**SBEADMR Adaptive Management Group Meeting Notes**

**J**une 22, 2017

The SBEADMR Adaptive Management Group (AMG) met at 1:00 PM on Thursday, June 22, 2017 in the Black Canyon Room at Friendship Hall in Montrose. Present and representing the various “seats” on the AMG were:

**Designated Seat**  **Regular Member** **Alternate Member**

Delta County absent absent

Gunnison County Jonathan Houck TBD

Hinsdale County absent absent

Montrose County absent Justin Musser

Ouray County absent absent

San Miguel County absent absent

Environmental/Conservation Chris Jauhola Robin Nicholoff

Environmental/Conservation absent Jim Stevenson

Forestry Processor absent TBD

Forestry Logger Mike Ganroth TBD

Community at Large

 East Zone absent TBD

 North Zone Mary Chapman TBD

 West Zone Nancy Fishering Andy Goldman

Water Resources absent TBD

Recreational User Groups absent TBD

Wildlife and Fish Craig Grother Jamie Nogle

Education absent Luke Mattson

Tony Cheng, Colorado Forest Restoration Institute (CFRI) and SBEADMR Science Team; Jody Rist and Austin Shelby, Colorado State Forest Service; Chris Miller, PLP Coordinator and Susan Hansen, Facilitator

**Review of Meeting Agenda**: The agenda was amended to allow Jodi Rist from Colorado State Forest Service (CSFS) to speak briefly on the role of the CSFS in the “good neighbor authority” program with the GMUG and SBEADMR projects. Secondly, Item No. 4, Science Team Report, and Item No. 5, Monitoring Subcommittee were moved up in the agenda to accommodate Jason Sibold’s schedule.

**Colorado State Forest Service: Good Neighbor Authority- Jodi Rist, Montrose District Manager**

Jodi Rist, Colorado State Forest Service (CSFS) District Manager, Montrose office, introduced herself and Austin Shelby, Asst. District Manager, Montrose office. Austin is the contact for the “good neighbor authority” for the Montrose district office. The CSFS works with private land owners on municipal and county lands in the areas of forest management, habitat improvement, and fire mitigation.

Under the “good neighbor authority” Austin works directly on Forest Service (FS) projects that the CSFS is invited to administer or have a part in some form or fashion as determined by mutual agreement. In terms of SBEADMR projects, CSFS recently helped set up the Lone Cone salvage sale (San Miguel County). Clay noted that the GMUG currently has three “good neighbor authority” projects in place – one in each of the three timber zones. Within each of the vegetation management zones, close coordination between GMUG staff and Colorado State Forestry is occurring. Monthly calls are also occurring with the State Office and the GMUG Supervisors Office.

**Item No. 1: Canada Lynx Habitat Project Update: Clay Speas and Jason Sibold**

Clay reported that he and Jason had been in conversations recently with representatives of WildEarth Guardians (WEG) regarding its claim that the GMUG was not using current data/science for determining lynx habitat. WEG claimed that the data the GMUG used to select high priority area was not current given the changing nature of the forest as a result of recent spruce beetle infestations. In addition, Clay and Jason have been in consultation with two research scientists, John Squires, a lynx biologist, and Jake Ivan, SBEADMR Science Team, regarding current research and monitoring/modelling efforts to address concerns about the impact of spruce beetle infestations on lynx habitat. Squires and Ivan are currently doing research with collared lynx on the Rio Grande NF (RGNF) to learn where the lynx are on the forest, how this relates to forest change and what the most important attributes in a spruce fir forest are for the Canada lynx. As a result of these conversations and negotiations on how to best leverage ongoing research on the RGNF with work the GMUG is doing to address the impact of a changing landscape on lynx habitat , WEG agreed not to pursue litigation against the SBEADMR Record of Decision (ROD) at this time.

