SNAMP 2013 2nd Quarter MOU Partners Meeting

Tuesday, July 30, 2013, 10:00 am - 2:30 pm, McClellan, CA

Notes

In attendance:

John Battles – UC Berkeley	Maggi Kelly – UC Berkeley
Martha Conklin – UC Merced	Susie Kocher – UC Cooperative Extension
Chris Fischer – USFS State & Private Forestry	Shufei Lei – UC Berkeley
Todd Ferrara – CA Resources Agency (Phone)	Anne Lombardo – UC Cooperative Extension
Patricia Flebbe – USFS Region 5	Victor Lyons – USFS Tahoe NF (phone)
Cay Goode – US Fish and Wildlife Service	Pat Manley – USFS Pacific SW Research
Qinghua Guo – UC Merced	Chris Nota – USFS Region 5
Mary Beth Hennessy – USFS Region 5	Kim Rodrigues - UC Cooperative Extension
Arthur Hinojosa – CA DWR	Scott Stephens – UC Berkeley
Peter Hopkinson – UC Berkeley	Deb Whitman – USFS Region 5
Lynn Huntsinger – UC Berkeley	

I. Welcome and overview for the day: Staff from the Wildland Fire Training Center gave a safety briefing and also an introduction to their new 'One Less Spark – One Less Wildfire' campaign. Kim Rodrigues gave an overview of meeting ground rules and the roles to be played by the facilitator, participants and meeting leaders – John Battles and Patricia Flebbe.

II. Meeting goals and recap: John Battles and Patricia Flebbe reviewed all the activity that has occurred since the last meeting in April. That meeting produced a long list of things to do, and there was a lot of uncertainty about many aspects of the project. The good news is that much of this uncertainty has been resolved. The partners committed to providing 85% of the budget provided in Year 7 for analysis and report writing in Year 8. The USFS has provided funding as well as the Department of Water Resources which provided $165,000 towards the Water Team's work. The funding to refly LiDAR on the Tahoe National Forest was carved out from a larger LiIDAR buy to cover the Tahoe National Forest. UC Berkeley has developed the larger contract with NCALM in order to get the SNAMP Last Chance LiDAR products. And the new

arrangements for the fisher team are nearly complete. Thanks to all the people who have contributed to accomplishing these tasks.

III. The MOUP decision-making process

Patricia Flebbe brought this issue to the group to develop and formalize the MOU partners' group decision-making processes. Consensus is the current assumption. How is consensus defined for MOUP purposes? Is there an alternative process in place if consensus is not achievable? Patricia said that since each agency has a mission, it may not always be possible to reach consensus. She offered the following decision-making process for the MOUP to consider:
> *First, aim to achieve consensus (defined as agreement that all parties fully support). If consensus cannot be achieved, then aim for an agreement/decision that all parties can live with. And if that is not possible, then explain what could not be agreed to and why.*

Kim Rodrigues added that it is important to think about what kind of decisions have to be made and who has decision-making authority. To help with the discussion, she handed out a decisions options chart.

MOUP members asked about the history of the decision-making process in the past. John explained that the agencies originally met and signed the MOU before the UCST was involved in the project. They made many of the early decisions about the workplan and funding before then.

Cay Goode added that when the MOU was being developed, neither the USF&WS nor CAF&G were invited to participate. It was mostly resource agencies developing the MOU related to a concern about litigation; the state was going to sue the USFS. Other regulatory agencies were asked to join the MOUP near the end of the process. The regulatory agencies did have a lot of input into what studies would go forward about wildlife, e.g., the owl and fisher rather than general wildlife, because it would be species of concern that would be a problem as it relates to fuel reduction.

Cay feels that the USF&WS has not really been an equal partner in the group because they do not contribute much funding to the project. So their opinions do not carry as much weight.

Deb Whitman reiterated that the USFS has committed and will continue to commit resources to SNAMP. Unfortunately, they are not able to make advance decisions. They must decide how much support to give SNAMP based on annual budgets.

