Learning how to apply adaptive management to the Sierra Nevada Forest Plan Amendment

Public Participation Team
Integration Team Meeting
Davis, CA
May 19, 2009

Meeting Goals and Desired Outcomes

**Goals:** To inform stakeholders about SNAMP public participation research, get feedback on outreach strategies, and develop strategies on how best to include the public in adaptive management.

**Desired Outcomes:** A better understanding of how the public fits into adaptive management in SNAMP.

- Increased knowledge of how the public participation research will be integrated into SNAMP.
- Feedback on current SNAMP outreach strategies and suggestions for the future.
**Morning Agenda**

**Welcome and overview – Kim Rodrigues**
Background of SNAMP and Integration Team (10:00 – 10:15)

**How SNAMP integrates the public in adaptive management – Kim Rodrigues**
Adaptive management definition, role of public involvement and conceptual framework for participatory democracy and SNAMP (10:15 – 10:45)

**SNAMP outreach strategy and activities – Susie Kocher**
Current role of public in SNAMP, overview of public involvement activities and public outreach strategies (10:45 – 11:00)

**Interview Responses about SNAMP – Adriana Sulak & Lynn Huntsinger**
PPT research team findings about public involvement in SNAMP (11:00 – 12:00)

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**Adaptive Management (AM) is:**

**Learning through deliberate experimentation**
*(Walters and Green, 1997)*

The UCST is committed to a participatory AM process that engages scientists, public stakeholders and the resource agency(s) throughout the entire process.
Challenges to Participatory AM

We expect changes in management and research objectives as society, environment and knowledge change. (Tear, et al, 2005)

How to integrate these changes, measure and monitor these changes and adapt to these changes throughout the entire cycle?

Why SNAMP?

Controversy over USFS management

Consensus that forests are at risk from fire

Uncertainty on how best to reduce risk

An acknowledged need to learn more
Project Goals

Provide independent third-party research on effects of USFS fuels treatment
Help develop and evaluate an adaptive management program with strong public participation

Adaptive Management Framework

USFS: Plan projects with existing management direction (ROD)
USFS: Change management direction as needed
Propose adjustments to management?
Analyze & model expected environmental affects
Observe & measure
USFS: Implement projects as treatments

Sierra Nevada Adaptive Management Project
http://snamp.cnr.berkeley.edu
Adaptive Management Framework –
The Reality

Public participation continuum

Inform: one way flow of information

Manipulation:
- Rubber stamp advisory groups
- Create support or educate

Consult:
- Inform
- Solicit input
- Public hearings – public reviews and comments
- Considers publics concerns
- No intention to reach agreement

Involve:
- Work more closely with participants
- Address concerns to extent legally possible

Collaborate:
- All parties exchange information
- Work together toward an agreement
- Citizen and agency are partners
Increasing Levels of Ownership with Shared Decision-making

SNAMP Key Agreements Associated with Participatory Democracy Criteria

<table>
<thead>
<tr>
<th>PARTICIPATORY DEMOCRACY CRITERIA</th>
<th>SNAMP KEY AGREEMENTS ASSOCIATED WITH PD CRITERIA</th>
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<tbody>
<tr>
<td>Efficacy</td>
<td>Agreement that USFS is responsible for developing and implementing the treatments and all associated public participation processes.</td>
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<tr>
<td>Representation and Access</td>
<td>Agreement that UC Research Team will engage the public in research, monitoring and educational activities both to inform and learn from the public.</td>
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<td>Information Exchange</td>
<td>Agreement that Adaptive Management needs to be clearly defined – agreed to use Walter’s definition for guidance. Agreement to minimize use of jargon and define acronyms and terms associated with SNAMP.</td>
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<td>Continuity of Participation</td>
<td>Agreement that public participation needs to occur throughout the entire AM Process.</td>
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<tr>
<td>Decision-Making</td>
<td>Agreement that all research decisions (internal and external) will be open and shared publicly.</td>
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Why do outreach?

Essential components of the SNAMP process
- Outreach
- Comprehensive and sustained process
- Effective facilitation
- Transparent decision making

Will increase participation, which should:
- Allow for shared learning
- Improved research and implementation outcomes
How to do Outreach?

Partnership with UC Cooperative Extension:
• Public Involvement Team Leader – UCCE Regional Director
  Kim Rodrigues, 2005 – not funded
• Program Representative in Oakhurst
  Anne Lombardo, August 2007 - 75% to 100% funded
• Advisor in Lake Tahoe
  Susie Kocher, May 2008 - 50% funded
• Program Representative in Foresthill
  Kim Ingram, July 2008 - 50% funded

Outreach/ Involvement Methods

• SNAMP public meetings began 2005
• SNAMP annual meetings since 2005
• Website began 2005
• Presentations to local groups since 2007
• Newsletters since 2007
• Listserv communication began 2007
• SNAMP Integration Team meetings since 2008
• SNAMP field trips/presentations since 2008
• Advertisements/media
Target groups: Local to study sites

Oakhurst (Mariposa/Madera/Tuolumne counties) and Foresthill (Placer/Nevada/El Dorado counties)

