

ADAPTIVE MANAGEMENT-CLOSING THE LOOP

How do we know if we have succeeded?



Tracking AM – how did others use the information to adjust management decisions?

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<i>SNAMP Activity 4 – Carry out and communicate science to project partners to enable informed input into USFS adaptive management</i>				
Outcome	Indicator	Data source	Responsible for collection	Collection timeline
4.1 Dissemination of results to the public, agency partners, and scientists.	SNAMP disseminates all results through multiple methods: papers, briefs, meetings, notes, outreach presentations	Project records, website	PPT	On-going
	SNAMP produces integrated final report and shares it with multiple audiences	Report, project records	PDM, PPT	Fall 2014
4.2a Engagement of stakeholders in interpreting science	Stakeholders involved in framing, revising and interpreting research	Work plan development dissertation	Kim R.	2009
		Meeting minutes	PPT	On-going
		Mid-term interviews	Adriana	2012
		On-line evaluation survey	Adriana	2009
4.2b Engagement of stakeholders in recommending management changes	Stakeholders involved in interpreting research and making management recommendations	Meeting minutes	PPT	On-going
		Final interview	Adriana	Fall 2013
		Final on-line survey	UCCE	January 2015
4.3 SNAMP research information is used in adaptive management	Local USFS uses pre-treatment data in preparing projects (forest, fisher, PPT)	Data release and use survey / interview	UCCE	On-going every six months - 2014
	Other USFS units/MOUP agencies use SNAMP results in management projects	Literature review of agency environmental documents	UCCE	2012, 2014
		Review of IFWG, Sierra Cascades Dialog materials	UCCE	2014
	Local USFS uses research results/ report in modifying post-SNAMP projects	??	??	2015 and beyond
	USFS uses SNAMP results to revise the Sierra Nevada Framework	??	??	2015 and beyond
	The SNAMP model is used to inform future adaptive management efforts	??	??	2015 and beyond

SNAMP 2012-2014 Evaluation Plan Draft - Susie Kocher

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SNAMP DATA USE COLLECTION FORM

We would like to work with the MOUP to collect information on how SNAMP data is used

Name			
Work place			
Title			
Project/Date	What SNAMP data was used?	How was data used?	Please briefly describe its value to you.
IE. Willow Creek 3/2012	Fisher den locations	Designed LOP for WC project	?

SNAMP LITERATURE USE - CITATIONS

SNAMP Publications cited

Date	Publication	When	Title	Author
(doing work)	(where SNAMP cited)	(date of publication)		
6/8/2012	Journal of Combustion	Volume 2011 (2011), Article ID 572452	Integrating Fire Behavior Models and Geospatial Analysis for Wildland Fire Risk Assessment and Fuel Management Planning	Alan A. Ager, ¹ Nicole M. Vaillant, ¹ and Mark A. Finney ²
6/8/2012			The Science and Opportunity of Wildfire Risk Assessment	Matthew P. Thompson, Alan A. Ager, Mark A. Finney, Dave E. Calkin and Nicole M. Vaillant
6/8/2012	White Paper F14-SO-WP-Silv-4		Active Management of Dry Forests in the Blue Mountains: Silvicultural Considerations	David C. Powell; Forest Silviculturist

