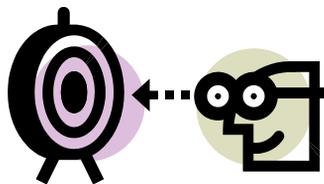


## Unit 3.6. Data Gathering



### Unit Objectives

- Address the role of data in the planning process
- Identify types of data used in planning
- Evaluate the process of conducting a data gap analysis
- Describe IT applications for collecting data



3.6 - 1

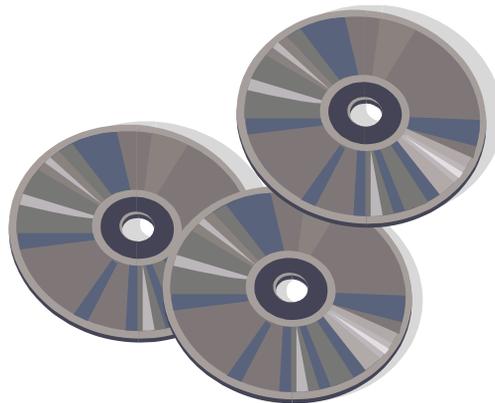
## Role of Data in Planning

- Basis for support of plan decisions
- Indicator of hard look, required by NEPA
- Interdisciplinary team unifier
- Fundamental part of the administrative record
- Importance not confined to scientific approach and product. Greater importance is the role it plays in giving credence to the process
- BLM Planning Handbook, Appendix G

3.6 - 2

## Important Distinctions

- Data
- Information
- Knowledge
- Wisdom



3.6 - 3

## Where Are We with Regard to Data?

- What we have
- What we need
- What we want
- Who will gather it?
- How much will it cost?
- When do we need it?
- When will we get it?



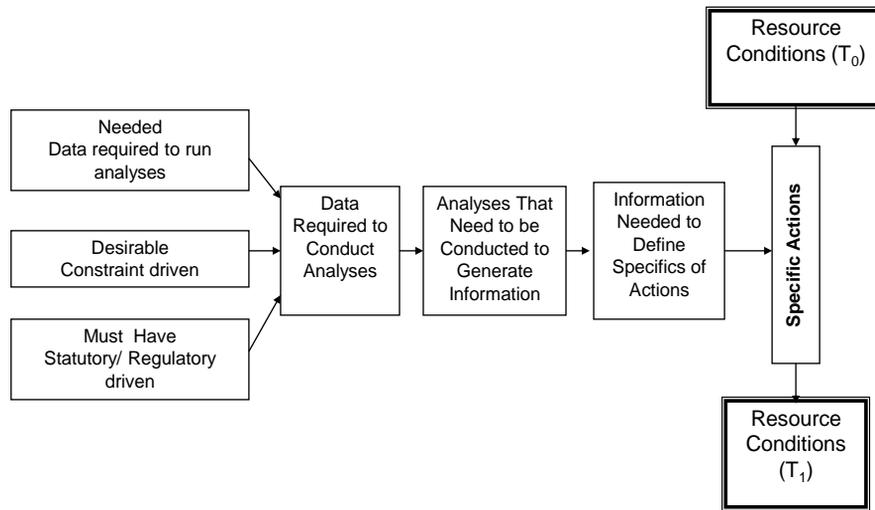
3.6 - 4

## Dealing with Incomplete or Unavailable Information

- If cost of obtaining information not exorbitant, include information in EIS
- If cost of obtaining information exorbitant, EIS must
  - ◆ State that information is incomplete or unavailable
  - ◆ State relevance of information to evaluating reasonable foreseeable significant effects
  - ◆ Summarize credible scientific evidence about impacts
  - ◆ Use methods accepted by scientific community
- “Worst-case analysis” not required

3.6 - 5

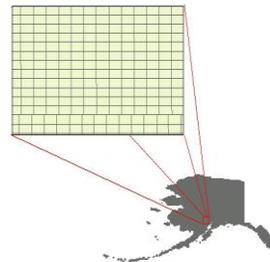
## Data-to-Information-to-Decisions



3.6 - 6

## IM 2003-238—Guidance for Data Management in Land Use Planning

- Roles and Responsibilities
- Characterizing and Managing Data
- Metadata Requirements
- Data Standards



