

# Monitoring and Evaluation



# Objective

- Identify appropriate monitoring techniques.
- Identify approaches to evaluating plan implementation and effectiveness.



# Natural Disasters



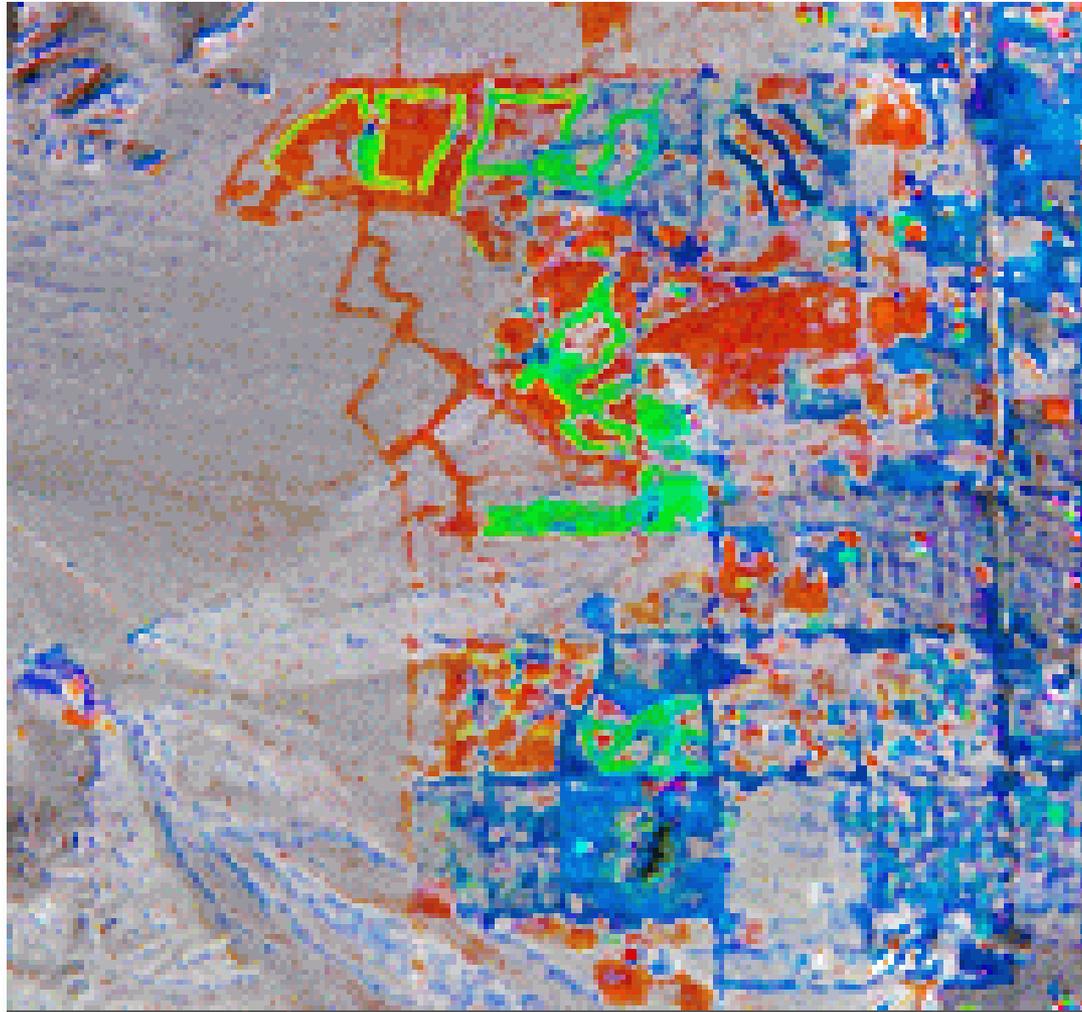
# Natural Disasters



# Changing Recreational Uses



# Changing Demographics



# Definition of Monitoring

The process of...

- Tracking the implementation of land use planning decisions (implementation monitoring), and
- Collecting data/information necessary to evaluate the effectiveness of land use planning decisions (effectiveness monitoring).

# Why Is Monitoring Important?

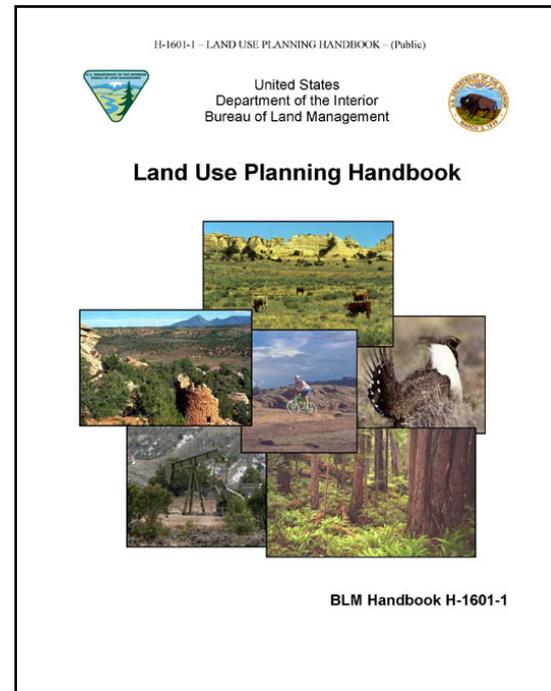
- Monitoring links to adaptive management and modifications of plan decisions.
- Planning is a dynamic, iterative process that requires monitoring and modification of decisions.
- Ongoing data collection is an essential component of the planning cycle.
- Feedback is the first step in future adjustments.
- Monitoring plan must be included in RMP.

