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Best Management Practices and Adaptive
Management in Oil and Gas Development (May
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SLIDES: Adaptive Management

Tim Salt

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Adaptive Management

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May 13, 2004



The Reality

- Currently over 40 plans reference AM
- No common definition
- No consistency in approach
- Vulnerability to challenge

The Assignment

Develop policies and procedures to *INTEGRATE* adaptive management concepts into the NEPA and Planning Process.



What is Adaptive Management?

- Highly varied in literature and practice
 - Application of scientific method
 - Research lab to make better decisions
 - Tool to collaborative decision making
 - Excuse for not making hard decisions



OEPC Guidance

Adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes.

(OEPC ESMO3-6)

The bottom of the slide features a dark blue gradient background with silhouettes of birds in flight and a mountain range, creating a naturalistic scene.

Why Adaptive Management?

- Complexity of ecosystems
- Changing environmental conditions
- Changing practices and treatments
- Lack of complete information
- Need to take action



What Do We Hope To Achieve with AM?

- Enhance our ability to achieve plan outcomes
- Get the most out of the NEPA/Planning process first time through
- Plan flexibility
- Validate impact predictions, ensure mitigation is effective, adapt for unintended consequences



The Challenge

- Efficiently and effectively employ the NEPA and planning processes to address actions and make decisions that may subsequently be modified in light of monitoring or other new information



The Impediment

- Prescriptive decisions
 - Actions vs. outcomes



Assumptions

- Underlying objective- Achieve outcomes by supporting changes or modifications in management actions without reinitiating process
- The key to achieving that underlying objective is outcome or performance based decisions



Assumptions

- The key to performance-based decisions is clearly defined, measurable performance standards
- Measuring performance standards requires a firm commitment to long term monitoring



When to Use AM

- The Filter
 - Decision is performance based and defined by performance standards
 - Actions to achieve outcomes can be adapted
 - Affects of the action are unknown or uncertain
 - Firm funding and workload commitment to monitoring

Where to Use AM

- Based upon Filter
 - LUP Level
 - Activity Plan Level
 - Project Level



Policy Recommendations

- The underlying objective in adopting AM is to enhance the ability to achieve outcomes.
- The ability to achieve outcomes is enhanced when one can make changes or modifications in management actions without reinitiating the planning/NEPA process.



Policy Recommendations

- The key to making changes without reinitiating the process is outcome or performance based plan decisions
- The key to performance-based decisions is clearly defined, measurable performance standards
- Measurable performance standards require a firm commitment to monitoring



Policy Recommendations

- Actions to achieve outcomes are not plan decisions
- Alternative actions that have been analyzed can be employed to achieve an outcome without amending the plan so long as outcome is unchanged



Policy Recommendations

- A plan must contain all the essential elements to be considered an AM plan
- AM can be used on any plan, activity or project so long as the filter is employed and criteria met
- AM should not be used on any plan, activity or project unless all filter criteria are met

Challenges for AM

- Institutional Challenges
 - Procedural Challenges
 - Scientific Challenges
 - Sociological Challenges
 - Fiscal Challenges
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