

NRST FINDINGS AND RECOMMENDATIONS
Argenta Cooperative Monitoring Group (CMG)
August 24-27, 2015 Meeting

EXECUTIVE SUMMARY

The Argenta Settlement Agreement (initiated June 24, 2015) outlines a number of goals related to the replacement of temporary closures with a short-term grazing management plan. The settlement also directs the National Riparian Service Team (NRST) to serve as convener and neutral third party on the Argenta allotment. The team is responsible for reviewing activities/issues, providing recommendations, and facilitating discussions among the CMG and with others. The CMG met during the week of August 24th to collaboratively review and discuss issues concerning riparian and upland monitoring, non-signatory permittees, south boundary fence, livestock management and limitations, stockmanship plan updates, and CMG function. This report summarizes NRST findings and recommendations from the week.

Riparian Designated Monitoring Areas (DMAs)

Crippen Creek: Concerns regarding the existing location of this DMA were raised during the March field review with BLM, permittees, and the NRST. The NRST recommended BLM stratify and randomly locate two proposed DMA locations prior to the August meeting, so CMG could review in the field. Following NRST's August recommendation, the second proposed site was accepted and monumented.

Ferris Creek/Hilltop Canyon/Rock Creek: In July, the NRST recommended the BLM stratify and randomly locate a DMA on one of the other streams (in addition to Ferris) in the Maysville Use Area prior to August meeting. The CMG reviewed two other potential riparian monitoring locations higher in the canyon; neither was chosen and more field reconnaissance is necessary (to be completed 2016). For 2015, NRST recommends the existing DMA on Ferris Creek as the riparian monitoring site for this use area; additional DMAs will be determined in 2016.

Trout Creek: Per NRST's July recommendations, the BLM stratified and randomly located a new riparian DMA in the northern tributary of Trout Creek. It will be installed by BLM prior to end-of-season monitoring (October). Further field review was unnecessary, since no concerns exist.

Mill Creek: During the July CMG review, the Mill Creek MIM site was found to be unsuitable for monitoring livestock use effects because of compounding factors related to the adjacent haul road. NRST recommended the establishment of an effective upland KMA, instead of a riparian DMA. In August, the BLM requested CMG review three additional stream reaches identified in the office as potential riparian complexes for establishing a MIM DMA. Upon field review, NRST did not find any of these to be

suitable for a MIM DMA and continues to recommend locating a suitable upland KMA to monitor within season and end of season use levels.

Upland Stratification and Key Management Area (KMA) Selection

Protocol Development: As noted in the July report, a protocol for stratifying areas and locating upland monitoring sites is being developed. The purpose of this stratification and key monitoring area selection protocol is to objectively locate sites to monitor livestock utilization on herbaceous and browse species, and ultimately to monitor the long-term condition and trend of rangelands within the stratum. In order to ensure that forage utilization data is useful, it is important that monitoring site selection is based on objective ecological and management criteria. KMAs located so far this year using the draft protocol will be significantly more effective than most of the previously identified KMAs. This is because most, if not all, of the old KMAs were subjectively located without the use of formal, documented criteria to ensure their utility. However, this effort is incomplete and still evolving. Although the rejection/acceptance criteria have been generally working, a critical issue arose regarding whether selected monitoring sites were established within the proper ecological sites so they could be used to correlate information to similar areas as part of long-term monitoring.

Upland Monitoring KMAs Site Selection: All of the potential KMAs discussed below followed the draft stratification and KMA selection protocol and points were randomly located in the office using GIS (per the protocol). During the week of Aug 24, each of the points within the following use areas was reviewed in the field with the CMG.

Mule Canyon: A new upland monitoring site was reviewed in the field and accepted.

Fire Creek: Two sites were reviewed in the field. The first site was rejected because it exceeded the 30% slope criterion. The second site met all criteria and was accepted.

Horse Haven: The upland point that fostered disagreement in July was again discussed and further tested against the draft protocol. At this time, the site (AG 23) continues to be supported by NRST. NRST also recommends that options for water developments in this use area be considered in 2016.

Whirlwind: Two upland sites were reviewed. The first site was rejected. The second site was not acceptable at its GIS-defined randomly generated point because it was too close to the road. However, by applying the rules for systematically moving away from the rejected point, this KMA remained within the representative area and was accepted.

Indian Creek: One of three potential upland sites was reviewed by CMG. While it met the topographic acceptance criteria, it was determined initially that the availability of key species plants was too sparse for a suitable transect site. (NRST recommendation below).

Trout Creek: A new upland monitoring site was reviewed and accepted.

Mill Creek: Two upland sites were reviewed, and both raised substantial issues within the CMG. These issues were related to the application of some of the acceptance/rejection criteria and proper identification of ecological sites; they were not resolved. (NRST recommendation below).

NRST Recommendation: Members of the CMG should continue to provide input on the upland stratification and KMA selection protocol over the winter, and the document will be refined. NRST recommends that the final protocol be completed by spring 2016. Following that, all upland KMAs should be revisited and validated using the final protocol as part of a field review prior to the 2016 grazing season. At that time, additional KMAs could be established if necessary. This was discussed by the CMG and seemed to be an acceptable approach. NRST will then make final recommendations regarding the upland KMAs.

In the interim, the NRST recommends using existing upland sites that have been reviewed and accepted to date for the 2015 end-of-season monitoring. For the sites that still need to be located (including Indian Creek and Mill Creek which were visited but no KMA established), NRST recommends BLM use the draft protocol to establish the minimum number of KMAs necessary to represent the specific remaining use areas. These KMAs will be reviewed during the October end-of-season monitoring meeting, and any disagreements will be noted as part of the report. Since these additional KMAs will also be revisited in the spring of 2016, there will be an opportunity to move them if deemed necessary.

