Chapter 8: Establishing and adjusting appropriate management levels

Lynn Huntsinger

Outline

- Charge
- Tools
- Setting
- Tools for stakeholder involvement
- Conclusions

Charge

- Address divergent and conflicting perspectives
- Consider stakeholder concerns
- Protect land and animal health
- Within BLM context and constraints

Tools

- Social science research is needed, called for repeatedly over last 30 years, including 1982 NRC report.
- NRC 2008 report on participatory management
- Diverse decision-making formats fit to local and agency constraints, balanced with more consistency across BLM
- Transparency
- Shared and communicated scientific information and management methods
- Commitment, including training, time, and funding, to working with the public

- A better understanding of the knowledge and values that frame public opinion about free-ranging horses and burros would give managers insight and possibly help them to find ways to bring polarized groups into a deliberative process.

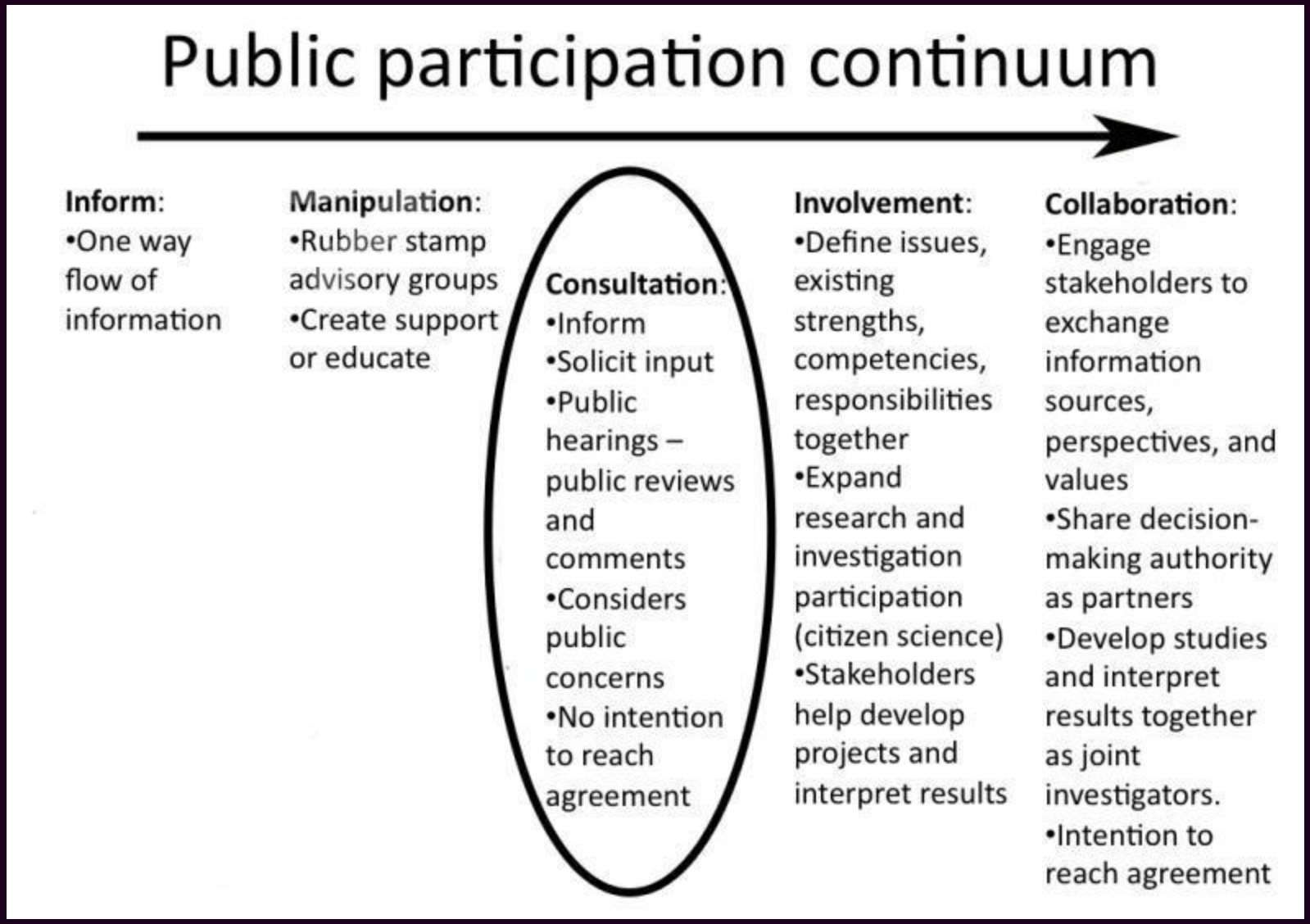
Setting: Perspectives on Horses

- Second most popular animal in the U.S. (Kellert and Berry 1980).
- “Loved animals that deserve more resources and land from BLM”
- “Horses should be managed like protected wildlife”
- “Unproductive animals that compete with land for agriculture and wildlife”
- “Horses should be managed like livestock”
- “Horses should be managed for tourism and/or history”

Public Participation

Goals:

- Reduce conflicts
  - Participation can reduce conflicts, build consensus (Rowe and Frewer 2005).
  - Development of shared norms and values (Early and Mosakowski, 2000).
- **Improve decisions and management**
  - Scientific information + values
  - Local, traditional, indigenous knowledge and experience is valuable
  - Understanding of stakeholder norms and values needed
  - Volunteers and learners



