

# SNAMP Quarterly Meeting - Q1 2009

## Notes

**Date:** Wednesday, April 22, 2009

**Time:** 2:00 to 4:00pm

**Location:** Federal Building, 650 Capitol Mall, Sacramento, CA, and by phone conference.

### **Participants:**

UCST: Kim Rodrigues, Ann Huber, Doug Tempel, Adriana Sulak, Rocky Gutiérrez, Qinghua Guo, John Battles, Susie Kocher, Roger Bales

MOUP: Mike Chapel, Beth Pendleton, Crawford Tuttle, Frank Gehrke, Matt Triggs (sitting in for Chris Fischer), Cay Goode, Todd Ferrara (joined call half-way)

### **Meeting Purpose:**

- Provide direct communication between UCST and MOUP on a quarterly basis, as committed.
- Update MOUP on current status of SNAMP research and budget.
- Attain feedback from MOUP on discussion items.

### **Desired Outcomes:**

- Shared understanding of status of SNAMP budget, upcoming potential funding gap, and its potential consequences.
- Identify solutions and next steps to avoid funding gap.
- Shared understanding and approval from MOUP of steps needed to prepare for possible end of SNAMP if upcoming potential funding gap is not resolved.

## **Main Outcomes and Next Steps**

### Budget

1. UCST needs assurances on YR3 money by June at the latest.
2. MOUP members on call are optimistic they will be able to work something out to keep SNAMP going.
3. Beth and Crawford expressed commitment to do whatever they can to make it work.
4. Crawford is cautiously optimistic that state will release funds for existing projects (such as SNAMP), because of a recent announcement by the Governor.
5. The Dept of Finance report that is expected to come out within next 2 weeks will provide better understanding of what the Governor's announcement means to SNAMP.  
*-note added April 27th – Dept of Finance report has since released state funds for SNAMP.*
6. Beth will have a better idea of the ability of the USFS to advance money to UCST after a USFS quarterly report comes out in June.
7. There is a ~\$350,000 projected shortfall for Year 4 if no new sources of funds are found.
8. Crawford recommended that UCST pursue an economic analysis to assess true cost if Sugar Pine and/ or Last Chance projects do not go forward.
9. John agreed to track jobs directly and indirectly affected by SNAMP.

### Next Steps:

# SNAMP Quarterly Meeting - Q1 2009

1. As soon as Dept of Finance report comes out, Crawford will meet with subset of MOUP to determine a) mechanics of moving the money to UCST, and b) critical paths to amending the existing DWR contract with USFS.
2. Beth will work on USFS capacity to advance funds to UCST; may need to wait until June to find out.
3. Ann and John will keep UCST up to date on any developments made by MOUP.
4. Frank will look into possibility of doling out incremental amounts of money from the DWR contract, which may speed the cash flow.
5. Ann will check with Bass Lake Ranger district if there are any updates to the Sugar Pine timeline.

## Other agreements

1. If PPT runs a SNAMP webinar for the public, Kim and Susie agreed to provide Mike with a summary of what was presented and how it was received.

## *Notes:*

---

### **1. UCST research update**

-- Ann summarized main research findings and work completed since last reported in the quarterly meeting with MOUP in January. Summary will be appended to the end of these notes.

### **2. Budget**

#### **a) Status of 2009 budget**

- John gave a summary of current budget and anticipated funding gap for Yr 3 (2009)
- Spatial team runs out of money in June.
  - Water team could run out of money soon after.
  - Maggi needs to be able to commit to grad students for fall by June.
  - Water team needs to hire a person, but is waiting on assurance for Year 3 money.

-- The summary tables will be appended to these notes.

#### **b) State funding outlook**

-- Insight from State partners on when SNC or DWR funding might become available.

Crawford : cautiously optimistic

- State bond sales going well. Governor announced restarting of funding for state projects. Crawford expects the release of funding will be for existing contracts and awards only. He expects a report from Dept of Finance within next 2 weeks that will provide further guidance on how the finances will be handled. At that time Crawford will be able to better assess when money for SNAMP will become available.

