



Notes from the June 22nd, 2012 SNAMP Project Update Meeting

The Wildfire Training Center, 3237 Peacekeeper Way, McClellan, CA

In attendance:

Jared Aldern – Prescott College

Heidi Ballard – UC Davis

John Battles – UC Berkeley

Jerry Bird – USFS

Steve Brink – California Forestry Association

Sue Britting – Sierra Forest Legacy

John Buckley – CSERC

Mike Chapel – USFS, Region 5

Chris Fischer – USFS, American River District

Patricia Flebbe – USFS, Region 5

Frank Gehrke – CA Dept. of Water Resources

Julie Griffith Flatter – Sierra Nevada Cons.

Barnie Gyant – USFS, Region 5

Max Hampton - USFS

Peter Hopkinson – UC Berkeley

Lynn Huntsinger – UC Berkeley

Kim Ingram – UC Cooperative Extension

Jerry Jensen – AFRC SAF

Trinidad Juarez – USFS, Region 5

Maggi Kelly – UC Berkeley

Susie Kocher – UC Cooperative Extension

Shufei Lei – UC Berkeley

San Li – USFS

Anne Lombardo – UC Cooperative Extension

Lynn Lorenson – Unaffiliated

Diane Macfarlane - USFS

Dave Martin – USFS, Bass Lake District

Kim Rodrigues – UC Cooperative Extension

Richard Rypinski - Unaffiliated

Brett Storey – Placer County

Adriana Sulak – UC Berkeley

Rick Sweitzer – UC Berkeley

Craig Thomas – Sierra Forest Legacy

Mandy Vance – Sierra Nevada Conservancy

Don Yasuda – USFS, Region 5

By webinar:

Frank Stewart, California Fire Safe Council

This meeting was hosted by the SNAMP Public Participation Team to:

- update stakeholders on SNAMP's funding reductions and how they affect work plans.
- discuss how delay of fuel treatments has affected the team's work plans and deliverables.
- seek input on of final SNAMP report to be the most useful product for users

The agenda and meeting documents can be found online at:

<http://snamp.cnr.berkeley.edu/events/june-22-2012-snamp-update-meeting>

The power point presentations used at this meeting can be found at

<http://snamp.cnr.berkeley.edu/events/june-22-2012-snamp-update-meeting>

1. Welcome and Overview: Kim Rodrigues, from the SNAMP Public Participation Team, welcomed the group to the meeting and shared some basic ground rules to ensure success.

II. Implementation Updates from Forest Service District Rangers:

Last Chance project: Chris Fischer, District Ranger of the American River Ranger District, provided the following information on work completed in the studied fuel treatment project.

Thinned – 1086 acres	Underburn – 386 acres
Small tree removal – 1045 acres	Prescribed fire – 200
Mechanical piling – 305 acres	Bear grass – 2 acres
Hand piling – 132 acres	Cable thinning – to begin summer 201

Chris said 53 acres have been removed from the project for a variety of reasons, including steepness of slopes.

Sugar Pine project: Dave Martin, District Ranger of the Bass Lake Ranger District, said that the Sugar Pine fuel treatment is about 15% complete. The goal is to finish it by Oct 30th 2012, as that is the termination date for the contract. Pile burning will be handled as part of the biomass stewardship contract. In general, just having a biomass contract leaves less pile burning to be done in the end.

Question: *Will the Forest Service burn masticated areas at a later date?*

Answer: *That depends, not if the land is too steep.*

Question: *Will all the burning be done within the SNAMP's timeframe? Or is there some time disjunct between the end of the project and the actual completion of the project?*

Answer: *All the underburning is not expected to be done before SNAMP ends.*

Question: *Can you please define project completion?*

Answer: *Projects will be mostly complete including all thinning and mastication. Some burning may remain.*

Question: *How do you define "small trees"?*

Answer: *These have been defined as those 9.9 inches in diameter at breast height and under.*

Question: *How representative is the SNAMP project if few trees over 20" dbh are marked for removal in the Sugar Pine project? This is not the norm farther north in the Stanislaus where 30" dbh is more the norm.*