Legal scholars argue that final decision-making authority must remain with the agency and cannot be devolved or abdicated outside the reach of Congress (Coggins, 1995, 1999; Moote et al. 1997)

BLM Consultation

- NEPA
- Resource Advisory Councils (RACs)
- WHB Advisory Board
- Land Use Planning (LUP) process –move toward involvement and “collaboration”
  - Stakeholders “will be involved well before the planning process is officially initiated, rather than only at specific points stipulated by regulation and policy” (BLM 2005)
  - Inclusiveness, accountability, full disclosure of agency responsibilities and roles of participants, recognition of the limitations of the process.
  - Stakeholders concerned with transparency, particularly in area of AMLs.

Tools

- Appreciative Inquiry
- Structured Decision Making
- Participatory Adaptive Management
- Analytic Deliberation
- Citizen Science

Appreciative Inquiry

- Reframe to build on strengths reduce tension between polarized views.
- Reinforce the capacity of people to be agents of change and transformation
- What is working well in WHB for stakeholders?

A.I.: Emphasis on the positive

- Sets the tone for working together, inspiration
- Improved understanding of the experience of others reduces conflicts (Cooperider et al. 2008).

Involving stakeholders: Structured Decision-Making

- Problem is methodically analyzed and decisions are reached to achieve clearly defined objectives.
- Integration of technical analysis with value-based deliberations
- Somewhat formulaic and hierarchical, not as flexible as adaptive management and analytic deliberation.
- Action-reflection-action loops for <u>social learning</u>.

1: Clarify the Decision Context
2: Define Objectives & Evaluation Criteria
3: Develop Alternatives
4: Estimate Consequences
5: Evaluate Trade-Offs & Select
6: Implement & Monitor
Iterate

- Focusing on values led to more thoughtful discussions and better informed decisions (Arvai et al. 2001).

- Links back to appreciation of experience of others, development of shared norms and values.