Currently, research and/or monitoring efforts on the RGNF and GMUG related to lynx habitat include:

* Change Detection: GMUG is collecting data based on photo interpretive work conducted two years ago to begin to document how the forest has changed as a result of spruce beetle kill, i.e. percentage of mortality within a stand of trees. Three primary vegetation “strata” will be targeted as part of the change detection process – spruce-fir, spruce-fir-aspen and mixed conifer. Data for lodgepole pine were collected in previous years.
* Dense Horizontal Cover (DHC): GMUG has joined a study of DHC led by John Squires on the RGNF to get an understanding of how lynx are using the beetle kill landscape. There is a tight relationship between DHC and quality lynx habitat. In the DHC areas there is evidence of what lynx eat, i.e. snowshoe hare. GMUG has placed 2,000 plots on the GMUG side to add to the database. Approximately 15 percent of the 2,000 plots collected in 2017 for change detection will also include DHC measurements (300 plots). These data will be used to supplement other DHC plots established o the forest in recent years.

Jason outlined the plan they have developed to “piggyback” off what Squires and Ivan are doing on the RGNF. Rather than duplicating the work that Squires and Ivan are doing, given that it is a multi-year effort to capture, collar and track animals, it was deemed more efficient and expedient to “piggyback” off the work that they are doing on the RGNF. The plan proposes to leverage the findings from the RGNF studies and the change detection work on the GMUG to develop a model that can be applied to `the GMUG on a landscape scale based on the statistical relationships from the plots. The plan calls for using a lot of existing guidelines for determining high quality lynx habitat as well. A final step in the process will be to look for larger blocks of landscape where there are larger areas of high quality sites clustered together to guide management response at a scale that is reasonable. This could be another layer incorporated in the GIS optimization model that was developed to help identify priority treatment areas for SBEADMR.

**October 2017 update:** All of the 2,000 quick plots have been installed in the three targeted strata. The 300 DHC plots will be completed by the end of October.

Questions/Comments

*Nancy Fishering*: Q: Where does funding come from for the extra effort?

*Clay Speas response*: Funding for change detection and DHC plots came through a separate funding stream in the Forest Service to complete the project. The change detection piece of the project was initiated in 2015 when photo interpretation was completed by the Remote Science Application Center in Salt Lake City, Utah.

*Craig Grother*: Q: When lynx were originally listed as “threatened” in 2009, lynx habitat was modelled across all forests in Colorado and included aspen, lodgepole pine, spruce, etc. Has some of that habitat been eliminated?

*Clay Speas response*: As a result of a joint effort with the GMUG, RGNF and San Juan NF (SJNF) in 2010 to update the lynx habitats on the forests based upon better knowledge of lynx use of habitat in Colorado. This process did eliminate approximately 200,000 acres of lynx habitat primarily in the dry lodgepole vegetation type and isolated pieces of habitat with limited utility for lynx conservation. Fish and Wildlife Service participated in this effort.

*Robin Nicholoff*: A: Are there maps available?

*Clay Speas response*: Only photo interpretive data. Plots that have been established this summer will tie “on the ground plot data” to the photo interpretive data. Hope to have maps by winter.

