

HOW IS A MONITORING STRATEGY DEVELOPED?

A robust and comprehensive monitoring strategy for visitor use management should consider and plan for each of the following (checklist modified from Broom and Hall 2008):

- ✓ What is going to be monitored and why?
- ✓ Where will monitoring occur? Who will collect the data?
- ✓ How often will an indicator be monitored?
- ✓ How will data be collected? Is there a manual with quality assurance protocols, equipment needs, and other resources?
- ✓ Are there rules that apply to how the data is collected, analyzed, managed, or reported?

HOW IS MONITORING IMPLEMENTED?

Monitoring requires a commitment to collecting and evaluating data over an extended period. Visitor use, including the types of activities, number of visitors, and visitor behaviors, is highly susceptible to change. Therefore, monitoring the effects of visitor use is needed to ensure desired conditions are achieved and maintained for the long term. Good visitor use management involves development and implementation of monitoring long before critical decisions and management actions are needed. Recognizing the need for monitoring early allows for a more proactive approach to visitor use management.

A well-planned monitoring strategy provides for transparency, communication, and potential cost savings through efficiencies and possibly cost sharing. The greater the management team's awareness of visitor use monitoring, the greater the management team's receptivity to taking new management actions as a result of monitoring.

Process for selecting indicators and establishing thresholds, triggers and objectives.

REVIEW EXISTING DIRECTION

REVIEW the analysis area's purpose, management direction, and project issues.

CONDUCT an assessment of existing monitoring information.

Outcome: Understand current conditions and existing monitoring.

PROCESS FOR SELECTING INDICATORS

IDENTIFY potential indicator topics.

BRAINSTORM and refine ideas for potential indicators.

SCREEN potential indicators.

DETERMINE the appropriate unit of measure for each indicator.

TEST indicators.

Outcome: A draft indicator.

PROCESS FOR ESTABLISHING THRESHOLDS, TRIGGERS, AND OBJECTIVES

ESTABLISH potential thresholds and, if needed, triggers for each indicator.

DOCUMENT the rationale for threshold(s) and triggers.

ESTABLISH objectives, if desired.

Outcome: Threshold for each indicator, a trigger, if needed, and an objective, if desired.



MONITORING GUIDEBOOK Evaluating Effectiveness of Visitor Use Management

Edition One | June 2019



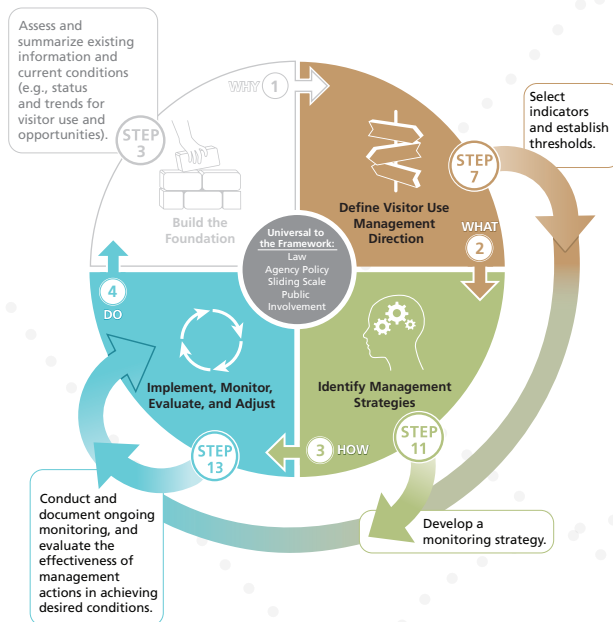
WHAT IS MONITORING?

Monitoring is the process of routinely and systematically gathering information or making observations to assess the status of specific resource conditions and visitor experiences. Conducting an inventory of conditions or gathering information about a particular issue is not monitoring. To qualify as monitoring, three components are necessary: (1) selection of indicators, along with establishment of thresholds or objectives, and any needed triggers; (2) routine, systematic observations or data collection of the indicators over time; and (3) documentation and analysis of the observations or data collected to assess whether changes in management actions are needed.

Indicators are specific resource or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed.

Thresholds are the minimally acceptable condition associated with an indicator.

Representation of where monitoring is integrated into the framework.



WHY MONITOR?

Monitoring is an integral component of visitor use management that ensures quality visitor experiences and protects the natural and cultural resources that attract people to federally managed lands and waters. Monitoring allows managers to objectively and effectively evaluate whether desired conditions are being achieved and maintained. Ensuring that visitor use decisions are based on sufficient information results in a higher degree of accountability, defensibility, and transparency. Monitoring shows how conditions change over time, including the rate and magnitude of change. If a visitor capacity is identified, monitoring is essential to ensure that desired conditions are achieved and maintained. For these reasons, monitoring is as essential for managing visitor use as it is for managing natural resource conditions, such as the quality of wildlife habitat, air, water, rangeland, and other resources.



A crowd of visitors looks out over a clearing where a large bison lays in the dirt.

HOW ARE MONITORING DATA USED?

Once a monitoring strategy is developed, data collected should inform management actions so that desired conditions are achieved. To begin, existing conditions are compared to desired conditions. There are three possible outcomes of this comparison: (1) conditions are acceptable; (2) conditions are near thresholds; or (3) conditions are exceeding thresholds. Key tasks in using monitoring data include analyzing and interpreting trends, investigating potential causal factors that might explain the trends, and adjusting management actions if necessary.

WHAT IS THE MONITORING GUIDEBOOK?

The monitoring guidebook is intended to complement the Interagency Visitor Use Management Council "Visitor Use Management Framework" (the framework). It can be used by those who have not yet selected indicators and thresholds or developed a monitoring strategy, or it can be used by those who are seeking to make updates or improvements to their monitoring strategy. The monitoring guidebook builds on the expectation of already having clearly defined desired conditions that tier to the foundational direction of the project area. The monitoring guidebook chapters are:

Chapter 1: Introduction

Chapter 2: Why Monitor?

Chapter 3: What is Monitoring?

Chapter 4: How is a Monitoring Strategy Developed?

Chapter 5: How is Monitoring Implemented?

Chapter 6: How are Monitoring Data Used?

Appendices provide examples of indicators, thresholds, triggers, and objectives for a variety of resources and settings to show how monitoring information is used to inform management actions.



Student volunteers on Long Pine Key Nature Trail at Everglades National Park.