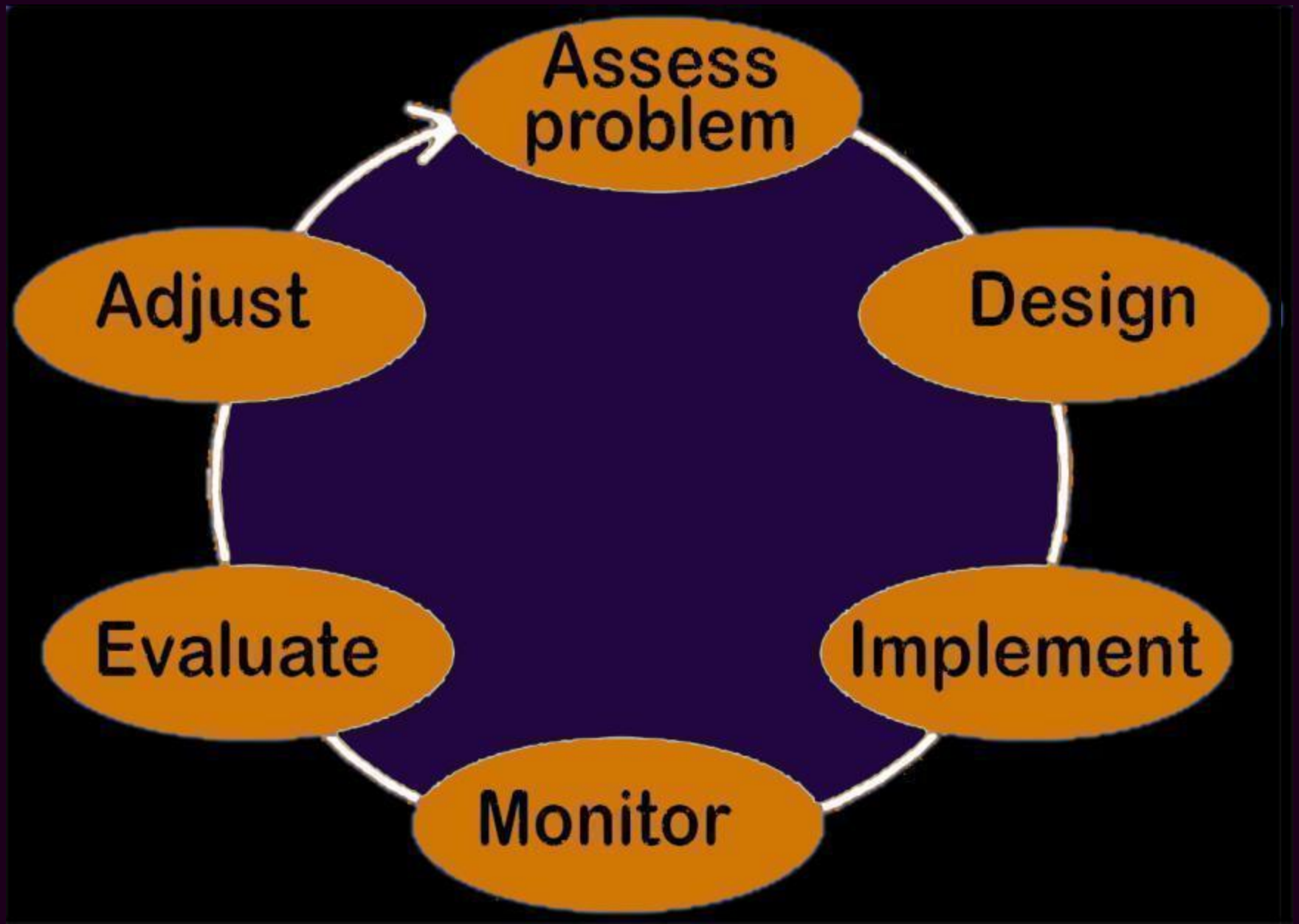
Combine with experimentation, ecological research : Adaptive Management

- Classic form: learning by experimentation.
- When uncertainty is high, due to climate, lack of knowledge, unpredictable weather.
- “Passive AM” based on observation, monitoring.
- Develop model of how the system works.

Participatory Adaptive Management

- Stakeholders participate throughout, in setting goals and design, monitoring, interpretation, adjustment of management
- Agreed upon objectives
- Transparency!
- Can bring common understanding and increase confidence (Fernandez-Gimenez et al. 2008)
- EX: test herd level impacts? Monitor population numbers? etc.