# SNAMP Quarterly Meeting - Q1 2009

John / Crawford: keeping an eye on state bond initiatives up for vote in May. If they fail revenue shortfall for CA will be really ugly.

Crawford: Important to identify jobs directly and indirectly affected by SNAMP. John agreed to do this.

Kim / Crawford: Important to assess broader economic value of SNAMP, including the value of the Sugar Pine and Last Chance projects have on the economy; ie, the costs associated with Sugar Pine and Last Chance not getting implemented.

- Crawford: Can expect this question at annual meeting, should think about being able to respond to that question by the time of the meeting.

Frank – restrictions on state funded projects do seem to be lifting somewhat.

- His ability to move money around is much more restricted these days.

## **c) Possibility of bridge funding or other solutions**

Possibility of advanced funds from USFS:

Beth will need to refer to a USFS budget report that will come out in June before she can know whether and how much USFS could advance to SNAMP.

Frank suggested he would look into possibility of doling out incremental amounts of money from the DWR contract, which may speed the cash flow.

## **3. Preparation for possible end to SNAMP**

John:

- union contracts require 60 day layoff notice
- grad funding for fall needs commitment by June
- SNAMP contracts have different end dates.

John: worst case scenario that we cannot go forward with integrated project, what happens if UCST as contractee pulls out of the contract? It is up to USFS how we end it.

Mike / Crawford: do not think it will come to this.

## **4. Logistical issues or questions from UCST PIs or MOUP members**

- Fisher permit in Yosemite is moving forward
- Fisher backup plane issue is moving forward

## **5. Timeline updates from districts**

- No rep from Sierra N.F., so Ann reported last communication from Sierra which said that Sugar Pine Draft EIS will come out in mid April to May, which puts earliest implementation to mid Sept if no appeals and next year if appealed.

# SNAMP Quarterly Meeting - Q1 2009

Matt: Last Chance still on track for end of April / first week of May for Draft EA

- 30 days from date of decision to projects on ground
- mid August earliest implementation if not appealed.
- concerned about issue of Lincoln Mill – they are not accepting logs right now. Without a nearby mill there is an issue of whether they can find bids to do the work.
- trees for sale will mainly be white and red fir.

## **UC Science Team Updates for 2009 Q1 Meeting**

Main research findings and work accomplished since last reported to MOUP in January 2009

April 22, 2009

### **Project Integration and Management Team**

- Meta-analysis of fire hazard assessments within the Sierra Nevada.
  - Completed coordination of the modeling framework for 4 of the 5 studies (Sagehen Experimental Forest, Last Chance, Sugar Pine, and Lassen-Plumas Administrative Study)
    - Next step is to bring in Kings River Experimental Watershed data.
    - Dave Saah will presenting results at the ESA meeting in August.
- Regularized budget reporting process – giving monthly reports to USFS.
- Negotiated 15% budget cuts among science teams.
- Presented SNAMP at Science Innovations Conference in D.C.
- Planning for a UCST-wide science integration meeting in late summer / early fall.

### **Spatial Team**

- Received Lidar data for Last Chance.
- Completed 1m Digital Elevation Map for Last Chance and Sugar Pine study areas.
- LiDAR processing to extract vegetation and fuel parameters for Sugar Pine (Initial tree height and tree crown extraction is completed for the Sugar Pine site.)
- Spatial Integration Team meetings planned for June 3 and June 4.
- Completed Spatial Team Workplan (sent to MOUP and also available on SNAMP website).

### **Fire and Forest Ecosystem Health Team**

- Continue to make progress on the fire behavior and effects modeling for Last Chance.
- Working to get the Lassen-Plumas fire behavior study done for the integration team aspect SNAMP (Meta-analysis of fire hazard assessments within the Sierra Nevada). This has been given greater emphasis with the new shift of funds in response to the budget cut.
- Improvements made to Lassen-Plumas models will be used to improve the model already developed for Last Chance.
- All data uploaded to SNAMP dataserer.
- Forest health Integration Team meetings for both sites this summer (May 28 Sugar Pine).