Upland Utilization Monitoring Protocol

The CMG had an extensive discussion in the field comparing the key species and height-weight (HW) methods and the relative advantage of each. Although both protocols are authorized for use in BLM, and both use the key species concept; the height-weight method measures the actual height of the plant (what is actually there), which is simpler and arguably more accurate than estimating what has been removed as per the key species method. In addition, the height-weight method provides a record of grazed and ungrazed plants. This can be useful in helping to assess annual productivity and vigor and is important for monitoring stubble height in accordance with sage grouse monitoring plans currently being developed.

The NRST recommendation is to use the HW method on key grass species. If time allows, some comparison between the two protocols during the end-of-season monitoring week should be done to allow for comparing how previously collected data using the key species method may be correlated to height-weight. Because there is no corresponding height-weight method for shrub species, the key species method will be used for measuring utilization on key shrub species.

Non-Signatory Permittees

The CMG met with some of the Argenta permittees (Newmont and Barrick) who were not involved in litigation or settlement negotiations (non-signatory permittees), but who are affected by the terms and conditions of the settlement agreement. Non-signatory permittees will continue to review the settlement and determine whether they want to voluntarily sign the agreement. They will also be invited to participate in the November 2015 Argenta CMG end-of-year review, as well as subsequent meetings to develop the 2016 stockmanship plan.

South Boundary Fence

The settlement agreement directs BLM to issue a decision for the south allotment boundary fence. As noted in the agreement and in the July CMG report, the NRST supports a fence that separates the Argenta and Carico Lake allotments. This would eliminate any drift onto Argenta and would serve to break up the Indian Creek Use Area to promote better overall management. The CMG met with Barrick representatives to review and identify a potential location for the south boundary fence; a field review is necessary to finalize the proposal.

Livestock Management and Limitations

An informal meeting was held one evening with permittees to allow them to review efforts to date, and to begin discussions of approaches that can enable completion of successful plans for the 2016 grazing season when the CMG meets in November. Permittees, BLM, and NRST will meet again to further discuss options in advance of the November CMG meeting.

As discussed during the July CMG meeting, low stress herd movement and placement marks a major change in practices of herding and moving stock. It is time intensive, and the large acreage, limited water, and rugged terrain make it a challenge to implement. As noted in July, permittees are working hard to move cows but are frustrated with the system and the inability to meet riparian triggers (although the use of supplement tubs as an adjunct to riding has shown to be successful to some degree).

By far the largest impediment is the absence of adequate water developments and riparian fencing. Although the focus of the settlement agreement is on stockmanship (with critical, but minimal, riparian protection fences and water haul sites) and monitoring, addressing the level of commitment to long-term management by all parties is becoming an increasingly inescapable need.

Additionally, communication about moves, plans, within-season monitoring, and other elements directed by the settlement has been less than needed and often unclear. During the review of the 2015 season and planning for the 2016 season, the importance of improved and frequent communication with members of the CMG will be stressed.

Stockmanship Plan Update

Shortly following the August CMG meeting, the Tomeras and Meriluches advised NRST on planned livestock moves. These are in general agreement with the rotation outlined in the stockmanship plan

CMG Function

The CMG continues to make progress in building working relationships and improving the ability to openly and honestly talk through contentious issues. However, improvement is still needed in terms of all members fully supporting the approach, and openly and honestly communicating with the group as a whole, in real time, as issues arise. In a number of instances, topics at issue have not been addressed until the group separates and then a party will address it to the NRST separately. The focus needs to be on working through issues together. NRST is not in a position to serve as an agent for others or make decisions; rather, their role is to provide oversight, advice, recommendations, training, coaching, and facilitation as needed.

Another concern that became further evident during the August meeting is that the compressed time frames in the settlement agreement are exacerbating the stresses of working collaboratively on needed activities when little or no trust exists between parties. New processes, any form of delay on activities, and/or lack of adequate review time have led to misunderstandings, accusations of unfairness, and relationship setbacks. A concerted effort will be made in future activities to ensure equal access to process elements for all CMG members – including the development of field tour agendas and routes. At the same time, all CMG members should hold themselves accountable for promptly reviewing all e-mails and documents that are provided, and commenting where needed.

INTRODUCTION

The Argenta Settlement Agreement (initiated June 24, 2015) outlines a number of goals related to the replacement of temporary closures with a short-term grazing management plan, including:

- Protection of important riparian-wetland areas;
- Reliance on a grazing management strategy designed to improve resource condition through stockmanship (use of riding and supplement placement to allow for the ‘fenceless’ rotation of livestock);
- Use of implementation and effectiveness monitoring data to inform and improve management as part of the three-year trial period, as well as long-term allotment management planning; and
- Achievement of collaborative and effective working relationships among the CMG.

The settlement also directs the NRST to serve as convener and neutral third party on the Argenta allotment. The team is responsible for reviewing activities/issues, providing recommendations, and facilitating discussions among the CMG and with others.

The CMG met during the week of August 24th to collaboratively review and discuss riparian and upland monitoring, issues concerning non-signatory permittees, proposed location for the south boundary fence, stockmanship progress, and CMG function. This report summarizes NRST findings and recommendations from CMG meetings during the week of August 24th. The CMG met previously on July 8th and during the week of July 27th. For additional information, see the 7/8/15 CMG meeting notes (7/13/15) and the NRST Findings and Recommendations Report from the July CMG Meeting (8/11/15).

NRST FINDINGS & RECOMMENDATIONS

Riparian Designated Monitoring Areas (DMAs)





Crippen Creek



Concerns regarding the location of the existing DMA were raised during the March field review with the BLM, permittees, and NRST (pre-settlement). This DMA was reviewed during the August CMG meeting, and NRST determined that it was not representative of the dominant sensitive complex along the stream. Discussions in the field noted that the existing DMA is located upstream of an adjacent spring, which provides additional flow to the stream. The site is also dominated by primarily herbaceous vegetation, whereas considerable portions of the drainage include a complex that exhibits a mix of woody and herbaceous vegetation. For these reasons, it was important to select a new DMA.