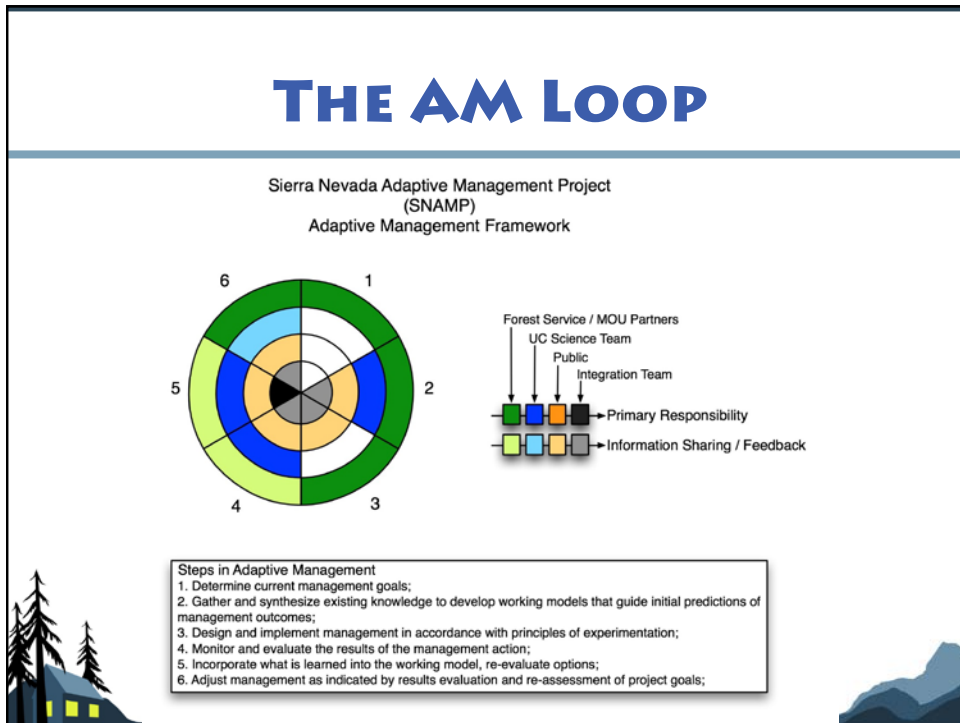


SNAMP LITERATURE USE - DOCUMENTS

SNAMP publication use tracking form

Planning documents and whether they use SNAMP pubs

Date	Org	Location	Project	Type.	Document
4/19/2012	USFS	Eldorado NF	2-chaix	Fuels reduction, forest health	EA
4/19/2012	USFS	Eldorado NF	Tobacco Gulch	Fuels reduction, forest health	Scoping notice
4/19/2012	USFS	Tahoe NF	Plum Project	Wildlife, fish, rare plants, forest products, veg. management, fuels management, watershed management, road management	EA
4/19/2012	USFS	Tahoe NF	Saddle Project	Forest products, veg. management, fuels management	EA
4/19/2012	USFS	Tahoe NF	Sagehen Project	Fuels management, watershed management, wildlife, rare plants, veg. management, R&D	Scoping notice
4/20/2012	USFS	Lake Tahoe BMU	Slaughterhouse Project	Fuels reduction, soil quality monitoring	Monitoring report
4/20/2012	USFS	Lake Tahoe BMU	Roundhill Fuels Reduction Project	Fuels reduction, soil quality monitoring	Monitoring report
4/20/2012	USFS	Lake Tahoe BMU	Angora Fire Vegetation Monitoring Annual Progress Report	Veg. management	Progress report
4/20/2012	USFS	Lake Tahoe BMU	Camelion Hazardous fuels reduction & healthy forest restoration project	Fuels reduction, forest health	Scoping notice



CLOSING THE AM LOOP

An adaptive management project is recognized as 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
- implementation is consistent with applicable laws.

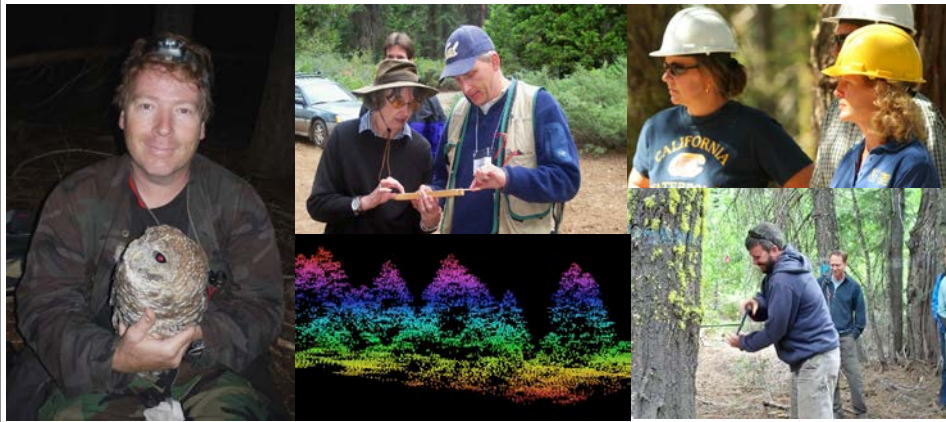


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COLLABORATIVE ADAPTIVE MANAGEMENT

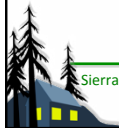
Requires true **labor**, extensive **time** and a sincere **commitment** from all participants.



