

Tool: Adaptive Management Technical Guide

Summary

The Department of the Interior developed a technical guide to assist Federal agencies in improving decision-making through adaptive management.

Keys to Success

Collaborative involvement of communities of interest and place, results from monitoring and assessment are used to adjust management decisions, progress is made toward management objectives, implementation is consistent with applicable laws

“The joint focus on learning and management promotes a process that focuses on goals and engages interested citizens in the decision making process.”

--Dirk Kempthorne, Secretary of the Interior

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Adaptive Management Requires Collaboration

Despite uncertainties and lack of full knowledge about a situation, Federal agencies are tasked every day with making complex land management decisions. In an effort to make better decisions, learn mid-stream from the impacts of those decisions, and involve communities of interest and place in stewardship efforts, the Department of the Interior recently issued a tool called “Adaptive Management: The U.S. Department of the Interior Technical Guide.”

The guide includes the following useful features:

- A one page problem-scoping key to help determine if adaptive management is an appropriate approach
- Thorough discussions of what adaptive management is and when it should be used
- Key questions for successful implementation

Adaptive management at its best is science-based, objective-driven, open, and collaborative. As stated in the guide, it “involves ongoing, real-time learning and knowledge creation, both in a substantive sense and in terms of the adaptive process itself.”

The guide makes an important comment about uncertainty and the need for collaboration among agencies and communities of interest and place:

Often the uncertainty about management impacts is expressed as disagreements among stakeholders who have differing views about the direction and magnitude of resource change in response to management. An adaptive approach explicitly articulates these viewpoints, incorporates them into the decision making process, and uses (adaptive) management itself to help identify the most appropriate view about resource dynamics.

See the attached “Problem-Scoping Key for Adaptive Management”, excerpted from the Technical Guide, or go to the link below for the full report.

Links

Department of Interior Adaptive Management site (which includes a downloadable version of the guide)

www.doi.gov/initiatives/AdaptiveManagement/index.html

Collaborative Adaptive Management Network (CAMNet)

www.adaptivemanagement.net/whatis.php

Problem-Scoping Key for Adaptive Management

The following key can help in dissecting a particular management problem and determining whether adaptive management is an appropriate approach to decision making. If the answer to any question in the key is negative, then an approach other than adaptive management is likely to be more appropriate.

1. Is some kind of management decision to be made?
(see Sections 1.1, 2.1, 2.3, 3.1, and 5.5)
No – decision analysis and monitoring are unnecessary when no decision options exist.
Yes – go to step 2.
2. Can stakeholders be engaged?
(see Sections 1.1, 1.2, 2.1, 3.1, and 4.2)
No – without active stakeholder involvement an adaptive management process is unlikely to be effective.
Yes – go to step 3.
3. Can management objective(s) be stated explicitly?
(see Sections 1.2, 2.1, 2.2, 2.3, 3.1, 4.2 and 5.1)
No – adaptive management is not possible if objectives are not identified.
Yes – go to step 4.
4. Is decision making confounded by uncertainty about potential management impacts?
(see Sections 1.1, 1.2, 2.1, 3.1, 4.1, 4.2 and 5.2)
No – in the absence of uncertainty adaptive management is not needed.
Yes – go to step 5.
5. Can resource relationships and management impacts be represented in models?
(see Sections 1.2, 3.1, 4.2, and 5.1)
No – adaptive management cannot proceed without the predictions generated by models.
Yes – go to step 6.
6. Can monitoring be designed to inform decision making?
(see Sections 2.1, 2.3, 3.1, and 4.2)
No – in the absence of targeted monitoring it is not possible to reduce uncertainty and improve management.
Yes – go to step 7.
7. Can progress be measured in achieving management objectives?
(see Sections 1.1, 3.1, 4.1, and 4.2)
No – adaptive management is not feasible if progress in understanding and improving management is unrecognizable.
Yes – go to step 8.
8. Can management actions be adjusted in response to what has been learned?
(see Sections 1.2, 2.1, 3.1, 4.1, 4.2, 5.3, and 5.4)
No – adaptive management is not possible without the flexibility to adjust management strategies.
Yes – go to step 9.
9. Does the whole process fit within the appropriate legal framework?
(see Sections 2.3, 2.4, 3.2, 4.1, and 4.2)
No – adaptive management should not proceed absent full compliance with the relevant laws, regulations, and authorities.
Yes – all of the basic conditions are met, and adaptive management is appropriate for this problem.