### **Spotted Owl Team**

- Continue to make progress on vegetation classification shapefile for all owl territories.
- Completed land ownership shapefile for all parcels within Owl study areas.
- Acquired harvest activity shapefiles from Lone Star Timber Co. (still waiting for shapefiles from SPI) .
- All Owl data uploaded to SNAMP dataserer.

## Water Team

### Installations:

1. 5 stream stage loggers (pressure transducers). One in each of the study catchments and an additional one in the upper portion of Big Creek (Sugar Pine site).
2. One water quality/stream chemistry instrument in each of the Sugar Pine and Last Chance catchments (4 total).

### Data Currently Being Collected:

1. At the met towers we are collecting wind speed, wind direction, precipitation, solar radiation, snow depth, barometric pressure, temperature, and relative humidity – data available on CDEC.
2. At the instrument nodes we are currently collecting snow depth.
3. In the stream we are collecting stage, turbidity, dissolved oxygen, conductivity, and temperature.

### Other tasks:

1. A 1 km<sup>2</sup> snow survey was done near Duncan Peak to assess snow depth variability.
2. Setting up the DHSVM model (GIS and met station inputs).

## Fisher Team

1. Presently tracking 24 collared fisher.
2. Five mortalities in last 5 weeks. Four appear to be predation mortalities, and one recovered carcass was intact and healthy looking. Awaiting necropsies to verify cause of death of all mortalities.
3. Fisher denning season is now in full swing:
  - a. 12 natal den trees verified.
    1. 2 natal den in Sugar Pine Project area, and 1 on the edge of the Project area.
  - b. Methods for identification and verification of natal/maternal den trees include a combination of early morning telemetry flights, GIS mapping, early morning and evening walk-ins on individual female fishers, and automatic cameras.
4. Completed second year camera trapping in Fisher Study Key Watersheds focal study area (119 1-km<sup>2</sup> grids). Initial observations show that this year's occupancy is similar to last year's occupancy.
5. Field testing of 2 GPS prototype collars on fishers (one female, one male). GPS location records can be retrieved by ground within 50-150 meters or by air within 200-350 meters. Retrieval by air possible only during stable atmospheric conditions and when animals are in relatively open topography. Very preliminary indications have shown that the collars are unable to regularly acquire good quality location records on collared fisher in our study area.
6. A systematic camera-based assessment of the accuracy of the Conservation Biology Institute Fisher Habitat model Land8yr0 is underway ("CBI Test"), which will be completed by May 31, 2009.
7. Developed a list of "Triggering Events / Thresholds" for fisher that will be used to indicate the need for a management change or response by Sierra National Forest. Will report on these at Integration Team meeting to be scheduled this summer.

8. Developing preliminary, baseline estimates of rates of survival for juvenile, subadult and adult fishers using data on the survival status of radiocollared fisher from both the SNAMP Fisher Study and the USDA Forest Service Kings River Fisher Study.
9. Exploratory analyses with mark-recapture models to develop a preliminary estimate ( $\pm$  95% C.I.) of the number of fisher occupying the SNAMP Fisher Study Area using data on fisher activities in areas surveyed with cameras.

### **Public Participation Team**

#### *Website*

- Working on updating discussion section of the web to be secure.
- Continual postings to website <http://snamp.cnr.berkeley.edu/>.

#### *Research*

- Reported to USFS on the NEPA process in January.
- Completing last phase of interviews (Native American groups).
- Working on local histories and interviewing of local sources.

#### *Outreach*

- Hosted 2 webinars in January on SNAMP to help spur involvement of UC Cooperative Extension partners.
- Local outreach in northern and southern sites through individual presentations to a variety of conservation groups, business groups, high schools, rotary groups, and government agencies.
- Integration Team (IT)
  - Held Sugar Pine Project IT meeting February 6.
  - Next IT meeting is May 19 in Davis: SNAMP Public Participation. A discussion with public and MOUP on SNAMP public participation research, seeking feedback on outreach strategies and to further develop how best to include the public in adaptive management.
- Working on upcoming IT meetings this summer:
  - SNAMP study design, and Fisher meeting in July.
- Worked with science teams to develop outreach schedule for this summer.
  - Upcoming field trips: Forest Health, Water team, Owl team.
  - Other educational events: Spatial educational meeting, Fisher talk at local high school.