John Battles pointed out that though the USFS has initiated budget cuts, they have never dictated how those would be apportioned to the UCST, which has always decided to take funding reductions equally among SNAMP teams. This has been true except for the Water team because

it was state-funded and those funds were delayed, so they got a disproportionate cut. But other than that, all cuts have been proportional.

Also, though the USFS has funded most of the data collection, the data are also being shared. The large LiDAR acquisition to be flow over the Tahoe NF will be paid for by the USFS, but all data will be released to all agencies.

Kim Rodrigues identified two main issues to be addressed:
    1) Inclusion of agencies at the beginning of SNAMP (or the MOU).
    2) Current imbalance in power between MOU partners, related to funding.
She asked, 'What would it take for all MOU partners to feel as equal partners?'

Cay Goode said it would help to be consulted more frequently in advance of major decisions being made. She is on the new fisher outreach team but was not consulted about the transition between SNAMP and Sugar Pine fisher teams. This is indicative of the imbalance in input amongst the agencies. The USF&WS will be the agency dealing with the Pacific fisher listing and the conservation decisions so they appreciate the USFS including them in the outreach team, but there was a disconnect because they were not included in providing input into SNAMP fisher project transition.

Deb Whitman explained that at the last MOUP meeting, John was asked to look further into finding PIs to finish up the SNAMP fisher project. The USFS partners with many agencies on many project including the USF&WS regularly, and if there is missed opportunity, it is not their intent to exclude anyone, but sometimes in all the swirl of meetings going on at all levels, not everyone gets included who might be. There was no intention to leave anyone out.

John Battles pointed out that the transition to the USFS PSW Sugar Pine project was not a SNAMP process, and that he was not a decision-maker. There will also be a parallel track with the Water team. There will probably be a post-SNAMP water project, and there are issues to be decided about how to continue, archiving data, etc. The UCST has been committed to a collaborative process, and he hopes that this will continue after SNAMP finishes.

Kim Rodrigues reviewed the success triangle – success can be measured on three levels: process, results, and relationships. The group may not have maintained the relationship leg of the success triangle in the hiring of the new fisher leader and the decisions on transitioning from the SNAMP fisher project to the USFS PSW Sugar Pine project. It is important for the partners to focus on how they will deal equitably with the final SNAMP report. UC Cooperative Extension is offering workshops on collaborative processes to partner agencies, to help them to develop internal capacity for facilitation and collaboration. One of the challenges has been building inclusive communications processes.

If the MOUP adopted such an agreement, new MOUP representatives could learn how decisions will be made easily. This may not have been done before in SNAMP because the MOUP have not had to make many decisions since the beginning of the project. But now that SNAMP is coming to a close, there are some important decisions to be made about funding, data-sharing and archiving, etc.

- MOUP DECISION: MOUP agree on consensus and options following consensus below: *First, aim to achieve consensus (defined as agreement that all parties fully support). If consensus cannot be achieved, then aim for an agreement/decision that all parties can live with. And if that is not possible, then explain what could not be agreed to and why.*

John suggested that the MOUP have an official response to the SNAMP final report that mirrors the written agreements in the UCST for including a minority report if some PIs do not agree with the conclusions. The MOUP could also have a minority report if some of the agency partners do not agree with the report or the response to it by other agencies. Cay Goode agreed that having the MOUP response to the final report in writing is the way to go so that each agency can say what it thinks about the SNAMP final report.

- ACTION ITEM: Develop a process for making written comments on the SNAMP final report at the next MOUP meeting (Cay Goode to lead).

IV. Update on SNAMP and SNAMP-related contract fiduciary report sharing

The goal of this agenda item was to clarify and confirm the process by which SNAMP and SNAMP-related contract fiduciary reports are shared with the MOUP and stakeholders. At the last MOUP meeting, the Partners discussed the desire for contracting reports to be shared with all MOUP simultaneously to avoid the perception of bias when one agency's comments are addressed but not other agencies' comments. The fall-back to be used in the case when a report cannot be released to all MOUP simultaneously is to have the report document any comments and any changes made to accommodate those comments.

