-statement to say that all of the members of the CMG agreed or understood that key species monitoring data would be averaged at each site. If this understanding existed, there would not currently be a dispute resolution in process. It is in cases where the CMG moves forward without a consensus of the entire group that a member of the CMG may choose to submit a dispute resolution form. Given the lack of consensus evidenced by this dispute resolution process, it is not accurate to state that "rules of the game" were changed after the fact.</p> |
| <p>WWP's option for resolution constitutes a</p> | <p>MLFO does not agree that WWP's proposed use of</p> |

highly biased approach. Ensure undue degradation of public resources

- NRST clearly reported and did use all available data (average utilization and utilization values of individual species) when it came to making adjustments in the 2016 stockmanship plans and for the purposes of prioritizing and intensifying 2016 monitoring.
- The averaging approach was used only for the purposes of reporting % success on the scorecard.

the highest utilization value for a key species "represents an extremely biased approach in which only the most-utilized species are selected and all of the lesser-utilized species are omitted from interpretation.

(1) It is not biased to base management decisions on the most utilized *key species* being measured, as this is a common practice used by the BLM and that has been validated through existing case law (Talencon v. BLM, 174 IBLA 152 (2008)). (2) When using the highest single key species utilization approach, the other information collected is not omitted and is presented; however, all key species are not averaged to determine whether objectives were met or not met. Information on all key species can be and is used to identify what is happening at the site and to inform management. (3) There are situations where averaging utilization may be appropriate and situations where it is not appropriate. As Mr. Willoughby testified in the Talencon case, "without information, site specific information on... palatability of... these various species, it is also inappropriate to... average across them". Because averaging utilization can mask over-grazing of more desirable and more palatable key plant species, thereby adversely affecting the overall vegetative community that BLM is tasked with protecting, averaging must be used with caution and only where clearly appropriate, whereas a not averaging approach to prevent undue degradation of rangeland resources is typically more likely.

Determine utilization for use areas based on the key species most used by livestock.

- WWP suggests that some species used to determine utilization were not in fact key species or were not adequately used by livestock. There is no evidence to support the claim that selected species were not favored by livestock. (documented in response)
- Determining whether the selected key species are correct is a different question, and requires a more robust process than selectively picking which key species to use or omit after the data has been collected, analyzed, and

Point NRST rationale states that "There is no evidence to support the claim by WWP that the CMG selected species that are not favored by livestock." However, the issue is not whether the key species are used by livestock; it is whether averaging could mask over-grazing of a preferred key species.

MLFO agrees with NRST's discussion about the importance of proper key monitoring area (KMA) and key species identification at each KMA. BLM is currently revisiting and reviewing the KMAs with the NRST and part of the CMG to ensure that each site has been appropriately selected, that ecological sites are clearly identified, that key species are appropriately identified and selected for monitoring purposes, and that some initial

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| <p>interpreted (WWP's recommended approach).</p> <ul style="list-style-type: none"> • No objections were made regarding selected species. • The selection of key species can be revisited by CMG during the week of May 9th. | <p>determinations be made as to whether averaging of the key species at a given site is appropriate. With proper KMA and key species selection, the MLFO believes there will be greater clarity for the coming grazing season as to whether utilization can be averaged across key species at a given KMA or whether achievement of utilization objectives should be determined based on individual key species utilization.</p> |
| <p>MLFO Recommendation to the Mount Lewis Field Manager for Dispute: After carefully considering the recommendations and rationale provided by the NRST on this dispute, and in careful coordination with the Regional Office of the Solicitor, National Upland Monitoring Lead, National Operations Center, and the Nevada State Office, the MLFO recommends that the field manager adopt the recommendations provided by the NRST pursuant to and in accordance with the MLFO responses to both NRST recommendations and the accompanying rationale that is specified above.</p> | |