Adaptive Management



Analytic Deliberation

- National Research Council recommendation since 1996, best practices.
- Scientific analysis and public deliberation, coordinated to be mutually informing
- Face to face engagement over time
- Iterative interactions: public, agency, social science practitioners in shared stewardship of the participatory process itself, beginning with problem definition.

- Challenges identified: diagnosis
- Collaboratively design tools and techniques for participation
- Investigate where there is agreement, and where there are differences, importance of issues
- Continued evaluation of the process and adjustment

Analytic Deliberation Structure

- Clear purpose
- Agency commitment
- Adequate capacity and resources
- Timeliness
- Focus on implementation
- Commitment to learning
- Inclusive
- Intense deliberation
- **Transparency**
- Competent discussion: transparent relevant info and analysis, using scientific information, being explicit about assumptions, acknowledge uncertainties, have independent reviews, iterate between technical analysis and stakeholder deliberation.

NRC 2008

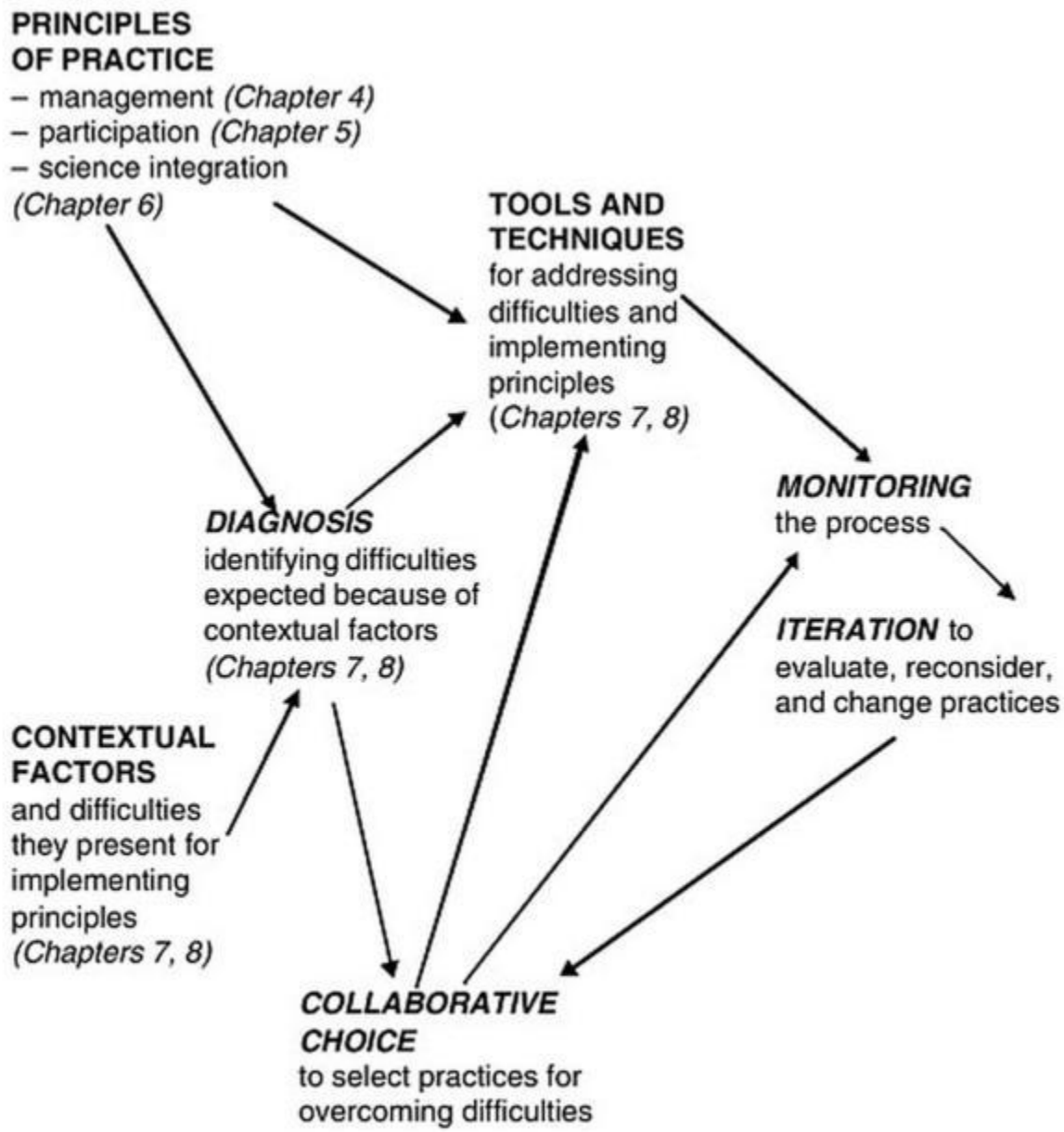


FIGURE ES-1 Elements of best process for public participation in relation to the principles of good public participation and variations in context.

Analytic Deliberation Principles

(Dietz and Stern 1998)

- Involve all perspectives