Prior to the August field visit, BLM stratified the stream, used a random number system, and identified the beginning and end points of two new potential DMA locations for review. The

uppermost of those was reviewed and rejected due to the fact that stream flow was intermittent/interrupted.

The second potential replacement location was reviewed and found to be an acceptable location. It contains a mix of herbaceous and woody riparian plants, which is common in this drainage below the spring. With management focused on improving riparian health, the site will likely evolve to be dominated by woody plants since there are young willows throughout the DMA length. Upper and lower stakes were established, and GPS points taken of those locations. A witness post was placed near the lower stake and a utilization cage near the upper stake. The DMA will only be used for short-term indicators this year; it is planned to conduct the full MIM protocol in the spring for long-term monitoring.

	
<p>Potential DMA #1 (rejected). Upstream view from bottom.</p>	<p>Potential DMA #1 (rejected). View of upper end.</p>
	
<p>Representative downstream view of the existing DMA area.</p>	<p>Sidehill spring that adds flow to the stream (flows into the stream just below the bottom of the existing DMA).</p>

	
<p>Lower end of existing DMA that was changed. Note that this is the bottom of the DMA so spring flow contributing to maintaining perennial vegetation would not be available to the existing DMA.</p>	<p>Downstream view from upper end of selected new Crippen Creek DMA.</p>

Ferris Creek/Hilltop Canyon/Rock Creek



Following a review of the Ferris Creek DMA and proposed lotic fence project in July, it was determined that the DMA falls within the proposed fence area. NRST recommended to maintain the existing DMA for monitoring long-term recovery rather than livestock use once the fence is completed (reference DMA), and add at least two other DMAs in the Maysville Use Area. One could be established upstream from the existing Ferris Creek DMA, and another one could be added on one of the other streams in this use area. NRST recommended BLM stratify and randomly locate proposed new DMAs in advance of the August meeting, so CMG could review in the field.

Prior to the August meeting, the BLM identified two potential DMA locations on Rock Creek.¹ Based on aerial imagery and site-specific inspection, it was not possible to determine whether the proposed sites are representative of a larger, more dominant complex. Short-term indicators, such as stubble height, could be measured; but NRST recommends more thorough stratification and field inspection of riparian complexes along Rock Creek be completed to determine whether the potential DMA is representative. For 2015, NRST recommends the existing DMA on Ferris Creek as the riparian monitoring site for this use area; additional DMAs will be determined in 2016.

During the August CMG field review, it was clear that the two potential DMA sites on Rock Creek had experienced heavy use and appeared to have exceeded utilization limits. Thus, CMG

¹ A DMA exists near the mouth of the canyon, however, it is unclear if and to what extent this site is representative of the larger complex. This DMA has not been used in the recent past; and the CMG did not review this DMA (although NRST reviewed the site with BLM and the permittees in March).

discussion at this site focused more on options to address the issue of obvious heavy use on these areas rather than monitoring details. The first proposed Rock Creek DMA is located in the main canyon just below a seep and above a drift fence (below which is private land). The total distance from the head of the seep to the drift fence is approximately 400 meters; the channel is dry above the seep. The presence of perennial water has caused livestock to heavily use this area, which may be exacerbated by the presence of the drift fence. There was no argument that use was heavy in this area and the CMG discussed the need to move the drift fence to help lighten the use, although that alone will not solve this use issue as heavy livestock impacts were observed all along Rock Creek. The second proposed DMA is located higher in the drainage (on the East Fork of Rock Creek) just below a seep located in the valley bottom (this site is more of a lentic vegetated waterway characterized by little or no channel development).

	
<p>Potential DMA site 1 (Rock Creek).</p>	<p>Upper end of potential DMA site 2 (upper East Fork of Rock Creek); primarily a lentic riparian area</p>

Trout Creek

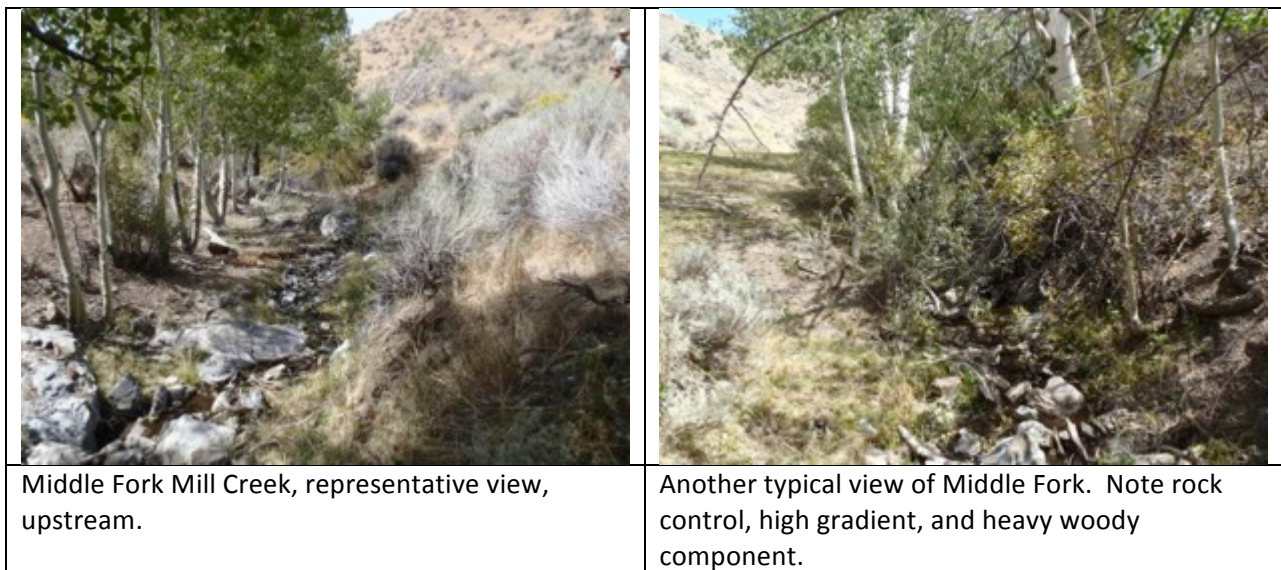
Per NRST’s July recommendations, the BLM stratified and randomly located a new riparian DMA in the northern tributary of Trout Creek. It will be installed by BLM prior to end-of-season monitoring (October). Further field review was unnecessary, since no concerns exist.

