

Monitoring Program Exercise - Step Five
Specify standards for acceptable limits of change

Due Tues. 4/18

Purpose: Standards insure that collected indicator information actually leads to management action and is used in decision-making. By achieving the standards established for an area, it is assumed that desired area conditions are being achieved. Standards are usually set after conditions are inventoried, thus your standards may not be realistic in this draft.

Definition: Standards are measurable objectives which describe the conditions managers feel can be achieved over a reasonable time period (e.g. 5 years). Standards describe the maximum amount of change in conditions that is considered acceptable.

Assignment:

1. For each of the 3 indicators you identified in Step three, write a standard that describes the maximum amount of change in conditions you consider acceptable. Consider your desired area conditions when deciding how much impact is considered acceptable.
2. Assume that you measured conditions for your indicators and found conditions to be below standards. Identify 2 corrective management actions for each of your indicators.

Example of Step Five Assignment

Alaska Basin Zone - Jedediah Smith Wilderness, WY

1. Indicator - Number and distribution of campsites

Standard - A maximum of 30 campsites which are a minimum of 200 ft. from lakeshores and 100 ft. from trails.

Corrective Management Actions -

- a. 30 campsites in the most environmentally durable locations will be selected. All others will be closed with rocks and will be revegetated.
- b. The education program will encourage visitors to camp at the selected sites. Visitors camping within 200 ft. of lakeshores or 100 ft. from trails will be asked to move their camp immediately and will be given a warning notice. Uncooperative visitors will be cited.

2. Indicator - Frequency of occurrence of exotic plant species.

Standard - No exotic plant species may persist more than one season.

Corrective Management Actions -

- a. All exotic plants will be physically removed using a pulaski or shovel to remove the roots.
- b. The source of exotic species introduction will be determined and an education program initiated to make visitors aware of ways they can help control the introduction of exotics.

3. Indicator - Trail transect

Standard - The average soil loss (based on 6 transects) for any one trail segment cannot exceed 300 sq.cm.

Corrective Management Actions -

- a. If the trail is in an acceptable location, waterbars and other erosion control structures will be installed.
- b. If the trail is poorly located, it will be re-routed and the abandoned trail will be checkdamed and revegetated.

4. Indicator - Fecal coliform / Fecal streptococci ratio

Standard - The FC/FS ratio for any one sample cannot exceed 4.0

Corrective Management Actions -

a. A visitor education program will be implemented to stress the importance of burying human waste at least 200 ft. from surface water.

b. The law enforcement program will be stepped up. Any people found not burying human waste will be automatically cited.

5. Indicator - pH of rain and snowfall, pH and alkalinity of surface water

Standard - The pH of rain and snowfall must be greater than 6.0. The pH of surface water cannot change more than 1/2 increment from the current pH and cannot fall below 20 mg/l.

Corrective Management Actions -

a. The source of SO and NO emissions will be determined. A report will be filed with EPA to pressure industry to clean up emissions.

b. Test feasibility and effectiveness of adding lime or other alkaline material to increase the water's buffering capacity.

6. Indicator - Relative abundance of marmots

Standard - Based on a 3 year sampling period, the abundance of marmots in Alaska Basin must not be consistently greater than the abundance of marmots in South Leigh Lakes.

Corrective Management Actions -

a. The education program will emphasize ways visitors can prevent marmots from being attracted to campsites.

b. A program of negative reinforcement will be initiated wherein every time a marmot enters a campsite, it is chased away.

7. Indicator - Number of occupied campsites within sight or sound of another campsite

Standard - No more than one campsite will be visible from any other campsite. No more than two campsites will be within hearing distance of any campsite.

Corrective Management Actions -

a. Wilderness rangers will contact visitors as they enter Alaska Basin and encourage them to camp at one of the 30 selected sites each of which will be located so as no other campsites are within sight or sound.

b. Sites within sight or sound of the 30 selected sites will be made unattractive by covering them with rock. A sign will be posted at the entrance of Alaska Basin encouraging visitors to hide their campsites and camp at least 200 ft. from lakeshores and 100 ft. from trails.

8. Indicator - Length of multiple trails

Standard - The length of multiple trail will not exceed 100 ft. (as indicated by trampled vegetation along existing trail). The length of multiple trail which has bare soil exposed will not exceed 10 ft.

Corrective Management Actions -

a. The visitor education program will ask visitors to stay on the trail regardless of whether it is rocky, muddy or snow-covered.

b. The original trail will be made attractive to walk on by removing rocks, installing waterbars, and constructing trench and turnpikes through boggy sections. At the same time, the multiple trail will be made as attractive by covering it with rock.