

Sierra Nevada Adaptive Management Project
Public Meeting – June 2, 2006
Cabernet Room, Silo, UC Davis, CA

Kim Rodrigues welcomed participants, explained purpose of the meeting and reviewed the Ground Rules for the session.

- Listen and consider the opinions of others.
- Respect time limits.
- Please turn off phones and pagers.
- Please be patient with us as we use ReadyTalk to connect with our distant participants.
- Share responsibility for the success of this meeting.
- Define/Spell out jargon and/or acronyms.

Kim reviewed Strategic Moment concept – i.e. that the project is at a point where we are not sure where to go from here and we need your input to guide the project at this point.

Susan explained the process for taking questions and engaging people who are participating in meeting via ReadyTalk.

Kim reviewed history of SNAMP project with a PowerPoint slide presentation that was also web-casted via ReadyTalk.

Kim explained the challenge of maintaining credibility of the project as we move forward.

We need everyone's input now to help guide the next steps with the project.

Dr. Lynn Huntsinger was introduced to explain the Adaptive Management Participatory Process. AM involves a feedback system to help adjust and improve goals of the overall management strategy for the ecosystem. (Refer to .ppt)

Scott Stephens and John Battles developed Fire and Forest Ecosystem Health component of the project. Scott was at the meeting to present an overview of this aspect of project. (Refer to .ppt) Scott offered example of SPLAT in Grasslands – need to figure out how to do SPLATs effectively in forests.

Question: We had a situation with the Cone Fire – Lassen Nat. Forest – have we learned any thing from that?

Response: This was not a SPLAT – but we did learn from this and can learn more.

Question: Is the design of SPLAT affected by weather conditions and is there a point where SPLAT may not work?

Response: SPLAT design will no doubt be affected by weather...

Roger Bales commented on water quality and quantity aspects of use of SPLATs (Refer to .ppt). He covered some aspects of field measurement program to gather more data. Field measurements are critical and important to be able to do the modeling.

Questions: 1. – How does this research design relate to the SPLAT? 2. – How are you going to screen out background noise?

Responses: SPLATs are laid out across water basins and we monitor edges... Modeling and parameter estimations help to filter out other factors that might have effects on research findings. We don't know exactly how the SPLATs will be laid out at this point.

Question: Will there be snow affecting some of the sites?

Response: The Northern site is at snow line and will be affected by snow fall

Question: What time frame before the study can get started?

Response: We are ready to go once final design is...

Question: Are we going to be monitoring actual SPLATs or the theoretical aspects of SPLATs?

Response: We are going to be evaluating actual SPLATs – the modeling aspects are more focused on the theoretical aspects.

Dr. Reginald Barrett – provided explanation of the Wildlife Research aspects of the project. There are too many species to monitor in the project area given the realities of available funding so we narrowed it down to focus on the fisher as the first priority and the spotted owl as the second priority. Fishers only exist in the southern study area – no longer in the North. Fisher will not be introduced in the North. Therefore we will study the fisher in the South. If there are sufficient funds we will also study spotted owl in the North. The northern goshawk has been eliminated as a species for study.

The plan is to conduct a complete census of the numbers of fishers or spotted owls in a study area. A detailed ecological study of these species is needed to determine what is limiting their populations. This will require documenting the cause of each animal's death, reproduction rates and dispersal rates to calculate population status and trend. While much research has been done, especially on

the spotted owl, we still do not know with confidence what is limiting the populations of either of these species in the Sierra Nevada. We have many competing hypotheses, but few of these have been tested with field experiments. The basic approach to studying either of these species would be the same.

Question: There have been studies of spotted owls in other localities in the Sierra Nevada. Hasn't this species already been studied enough?

Response: This will be a more intensive, structured study focusing on determining the causes of the trends that have been documented.

Question: How many years of data collection are required to establish a baseline to compare post-project populations?

Response: I wish it could be 20 years or more – we will do it for 7 years.

Question: When will you connect the findings regarding wildlife with the SPLAT treatments? Is that part of this SPLAT study or will that be Phase II?

Response: We need to determine what is limiting fishers now as well as the response of fishers to the SPLAT treatments. The limiting factor may be habitat conditions or it may be disease or other environmental factor. Each of the few individuals in the study area must be monitored intensively so that we can determine the cause of death for each mortality. This is done by locating each individual in the study area daily and collecting the carcass for necropsy within 24 hours of death.