Mill Creek

During the July CMG review, the Mill Creek MIM site was found to be unsuitable for monitoring livestock use effects because of compounding factors related to the road. This very short stream reach is highly altered by the adjacent haul road, which severely limits its potential and makes it difficult to isolate the effects of livestock. NRST recommended the establishment of an effective upland KMA, instead of a riparian DMA. In August, the BLM requested the CMG review three additional stream reaches identified in the office as potential riparian complexes for establishing a MIM DMA. These three streams are the South Fork of Mill Creek, the Middle Fork of Mill Creek, and the lower North Fork of Mill Creek. Upon field review of these additional

sites, NRST did not find any of these to be suitable for a MIM DMA and continues to recommend locating a suitable upland KMA to monitor within-season and end-of-season use levels.

The South Fork had some very short riparian reaches with a weakly defined channel, but only one even approached the length needed for a DMA. Following discussion, NRST believed no suitable section was available for placement of a MIM DMA. Although the riparian areas in this drainage were not suitable for a MIM DMA, livestock impacts were heavy in places. Thus, NRST believes that management should be initiated to lighten the use along the South Fork of Mill Creek. This led to some discussion about fencing the small section, which may be considered in the future. Middle Fork of Mill Creek had a longer length of lotic riparian, but it was rock-controlled with trees and brush along most of its length and not responsive to changes in livestock management as the animals have little impact on that type of channel. The North Fork was a very short reach (due to private land upstream) and was similar to the Middle Fork (rocky with trees and brush).



Upland Stratification and Key Management Area (KMA) Selection

Protocol Development

As noted in the July report, a protocol for stratifying areas and locating upland monitoring sites is being developed. The purpose of this stratification and key monitoring area selection protocol is to objectively locate sites within key areas to monitor livestock utilization on herbaceous and browse species and ultimately the long-term condition and trend of rangelands within the stratum. As set forth in the June 24th, 2015 Argenta Settlement Agreement, utilization levels will be monitored both within-season and at the end of season. In order to ensure that forage utilization data are useful, monitoring site selection must be based

on objective ecological and management criteria. KMAs located so far this year using the draft protocol will be significantly more effective than most of the previously identified KMAs. This is because most, if not all, of the old KMAs were subjectively located without the use of formal, documented criteria to ensure their utility. However, this effort is incomplete and still evolving. Although the rejection/acceptance criteria have been generally working, a critical issue arose regarding whether selected monitoring sites were established within the proper ecological sites so they could be used to correlate information to similar areas as part of long-term monitoring.

During the August CMG meeting, the difficulty of having to establish points for monitoring when the protocol has not been fully developed was discussed. This issue arose because there is some disagreement regarding a few of the stratification elements. A question was posed about whether the monitoring efforts being done are intended just to meet the utilization requirements of the settlement agreement, or whether they are also intended to correlate the utilization data with long-term condition and trend for a designated representative upland stratum (using dominant and co-dominant ecological sites). Some CMG members noted that the intent should be to establish sites that can later be used to correlate to condition and trend. In fact, this is necessary because the settlement agreement requires BLM to initiate collecting trend data in 2016 (section 10.3). The MIM protocol and DMA selection process therein was established in large part, to meet that very need – to enable short-term indicators to be correlated with long-term indicators for a selected riparian complex. The upland KMA selection process is early in its development and likely needs additional refinement to provide an effective means to accomplish this intent.

Upland Monitoring KMAs Site Selection

All of the following potential KMAs followed the draft stratification and KMA selection protocol, and points were randomly located in the office using GIS (per the protocol). Subsequently, during the week, each of the points within the following use areas was reviewed in the field with the CMG.

Mule Canyon: A new upland monitoring site was reviewed in the field and accepted. This site is on a low elevation flat area used for early or late season grazing.



Pink ribbon denotes location of randomly located point.

Fire Creek: Two sites were reviewed in the field. The first site was rejected as it exceeded the 30% slope threshold when ground verified. The first site was also more than one mile from the nearest road/trail. The second site met all acceptance criteria and was accepted.



Fire Creek upland site – average slope exceeded 30%, location was rejected.



Fire Creek upland alternative site – met all criteria, accepted for use area monitoring.

Horse Haven: The upland point (AG 23) that fostered disagreement in July was again discussed and further tested using the draft stratification and KMA selection protocol. During the July CMG field trip, the decision was made to compare the relative acreage of unburned blocks of sagebrush with the narrower, unburned stringer or “fingers” and that the KMA would be placed in whichever landscape pattern (blocks or stringers) that is most dominant in the unit. NRST recommends this activity be completed. Pending any new evidence generated by this comparison and/or additional information submitted by the permittees/consultants, the NRST supports use of the AG 23 KMA. See the July CMG meeting report for a description of this site and other details regarding management in this area.

