INVENTORY, ASSESSMENT & MONITORING (IAM)

Inventory

- To List
- To Count
- Resource Inventory
 - Vegetation
 - Soils
 - Sites
 - Buildings
 - Infrastructure

Assessment

- Condition of items in the inventory
- Resource Inventory
- Site, soil or vegetation condition
 - Rangeland Health Indicators
 - Watershed Health
 - Riparian Health

Monitoring

- Monitor to watch or check
- Detect change



Monitoring implies a series of observations over time for the purpose of detecting change.

MONITORING

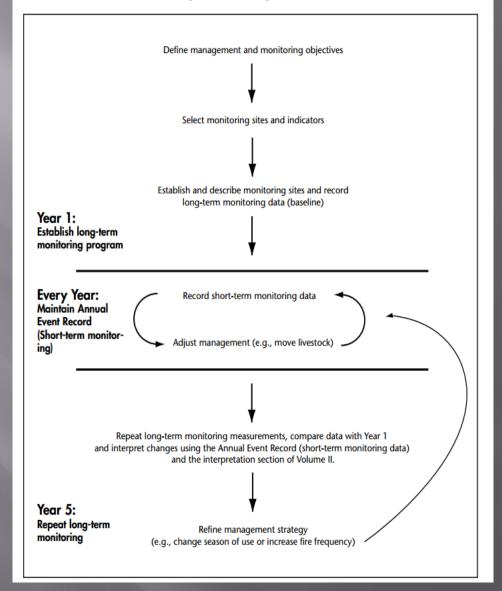
Why, Who, What, Where, When, and How Long?

Why Monitor?

- Most important question.
- Is management meeting objectives?
- Objectives need to be clear, meaningful and attainable.
- Vague objectives = vague results.

What, Where, When and How Often – depends on your objectives

Monitoring and Management Flow Chart



Management Objectives

Long-term Monitoring

- Sustainability:
 Maintain or increase land productivity*
 and the number of land use options.
- Minimize risk of land degradation.

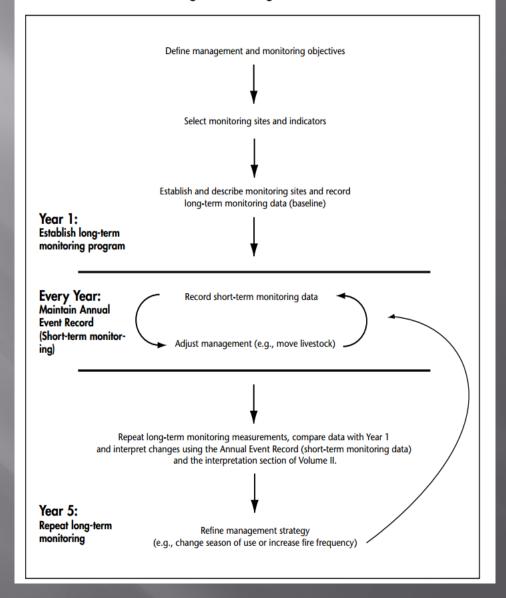
Short-term Monitoring

- Maintain adequate cover to limit soil erosion and promote water infiltration.
- Maintain or increase cover of one or more species that persist through catastrophic disturbance
- Limit invasive species

Measurable Objectives

- Residue (RDM) level meets standards for the site.
- Increase ground cover from 70 % to 90 %
- Reduce bare ground from 30 % to 10 %
- Decrease bare ground patch size (gap)
- Increase canopy cover from 50 % to 70 %.
- Increase soft chess from 40 % to 60 %
- Prevent gully from getting larger.
- Decrease invasive species
- Increase purple needle grass
- Increase hiding cover for deer.
- Reduce fire hazard

Monitoring and Management Flow Chart



What to Monitor? Monitoring Strategy

Long-term Monitoring

- Monitoring Intensity Level I
 Photo points
- Monitoring Intensity Levels II and III

Photo points and one or more of the following measurements:

- 1. Line-point intercept (III) or step point (II) (for cover and composition)
- 2. Gap intercept (III) or step gap (II) (for size of bare patches)
- 3. Soil stability test (III) or bottle cap test (II) (for soil erosion resistance)
- 4. Belt transects (III) (for invasive species)

Short-term Monitoring

- Monitoring Intensity Level I
 Daily to monthly observations
- Monitoring Intensity Level II
 Daily to monthly observations and
 - 1. Step-point (percent cover only)
 - 2. Step-gap (percent steps completely in bare patches)

Monitoring Methods

- Keep Records
- Photo Monitor
- Vegetation Attributes
- Soil Attributes

Records

- Fertilizer application.
- Pesticide application
- Herd health practices
- Pasture use

End of IAM