- Begin early
- Structured to promote discussion
- Build understanding and support but consensus not necessary

Principles for WHB

- Clarity of purpose and commitment to participation
- Provision of adequate funding and staff
- Commitment to self-assessment and learning from experience
- Activities to engage the public planned and evaluated with the public and social science practitioners.

Agency, practitioners, and public participants work together to address the diagnostic questions developed to assess the situation, and then follow the most suitable regime for the situation.

Use 2008 NRC report, “Public participation in environmental assessment and decisionmaking.

Citizen Science

- Joint research and monitoring builds relationships
- Social learning
- Interactive websites
- Volunteer programs (BLM has some for adoption, vaccination, training)
- GIS and mapping
- Ex: Scout programs with Zebra (Rubenstein, 2010)

Recommendations

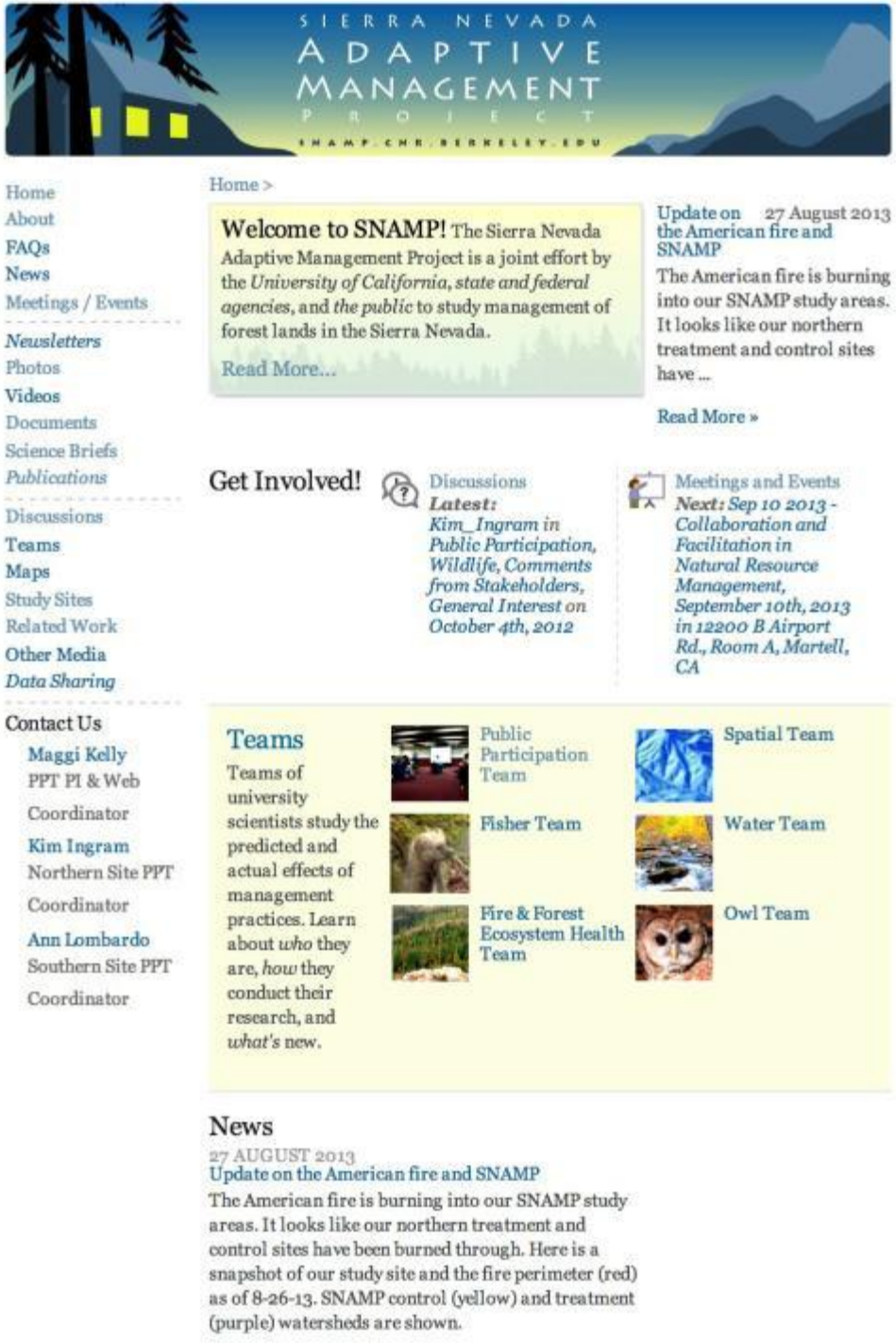
- Engage public that allows public input to influence agency decisions
- Develop an iterative process between public deliberation and scientific discovery
- Co-design the participatory process with representatives of the public
- Support research to capture tradeoffs in public concerns and improve understanding of public perceptions, values and preferences
- AM for testing policies and practices