Additional discussion took place during this field review. Several acceptance/rejection criteria are being debated for this KMA by the permittee/consultant:

Criterion 2.1.2 – “[Sites] Should be capable of, and likely to show, a response to management actions. This response should be indicative of the response that is occurring on the stratum.” While there is some bluegrass (Pose) intermixed with sagebrush, the primary forage species is crested wheatgrass (*Agropyron cristatum*, Agcr). Agcr is an introduced species that normally is managed through heavy early season use for forage and to reduce risk of cheat grass invasion. It is unknown how this crested wheatgrass became established; it does not appear to have been drilled which is usually the case. AG 23 has more presence of Agcr than most other nearby areas or in the stratum. It is also unknown what the ecological site is, given the current approach to stratification. As a result, the expected response to changed management is not defined, as response of Agcr likely is not typical of the stratum.

Criterion 2.1.6 – This criterion, which deals with ecological sites, states that sites “..should be located within a single ecological site, plant community and vegetation community type.” This may not have been fully considered during field review given the approach to stratification at the time.

As is described in the July report and discussed during this review, because this use area is served by only one livestock water source (well), significant trailing radiating out in all directions from the well is common throughout the unit. NRST recommends that options for water developments in this use area be considered in 2016. It was discussed that the completion of the Fire Creek projects would lighten the use on the Horse Haven unit.

Whirlwind: Two upland sites were reviewed. The first site was rejected. The second site was not acceptable at its GIS-defined randomly generated point because it was too close to the road. However, by applying the rules for systematically moving away from the rejected point, this KMA remained within the representative area and was accepted.

	
<p>Whirlwind monitoring location #1; It did not meet the acceptance criteria.</p>	<p>Whirlwind monitoring location #2, meets acceptance criteria by moving following directions in protocol documents.</p>

Indian Creek: One of three potential upland sites was reviewed by CMG. Although it met the topographic acceptance criteria, it was determined initially that the availability of key species plants was too sparse for a suitable transect site and was rejected under criterion 2.2.2 (draft upland stratification and KMA selection protocol). This determination generated disagreement, although it was not done on the site at the time.

The contention by some members was that while adequate key species plants existed, they were not all in the interspaces between sagebrush clumps. They stated that much of the grass partially under sagebrush constitutes the available forage base (although it was also recognized that grass under the interior of the brush is not available). Even though cows prefer to feed in the opening, they will push into sagebrush for forage. This dispute was not resolved at this site, and it was too late in the day to review either of the two alternate sites that had been identified by GIS protocols.

Some members of the CMG assumed others were only considering grass plants in the interspaces but later discussions concluded that most were considering both the interspaces and plants partially under the brush. Some discussion occurred about doing a “dry run” of the utilization protocol to determine if most plots would include key perennial grasses. If most plots included enough key species plants, criterion 2.2 would be met. NRST recommends this be done if disagreement regarding this issue exists. Additionally, some questions arose about whether or not the specific location was within only one Ecological Site, or whether it was located on an ecotone. Site location on an ecotone is not consistent with Rejection Criterion 2.2.6. NRST recommends an alternative site be located for this year (see below).

<p>Soil surface has wide interspaces between plants; available forage plants are sparse.</p>	<p>Discussions continue on Indian Creek potential KMA site #1.</p>

Trout Creek: A new upland monitoring site in the upper reaches of the drainage was reviewed by the CMG and is recommended by NRST.

<p>Uphill view of area of monitoring location, heavy sagebrush with grass understory.</p>	<p>Pink ribbon notes transect point location.</p>



Mill Creek: Two upland sites were reviewed in this use area. Both sites raised substantial issues regarding the validity of the acceptance/rejection criteria within the stratification protocol that is being developed and whether monitoring sites selected to date could be correlated to long-term monitoring for a discrete stratum based on ecological sites (see discussion in ‘Upland Stratification and KMA Selection’ section). These issues have not been resolved.


The first site generally was believed to meet the acceptance criteria at the first viewing. However, several CMG members later noted that that it was flawed. The selected area was within the slope criterion, however, it was located on an outflow area at the mouth of a small

dry canyon. It also included at least three separate ecological sites in close proximity that the transect would have to cross.

The second site was located on the flats outside the mouth of the canyon, and is part of an extensive area of similar land. At the defined GIS point that marked the potential transect beginning, it was within 100 yards of an existing road. The protocol is to move perpendicular to the road for the long term transect. In this case, that would have moved transect over the top of the ridge and onto a steep slope >30%. Following the protocol for moving, the CMG walked through the various 90 degree turns until a suitable site was identified.

This KMA site also generated discussion regarding whether the point was a discrete ecological site and representative of the most common ecological site in the use area. Questions were also raised as to whether it meets criterion 2.1.2, which states that “[sites] should be capable of, and likely to show, a response to management actions.” This ecological site is very low on the productivity scale, and change is likely to take decades at a minimum. Soils are shallow and droughty, and the primary grass is just wispy little patches of bluegrass. At the conclusion of discussions in the field, these issues were not resolved. NRST recommends that an alternative site should be located for this year (see below).

	
<p>Mill Creek upland, potential site #1. Lies in lower end of a relatively gentle swale, multiple ecological sites converge in a small area.</p>	<p>Looking across the slope, in the general area where transect would run. No decision, pending review of second alternative location.</p>

	
<p>Mill Creek upland, potential site #2.</p>	<p>Mill Creek upland, potential site #2.</p>

NRST Recommendation: Members of the CMG will continue to provide input on the upland stratification and KMA selection protocol over the winter and the document will be refined.² NRST recommends the final protocol be completed spring 2016. Following that, all upland KMAs should be revisited and validated using the final protocol as part of a field review prior to the 2016 grazing season. At that time, additional KMAs could be established if necessary. This was discussed by the CMG and seemed to be an acceptable approach. NRST will then make final recommendations regarding the upland KMAs.