Local high schools / science teachers
Home owners/property owners/ businesses
Organizations
- Rotary/ Soroptomists, Mountain Women’s Club, Chamber of Commerce, recreation groups
Government agencies
- County Supervisors, Tribes, UCCE/ 4H
Resource organizations/Environmental groups
- Fire Safe Councils, local watershed councils, Resource Conservation Districts, Resource and Development Districts, forestry forums/professional societies

Environmental groups
- Sierra Club, Native Plant Society, The Nature Conservancy, North Fork American River Alliance

SNAMP Public Involvement Events per Month (52 events)
Total Participation at SNAMP Public Involvement Events since 12/05
(1278 including duplicated)

Total Participants

N. Program Rep
S. Program Rep
Advisor

Discussion Questions

Who still needs to know about SNAMP?
- What are groups / organizations to which you recommend outreach?

What methods work best for participation in SNAMP?
- What outreach formats we are doing or not doing work best for you or others?

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## PPT Research

**Introduction to PPT methods and qualitative research (Lynn)**

**Draft results**
- Forest health (Lynn)
- Adaptive management (Lynn)
- Improving relationships (Adriana)
- SNAMP success (Adriana)

### Participant observation – SNAMP & NEPA

- Assessment questions, matrix
- Tracking and archiving attendance, evaluations, activities, events

**In-depth interviews**
- 34 interviews completed: active, lightly active, non participants, MOUP, public, USFS, UCST, Native American, historical
- 1st round of interviews to be finished 2009 (~ 7 more to do)
- 2009/10 data analysis, follow up, publication and design next methods

**Products to date**
- Co-management white paper (6/2008)
- Workshop with USFS re: NEPA analysis (1/2009)
- PPT IT meeting today: presentation of a portion of SNAMP focused interview results
Research Approach

- Develop questions or hypotheses, and then gather evidence to answer questions and support findings.
- A way of developing theories or explanations for human and social behavior.
- Qualitative research: understand perceptions within the respondent’s world view
- Content analysis (manual & NVivo)
Interviews

- Completed based on what the respondent says.
- More personal than questionnaires.
- Interviewer works directly with the respondent.
- Can probe or ask follow up questions.
- Easier for respondent, especially if what is sought is opinions or impressions.
- Time consuming and resource intensive.

Workplan

Interview UC science team, USFS and public to assess SNAMP project and UC function in third party role.
SNAMP Participation Research

One way to look at SNAMP: Does SNAMP help change relationships among people and groups of people in ways that improve forest management in the Sierra?

1. What are people's perceptions about forest health and adaptive management at this point in the SNAMP process?
2. Do people think that relationships are changing and why?
3. What is success and how should we measure it?
4. How do past experiences with USFS, UC, and other stakeholders influence views of SNAMP and other participants in SNAMP?
5. How can SNAMP be improved?

Forest Health: Laying the groundwork for mutual learning

How would you define forest health?

How do you know when a forest is healthy?
Narrative 1: Stand condition and structure

- Concerned with tree mortality, disease
- Used historic conditions as a reference
- Considered wildlife as often as anybody else
- “I think of diseases and stand structure and departure from historical conditions and mortality”

Narrative 2: Resilience

- Focus on resilience
- More concerned with biodiversity, water quality
- “I think about the resilience of the forest and its capacity to respond to ecological disturbance”
Narrative 3: Wildlife

• “For me, it is a diversity of habitat types that support multiple species and wildlife”

Narrative 4: Double talk

• “The word is tainted for me...it is a word used by people who want to cut trees, it just means they want to cut trees”
Draft Results - Forest Health

Rating “forest health” in the Sierra:
• Almost always 2 out of 5, where 1 is very unhealthy and 5 is very healthy

Adaptive Management: Laying the groundwork for mutual learning

What do you think adaptive management is?

How would you recognize it?
Narrative 1: Learning by doing

- “Adaptive management is adjusting management strategies in the light of unfolding knowledge or events”
- Monitoring an important component

Narrative 2: Management as experiments
Draft Results – Recognizing Adaptive Management

Narrative 1: The process

• “I would look for a protocol that has been used to assess the ecosystem—what is being measured—is it occurring?”
• “Is the data being provided back to the managers and are people using it to make decisions about land management?”
• “Was there adaptation, planning, public input?”
• Process orientation from forest health question continued

Draft Results – Recognizing Adaptive Management

Narrative 2: The outcome

• “I would look to see if the forest was healthy, more of the land looking like photos from before there was fire suppression and before the big trees were cut down.”
• “Traditional management is restored”
Draft Results – Recognizing Adaptive Management

Narrative 3: Specific actions don’t happen

- “Just the recognition that no policy is fixed, I think it would be beneficial overall. Also no clearcutting, I would want to watch for a decade or two to see if they do what they say.”

People have varying ideas about what might constitute success in improving forest health and implementing adaptive management. Some people are more process-oriented, some more oriented to outcomes.