Social Science Research is Essential

- Taxonomy of values and benefits of free-ranging horses and burros.
- Costs of free-ranging horse and burro management alternatives.
- Economics of management alternatives drawn from proposed research programs.
- Public preferences for alternative management and control strategies.
- Analysis and evaluation of demands for excess free-ranging horses and burros.
- Nonmarket values of free-ranging horses and burros.
- Public attitudes, behaviors, and knowledge regarding free-ranging horses and burros.
- Conceptual development of public-rangeland management models. (NRC, 1980).

Conclusions

- Use analytic deliberation, with adaptive management when appropriate
- Engage public in things they care about.
- Continue and develop volunteer programs, direct interaction with the public
- Make it easier to see horses, webcams?
- Citizen science networks e.g. Christmas bird count
- Native or non-native and does it matter?
- Consistency, transparency, and rationale for allocation.
- Public, interactive, updated website
- Investment in socio-economic research



Participatory adaptive management with interactive website

Announcing two one-day workshops on:

Collaboration in Natural Resources Management

Hosted by the Sierra Nevada Adaptive Management Project

http://snamp.cnr.berkeley.edu

(University of California Cooperative Extension outreach team)

August 1, 2013 Auburn 10am to 4pm

Sierra Nevada Conservancy office, 11521 Blocker Drive, Ste. 205, Auburn

September 18, 2013, 9am to 3pm

Oakhurst, Sierra Vista Presb. Church, Highway 41/ 49, Oakhurst

Workshop Goal:

The goal of these workshops is to build on a SNAMP collaboration workshop series held in each location in Spring 2013. The objectives are to help improve communication by building facilitation skills within the many groups involved in collaboration in natural resource management projects. We will work to build a common language to support collaboration, share tools to prevent problems, and demonstrate interventions to support success when problems arise. These workshops are designed to support the building of a common knowledge base of collaboration skills through mutual learning and discussion. UC Cooperative Extension has developed training modules for all levels of natural resource management staff and stakeholders interested in developing these skills.