In the interim, the NRST recommends using existing upland sites that have been reviewed and accepted to date for the 2015 end-of-season monitoring. For the sites that still need to be located (including Indian Creek and Mill Creek, which were visited but no KMA established), NRST recommends BLM use the draft protocol to establish the minimum number of KMAs necessary to represent the specific remaining use areas. These KMAs will be reviewed during the October end-of-season monitoring meeting, and any disagreements will be noted as part of the report. Since these additional KMAs will also be revisited in the spring of 2016, there will be an opportunity to move them if deemed necessary.

Upland Utilization Monitoring Protocol

The Settlement Agreement (section 6.9.1) states that “any monitoring locations, methods, key species to be monitored, and analysis of the monitoring data will be per BLM protocols.” While there are a variety of upland and riparian protocols utilized by the BLM, the two primary

² To avoid slowing down progress on activities such as the stratification process and protocol for upland monitoring document, it is recommended that a small working group involving key technical specialists provide the lead. Initially it is recommended that the technical group include BLM range conservationist, NRST, and permittee consultants. This group will work through the various iterations and edits of process documents without sending to the larger mailing list. If other CMG members want to be involved, please let NRST know.

protocols being considered for upland monitoring is the Key Species (KS) method, and the Height-Weight (HW) method. The Battle Mountain District primarily uses the KS method, but both methods are used in Nevada BLM.

A draft refinement of both the KS and HW protocols in the Interagency Technical References: Utilization Studies and Residual Measurements (1999) was distributed during this meeting. During this discussion, the CMG was made aware that additional refinements have been made to the HW protocol from other sources and need to be incorporated into the draft protocol refinement document. These include additional details on measuring plants (average leaf length, how to consider culms, etc.). The permittee consultants agreed to provide this information.

The CMG had an extensive discussion in the field comparing the key species and height-weight methods and the relative advantage of each. The CMG engaged in a discussion/demonstration in the field to review the refinements of the KS and HW procedures, and to compare the attributes of each protocol. Additionally, a comparison matrix was developed and circulated among the CMG. The following points were raised during discussion:

- The KS method estimates use within seven use categories (0-5%, 6-20%, 21-40%, 41-60%, 61-80%, 81-94%, 95-100%). Using this procedure, the mid-point of the category that fits is recorded. The HW method measures the height of ungrazed and grazed plants and calculates a percent utilization based on the height-weight relationship for a particular species.
- Both methods employ the key species approach.
- Both methods, when used by trained, experienced observers can provide reliable and consistent results.
- Both methods are approved for use in the BLM (Interagency Technical References: Utilization Studies and Residual Measurements (1999)).
- Both methods require sampling at least some ungrazed plants in order to obtain percent utilization by weight data. The KS method employs a clip and weigh training procedure to calibrate estimates. The HW method requires ungrazed and grazed plants to be measured on all plants sampled and percent utilization calculated based on this height-weight relationship (which was developed by USDA research clipping and weighing thousands of plants).
- The HW method provides height information for both grazed and ungrazed plants that can be useful in helping to assess annual forage productivity and vigor. NRST believes a simplified approach to use intensity would benefit the discipline of range management. Measuring the actual height of what is there is simpler and more reliable than estimating what has been removed as per the KS method. MIM employs a stubble height procedure that has proven to be reliable and precise – the HW is similar to this since it requires heights to be recorded as well.

- Sage Grouse plans have indicated a minimum stubble height for upland grasses. This will require height data be collected for both grazed and ungrazed plants and areas – clearly, the HW method provides this data while the KS method does not.

NRST Recommendation: Use the HW method on key grass species. If time allows, some comparison between the two protocols during the end of season monitoring week should be done to allow for comparison with previously collected data. Because there is no corresponding height/weight method for shrub species, the key species method will be used for measuring utilization on key forage shrub species. The KS and HW protocol refinement documents also needs to be finalized prior to conducting the end-of-season monitoring.

Non-Signatory Parties

A two-hour meeting was conducted on 8/27 to discuss the issue of how the Argenta Settlement Agreement applies to and affects other permittees who also operate in the previously closed areas and were not involved in settlement discussions and did not sign the final agreement. The purpose was to review the existing situation, answer questions, discuss existing/future concerns, and determine next steps. Participants included signatory permittees, non-signatory permittees, BLM, NRST and other CMG members.

BLM provided an overview of the Argenta Settlement Agreement, which replaces the closure decision with three-year management trial focused on the following:

- Reliance on adaptive stockmanship and monitoring plans (distribute livestock in response to riparian/upland within-season and end-of-season use levels)
- Implementation of critical range improvement projects (lentic/lotic riparian fencing, allotment boundary fencing, and water haul/development sites)
- BLM commitment to complete long-term management plan (permit renewal) for the Argenta allotment

BLM also highlighted existing/future concerns:

- The settlement specifies that the appellant permittees (signatories) will graze in separate areas, and will be responsible for meeting within-season and end-of-season use triggers for both riparian and uplands on the areas they graze. One concern is within-season drift from non-signatory permittees' cattle. This may become an issue of significant concern if signatory permittees have moved their cattle out of an area in response to meeting within-season triggers, but end-of-season use levels are exceeded due to use by other cows. This could be potentially avoided if all Argenta permittees agreed to abide by the triggers and determined seasons of use.
- The other concern is that non-signatory permittees, whose season of use does not begin until November could be denied grazing opportunities because end-of-season use levels have been met. This issue requires further consideration.