C.A.M. PROCESS

- Must be **clear** and designed to **meet specific desired outcomes**
- Provide a **safe** environment
- **Guide** the group(s) to shared goals
- Designed to **build understanding and respect**
- Practice **active listening and sharing**

Ultimately seeking **agreement** and **building trust**.



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STEPS FOR COLLABORATIVE ADAPTIVE MANAGEMENT

Contains the following essential elements:

- Deliberate experimentation
- Engagement
- Evaluation
- Avoidance of becoming “trapped in an apparently endless loop of model development and model refinement”



A.M. – AFTER SNAMP

The goal is to continue collaboration and build capacity to institutionalize information sharing and mutual learning through an Integration Team meeting-type framework.



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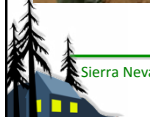


SNAMP INTEGRATION EXAMPLE

SNAMP's Integration Team meeting process and full public involvement in all areas sets it apart from other AM efforts.



Mutual learning in SNAMP happens during IT meetings, field trips and other events – **BE PREPARED**



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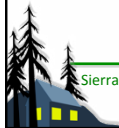
FOREST SERVICE IT EXAMPLE

The IT meeting purpose is to share what has been learned, how the agency has adapted to new information and /or conditions and to better structure the decision making process. For example:

Regional level – An annual IT type meeting with all parties to describe what was learned through SNAMP about the Framework, what is being monitored, measured, and what is being learned.

Forest level – A bi-annual IT type meeting with all parties to describe 5 year plan of work, annual SOPA, and/or forest plans.

District level – A quarterly IT type meeting with all parties on specific high profile projects.



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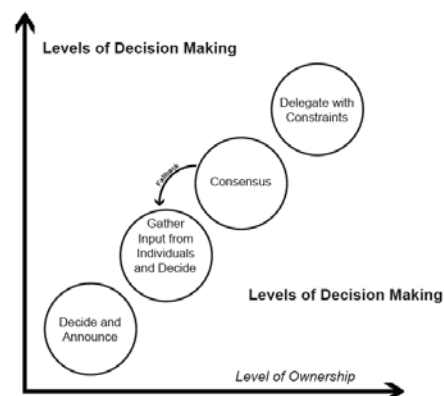
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LEVELS OF DECISION MAKING

Be upfront and specific about the levels of public participation requested, how the input will be used and who will be making the decisions and by what method.



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10/10/2008-01/2010/2011



*Graphic from Interactive Associates

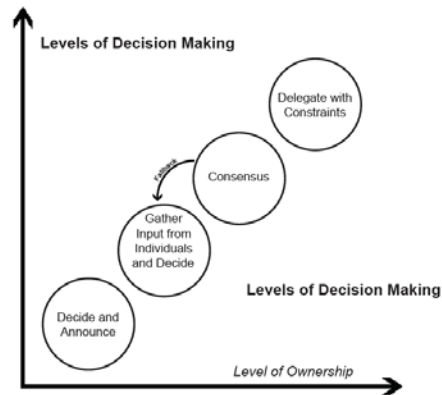


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WHO DECIDES?

Be upfront and specific about who participates at each level – names, roles, responsibilities, including backup plans when personnel changes occur, etc.



*Graphic from Interactive Associates

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CAPACITY TRANSFER

- IT meetings need process tools or structural facilitation to succeed in bringing the public and scientists together.
- Identify a lead facilitator for these teams (may be person outside USFs with facilitation skills)
- Note that this type of interaction on CAM requires a dedicated person within USFS to be responsible at District and Forest level(s)
- Support distance communication through a website with specific links to each CAM project as it goes forward



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