SNAMP collaborative field trip on the Tahoe National Forest involving multiple agencies and stakeholders.

Workshop Content:

This workshop will focus on detailed discussions of participants' real life experiences in the many collaborative efforts underway in the natural resource management world and will include practice and discussion of the most appropriate facilitation practices .

OakMapper

Monitoring Sudden Oak Death

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LOGIN

Welcome to OakMapper! Here you can find the most up-to-date data on locations of p. ramorum (the pathogen that causes sudden oak death (SOD)) in California. These official confirmations are shown in red on the maps. This site also functions as a citizen science portal and we would like you to help us collect information on the possible locations of sudden oak death in California. You can create a login, and once registered, you can tell us about possible SOD via the map interface, or by using the iPhone app. Your contributions will appear in yellow on the map. You can also create your own custom maps of the locations of sudden oak death. Please explore the site, and sign up!

New 2012 SOD Confirmations Added to OakMapper!

New confirmed cases of Sudden Oak Death (SOD) (P. ramorum) have been added to OakMapper. 613 new points collected in 2012 have been added to OakMapper bringing the total number of confirmed SOD locations to 2804. The new data consists of laboratory confirmed cases collected by the annual SOD Blitz campaign of 2012 from the Forest Pathology and Mycology Lab run by Dr. Matteo Garbelotto.

Published on Feb '13.

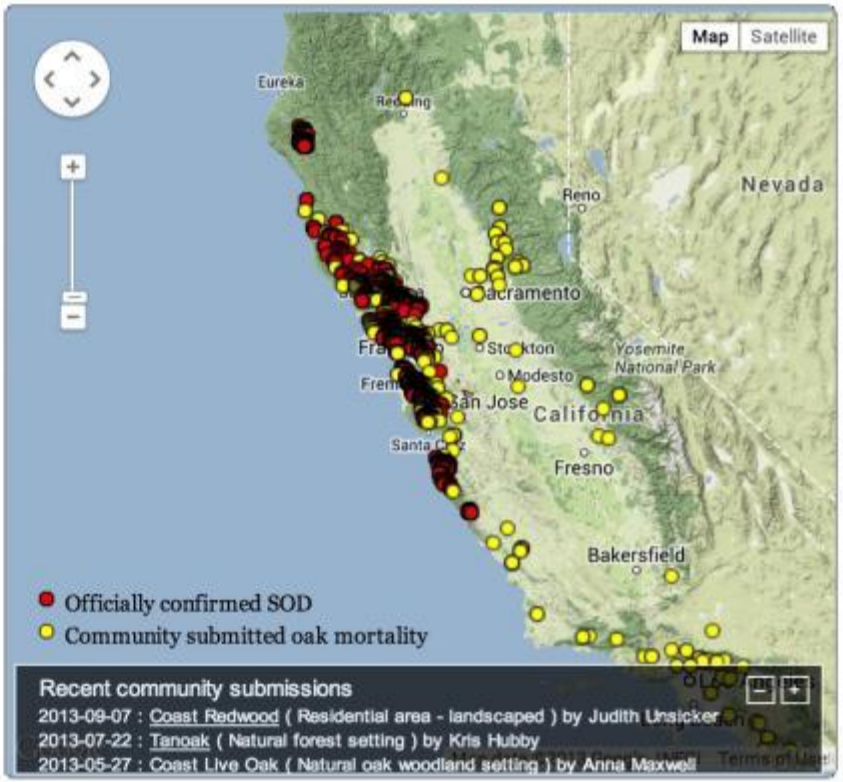
1 2 3 4 5

Learn More about SOD, see photos and links

Submit suspected cases of SOD

View and download maps of SOD cases

Create an OakMapper account and start mapping



GEOSPATIAL INNOVATION FACILITY

Cutting-Edge Mapping Technology at UC Berkeley

Kelly Research & Outreach Lab