Presentation Overview

- NPS commitment to resource protection and visitor enjoyment
- Visitor Use Management Process
  - Best practices for management strategies
- Park Examples
  - Yosemite National Park
  - Denali National Park
  - Zion National Park
  - Up Next: Grand Teton example
Organic Act of 1916

Requires the US National Park Service “to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations”

U.S.C., title 16, sec. 1
Why Manage Use?

Strategically manage visitor use to:

- **Preserve** the quality of the resources (wildlife and ecological systems) and visitor experiences

- **Prevent** avoidable impacts to resources (including impacts to wildlife)

- **Minimize** unavoidable impacts
Visitor Use Management

Process for managing characteristics of visitor use and setting

• Sustain resource conditions
  – Including wildlife habitat, ecological systems

• Provide desired visitor experiences

• Variety of strategies and tools
  – Education
  – Site management
  – Regulation
  – Enforcement
  – Rationing/allocation
Components of Visitor Use Management Planning

**Visitor Use Characteristics**
- Timing and distribution
- Activities
- Behaviors
- Levels of use

**Visitor Capacity**
- Component of visitor use management, is the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining desired resource conditions and visitor experiences consistent with the purposes for which the area was established
Kinds and Amounts of Use

• Sometimes, very little use can cause a lot of impact

• Need multiple strategies to protect important resources and visitor experiences
Planning
Process Overview
Visitor Use Management Process

**WHY**
Determine why the park was established as a unit of the NPS system

**WHAT**
Identify desired conditions and related direction for visitor use management

**HOW**
Manage visitor use to achieve and maintain desired conditions over time

**Park purpose, significance, FRVs, ORVs**

**Guidance from previous park plans, including desired conditions**

**Assessment of visitor use knowledge, including issues and opportunities**

**Visitor use management goals and objectives**

**Existing conditions assessment**

**Indicators & Thresholds**

**Management strategies, including visitor capacities, where needed**

**Monitoring & research related to indicators and thresholds**

**Adjust management strategies, including capacities, as needed**
Possible Desired Conditions
Possible Influences from Visitor Use

Source: i09.com

Source: Weather.com

Source: WanderingTrader.com

National Park Service National Historic Photograph Collection
Photo: Jack Boucher, Yellowstone National Park, 1959
Types of Activities
Indicators, Thresholds, & Strategies

• **Indicator:** Presence of aquatic invasive species

• **Threshold:** No more than 3% increase in aquatic invasive species in the area

• **Management Strategies:** Increase educational messaging to boaters; institute boat check for aquatic invasive species.
Management Strategies

Education and Regulation

• Promote low impact practices through visitor education (e.g., signage, presentations)

• Redirect visitor use patterns with information (e.g., Intelligent Transportation Systems, internet)

• Establish regulations on public use (e.g., no parking areas, require permits, limit on group sizes)
Management Strategies

Site Management

• Select resistant sites
• Use physical barriers (e.g., fencing, brush)
• Provide facilities to reduce impact (e.g. fire grate, boardwalk)
• Close areas or facilities
• Open new areas to disperse use
• Change size/number of facilities (e.g., resize parking lots)
Case Study Examples
Yosemite Visitor Use and Impacts Monitoring

• Monitoring indicators of wildlife exposure to human food

• A bear’s ability in the wild is diminished by conditioning to human food

• Visitor experience is diminished by bear “break-ins”
Yosemite
Wildlife Exposure to Human Food

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Plan/Application</th>
<th>Threshold</th>
<th>Observed Condition</th>
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| Vehicle Compliance     | In development as a potential indicator for the Merced River corridor            | 95% or greater compliance with food storage regulations for vehicles      | **Camp 4 Parking Lot:**
                                                                          |                                                                                   | Vehicles inspected: 17,780; Compliance Rate: 95%        |
|                        |                                                                                   |                                                                           | **Wilderness Lot:**
                                                                          |                                                                                   | Vehicles inspected: 3690; Compliance Rate: 94%         |
                                                                          |                                                                                   |                                                                           | **Yosemite Lodge Parking:**
                                                                          |                                                                                   | Vehicles inspected: 31,202; Compliance Rate: 96%       |

Weblink to Yosemite’s Visitor Use Impact and Monitoring Program:
http://www.nps.gov/yose/naturescience/visitor-use-monitoring.htm
Denali Vehicle Management Plan

Objectives:

• Ensure a transportation system that provides a high-quality opportunity for viewing scenic landscapes and wildlife.

• Manage the transportation system to ensure protection of wildlife populations, wildlife habitat, and the processes and components of the park’s natural ecosystem.
Denali Vehicle Management Plan

**Indicator:**
- Nighttime traffic

**Threshold:**
- Average of 3 vehicles or fewer per hour between 10:00pm and 6:00am, with 95% success rate

Weblink for the Road Study:
Zion National Park Soundscape Management Plan

**Desired Condition:** Human caused sound levels are not likely to mask natural sounds in the wilderness zone.

- Listening area under ambient conditions
- 50% reduction in listening area
- 75% reduction in listening area
Zion Soundscape Management Plan

• **Issues and Impacts**: Increase in human caused noise (dBA) causes decrease in wildlife listening area

• **Indicator**: Sound level

• **Threshold**: The hourly change in exposure does not exceed 3 dBA for 75% of the day and does not exceed 6 dBA for 90%. Human-caused sound events never exceed 60 dBA

• **E.g. Management strategies related to visitor use**: Encourage and remind visitors to limit vehicle & self noise; enforce existing noise ordinances (36 CFR §2.12)

Weblink to the Zion Planning: http://www.nps.gov/zion/parkmgmt/index.htm
Questions?

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Definitions

**Visitor use** refers to human presence in an area for recreational purposes, including education, interpretation, inspiration, and physical and mental health.

**Characteristics of visitor use** include the amount, type, timing, and distribution of visitor activities and behaviors.

**Visitor use management** is the proactive and adaptive process for managing characteristics of visitor use and the natural and managerial setting, using a variety of strategies and tools to achieve and maintain desired resource conditions and visitor experiences.

**Visitor capacity**, a component of visitor use management, is the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining desired resource conditions and visitor experiences consistent with the purposes for which the area was established.

**Desired conditions** are statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area.

**Visitor experience** is the perceptions, feelings, and reactions that a visitor has before, during, and after a visit to an area.

**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 minimally acceptable conditions associated with each indicator.

A **Trigger** is a point that reflects a condition of concern for an indicator that is enough to prompt a management response to ensure that desired conditions continue to be maintained before the threshold is crossed.