The case in which this came up was the fiduciary report for the Eldorado Demographic Owl Study, for which reports must be turned in and approved by the Forest Service before being shared with other agencies and stakeholders. This decision was made by the Forest Service contract officer for the Eldorado Owl Study. Once the final version is approved for release, the SNAMP Owl team will document and describe any changes made to the draft version. The timeline on the 2012 report is that a draft was submitted in February 2013; minor revision were requested and made; a revised version was submitted on June 5, 2013; and a final version was emailed to the MOUP yesterday. The Owl Team has documented all comments and responses in

an attachment [both the report and the comments and responses document are available at http://snamp.cnr.berkeley.edu/news/2013/oct/13/2012-owl-team-annual-report-and-comments/].

V. SNAMP fisher team update

John Battles briefed the MOUP on the status of the fisher team leader search and of planning for the transition from SNAMP fisher project to the Sugar Pine fisher project. The US Forest Service has decided that the USFS Pacific Southwest Research Station will run the Sugar Pine fisher project after SNAMP fisher field work concludes in October 2013. The lead scientist will be Dr. Craig Thompson of PSW. PSW will conduct the 2013/2014 capture and collar efforts. UCB will continue aerial telemetry and camera trapping through December 2013. On January 1, 2014, field operations will be transferred to PSW.

To complete the SNAMP Fisher research, Dr. Thompson will collaborate with UCST and:
1) assist with analysis and presentation of fisher habitat use and occupancy, and fecundity;
2) assist with the development of three habitat use models;
3) help with publishing additional fisher research data in a timely manner;
4) consult with UCST on fisher ecology and response to fuel treatments.

Patricia Flebbe added that there will be no major changes to the study. It will continue to address the original SNAMP fisher objectives. Scientists will focus on treatment areas. The USFS Region 5 and USFS PSW are working out details of the budget and study plan. Air support and funding will be the same because that is the method that has been used for pre-treatment fisher data collection.

Collaboration will continue after SNAMP through groups with which SNAMP Fisher has been collaborating:
- The Southern Sierra Fisher Working Group
- The Southern Sierra Fisher Conservation Strategy Project
- The Fisher Interagency Leadership Team (FIALT)
- The Fisher Technical Team (FTT)

They will continue to practice Collaborative Adaptive Management through their agency processes. Pat Manley acknowledged that although the Sugar Pine fisher project is transitioning to PSW, they will still be working closely with John and others at UC Berkeley.

There was concern expressed that the Southern Sierra Fisher Working Group is not necessarily inclusive or transparent. Cay suggested the group needs written products. Often, these groups talk about things but never produce any documents or written decisions. For the USF&WS to

participate in these types of groups there needs to be more documentation of what has gone on in them.

Qinghua Guo asked about the on-going use and collection of LiDAR data in the Sugar Pine fisher project. Will there be additional LiDAR data collected to accommodate the larger footprint of the on-going fisher study? Patricia Flebbe was unclear on whether a larger area would be included in LiDAR and referred him to Carlos Ramirez.

Authorship on fisher papers will be worked out with Craig Thompson. John said that in such big collaborative efforts, they will respect everyone's contributions and there will be multiple authors. Craig will take lead on paper on linking the Sugar Pine and Kings River Experimental Watershed (KREW) data. Dr. Zach Peery will oversee integration of the fisher habitat models into the SNAMP final integration report, with consultation and assistance from the PSW as necessary. Zach is doing the integration so both wildlife species will be treated the same in integration. Craig felt uncomfortable leading fisher integration, as he has not been in on SNAMP from the beginning but will be happy to contribute and help with papers.

VI. 2014 SNAMP Budget

John Battles shared the 2014 SNAMP budget:
- $550,000 from US Forest Service;
- $165,000 from CA DWR to finish SNAMP (note: expectation for DWR to maintain monitoring in 2014+);
- $185,900 in waived indirect from UCST.