Mutual learning is the method of learning about different points of view and criteria for success. These points of view influence all aspects of the project:

- how well we understand each other and work together
- what should be done to improve forest health
- how we should assess what we have accomplished
Improving Relationships: The groundwork for mutual learning

Do you think that the SNAMP process is improving the relationships among stakeholders, university researchers, and the USFS?

How?

Draft Results - Improving Relationships?

Yes!

- USFS ........................................... 5 out of 5
- MOUP .......................................... 3 out of 5
- Non-agency participants ............... 6 out of 7
- UCST .......................................... 5 out of 6

= 82% said yes

Other: too soon to tell; improving between some groups but not others; no change
Draft Results - Improving Relationships?

Narrative 1: Better understanding of each others’ skills and constraints

- Learned more about USFS and MOUP and how they operate and the barriers they face
- MOUP more supportive of SNAMP than expected
- “More sympathetic to USFS need for money and how they are going to get competing needs done without more money”
- “I have a better understanding of the university and of the USFS”

Draft Results - Improving Relationships?

Narrative 2: Communication

- “Having a community person that everyone can contact or comment to – that’s been really important”
- Everyone making an effort to meet face-to-face; all stakeholders come to all meetings
- “As long as everyone is acting in good faith then communication will improve relationships”
- “Let’s see what happens when we are executing the experiment, it is easy to be on board in the pre-treatment phase”
Draft Results - Improving Relationships?

Narrative 3: New Relationships

• “I actually like the people who are working on this project and I would not have said that a few years ago.”
• Appreciation of exposure to new people, and that new participants are encouraged

Draft Results - Improving Relationships?

Other narratives

• Too early to tell
• Relationships already changing before SNAMP
• Legacy of past relationships
Criteria for success

What does success look like to you?

What kinds of metrics do you think are important indicators of success?

How do you think the SNAMP process should be evaluated?

Draft Results – SNAMP Success

Narrative 1: Social

• A draft final report goes to the public for review, the final report agrees with public input (Outcome)
• A diverse group of stakeholders continues to be involved (Process)
• People change their attitudes toward each other (Outcome)
• Broad support for SNAMP among public and agencies (Outcome)
Draft Results – SNAMP Success

Narrative 2: Political
• Creation of more defensible USFS management strategies (Outcome)
• USFS incorporates UC science into policy and practice (Outcome)
• Ability to overcome financial obstacles (Process)
• “SNAMP doesn’t get forgotten”, information is available to other groups (Process)

Draft Results – SNAMP Success

Narrative 3: Ecological
• SPLATs create a healthy forest (Outcome)
• “SNAMP has an answer to how to minimize fire danger and still have owls and fisher around” (Outcome)
• Increased information on fisher (Outcome)
Draft Results – SNAMP Success

Narrative 4: Management
- Implementation happens (Outcome)
- USFS uses SNAMP results in next cycle of treatments (Process)
- Define adaptive management (Outcome)
- “Completes a cycle of information review and can say what actions were taken on that information by USFS” (Process)

Narrative 5: Scientific
- Published peer reviewed research (Outcome)
- Remain a fully integrated science team (Outcome)
- Collection of information in a transparent and accountable manner (Process)
- Data is collected, fisher are tracked (Process)
Next Steps

Complete interviews

Complete data analysis

Use what we learn to improve SNAMP process

Key Questions

How do you define success?

How would you measure success?

What questions should we be asking and analyzing?
Afternoon Agenda

Web outreach – Shasta Ferranto
Role of website and technological communication to facilitate public involvement (12:30 – 12:45)

Next Steps – All Participants
Discussion of role of public in adaptive management and next steps for SNAMP (12:45 – 1:45)

Wrap up/Evaluation – Kim Rodrigues (facilitation) (1:45 – 2:00)

SNAMP Website
- Information tracking
- Information transparency
- On-going Dialogue
- Project Legacy
Information Source

- Document Repository

- Meetings/events
- Photos
- General Info
- Newsletters

Sierra Nevada Adaptive Management Project
http://snamp.cnr.berkeley.edu/
Place-based Discussion

- Questions for UCST
- Items of interest
- FAQs

Web-Outreach

- Web-casting of meetings
**Web-Outreach**

- Facebook

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5000 Hits last year
- 2300 unique visitors last year
- 250 unique visitors last month
Do they come back?

**Visitor Loyalty**

May 10, 2008 - May 10, 2009

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<td>0.13%</td>
<td>0.25%</td>
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>9 times = 38%

What are they looking at?

1. Home Page
2. Documents
3. About SNAMP
4. Fisher Team
5. Discussion
6. Photos
7. Teams
8. Events
9. FFEH Team
10. Newsletters
Research Questions

What is the role of the web and technological communication to facilitate public involvement in adaptive management?

How is this different from face-to-face interactions?

What types of information are shared on the web?
Suggestions and feedback

Do you use the website?
Why do you use the website?
Improvement?

Suggestions can always be posted to the discussion board, and/or e-mailed to the PPT.
Breakout Session

We will now be breaking out into small discussion groups. If you have any further questions or comments, please contacts us.
We will be emailing out notes of this meeting to all who have participated and then posting them on our website.
Thank You.

For more information contact:

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