To accomplish this we will have to saturate the study area with detection devices (live traps, camera traps) to capture all fishers in the study area. This is the only way that one can rigorously study the larger, wide-ranging carnivores such as mountain lions, wolves, bears, wolverines and fisher.

The first step is to begin looking at maps of the study area and to develop a habitat model along with a population viability model that can be tested with the field data we will gather.

Question: Where are the study sites?

Response: We asked Forest Service where they are already doing some work. Highest priority area is north fork of the American River near French Meadow. We still need to see maps of where the known spotted owl locations are, but we know there are at least some fishers in the South and some spotted owls in the North. The exact locations of fisher are not yet known.

Question: It seems that studying the fisher in the south and spotted owls in the north will not create a replicated research design – how will this be dealt with in the project?

Response: We will not be doing replications in the wildlife research. We will be doing one (BACI) case study in each place. The option to reintroduce the fisher to the northern study site was foreclosed and there is not enough funding to consider many replications throughout the Sierra Nevada. Extrapolating from one or two study sites will be an issue for all aspects of this adaptive management project.

Question: Will there be enough data collected in 7 years to be able to help people in the field in dealing with this issue.

Response: Yes – or I wouldn't be standing here.

Comment: There may be some other partners that might be willing to help address this issue and partner in these studies.

Response: The UC team is interested in collaborating with as many others as possible.

Mike Chapel – outlined some of the players

Bill Stewart – CDF –

Carl Holguin – USFS – confirmed that there was agreement that there was a need for a robust public participation element to the project. There is a need to develop the nuts and bolts details of the public participation process need to be developed with input from all stakeholders engaged as early as possible.

Q: Do you have a strategy for engaging the local community?

A: Yes – we do have the beginnings of a strategy to engage local communities. We want to work with others to further develop the process. We have a unique opportunity to replicate study of community engagement. The plan would be to compare some approaches that are outlined in the literature for engagement. There is a whole body of research on how to engage people in a productive manner.

Q: The decision space has not been clearly defined for this project – what is it?

A: The decision space is fairly constrained... One of our goals is to discover, document and analyze what the decision-space is for this project. We want to track how the actual decision-makers use the information.

Kim reviewed Levels of Involvement in Decision-Making model that considers decision-making alternatives and relative levels of ownership and involvement.

Comments: I understand that Forest Service or some other entity that will make final decisions... I'm not criticizing the UC team or your workplan – it just has not been made clear how, who, when decisions will be made.

Mike Chapel – responded – “the last step in the Adaptive Management process outlines what “triggers” the actual changes, etc. We want to work on that more with you and there is an item at the end of today’s agenda that will cover this topic.

Cay Goude – FWS - provided response to Wildlife presentation – there were considerations that involved what was practical and what could be done in determining what species to focus on. The FWS asked the Forest Service to come up with a list of other studies that were going on that would be complementary to this effort. We also talked with MOU partners about what day-to-day practical information is coming out of this adaptive management effort as well as theoretical, more basic science aspects. The public participation component is an important part of the process.

Brian Staab - responded about Water Quality & Quantity aspects. We suggested combining field measurements along with modeling. Another important component was the trade-off with the treatment and wildfire. Need to explore how to make the fire modeling fit with the water modeling. It is important to know whether the treatments are being implemented as designed. We will be working on more details with the UC team.

Beth Pendleton – USFS – commented on funding strategies. There is firm commitment and support from the MOU partners. There is a pretty good price tag attached to the 7 year project. Forest Service has funds this year primarily for the water aspects of project. UC is providing some funding for coordination, etc. State of California is funding some of the water quality aspects. For Wildlife aspects of project we are looking to Forest Service in Southern Calif. to support some of the fisher work. Also looking for foundation support. Part of the strategy is to convene a small group to begin to look at a full suite of funding sources including grants and foundations. An ad hoc team will be brought together. Is there an estimate of total dollars needed? Total needed is about \$2M/year. The bulk of it will go to the Wildlife studies. Also looking for “in-kind” from all of the MOU partners.

Comment from Sue Britting: Need to still further define the overall process and how the stakeholder input will be utilized. It is not satisfying to participate if not clearly defined.

Are we focused on the Correct Priorities?

