

Adaptive Management in DOI

- Effort began with a workshop for executives at NCTC in 2005
- Led to formation of an Adaptive Management Working Group (AMWG)

Adaptive Management in DOI

- Charge:
 - Define AM and describe its implementation
 - Develop a DOI AM Technical Guide
 - Identify training and communication needs and approaches

Motivation for AM

- The need for credible, science-based management of natural resources
 - With active involvement of stakeholders
 - And a clear record of decision making

Resource Context for AM

- Management actions are taken through time
- Resource system is influenced by changing environmental conditions
- System behavior is influenced by management actions

Distinguishing Feature in Applications of AM

- There is uncertainty about ecological processes, and the impacts of management on them
- Management is hindered the lack of understanding

DOI AM Technical Guide

- Developed by the Adaptive Management Working Group
- Organized around 4 key questions
 - What is AM?
 - When should it be applied?
 - How is it implemented?
 - How can success be recognized and measured?

Definition of AM

Learning through management, and adapting based on what is learned

- To learn is to improve understanding through time
- To adapt is to adjust management through time
- Two outcomes:
 - Improved understanding
 - Improved management

Key functions in AM

- Flexible decision making that can adapt to learning
- Post-management monitoring
- Assessment and analysis producing improved understanding

Key roles for science and management

- For management: decision making
- For science: analysis/assessment
- For both: monitoring

Adaptive Resource Management

Setup phase

Establish the management framework
Stakeholder involvement
Objective(s)
Potential management alternatives
Predictive models
Monitoring protocols and plans

Iterative phase

Sequential management

decision making
↓
monitoring
↓
assessment



Adaptive Management Set-Up Phase Step 1: Stakeholders as Partners



Engaging Stakeholders

- Stakeholders - people or organizations who use, influence, or have an interest in a particular resource
- There is a wide variety of stakeholder groups depending on the scale and complexity of the project
- Stakeholders must be committed to the adaptive management process

Process for Stakeholder Involvement

- Solicits input in project design including scope, objectives, and management actions
- Open, transparent, and accessible
- Provides for active, long term engagement

Defining Collaboration

Collaboration is a cooperative *process* in which interested parties, often with widely *varied interests*, work together to seek *solutions* for natural and cultural resource issues.

Key Characteristics of Collaboration

- Sharing a common vision
- Enhancing each other's capacity
- Sharing resources and rewards

Key Characteristics of Collaboration

- Encourages diverse participation
- Builds respectful relationships
- Results in innovative solutions to challenging natural and cultural resource issues

Role of Stakeholders in AM

- Commit to process for adjusting management over time
- Help assess problem and design activities to solve it
- Commit time and energy to implement and monitor, evaluate results and adjust management actions

Successful Outcomes

Benefits:

- New perspectives
- Mutual learning
- New networks for partners
- Sense of shared ownership
- Ability to manage future conflicts

Stakeholders and NEPA

- Individuals and organizations with a **vested interest** in a shared enterprise.
- Interests can include:
 - An expectation of received benefits;
 - A perceived threat;
 - A prior investment of time and/or resources; or
 - Values shared with others associated with the enterprise.

NEPA and the Public

- Public involvement is an important part of the NEPA process
- Agencies are directed to make diligent efforts in involving the public in preparing an implementing NEPA procedures. 40 CFR 1506.6(a).

Stakeholders vs. the Public

- Stakeholders actively engage and commit time and resources.
- Public may be more driven by self-interest and value-based requirements. Their objectivity may be limited. Involvement may be inconsistent.

Federal Advisory Committee Act (FACA)

Governs committees “established or utilized by one or more federal agencies in the interest of obtaining advice or recommendations.

When FACA May Not Apply:

- Group comprised of federal, state, tribal and local government employees.
- Group established to perform an operational rather than advisory function.
- Group that provides technical rather than policy advice.
- Group that provides individual advice versus group consensus.

Questions to Ask

1. What is the composition of the group?
2. Who “established” the group?
3. Who will “utilize” the group?
4. What is the function of the group?

Additional Information

- GSA:
www.gsa.gov/faca
- NPS:
www.nps.gov/policy/DOrders/facaguide.html
- BLM:
www.blm.gov/adr/adrFACA.html
- FWS:
www.fws.gov/pdm/advcom.html