Table 1. SNAMP finances projected through Year 4.

<b>SUMMARY</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Percent</b>	<b>2010</b>
	<b>Year 1 PR</b>	<b>Year 2</b>	<b>Year 3 REDUCE</b>	<b>Reduction</b>	<b>Year 4</b>
<b>1. DIRECT COSTS</b>					
<b>Total Direct by Group</b>					
PIM	\$138,540	\$216,173	\$128,368	30%	\$189,024
FFEH	\$151,239	\$264,920	\$188,581	15%	\$190,981
PPT	\$150,312	\$242,811	\$220,883	11%	\$256,384
Spatial	\$176,272	\$81,826	\$84,281	0%	\$100,578
Water	\$729,193	\$254,697	\$254,343	0%	\$269,203
Wild Owl	\$88,610	\$150,329	\$155,422	0%	\$159,451
Wild Fisher	\$444,020	\$592,092	\$548,510	10%	\$627,308
<b>TOTAL</b>	<b>\$1,878,186</b>	<b>\$1,802,847</b>	<b>\$1,580,389</b>	<b>10%</b>	<b>\$1,792,928</b>
<b>3. FUNDING</b>					
	<b>2007</b>	<b>2008</b>			<b>2010</b>
<b>Forest Service - Region 5</b>					
Firm annual commitment	\$850,666	\$900,000	\$975,000		\$975,000
Potential Forest Service Add-on			\$221,000		
<b>Forest Service - PSW</b>	<b>\$100,000</b>	<b>\$283,000</b>			<b>\$100,000</b>
<b>Total Forest Service</b>	<b>\$950,666</b>	<b>\$1,183,000</b>	<b>\$1,196,000</b>		<b>\$1,075,000</b>
<b>State of California</b>					
Department Water Resources	\$191,000	\$633,071	\$438,624	(2009+\$100K)	\$369,781
DWR support (instruments and salary)	\$266,213	\$48,927			
Department Fish and Game		\$191,000			
Sierra Nevada Conservancy		\$70,327	(\$123K org)		
<b>Total State of California</b>	<b>\$457,213</b>	<b>\$943,325</b>	<b>\$438,624</b>		<b>\$369,781</b>
<b>Other Contributions</b>					
U.S. Fish and Wildlife Service					
Resources Law Group		\$20,000	\$15,000		
<b>Total Other Contributions</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$15,000</b>		<b>\$0</b>
<b>Total - All Contributions</b>	<b>\$1,407,879</b>	<b>\$2,146,325</b>	<b>\$1,649,624</b>		<b>\$1,444,781</b>
<b>Role Forward</b>		<b>(\$470,307)</b>	<b>(\$126,829)</b>		<b>(\$57,594)</b>
<b>Bottom Line</b>	<b>(\$470,307)</b>	<b>(\$126,829)</b>	<b>(\$57,594)</b>		<b>(\$405,742)</b>



Table 2. Subset of SNAMP finances projected through Year 4. Excludes spatial and water components.