**Item No. 4: Science Team Report/Relationship between Science Team and AMG - Jason Sibold**

A. Science Team Update

* “The Effects of Dought on Engelmann Spruce Regeneration in Southwest Colorado” (Exhibit A). Jason distributed copies of a graduate student document addressing climatic conditions under which spruce degenerates. The study found that over time in the past spruce regeneration on the GMUG has not be severely impacted by higher temperatures or drought conditions. It appears that the window for regeneration tends to be broader than hypothesized. However, there may be unforeseen conditions under which regeneration may not occur.
* Additional funding for SBEADMR Science Team. Clay reported that the GMUG had secured an additional $50,000 to continue to support the Science Team. Clay reiterated his expectation that the AMG will help identify or shape what needs to be monitored and where monitoring should occur. He believes this should be stakeholder driven in terms of questions that the members of the AMG might have about what is happening, are the treatments effective and what are we learning as we go. Initial monitoring focus is on regeneration so he looking for input from AMG.
* Research papers. Jason and Mike are working on papers for publication based on information presented at the January annual SBEADMR meeting for peer review literature.
* Temperature sensors. Science Team has put out more temperature sensors that record temperatures every 2 hours for up to 3 to 4 years. Purpose of sensors is to understand how spruce beetle regeneration reacts to temperature changes. Some sensors are placed at soil level to learn how temperatures play out at ground/soil level for seedlings and saplings.
* Seed traps. Seed collection continues from traps placed in beetle infested areas of landscape to see how much seed is actually produced and to quantify how far the seed can travel to reseed itself. Seeds are collected from mesh traps early in the spring. This effort should inform the potential for the landscape to reseed itself given the changing landscape.
* Revisiting “tagged” trees. The Science Team has been revisiting trees that were tagged two summers ago in beetle infested areas to monitor whether seedlings are surviving or dying off. Question is what happens to seedlings that were holding onto understory and now have been exposed due to over-story mortality in beetle infested areas.
* Snowshoe hare pellet counts. The Science Team continues to advance the study of lynx habitat by linking some of the monitoring plot work completed with pellet counts to better understand how spruce beetle infestation, topography and weather influence habitat for snowshoe hares – one of the primary diets for Canada lynx in Colorado.
* Monitoring plots established in salvage treatment areas. Plots were established in salvage sites last summer to monitor what impacts salvage has on seedlings on these sites. Thus far haven’t seen any impacts on seedlings and saplings but need to monitor how they are going to react to opening the canopy and to increased solar radiation. Hope to see no impacts. Luke Mattson, Western State University (WSU) graduate student and FS seasonal employee, interjected that he is currently engaged in an understory plant recovery research project with Jonathan Coop (WSU) on the LaGarita salvage site in Gunnison County.

B. Clarifying Relationship/Expectations between Science Team and AMG

* Jason proposed that a more efficient way to communicate between the Science Team and AMG may be to establish a set day and time every three or four months for a conference call between the Science Team and interested AMG members rather than communicating individually. These calls could provide a means of checking in regularly and reporting on things that may have come up since the last meeting or communication.
* Tony noted that the proposed Operating Manual leaves out or is silent on the role and relationship of the Science Team to the AMG. It was noted that the MOU itself includes the Forest Service and Science Team as “invited members” on the team to serve in a resource capacity to the AMG. The Forest Service and Science Team were not included as “voting” members of the AMG due to concerns of potential FACA violation.
* Tony emphasized the importance of developing a framework for what kinds of monitoring questions are appropriate to ask and at what scale. Such a framework would be helpful for annual meeting reports.
* Tony also noted that in learning how to do adaptive management, it is important in the early stages to clarify expectations of who, when and how.

Comments:

*Craig Grother*: Noted that the Science Team sharing its learnings and observations with the AMG is important in order for the AMG to fulfill its role of providing meaningful input/recommendations to the GMUG in the adaptive management process.

*Nancy Fishering*: Supported Jason’s suggestion for quarterly calls. She pointed out the desire and need for a mechanism to report and record what is learned from the studies/research and monitoring that is presented at the annual meeting, for instance, i.e. “final takeaways” and/or recommended adaptations. She noted the calls would provide opportunity to learn about emerging issues, new opportunities for research and monitoring, additional funding appropriations, etc. The calls would enable the AMG to track what the GMUG and Science Team are learning and doing.

*Chris Jauhola*: Noted that reports of ongoing research are presented during meetings, but a list of what research is being done, where it is in the timeline, the scale is lacking.

*Nancy Fishering*: Suggested that a useful exercise for AMG members to familiarize themselves with a project or issue would be to participate in a FS field trip. When FS goes out there are usually a lot of ‘ologists’ along to raise questions and provide different scientific perspectives on an issue.

