

Adaptive Management: An Overview

BDCP Steering Committee

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The Five-Point Policy for HCPs Defines Adaptive Management As:

“a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned.”

(65 FR 106:35242-35257)

NCCPA Section 2805 Defines Adaptive Management As:

...to use the results of new information gathered through the monitoring program of the plan and from other sources to adjust management strategies and practices to assist in providing for the conservation of covered species.

Adaptive Management

- **A tool to allow for improving implementation of conservation actions over time**
- **Iterative process whereby Plan implementation is initiated, evaluated, and refined based on new information**
- **Recognizes and prepares for the uncertainty that underlies Plan implementation**

Adaptive Management (cont.)

- **Uses information from monitoring and research to continually evaluate and improve success of conservation actions and respond to changed circumstances**
- **Cannot be effective without an effective monitoring program**

Adaptive Management (cont.)

The key ingredient in successful Adaptive Management decision making is the availability of new information gathered through focused monitoring and research, including relevant information developed by others, that authoritatively informs effective implementation of the Plan.

Lower Colorado River MSCP: Key Adaptive Management Plan (AMP) Elements

- **AMP description is brief (4 pages)**
- **Identifies commitment of Implementing Entity to adaptively manage Plan implementation based on new information (i.e., monitoring and research results)**
- **Broad description of process for adjusting implementation in coordination with USFWS (e.g., modifying, eliminating, adding conservation measures)**
- **General description of uncertainties anticipated to be addressed through research and adaptive management experiments**

LCR MSCP Adaptive Management Plan (cont.)

Following approval of permits, the Implementing Entity prepared a Science Strategy detailing:

- **Process for adaptive decision making at conservation action level (e.g., implementation techniques) and program (i.e., adjustments to the Conservation Strategy)**
- **Decision making responsibilities (Implementing Entity, USFWS, Steering Committee)**

LCR MSCP Adaptive Management Plan (cont.)

- **Limits scope of monitoring and research to informing implementation of Plan elements**
- **Process for incorporating science into program development and decision making**
- **Formal process for internal science reviews (technical and program level) with discretion to seek external science input**
- **Process for information sharing and data storage**

East Contra Costa and Santa Clara Valley HCPs/NCCPs: Key AMP Elements

- **AMP descriptions are brief (< 10 pages)**
- **Describes adaptive management decision making process and participating entities and their responsibilities**
- **Provides for ongoing independent science advisor input at discretion of the Implementing Entity**
- **Provides for formal outside science review every 5 years**
- **Provides for public input into decision making processes**

Recommended Contents of BDCP Adaptive Management Plan

Provide descriptions of the:

- **Scope of the AMP**
- **Entities participating in adaptive management decision making and their roles and responsibilities**
- **Process for incorporating science**
- **Adaptive management decision making process**

Recommended Contents of BDCP Adaptive Management Plan (cont.)

Provide descriptions of the:

- **Key uncertainties related to Plan implementation to be addressed through adaptive management**
- **Linkages to monitoring and research measures designed to address uncertainties**
- **Approaches to “active” and “passive” adaptive management**

BDCP Adaptive Management

- **Questions?**
- **Discussion?**
- **Next Steps**