Next steps:

- Newmont and Barrick's legal team will review the Argenta Settlement Agreement and determine whether they will voluntarily sign on to the agreement. Signatory permittees cautioned them against signing the agreement, noting they should avoid being held to the terms and conditions of the settlement if possible. Newmont and Barrick will update BLM on their decision.
- Newmont is in the process of transferring their sheep permit to Pete Tomera, which would eliminate competing within-season use. (Rand Properties still holds a 40 head horse permit 3/1-12/30.) Assuming no within-season drift from other cattle permittees, within-season issues should be resolved.
- Both Newmont and Barrick still hold cattle permits on Argenta (11/1-4/1 approximate season of use). They plan to participate in the November 2015 Argenta CMG end-of-year review, as well as subsequent meetings to develop the 2016 stockmanship plan. If issues arise regarding loss of grazing opportunities due to end-of-season use levels, they will be addressed at this time.

South Boundary Fence

A two-hour meeting was conducted on 8/27 to discuss potential locations for the south boundary fence between Argenta and Carico Lake allotments. The settlement requires BLM issue a decision on this fence by 12/31/15 or within eight months of a completed application. As noted in the agreement and in the July CMG report, the NRST supports the placement of a south boundary fence to prevent drift and promote better overall management. Participants included signatory permittees, Barrick representatives, NRST, and other CMG members.

Meeting participants reviewed possible routing of the fence, and the various approaches for building on all private land, all public land, or a mix of ownerships. They also discussed the relative expense and time involved with completion of the NEPA process for portions of the fence on public lands, and who could pay for necessary environmental review and the costs of materials and construction.

After discussion, there was a general location identified north of the Indian Creek road. This would become the allotment boundary that would separate Carico and Argenta, and would necessitate some modifications to the permits to account for changes in AUM's for each allotment. The final allocations would come through the permit renewal process, but permittees and BLM could reach documented agreement on numbers pending that process. This would resolve the issue of having both Carico and Argenta permitted on the same areas of the Argenta allotment. Barrick and Tomeras agreed to go out together to visit the site, and finalize the proposed location after further consideration of requirements for construction on public and/or private land.

Livestock Management Progress and Limitations

An informal meeting was held one evening with permittees to allow them to review efforts to date and to begin discussions of approaches that can enable completion of successful plans for the 2016 grazing season when the CMG meets in November. Permittees, BLM, and NRST will meet again to further discuss options in advance of the November CMG meeting.

Echoing sentiments expressed during the July meeting, permittees noted they are highly frustrated with this initial season. They have done more riding and herding than in any previous year, with little success to show for it. They have moved livestock out of most use areas as triggers have been met. Some cows are always missed during the first passes through an area and some of the cows continue to return to the favored areas they have used for water; thus, requiring repeat riding. At least one permittee family stated that the intensive riding efforts are causing his cattle to be in declining condition; calves in particular. This is just the opposite of what should be achieved if true stockmanship and low stress livestock movement is done. Given all the frustration, there is a feeling among permittees that they have been put in an impossible situation.

The use of supplement tubs as an adjunct to riding has shown to be successful to some degree. Cattle have quickly adapted to following the supplement to new forage locations, and are using high slopes and ridges that have seldom been used in past years. NRST noted it is important to GPS supplement location and to avoid using the same locations in successive years in order to prevent site damage.

As discussed during the July CMG meeting, low stress herd movement and placement marks a major change in practices of herding and moving stock. It is time intensive, and the large acreage and rugged terrain make it a challenge to implement. Additionally, the Argenta allotment is characterized by very few, extremely small seeps and stream reaches with very few developed water sources. Some developed water exists on the private lands within the checkerboard land ownership pattern, but these developments are inadequate for proper management of degraded riparian conditions.

NRST believes that by far, the most significant limitation to managing livestock on the Argenta Allotment is the absence of suitable (adequate) water sources that allow for larger groups of animals to water efficiently and return to areas away from water to feed. In order for the stockmanship plan to have any reasonable expectation of success, there has to be adequate distribution and capacity of water available for livestock. Currently, when livestock water on BLM, they trail into the small stream sections, most of which are shallow with very few pools, and walk up and downstream searching for suitable watering locations. This creates heavy bank trampling and forage use, and increases the overall time they spend in riparian areas.

The current lack of adequate water makes the protection of riparian areas nearly impossible. Developed water sources combined with strategically placed riparian fencing is the only feasible way of managing this. Thus, NRST believes that long- term comprehensive allotment

management planning that includes an array of management options that incorporates the installation of key water developments and fencing is required. Although the focus of the settlement agreement is on stockmanship (with critical, but minimal, riparian protection fences and water haul sites) and monitoring, addressing the level of commitment to long-term management by all parties is becoming an increasingly inescapable need.

Communication about moves, plans, monitoring for triggers, and other elements directed in the settlement has been less than needed and often unclear. During review of the 2015 season and planning for the 2016 season, the importance of improved and frequent communication with members of the CMG will be stressed. The importance of communication, good faith management, and records of moves, problems, weather, etc. is emphasized in sections 6.8.1 and 6.9.8 of the settlement agreement.

Stockmanship Plan Update

Shortly following the August CMG meeting, permittees/consultants advised NRST on planned livestock moves. These are in general agreement with the rotation outlined in the stockmanship plan and are captured below.

1. TOMERA

As of August 31, the Tomeras are removing approximately 100 head and are leaving the gates open between Hilltop Canyon and the Flats. They will gather onto private land at the Hilltop and Martin Ranches as bigger bunches come down and hit the Flats.