<b>SUMMARY</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Percent</b>	<b>2010</b>
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3 REDUCE</b>	<b>Reduction</b>	<b>Year 4</b>
<b>1. DIRECT COSTS</b>					
<b>Total Direct by Group</b>					
PIM	\$138,540	\$216,173	\$128,368	30%	\$189,024
FFEH	\$151,239	\$264,920	\$188,581	15%	\$190,981
PPT	\$150,312	\$242,811	\$220,883	11%	\$256,384
Wild Owl	\$88,610	\$150,329	\$155,422	0%	\$159,451
Wild Fisher	\$444,020	\$592,092	\$548,510	10%	\$627,308
<b>TOTAL</b>	<b>\$972,721</b>	<b>\$1,466,324</b>	<b>\$1,241,765</b>	<b>12%</b>	<b>\$1,423,148</b>
<b>3. FUNDING</b>					
<b>Forest Service - Region 5</b>					
Firm annual commitment	\$850,666	\$900,000	\$975,000		\$975,000
Potential Forest Service Add-on			\$221,000		
Forest Service - PSW	\$100,000	\$283,000			\$100,000
<b>Total Forest Service</b>	<b>\$950,666</b>	<b>\$1,183,000</b>	<b>\$1,196,000</b>		<b>\$1,075,000</b>
<b>State of California</b>					
Department Fish and Game		\$191,000			
Sierra Nevada Conservancy		\$70,327	(\$123K org)		
<b>Total State of California</b>	<b>\$0</b>	<b>\$261,327</b>			<b>\$0</b>
<b>Other Contributions</b>					
U.S. Fish and Wildlife Service					
Resources Law Group		\$20,000	\$15,000		
<b>Total Other Contributions</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$15,000</b>		<b>\$0</b>
<b>Total - All Contributions</b>	<b>\$950,666</b>	<b>\$1,464,327</b>	<b>\$1,211,000</b>		<b>\$1,075,000</b>
<b>Role Forward</b>	<b>\$0</b>	<b>(\$22,055)</b>	<b>(\$24,052)</b>		<b>(\$54,817)</b>
<b>Bottom Line</b>	<b>(\$22,055)</b>	<b>(\$24,052)</b>	<b>(\$54,817)</b>		<b>(\$402,965)</b>

**Table 3.** Summary of expenditures of the Sierra Nevada Adaptive Management Project for Year 3 from 1/1/09 - 3/31/09. Budgeted amounts were based on reduced Year 3 budget. Received amounts reflect actual transfers of funds to the contracting institutions. Balance reflects account balance as of 3/31/09. Encumbered amounts reflect funds already committed to pay salaries (as specified in hiring agreements) and ordered supplies/services. Available reflects the difference between Received – (Spent+Encumbered). Carryforward reflects cumulative balance (estimated) of ledgers at the end of Year 2. Carryforward is NOT included in Year 3 ledgers. All amounts in USD(\$).

Research Theme	Contracting Institution	Budgeted Year 3	Received 1/1/09	Balance 3/31/09	Encumbered thru 12/31/09	Available 03/31/09	Carryforward from Yr 2
Spatial <sup>1</sup>	UC Berkeley	37,328	0	--	--	--	11,580
	UC Merced <sup>2</sup>	46,953	0	--	--	--	>20,000
	Imagery	0	--	--	--	--	--
Fire and Forest Health	UC Berkeley	188,581	188,581	141,179	128,636	59,945	-1,911
Wildlife	UC Berkeley (fisher)	548,510	548,510	514,165	373,615	174,895	7,493
	U Minnesota (owl) <sup>2</sup>	155,422	155,422	?	?	?	0
Water <sup>1</sup>	UC Merced <sup>2</sup>	254,343	0	--	--	--	~200,000
Project integration	UC Berkeley	128,368	128,368	63,040	117,958		-44,423 <sup>4</sup>
Public participation	UC Cooperative Ext <sup>3</sup>	140,597	109,833	109,833	0	109,833	0
	UC Berkeley	80,286	80,286	55,286	68,623	11,663	-7,951
<b>TOTAL</b>	<b>UC Science Team</b>	<b>1,580,388</b>	<b>1,211,000</b>	<b>883,503</b>	<b>688,832</b>	<b>356,336</b>	

## NOTES

1. Spatial and water components are funded by DWR. We do not yet know the status of Year 3 funding. Also budgeted amounts reflect initial estimates yet due to delays in receipt of funding, revised estimates of imagery costs, and direct purchase of equipment, both the spatial and water budgets will need to be revised to reflect these changes.
2. We do not yet track subaward finances as closely as the awards held at UC Berkeley. However, given USFS information needs, we have asked for monthly ledgers from the subaward institutions.
3. The public participation subcontract with UC Cooperative Extension was from 1 May 08 to 30 April 2009. Thus it is the only award that extends past the calendar year for Year 2. Year 3 award will start on 1 May 1, 2009 and continue to 30 April 2010.
4. The Carryforward deficit on the PIM account reflects the difference between the PIM positive carryforward (\$8,250) and the suspended funds from the SNC grant (\$52,673).