To refly the Last Chance site post-treatment for a cost of $37,000, UC has taken on contracting for the entire Tahoe National Forest LiDAR acquisition with is worth $750,000. The Big LiDAR project was a good example of value of relationships between the UCST and MOUP.

Art Hinojosa gave background about the DWR budget, which comes from the general fund. There was a big boost in 2008 when the Resources Agency asked them to help fund the project, but there was not much money after that. It was a struggle for DWR to fund SNAMP thereafter. A large part of the value of SNAMP for them was the collaborative relationships that have been formed.

The budget reduction does put some of the timeline and deliverables at risk because there is no slack at all in the timeline. John explained that most of the budget covers personnel so the project will have to wrap up in December 2014 since there is no additional funding for going over into 2015. Many of the timelines for teams are contingent on other teams producing something. The Fire and Forest Ecosystem Health (FFEH) team might not be able to include LiDAR in the Last

Chance analysis. Faculty summer salaries have been cut. Tuition for students is coming from other budgets.

Lynn Huntsinger added that the PPT interviews will have to start a couple of months early, before the project is fully wrapped up. Qinghua Guo said that the budget cut has affected the Spatial team's ability to support the other teams. Spatial only has time to process the LiDAR but may not have resources to provide additional products for teams. Scott Stephens shared the good news that FFEH plot re-measuring is ahead of schedule.

Martha Conklin pointed out that the Water Team agreement with DWR currently ends at the end of May or June 2014 because of when it began, but the SNAMP final report is not due until December 2014. It is not a money issue; DWR managers and UC managers just have to extend the Water team contract. This is important so that staff can be told about their term of employment. Art said it has been a successful contract so it would be great to extend it. Todd Ferrara said he would support extending the contract.

VII. Data-sharing and archiving

The goal of this agenda item was to clarify the SNAMP UCST data-sharing agreement, especially for the Eldorado owl study. The UCST has an internal data sharing agreement but had not formalized how data will be shared with agencies and the public. The UCST's goal is turn over all data needed by agencies for management, while reserving the right to use it for academic purposes, including publishing, for at least one year. After the embargo year passes, use of the data is more open. Within the embargo year, UC does not want students and others to get scooped. If the UCST controls the data, that is not a problem, but if the USFS controls the data, the UCST cannot stop any academic use.

LiDAR - The USFS has all pre-treatment LiDAR data for both sites (which was paid for by DWR). Post-treatment LiDAR for Last Chance has been shared with the USFS and USGS and will be made public a year after they receive deliverables. Post-treatment LiDAR data for Sugar Pine has been shared with the USFS; likewise with a one year embargo on data being made public. Carlos Ramirez needs to be included in this discussion on sharing of LiDAR data so that if the USFS gets a data request, they can contact the UCST.

Forest and fire – The USFS requests FFEH data, for archival purposes, in case fire burns through in 30 years. Scott and John will turn over all these data to all MOU partners.

People – The Public Participation Team's data has not been requested because FS doesn't use these kind of data in their main database.

Owl – The owl data have already been received by the USFS from the Eldorado Owl Study and requested for Last Chance study site. John said that the Owl PIs are committed to giving access to all data collected during SNAMP but not all the data from Rocky Gutiérrez's whole career. The SNAMP data-sharing agreement (2011) says that *"In situations where data used in some SNAMP analyses precede the initiation of the SNAMP project, and hence have historical, long-term proprietary rights by the PI, these raw data may be withheld by the PI from data sharing with any internal or external party."* Therefore, the Owl team will share the followiong data collected on both the Last Chance and Eldorado studies from 2007 to 2012 (the period of time in which SNAMP funded field work):

- owl nest/roost locations,
- territory occupancy status,
- territory reproductive status,
- identities of newly captured owls.

Fisher - Fisher data have been transferred to the USFS Region 5 and USFS PSW. These data have been given for management purposes, but the UCST has not published any of the data yet. This makes things complicated as regards the listing for fisher which is coming up in 2014. Agencies need to use the best available data during a listing decision, whether they have been published or not. John said that the best way to deal with this issue is to publish these data and get them out as soon as possible. However, there may need to be a backup plan for sharing these data with USF&WS for the listing and conservation plan in case the data have not been published.