2. MERILUCH

The July CMG report noted that the Powerline well (aka generator solar well) serving Horse Haven and Whirlwind Use Areas would be turned off and the reservoir drained to discourage further use by cattle in the area of the trailing. This did not occur, due to concerns about cows coming over and being stranded without water. The Meriluches have turned on water at the geothermal plant to the east (Whirlwind) and are hauling water to at least one location to the east (Whirlwind/Geyser); both of these were viewed during the August CMG meeting. Riders are periodically pushing cattle off the Powerline well, to the other two water locations (both NOT in Horse Haven) where Shawn is also placing supplement to draw cattle to different locations. As shown in the 2015 stockmanship plan, the Mariluches plan to open up Sansinena again this fall, following "slight" utilization this spring, i.e. 7% on crested wheatgrass and 3% on forage kochia. Some of these cattle would come from any returning to the Powerline Well.

3. FILIPPINI

This will be inserted at a later date. The permittees/consultants will provide an update to the CMG via email.

Cooperative Monitoring Group Function

The CMG continues to make progress in building working relationships and improving the ability to openly and honestly talk through contentious issues. However, improvement is still needed in terms of all members fully supporting the approach, and openly and honestly communicating with the group as a whole, in real time, as issues arise. In a number of instances, topics at issue have not been addressed until the group separates and then a party will address it to the NRST separately. The focus needs to be on working through issues together. NRST is not in a position to serve as an agent for others or make decisions; rather, their role is to provide oversight, advice, recommendations, training, coaching, and facilitation as needed.

Another concern that became further evident during the August meeting is that the compressed time frames in the settlement agreement are exacerbating the stresses of working collaboratively on needed activities when little or no trust exists between parties. The pressures of trying to develop and review new monitoring approaches and sites at the same time as the CMG is trying to implement them during the middle of the field season has resulted in less than perfect attention to communication, coordination, and involvement of CMG members in every activity. New processes, any form of delay on activities, and/or lack of adequate review time have led to misunderstandings, accusations of unfairness, and relationship setbacks.

For example, the Upland Stratification and KMA Selection Protocol that the BLM was compiling, with NRST review/oversight, was not provided to CMG members in advance of the August meeting due to tight timelines, competing priorities, and technical difficulties. Then, a “minor” change was announced to the unviewed document; changing one of the rejection criterion from “within ¼ mile of an existing fence.....” to “within 100 meters.” Although no existing or proposed KMAs on the Argenta allotment are located closer than ¼ mile from an existing fence, several CMG members used this as an example of exclusion of permittees/consultants from the process, and evidence that the NRST and BLM were stacking the deck against them.

Another concern that has come to light is the fact that the BLM has historically not shared information with permittees/consultants. When past data or reports are shared or referenced during CMG meetings, it is often the first time that permittees/consultants are made aware of its existence. This obviously does not provide adequate time for review of background information, which is viewed as suspect given historic poor relationships and distrust. Furthermore, upon review, documentation of BLM rationale and process for locating monitoring sites often does not exist (or cannot be found). A number of these sites have been determined by NRST to be improperly located, which further undermines BLM credibility in the eyes of permittees/consultants.

Lastly, concerns were also raised regarding the lack of coordination during CMG field reviews. To date, the CMG has relied on BLM to manage the logistics, given their experience with the allotment. Largely due to time constraints (although some suspect bad intent) BLM has

developed agendas and tour routes, but they have not been fully explained to or vetted with CMG members well in advance of the meetings. As a result, it has been difficult getting everyone together at the same time at various sites.

Improved field tour logistics and discipline is needed moving forward. A map needs to be provided at the beginning of activities for the week showing routes of travel, where UTV access is preferable to driving pickups, and estimated walking distance/time to sites from nearest vehicle access. Once in the field, the trip lead should always maintain sight distance with following vehicles and wait at road junctions to avoid losing part of the caravan, and needlessly delaying work accomplishment. CMG members should avoid becoming separated for non-CMG reasons without notifying others in order to not hold up the entire crew. Site-specific discussions should not begin until everyone is at the location, to account for differences in walking speeds. That said, participants in recent reviews should be commended for their commitment to the process and willingness to work very long days under tough physical conditions.

A concerted effort will be made in future activities to ensure equal access to process elements for all CMG members – including the development of field tour agendas and routes. At the same time, all CMG members should hold themselves accountable for promptly reviewing all e-mails and documents that are provided, and commenting where needed.

*****Note regarding October CMG meeting*****

It likely will not be feasible to accomplish the planned October end of season monitoring with every CMG member being able to see/participate at each monitoring location. There are too many sites to visit, and day lengths will be much shorter than during the summer. NRST suggests that two teams be formed, splitting the work, and ensuring representation of all interests within the two teams. Comments/ideas on this topic are welcomed, as this is a departure from earlier plans.

Meeting Participants

Name	Representing	Mon. 8/24	Tues. 8/25	Wed. 8/26	Thu. 8/27
Shawn Filippini	Permittee	X	X		X
Angie Filippini	Permittee	X			
Dan Tomera	Permittee	X			X
Pete Tomera	Permittee	X			X
Paul Tomera	Permittee	X	X	X	X
Lynn Tomera	Permittee	X			
Bo Schwiegert	Consultant	X	X	X	X
Jamie Defoe	Consultant	X	X	X	X
Eddyann Filippini	Permittee	X			X
Jack Alexander	Consultant	X		X	X
Martin Paris	Consultant	X		X	X
Jeff White*	Newmont				X
Sam Kastor*	Barrick				X
Gale Ross*	Barrick				X
Dan Gralian*	Newmont				X
Sue Priest	BLM	X			X
Greg Ritson	BLM	X			
Adam Cochran	BLM	X	X	X	X
Michael Vermeys	BLM				X
John Sherves	BLM				X
Steve Leonard	NRST	X	X	X	X
Mark Gonzalez	NRST	X	X	X	X
Steve Smith	NRST	X	X	X	X
Mike Lunn	NRST	X	X	X	X
Laura Van Riper	NRST				X

*Invited participants for non-signatory parties meeting and/or the south boundary fence meeting.