Answer: *Dave Martin said the mark was a special prescription in the south designed for the fisher.*

Question: *Can the 53 acre change to the Last Chance project be mapped and shared with stakeholders?*

Answer: *Yes*

Action item: *Chris Fischer will provide a map of the acres removed for the SNAMP website.*

III. PPT Update:

Susie Kocher from the SNAMP Public Participation team shared the team's logic model designed to help determine whether public involvement goals are being reached. The team's evaluation plan was developed to make sure all data is tracked, when and by whom. Team goals are to track evidence of adaptive management including use of SNAMP pre-project data by the Forest Service District offices. Another effort will track citations of SNAMP publications in project environmental documents.

Question: *[With regard to the outreach evaluation framework] Are your evaluations all self-reporting?*

Answer: *Yes, all evaluation forms ask people to report on what they have learned. We have not used objective assessments, such as pre- and post-tests. The qualitative interviews were done at two different times however, so they self-report changes in attitudes and other information at two times.*

Dr. Maggi Kelly, UC Berkeley, who manages the SNAMP website, presented findings from a recently published a paper in the Journal of Environmental Management titled "*Expanding the table – the web as a tool for participatory adaptive management in California forests*". She and her co-authors used content and usage analysis, questions from the email survey and an analysis of the discussion board to reflect on how the website has helped to facilitate participation in SNAMP.

Most survey respondents (72%) in the email survey had visited the website, and said it helped inform, increase information transparency, was easy to use, and was a good source of information. She found that the quarterly "web updates" have been important. The most visited landing pages besides the home page were Fisher, Features, Documents, Photos, About and Events. The discussion board had low use, as only 8% of the survey respondents had posted comments to the website; many concentrated on wildlife issues.

She concluded that public participation is most effective when a combination of participatory tools are used including web, public meetings, active outreach, and open channels of communication. She suggests that those hoping to use the web to facilitate adaptive management emphasize and articulate the role of the website; assess and understand available resources and limitations; keep participants actively involved in the website, and incorporate dynamism in the site.

Question: *Do you have any notion of demographics in regards to website use, with particular interest in the next generation?*

Answer: *No, Google analytics reports location and where visitors go, but not demographics. It is a good point, as different communities use the web differently. This could use follow up.*

Dr. Lynn Hunsinger from UC Berkeley shared findings from Journal of Forestry paper she wrote with Dr. Adriana Sulak titled “*Perceptions of forest health among stakeholders in an adaptive management project in the Sierra Nevada of California*”. They found that there is more possibility for convergence between forest management positions because of considerable overlap among the interviewees - none advocated the complete hands-off approach. There is distrust of term forest health and those that see high intensity fires as beneficial have little motivation to participate in a program aimed at reducing high intensity fires. There is some evidence for development of a hybrid culture with shared meanings, norms, and expectations about the process of working together. Criterion for success includes natural processes and biodiversity which are difficult-to-measure concepts. However, the flexibility in success criteria could leave more room for compromise on design of forest treatments.

IV. SNAMP funding and timeline update:

Dr. John Battles, SNAMP’s Lead Principal Investigator, discussed the general research design of SNAMP, the changes due mostly to treatment delays and funding changes, and revisions made accordingly by individual teams.

The original goal of SNAMP research was to go beyond the forest “stand” level to identify the effects of forest fuels treatment projects on fire, forest health, water, and wildlife in an integrated way at a fireshed scale. The two study sites were chosen because they were typical ecosystems for the Sierra, had upcoming projects and willing District Rangers. The UC Science Team purposefully was not involved in the planning of the fuel treatments in order to study as close to typical Forest Service projects as possible.

All the ecological effects being researched in SNAMP can be modeled, but models are only as good as their data, so researchers wanted to collect the best data possible. The goal is to produce science at a management relevant scale - the fireshed. Scale has been a constant challenge. The water team works at 1 km² and the fisher team works at 5 to 10 km².

John reviewed SNAMP’s original “dream timeline” verses the one in place now (“SNAMP 2014”), five years later (<http://snamp.cnr.berkeley.edu/documents/459/>). Timeline changes will make it a challenge to answer the original research question on the effects of SPLATs. The original BACI (Before-After-Control-Impact) design has already lost a year of ecosystem

recovery and now there will be only a year of post treatment data if the treatments are completed in 2012.