IM 2003-238 (this replaces IM 2001-202)

3.6 - 7

## Information Technology Opportunities for Data Collection

- Collaboratively furnished data
  - ◆ Inform collaborators early in process what data BLM has available and needs
  - ◆ Determine the veracity of collector's process
  - ◆ Data must be consistent, have suitable delivery format and meet data standards
  - ◆ Collaborators must meet process time constraints

3.6 - 8

## Data Analysis

- Use of standardized techniques where possible
  - ◆ Statistical
  - ◆ Quantitative
  - ◆ Qualitative
  - ◆ Professional judgement
- Peer review of results and conflict resolution
- IDT review
- How to deal with data uncertainty
- How to deal with conflicting data



3.6 - 9

## Data Stewardship and Consistency

- Data stewards
  - ◆ Subject matter experts
  - ◆ Identify planning data requirements
  - ◆ Implement data standards
- Data administrators
  - ◆ Technical experts
  - ◆ Coordinate data stewards
  - ◆ Develop data standards
  - ◆ Promote exchange of information
- Make both part of planning team at beginning

[http://web.blm.gov/data\\_mgt/datastewds.htm](http://web.blm.gov/data_mgt/datastewds.htm)

3.6 - 10

## Data Standardization Issues

- BLM standards
  - ◆ Create consistent quality
  - ◆ Create common "look and feel"
- FGDC (mandatory federal standards incorporated into BLM standards)
  - ◆ Federal Geographic Data Committee
  - ◆ Spatial and nonspatial metadata standards must be followed.
  - ◆ You are responsible for meeting metadata standards; get IT professional help

IM 2003-125

3.6 - 11

## Data Standardization Issues (Cont.)

- Metadata: What is it?
  - ◆ Summary and index of the data itself: how, where, when, who
  - ◆ Requires a resource specialist to identify:
    - the data standards
    - any limiting circumstances
    - whether data is outdated or new
  - ◆ After metadata is identified, GIS takes over
  - ◆ GIS coordinator will identify projection, size, etc.
  - ◆ Resource specialists need to stay involved in the metadata process

IM 2003-134

3.6 - 12

## Data Standardization Issues (Cont.)



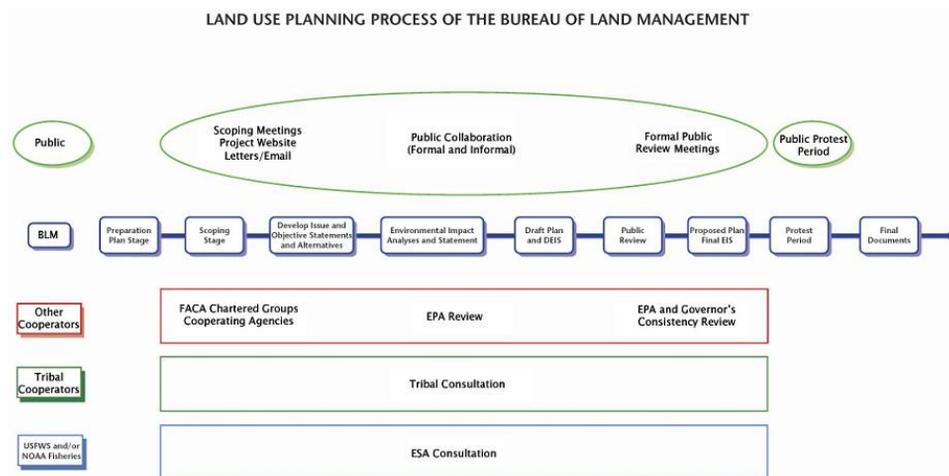
- ◆ If you identify that your data is outdated, perform a risk analysis
  - Can your decision be based on old data?
  - If no, continue looking for better data
  - If yes, use the data and document where you got it.

3.6 - 13

# Exercise I. Data-Gathering Process



3.6 - 14



3.6 - 15