Cay said that the listing process is very prescribed and regulated. Currently, when the USF&WS makes a data-request for a species listing decision, the USFS turns over their data to them. This has already been done for fisher. Cay is concerned that there may be preliminary analyses that get presented at conferences and then circle back to public comments on listing. Then, the USF&WS will need the raw data to be able to track the analyses from the data. John Battles agreed that this is a concern that SNAMP will need to deal with. The UCST's concern is that unscrupulous people could use SNAMP data to publish or to advocate for non-scientific causes.

- ACTION ITEM: SNAMP and the MOUP need to discuss data-sharing before fisher or owl are considered for listing and decide how to provide the best available science if those data are not yet published.
- ACTION ITEM: Include Carlos Ramirez in LiDAR data sharing understandings.

Data archiving
Individual UCST PIs will archive the data they have spent years collecting, but at the end of SNAMP, on-going data-archiving for public access will shift to the MOUP. PIs will no longer part of that discussion.

Patricia Flebbe and a USFS data manager looked at the sample datasets provided by the UCST and do not anticipate any problems. The USFS could archive data in one of two ways:
1)   Add data to a general archive as the UCST gives the data to them;
2)   Add data to a topic specific, pre-existing USFS database that USFS biologists look at. They could also add forest data to a fire planning database, etc.

Water data are being archived by DWR, and they are also on UC Merced site.

VIII. SNAMP integration: seeking input from the MOUP

The goal of this discussion was to introduce resilience as organizing concept for integration and solicit input on how best to present integrated results to managers and to the public. Peter Hopkinson gave a presentation on resilience. Resilience is commonly defined as the capacity of a system to undergo disturbance and maintain its functions and controls. The advantages of using the resilience concept include:

- It is explicitly a systems level concept.
- It is an intuitively comprehensible idea but is also grounded in four decades' worth of ecological theory.
- It explicitly incorporates human social systems.
- The resilience literature emphasizes the necessity of adaptive management in managing for resilience, a good match with SNAMP's core principles.
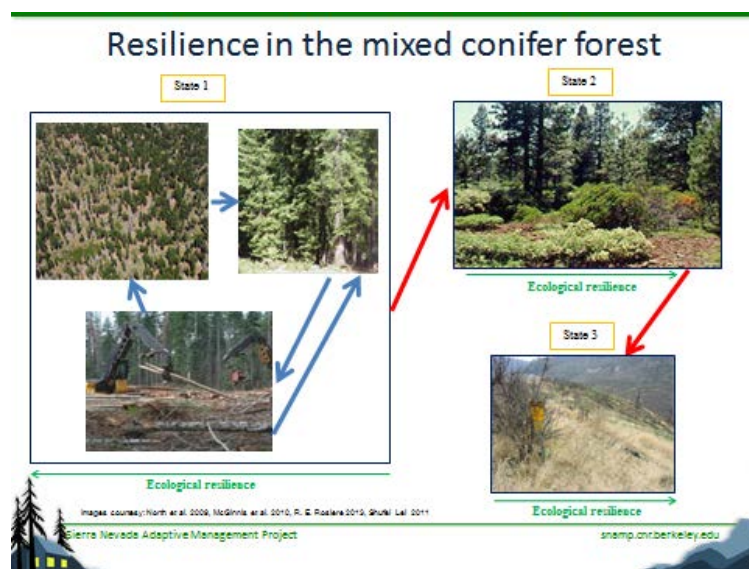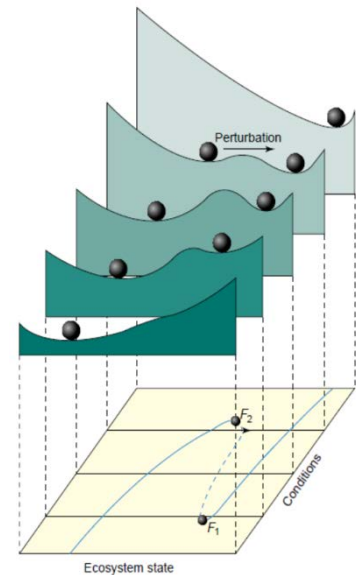
The Project Integration and Management team is still working out whether resilience is an appropriate integrating concept and how resilience might apply to SNAMP resources. They are currently planning on a two tier approach:

    1) Integrate to a resilience level for community and system resources (fire, forest health, water, society);

    2)   Examine some resources (owl, fisher) only at the first level of integration - the population level.

