



## **Proposal for a DOI Workshop on Adaptive Management**

**Purpose:** The workshop will provide an introduction to Adaptive Management (AM), including what it is, what is required to make it work, and how it can be incorporated into management actions of DOI bureaus.

**Location:** National Conservation and Training Center, Shepherdstown, WV

**Date:** April 15-16, 2004

**Target audience:** Senior executives and high-level managers of DOI bureaus having responsibility for natural resources management

**Host:** U.S. Geological Survey

### ***Proposed Outline:***

#### **Part 1: Framing the issue**

- Definition of AM – What it's claimed to be, what it's not, what it is
- Framework for AM – Sequential, goal-directed decision making; ability to learn through monitoring/assessment of system responses to decisions; opportunity to improve management through improved understanding
- Features (what makes it adaptive?) – Focus on uncertainty/understanding; accounting for where you are and what you know at each point in time; learning by managing and learning as you go; management is used to improve understanding through assessment, just as understanding is used to improve management
- Alternatives to AM – Ad hoc management; wait and see; steady-state management; conventional objective-based management

#### **Part 2: Roles**

- Role of science in AM – Make explicit the assumptions, objectives, etc. of management; provide a framework for conflict resolution; account for the dynamic nature of natural resources; promote linkages between research and management; enhance the opportunity for effective and efficient resource conservation over time
- Role of management in AM – Resolve conflicts about management objectives; determine which hypotheses should be considered; determine which management options to consider; be effective without long-term institutional commitment
- Role of policy and law in AM – Mechanisms and constraints on decisions, including links to policy, economics, politics and law, that affect the application of AM

#### **Part 3: Examples of AM**

- AM in DOI – Overview of agency endorsements and applications of AM; followed by discussion of specific examples including the resource issue, pivotal scientific points, commitments required, roles of scientists and managers, what works and does not work

- Species management – General features; potential examples are sport harvest of waterfowl, Columbia River anadromous fish management
- Habitat management – General features; potential examples are Northwest Forest Plan, South Florida Restoration and Glen Canyon Dam Adaptive Management Program

#### **Part 4: Challenges for AM**

- Establishing acceptable management goals
- Identification of the appropriate scale of management
- Importance of long-term monitoring and assessment
- Reaching consensus, especially in the scientific community, about what to monitor
- Involvement of the relevant partners in shared decision-making
- Processes for making decisions, especially where responsibility is shared unequally
- Long-term commitment by decision-makers

#### **Part 5: Steps toward a more effective AM model in support of natural resource management**

- Building on what we already have
- Funding support for management-oriented research
- Institutional arrangements to encourage the linking of research and management