 **Item No 5 – Appointment of Monitoring Subcommittee**

The previous discussion on Item No. 4, provided a good segue into consideration of establishing a monitoring subcommittee. There was consensus that such a subcommittee should be established to develop a monitoring framework for the following:

* Project specific implementation/monitoring (outcomes)
* The adaptive management approach (public participation)
* Socio/economic impacts of SBEADMR projects

The following AMG members volunteered to serve on the subcommittee: Mary Chapman, Nancy Fishering, Chris Jauhola, Hilary Cooper, Tony Cheng and Clay Speas. A notice will be sent out to all AMG members advising them of the establishment of this subcommittee and inviting them to participate if interested. Chris Miller, PLP Coordinator, will serve as the “point of contact” between this subcommittee and AMG membership.

This subcommittee will follow up on Jason’s and Tony’s comments/suggestions as noted above in addition to developing a more organized framework for monitoring. The subcommittee will report back to the full AMG at its next meeting.

**Item No. 2: Update on Status of SBEADMR Implementation** **– Clay Speas**

* SBEADMR Treatments Sold/Implemented to Date. Clay distributed and reviewed a spreadsheet (Exhibit B) of SBEADMR treatments sold and the current status of implementation/treatment.
* Nutras salvage sale is the only treatment that has started to date. Contractor has noted that wood in Nutras sale in deteriorating/”checking” faster than anticipated. If this pattern continues in other sites, it may lead to “ramping up” treatments per year but not increasing the total salvage volume as stipulated in the ROD.
* The Lone Cone sale is expected to start this summer but is on hold pending resolution of a road use permit issue with San Miguel County on the Fall Creek Road. The contractor claims the conditions imposed on weight, number of loads, work days and time of travel are too restrictive. Discussion followed on the socio-economic implications of such imposed restrictions, concern for impacts in “resort areas” and the importance of early community outreach when sales begin.
* All salvage sales awarded to date are spruce-fir sales. No treatments currently scheduled in aspen due to the lack of a market for aspen, i.e. plant in Durango burned down. There may be an opportunity for some stewardship contracting for aspen in the future.
* EIS Adaptive Management “Triggers”: Clay distributed and reviewed a spreadsheet (Exhibit C – page 1 of Southern Rockies Lynx Amendment VEG S2 Cumulative Tracking) for lynx habitat as an example of how the GMUG has established “trigger points” to monitor how it is doing in terms of exceeding or not exceeding prescribed thresholds (percentages) for converting suitable lynx habitat to unsuitable lynx habitat. For example, in Exhibit C if where threshold is 15%, the GMUG has set 10% as the trigger point for when it needs to slow down and look at how it’s managing treatment in order not to exceed the 15% limit.

**Item No. 3: FS Management Team Review – Clay Speas**

Clay reported that the GMUG management team had met in July. Most of the issues pertained to administrative minutia, i.e. cleaning up the project checklists, signature requirements, etc. It was the consensus of those present that the AMG is more interested in substantive issues – what we’re learning and what not learning. Anticipate that after this first year more substantive issues/discussions will emerge from the management team meetings to be reported to the AMG.

**Item No. 6: Status of August Field Trips**

August field trips to visit proposed 2018 treatment sites were scheduled as follows:

Wednesday, August 9th: East Zone – Gunnison area

Wednesday, August 16th: West Zone: High Mesa area – ridge between Big and Little Cimarron

Thursday, August 24th – North Zone: Overland/Hubbard Park area

Clay is working with timber districts on the agenda and maps for the field trips. Chris Miller will work with Clay to get information packets out prior to each field trip. Questions or comments about the agenda or trips, should be fielded through Chris Miller and she will refer to Clay or appropriate person.

Clay noted that there would be a 30 day public comment period on the proposed 2018 treatments. The field trips are scheduled to be held in the middle of the comment period. There will be a comment form on the GMUG website for the public to submit comments on the proposed treatment sites and design.

The following comments were noted in respond to question of potential concerns that might be raised on field trips:

*Craig Grother*: West Zone: pointed out that High Mesa is a super popular fall hunting area and public access has been restricted even though areas on High Mesa were released from the roadless designation under R2 review for roadless quality. He thought there may be concerns if access is too restricted. Also noted that there is a subdivision road in Johnson Park area that may become an issue.