Discussion about resilience included the fact that resilience does not specify a specific vegetation type. New vegetation types once converted to, such as grass, may be quite resilient; a social decision needs to be made about which habitat is the desired one. Owl and fisher would not be looked at from a resilience framework because the concept is explicitly a systems concept, and the fisher and owl components of the system also include other predators. Resilience is assessed at the level of a mixed conifer forest or a social system. Wildlife would need to be assessed for resilience at a functional guild or biodiversity level, not an individual species population level.

Peter said the specifics of the integration metrics and how they relate to resilience will be discussed at the annual meeting.

Cay Goode said she strongly agreed with the resilience approach and that use of the concept is what the USF&WS would like to see. This is because in the original study plan phase the USF&WS wanted to use the biodiversity approach, but other agencies wanted to focus in on only two species.

One concern about this approach is that resilience applies only at a higher level. A system without owl and fisher could fill in with other species and still be very resilient. For this reason, it will be important to communicate clearly about integration and where and when the resilience concept is applied and when it is not.

The way the SNAMP project was set up acknowledged data limitations – it is not possible to have enough data on all species to identify wildlife resilience, just as we could not originally answer questions about watersheds. In the original design, only two owl pairs were included in the Last Chance area. Adjustments had to be made in scale to get measurable answers. Because of these issues, a major goal of the project was to learn to collaborate and improve communication so we can learn to apply adaptive management. Cay suggested that the UCST go back to original SNAMP documents and presentations, which lay out all the constraints and limitations of SNAMP, when framing the resilience concept.

Manager meetings

At the last Integration meeting in June 2012, there was a desire expressed for managers' meetings to help review the SNAMP final report. The idea was that managers could give feedback on how to structure the chapters so that they would be of the most use to managers. The District Rangers were the most interested in this.

The UCST is willing to present findings and format to anyone who would like to invite them to a meeting. However, if the UCST hosts a meeting, then everyone including the public is invited, as

happens with all SNAMP public meetings. Therefore, if one agency is more comfortable sharing their input in an all-agency type setting, they should set up the meeting and invite the UCST, and UC Science Team members will try to accommodate that input. Chris Fischer suggested that it might be most useful for a group of USFS managers to review the document at the appropriate time rather than to meet. UCST members responded that they would be willing to share drafts with managers if Chris took on the responsibility of organizing and communicating with them.

IX. Next steps and announcements

Cay Goode said she wanted to be sure that the MOUP continues to meet and have input during the last year of SNAMP. Everyone supported this suggestion.

Kim Rodrigues announced that she is resigning as PI of PPT outreach after spring 2014, although she will continue to facilitate meetings and be involved in SNAMP. Susie Kocher will take over as PI of PPT Outreach.

Below are the action items/ agreements from the text above:

- MOUP DECISION: MOUP agree on consensus and options following consensus below: *First, aim to achieve consensus (defined as agreement that all parties fully support). If consensus cannot be achieved, then aim for an agreement/decision that all parties can live with. And if that is not possible, then explain what could not be agreed to and why.*

- ACTION ITEM: Develop a process for making written comments on the SNAMP final report at the next MOUP meeting (Cay Goode to lead).

- ACTION ITEM: SNAMP and the MOUP need to discuss data-sharing before fisher or owl are considered for listing and decide how to provide the best available science if those data are not yet published.

- ACTION ITEM: Include Carlos Ramirez in LiDAR data sharing understandings