# Legal Requirements

- CEQ NEPA Regulations (40 CFR 1505.2(c))
  - Require a monitoring and enforcement program
  - Must be summarized in the ROD
- BLM Planning Regulations (43 CFR 1610.4-9)
  - Monitor and evaluate approved land use plans.
  - Document monitoring every year.
  - Evaluate RMPs every five years (BLM Planning Handbook, Section V.).
- BLM NEPA Handbook (Chapter 10)

# Types of Monitoring

- Implementation
- Effectiveness
- Plan evaluation



**BLM Land Use Planning Handbook, pages 32-36**

# Implementation Monitoring

- Was the specified activity carried out?
- A process of tracking and documenting the implementation of plan decisions.
- Completed annually; tracking report is available for public review.
- The report describes management actions proposed and undertaken.
- Reports should also document which management actions were completed and what further actions are needed to continue implementation of decisions.

# Effectiveness Monitoring

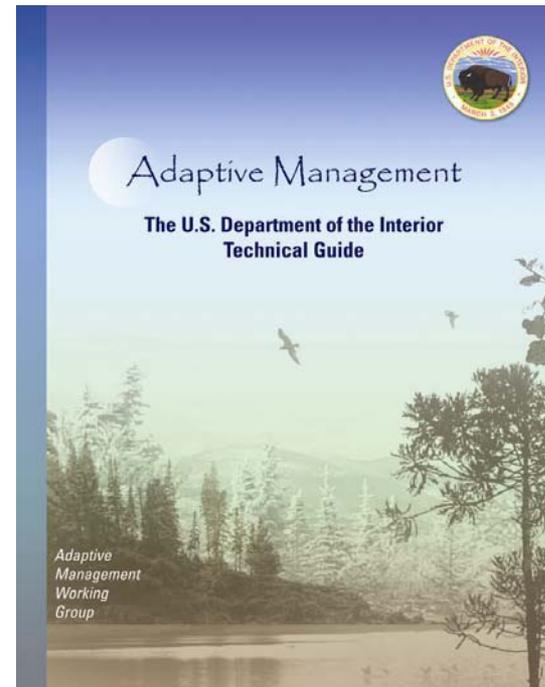
- Was the specified activity successful in achieving its objective?
- The process of collecting data to determine whether desired outcomes are being met as management actions are implemented.
- Requires development of indicators of change, thresholds, and timeframes, which will be used to evaluate decisions and determine whether desired outcomes are being achieved.

# Elements of an Effective Monitoring Plan

- List of resources to be monitored
- Indicators or thresholds for evaluating results
- BLM and collaborator responsibilities
- Schedule of monitoring activities
- Effectiveness monitoring can be expensive so data should be collected in the most cost-effective way.
- GIS can be an effective tool in the monitoring toolbox.

# Adaptive Management through Monitoring

- Use adaptive management to adjust plan decisions that are not meeting desired outcomes.
- Adaptive management requires ongoing information-gathering.



# Plan Evaluation

- Were the decisions in the plan successful? Are the management actions achieving the desired outcomes?
- The process of reviewing land use plan decisions and preparing monitoring reports to determine whether the land use plan decisions and NEPA analysis are still valid.
- Evaluation report should be prepared every five years.
- Include the monitoring schedule in the plan.

# Plan Evaluation Report Requirements

- Are actions outlined in the plan being implemented?
- Does the plan establish desired outcomes? Are they being achieved?
- Do the decisions continue to be correct or proper over time?
- Do any of the decisions need to be revised?
- Have there been significant changes in related or adjacent plans, including those of other agencies or tribes?

## Plan Evaluation Report Requirements (Cont.)

- Are there new data or analysis that significantly affect the planning decisions or NEPA analysis?
- Are new inventories warranted as a result of policy changes?
- Are there unmet needs which require a plan amendment or revision?
- Are there new legal mandates, such as newly listed species, not addressed in the plan?

# Three Types of Plan Modifications

## ■ Maintenance

- Minor technical changes or corrections necessary to keep plan accurate and up-to-date
- Can be done any time without NEPA analysis.

## ■ Amendment

- Changes to objectives, standards, or allocations
- Achieved with an EA or EIS

## ■ Revision

- Wholesale update of the plan
- Usually done every 10-20 years
- Requires an EIS