This means that there will be a reduction in the intensity of research efforts (post-treatment forest health data will not be collected for example) and the limitations imposed by the shorter post-treatment period will have to be accepted and adapted to. For the California spotted owl team, a new retrospective analysis approach will be used to identify the effects of treatments on owls. This will involve reconstructing the vegetation history in the SNAMP and Eldorado Study area where population data goes back for decades. Though the team feels they will be able to answer the effects question, this inferential approach is one-step removed from the originally envisioned BACI design.

Overall, the change in timeline and study design reduces scientists' ability to detect subtle changes, introduces more uncertainty in results and limits the scope of information provided. However, John still believes that SNAMP 2014 is a scientifically valid management study and that it is unique because it integrates the response of multiple resources to novel landscape-level treatments; conducts the investigation at the management-relevant scale (fireshed); and actively engages the public in the process.

John Battles asked the group assembled if it was worth continuing with the SNAMP project if the original scope was changed. Most in the group said yes, but there were frustrations voiced by stakeholders about how funding changes, and so curtailment of the project timeline, were made and communicated. Some said that the commitments made by the Forest Service within the Sierra Nevada Framework decision required funding of the project with the timeline as originally envisioned, including three years post-project data collection in order to produce a scientifically valid study. They said adjustments to the research timeline, particularly in regards to the fisher, will be necessary to avoid defaulting on a larger commitment made in the Framework. Wildlife is a key issue and SNAMP was a concerted effort to step out of the litigation cycle and look for better answers through good science. Stakeholders said that trust building is really based on performance at meeting these kinds of commitments.

John Battles reiterated that the UC Science Team is moving forward with the project with an end date of December 2014 in mind. That doesn't necessarily mean that the individual projects, such as the Pacific fisher research, could not continue past 2014, but rather that the integrated SNAMP project with its specific protocols and processes will end.

Dr. Rick Sweitzer from the SNAMP fisher team said that he has assembled estimates of the funding needed to continue the fisher research beyond December 2014 to allow determination of the effects of the fuel treatments on the local population for another two years. Presently Rick Sweitzer estimates he will only have six months of post-treatment data, considering the time it

will take to remove the collars and close down the research. He also pointed out that even if fuel treatment effects are more difficult to determine he has obtained very good scientifically valid fisher data not available before. Fisher habitat associations, even if they are not recommendations, will be critical information, have utility and will need to be shared with land managers.

The fisher team hopes to involve the other fisher research groups in the next fisher IT meeting: Hoopa, Sierra Pacific Industries, and the Kings River Experimental Watershed. Rick Sweitzer and Barnie Gyant of the Forest Service Regional Office will be sharing information on the costs of carrying fisher research forward past the December 2014 timeline. The Sierra Nevada Conservancy is also working to host a meeting to address on-going fisher research needs.

V. Forms of SNAMP Final Report:

Peter Hopkinson, from the SNAMP Project Integration Team, explored the potential contents of a final SNAMP report asking for stakeholder feedback. The final report is due December 2014.

The working title of the report is “Learning adaptive management of Sierra Nevada forests: An integrated assessment”. The current framework has three sections proposed to be structured as follows: the first section would be an introduction and framework, the second would be management recommendations – both integrated and resource specific (including dissenting recommendations if necessary) – and the third would be executive summaries of resource-specific scientific findings. Full reports from each team would be in an appendix as would be a list of all SNAMP publications.

Format: Attendees suggested that the report include an executive summary that summarizes the executive summaries of each section, an abstract, an index and perhaps a glossary of terms, acronyms. Having the report available in sections/modules would allow it to be used in pieces. Executive summaries should be as long as necessary to convey the information.

Content: Participants said it was important to share uncertainties early in the report, perhaps in a matrix describing the limitations of the science. Recommendations must be closely linked to the scientific findings that support them. Recommendations should have references that cite the findings, along with the page number of the data that supports it. Information that has implications for management but may not lead to a recommendation should also be shared. The management recommendations chapter should include recommendations about the adaptive management process.