*Robin Nicholoff*: North Zone: suggested that the field trip include the recent Hubbard timber sale and another one close to the Overland Reservoir in terms of looking at regeneration.

 **Item No. 7: AMG Housekeeping Issues**

A. Memorandum of Understanding (MOU) for AMG Members

 A revised draft of the MOU for the AMG was distributed and considered for adoption. There was discussion as to whether signatures of both the regular appointees for the designated “seats” and alternate members should be required. It was decided that there should be signature lines for the individuals appointed to the regular seats only and not the alternate members. There was also discussion on the potential conflict of interest if a Forest Service employee, serving as an alternate, was a signatory to the MOU.

After discussion, M/S/P Grother/Fishering. Approve the MOU as submitted. Unanimous “thumbs up” vote.

B. AMG Operations Manual

A revised draft of the AMG Operations Manual was also distributed and reviewed. The Operations Manual will be incorporated by reference in the MOU. Susan Hansen shared additional revisions that were suggested as follows:

* Page 2, Objectives. Add another objective to read: “Review ongoing monitoring to make recommendations for adaptive management for future SBEADMR projects”. Amendment accepted.
* Page 2, Guiding Principles. Amend the sixth bullet to read: “Projects will focus on supporting healthy forest ecosystem…..” rather than “enhancing forest ecosystems”. Amendment accepted.
* Page 3, a) Membership. Amend the 2nd sentence to read: “The members will be self-selected by stakeholder category except for the community at-large representatives who will be appointed by their respective County Commissioners.” Amendment accepted
* Page 6, B) Inability to Reach Consensus: Move the 4th bullet (regarding procedural protocol if input from AMG is not chosen by FS) under B) Inability to Reach Consensus to A) Reaching Consensus and insert it as a separate statement at the end of that section rather than as a bullet point. Amendment accepted
* Page 6, External Communication: Add the following language to the 5th bullet point; “public outreach…relating to SBEADMR implementation”…remains with the GMUG or its designee. Amendment accepted

In reviewing the individuals appointed as community at-large members it was noted that both Delta County and Gunnison/Hinsdale counties need to designate an alternate for the their respective timber zones. It was further noted that the Operations Manual is a “living document” and can be amended.

For instance, once a more formalized mechanism for communication between the Science Team and AMG and a monitoring framework are developed by the monitoring subcommittee that can be incorporated in the AMG Operating Manual.

There being no further discussion, M/S/P Fishering/Grother. Approve the Operations Manual as amended. Unanimous by “thumbs up” vote.

C. Elect AMG Chair and Co-Chair. The group discussed whether they wanted to elect a chair and co-chair of the AMG. The consensus was that having a neutral facilitator was adequate given the anticipated number of AMG meetings (3-4 annually). The role of the facilitator would be to keep the group task oriented.

D. Communication Going Forward. Chris Miller reported that she had an email serve list of 160 names from the beginning of the SBEADMR Working Group to present. She asked for clarification on the expectation of communicating with all 160 or just AMG members going forward. She proposed that only AMG members would get formal meeting packets. She will send a courtesy notice to the list of 160 advising them that all future AMG meeting notices and AMG documents related to SBEADMR would be posted on the PLP SBEADMR website. She would provide a link to both the PLP website and the GMUG’s SBEADMR site.

**Item No. 8: Opportunity for Public Comment**

### Gunnison Public Lands Initiative (GPLI): Jonathan Houck provided an overview of the consensus-based process to craft a proposal to recommend key public lands in Gunnison County be permanently protected as wilderness or special wilderness areas. Link: ([www.gunnisonpubliclands.org](http://www.gunnisonpubliclands.org))

**Item No. 9: Schedule Next Meeting/Identify Items for the Agenda**

No date for the next AMG meeting was scheduled at this time. It was assumed another meeting would be scheduled in the fall prior to the annual off-season workshop with the Science Team.

Meeting was adjourned at 3:05 pm

Notes compiled by Susan Hansen, Facilitator