- Wildlife is the most important component where the fisher exists. How will this be managed if the fisher study is not funded, i.e. – will there still be a study in the wildlife area? How will the study be managed in the absence of a fisher project in the South? The study has been modified from as originally submitted – i.e. fisher will only be studied in the South.
 - New proposals need to be shared as they evolve – stakeholders need to have this information.
 - If the fisher proposal is changed -- need to be clear on what is happening
 - We recognize that the fisher is a key component of the study in the Southern site. The actual research project approach is yet to be agreed upon. Dr. Barrett has a design that he has suggested. There is still a need to figure out if it is possible to do it with the resources available.
 - All the MOU partners will have to agree on final details for project and it will be peer reviewed and shared with stakeholders.
 - What is the time frame for this project to be initiated? We have agreement on four aspects of the project – however the overall project will not be started until the fisher study details are worked out. The train will leave the station with all the cars at the same time. We will continue to work on this over the summer.
- Funding efforts will push forward in June and plan to start developing grant proposals in July. Sept. we hope to have report for leadership team.
- Comment from Kim. R.: There is a chance that the project will not move forward unless we reach agreement on some of these issues.
- Comment: There is a need for some trust at some phases of the cycle for adaptive management. After information is assimilated, packaged and sent forward to decision-makers there is a gap between the information being developed and action taken.
 - How will the package be utilized – the UC science team can document this process.
 - What is accomplished can be documented.
 - It is important is to get USFS to commit to how it is used – but the UC science team must be skeptical and carefully, objectively watch and document what happens.
 - The invisible barrier (gap between) packaging information and action needs to be considered and discussed. There are other forces at play here – including values, politics, etc. that will affect action taken.
 - Great opportunity to work in the Adaptive Management cycle.

- It can be predicted that there will be different scientific perspectives that will come out – we need some trust and will probably need to continue to have this dialogue as we go through this process.
 - Probably useful to have the scientists offer their different perspectives and options.
 - We'll have to work through this – there may not be a clear answer.
- We need feedback on current/recent/past decisions – what were the alternatives and what was ultimately decided and why.
- Sometimes the process is more important than the actual project – there is a need to enter into the process and develop trust over time – you have to invest the time in establishing the partner relationships and the trust. The most important part of the study is building the trust and relationships – optimistic that we will learn something that will be useful.
- Ultimately the study depends on resources being in place to support the overall efforts effectively and as scheduled.
- Commitment: The MOU partners are committed to work together as a team through all phases of the project.

Team's approach to date – what has worked well...

- Web-site is great. It is very helpful. Ditto – wonderful tool. Good to have an e-mail reminder when something new is posted/changed on the Web site.
- How the meetings have been structured and run – notes being captured and getting them out to everyone right way. Right level of detail.
- I'm struck by change in attendance from Dec. to this meeting.... May need to consider a structure to get more participation and have some small group discussions with researchers. Proposed having detailed public conversations.
- Recruitment of other stakeholders – how do we make sure we are doing more active outreach. To date – we have been more passive in outreach. With more feedback and support from you all we want to do more active outreach. Once we determine the site we have contacted local Rangers to get their local stakeholders as a starting point. We need your input and ideas to expand this.
- Need to do more recruitment of other monetary investors – need to define a broader group of possible funders.
- Need more development of implementation of projects on the ground USFS -- this is a critical need. Worry about simulation modeling without actual data. UC science team not interested in just modeling.

- Opportunity to determine how adaptive management is different from NEPA. Does Adaptive Management really add value?
- Adaptive Management still has questions to be answered. Would like to have MOU partners react to ideas. Many elements are currently too abstract on the proposed agenda. Need more information to respond to either in written form or in person via another meeting.

Next steps

- Need to get the details of the alternative fisher project worked out. USFS is going to work on that and post on the web site.
- Develop an ongoing working group to address adaptive management and decision spaces: Kim R. will work with MOU partners and stakeholders to address this issue.
- We want to identify what people from stakeholder group want to help us (MOU partners) think about the “triggers” for implementing change/new goal/etc. in adaptive management project.
- Attendees were asked to submit responses to an evaluation form that will be posted on the Web site.

“+” What worked well with today’s meeting:

- 13 people were on line with the web cast and conference call. Picture 13 more people here in the room.
- Kim and Susan.
- Agenda was clear and like opportunity for people to call in to the meeting.
- Appreciated that the introduction was simple and brief so we could get into the discussion.
- Liked hearing from different team members rather than just one person.
- Was able to hear well after first 15 ‘ – good information.
- On-line component was good – useful to have combination of PowerPoint, notes, voice...

“++” – To make it better next time....

- Not on a Friday afternoon.
- Broader array of different stakeholders.
- Need to expand stakeholder list.
- Having a Internet connection that actually worked when we got here.
- Cooler room.
- Explore mechanisms to better engage people on the Ready Talk system.