Some stakeholders were concerned that the compressed timeline will lead to incomplete information and could mean no treatment effects were found. These findings could be misused because University of California opinion will carry considerable weight. Therefore, the UC Science Team will need to be as honest about its findings.

Process: Details of the draft report should be shared in “managers workshops” starting in September 2014, at a Forest Service office with District Rangers. Some participants said it is important to include a wider audience including private forestland managers and conservation organizations.

The UCST hopes to use a publication type that allows the information the greatest exposure and has the fewest limits to access. Possibilities beyond the required final report include a General Technical Reports (GTR) (which can be archived and distributed by the Forest Service research stations), a special journal edition or a book. Some attendees said a book would be a distraction to disseminating the information to forest managers for adaptive management.

Timeline: The current timeline involves producing part one of the report (introduction and framework) in 2012. The UC Science Team will make final decisions on common metrics for trade off analyses and integration in September 2013. Teams will analyze data and write individual team reports between January and June 2014. PPT will host integration team meetings with each team during this period to allow for public input into the individual team reports. The discussion board on the website may also play an increasing important role in this final stage of SNAMP.

Draft reports will be due by July 1st of 2014, and then sent to peer reviewers and returned by August 15th 2014. Revisions will be due back (along with executive summaries) by the beginning of September. Integrated management recommendations will be developed at the all scientists meeting in mid-September 2014. The final draft report will be written by October 7th 2014 and sent to the public for review before the annual meeting at the end of the month. The final report would be finalized by mid-November 2014 to allow for sharing with the MOUP and the communities of Oakhurst and Foresthill. The UC Cooperative Extension team will continue through April 1st 2015 and will use that extra time to meet with local stakeholder groups to report back on the project outcome.

VII. PPT and Adaptive Management: Closing the loop

Dr. Kim Rodrigues, a Public Participation Team Principal Investigator, said that an adaptive management project can be considered successful if stakeholders are involved and committed to the process, progress is made toward achieving management objectives, results from monitoring

and assessment are used to adjust management decisions and implementation is consistent with applicable laws.

She suggested continuing the adaptive management process after the project is over by holding Integration Team type meetings at the regional, forest and district level. The purpose would be to share what has been learned, to assess how the agency has adapted to new information and /or conditions and to better structure the decision making process. At the regional level, this could involve an annual meeting with all parties to describe what was learned through SNAMP about the Framework, what is being monitored, measured, and what is being learned. At the forest level it could involve a bi-annual meeting with all parties to describe the five year plan of work, annual SOPA, and/or forest plans. At the district level it could be a quarterly meeting with all parties on specific high profile projects.

Development of the capacity to facilitate public involvement into this process is critical including skills at structural facilitation with a structured process, ground rules and supportive conversation to make collaborative adaptive management successful. Kim suggested developing a series of capacity building workshops for US Forest Service partners so that they can facilitate public participation in the adaptive management process after SNAMP is over. There was positive feedback about this suggestion.

VIII. Wrap up: next steps:

Kim Rodrigues led the group in an articulation of next steps. Hosting a Fisher Integration Team meeting is a priority as well as identifying the costs of fisher research at the southern SNAMP site after December 2014. Additional SNAMP public and Integration Team meetings coming up include the Water Integration Team meeting on July 31, 2012, Owl Integration Team meeting on August 23, 2012 and the Annual Meeting on Oct. 23, 2012.

***Action item:** Rick Sweitzer will provide an estimate of money needed to continue the fisher research beyond SNAMP to be shared.*

***Action item:** Rick Sweitzer, John Battles and Kim Rodrigues will start discussions about a new date for the Fisher IT meeting.*

Kim asked the group what worked well about the meeting. They said:

- Information provided ahead of time
- The working lunch
- The meeting was well facilitated
- The environment allowed frank suggestions
- Open environment with agency and public getting to speak openly

She also asked what could have been better:

- More caffeine/sugar/macaroons!

Evaluation forms were filled out by 26 of the total 36 attendees. The respondents reflected that participants felt the meeting goals had been met, there was constructive discussion, and a lot was learned.

