Application of the VUM Framework: NPS Case Studies from Zion National Park and Ozark National Scenic Riverways

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Presentation Overview

- Overview on the Visitor Use Management Framework (IVUMC 2016)
- Application to NPS projects and planning:
  - Ozark National Scenic Riverways
  - Zion National Park
Importance of Visitor Use Management

Proactively managing visitor use maximizes the ability of agencies to encourage access, improve visitor experiences, and protect resources and values.
Council Vision
Providing a unified voice for excellence in visitor use management on our nation’s federally-managed lands and waters to sustain resources and quality visitor experiences.

http://visitorusemanagement.nps.gov/
Visitor Use Management Framework

1. **WHY**
   - Build the Foundation

2. **WHAT**
   - Define Visitor Use Management Direction

3. **HOW**
   - Implement, Monitor, Evaluate, and Adjust

4. **DO**
   - Identify Management Strategies

**Universal to the Framework:**
- Law
- Agency Policy
- Sliding Scale
- Public Involvement
Visitor Use Management Framework

Sliding Scale

- The ‘thought process’ is the same regardless of complexity
- Match investment with level of uncertainty
- Consistent with National Environmental Policy Act
- Framework includes Decision Support Tool
Visitor Use Management Framework

1. **WHY**
2. **WHAT**
3. **HOW**
4. **DO**

**Steps:**
1. Clarify project purpose and need.
2. Review the area’s purpose and applicable legislation, agency policies, and other management direction.
3. Assess and summarize existing information and current conditions.
4. Develop a project action plan.

**Outcome:** Understand why the project is needed, and develop the project approach.

**Steps:**
5. Define desired conditions for the project area.
6. Define appropriate visitor activities, facilities, and services.
7. Select indicators and establish thresholds.

**Outcome:** Describe the conditions to be achieved or maintained and how conditions will be tracked over time.

**Steps:**
8. Compare and document the differences between existing and desired conditions, and, for visitor use-related impacts, clarify the specific links to visitor use characteristics.
9. Identify visitor use management strategies and actions to achieve desired conditions.
10. Where necessary, identify visitor capacities and additional strategies to manage use levels within capacities.
11. Develop a monitoring strategy.

**Outcome:** Identify strategies to manage visitor use to achieve or maintain desired conditions.

**Steps:**
12. Implement management actions.
13. Conduct and document ongoing monitoring, and evaluate the effectiveness of management actions in achieving desired conditions.
14. Adjust management actions if needed to achieve desired conditions, and document rationale.

**Outcome:** Implement management strategies and actions, and adjust based on monitoring and evaluation.
Ozark National Scenic Riverways
Roads & Trails Management Plan
Key Issues

- Proliferation of Undesignated Roads and Trails
- Lack of Clearly Defined Designated Trails
- Natural and Cultural Resource Considerations
- Increasing numbers of Commercial “Group Rides” within the Park
Visitor Use Management Framework

1. Why
   - Build the Foundation

2. What
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   - Define Visitor Use Management Direction

3. How
   - Implement, Monitor, Evaluate, and Adjust

4. Do
   - Identify Management Strategies
Public Involvement

Public Scoping - October 2015

Partner/Stakeholders Meeting - May 2016

Public Review of Preliminary Alternatives - November 2017

Periodic outreach by Park Superintendent to counties and regional stakeholders
#1. Plan Purpose

To designate a system of park roads and trails that provide access to a variety of locations and experiences while also protecting the Riverways’ fundamental resources and values.
#2. Review area’s purpose and applicable legislation, agency policies, and other management direction.

- 2016 Foundation Document
- 2014 General Management Plan
- 2014 Superintendent Compendium
- Current River Trail Plan
#3. Assess and summarize existing information and current conditions

- Public listening sessions (scoping)
- Inventory of other related planning efforts
- Inventory current data and assess needs
- KSU Equestrian Research
- FWS informal consultation
- Identify planning issues and opportunities
#4. Develop a project action plan

- Develop a project agreement, clearly define team goals and responsibilities
- Establish key project milestones/adjust dates as needed (and as external factors dictate)
- Regular team meetings
- Established plan goals and objectives
- Communication strategy
  - who, when, how to engage the public...
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4. DO
   - Implement, Monitor, Evaluate, and Adjust
#5. Define desired conditions for the project area.

Developed Zone:

*Example:* Visitors would have opportunities to better understand the riverways’ significant resources and values through a wide range of interpretive facilities and services, interact with other visitors and park staff, and recreate in an environment that is supported by a variety of visitor services.
#6. Define appropriate visitor activities, facilities, and services.

Tie back to 2014 GMP management zones

*Example: Resource-Based Recreation Zone*

- Moderate levels of visitor services will be provided such as orientation and interpretive programs, signs and wayside exhibits, backcountry campgrounds, and commercial services if compatible with the desired resource conditions and visitor experiences.

- Moderate levels of development for the purpose of directing visitor use, enhancing recreational opportunities, and protecting resources.
#7. Select indicators and establish thresholds

Indicator:

**Number of undesignated (visitor-created) trails per mile of designated trail**

**Primitive Zone:** No more than one (1) visitor-created trail leaving designated trail per 1 mile measurement

**Natural Zone:** No more than (2) user-created trails leaving designated trail per 1 mile measurement

**Resource-based Recreation Zone:** No more than three (3) user-created trails leaving designated trails per 1 mile of measurement
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4. **DO**
   - Implement, Monitor, Evaluate, and Adjust
#8. Compare and document the differences between existing and desired conditions.

#9. Identify visitor use management strategies and actions to achieve desired conditions.

- Workshop in April 2016
- Prelim Alts shared with public in Nov 2017. Draft Strategies—
  - Increase in designated trail mileage (all user groups)
  - Restoration of undesignated trails
  - Slight reduction in the number of public recreation areas along river
  - Slight reduction in NPS Public Use Roads
#10. Where necessary, identify visitor capacities and additional strategies to manage use levels.

_In Progress_
#11. Develop a monitoring strategy.

#12. Implement management actions.

#13. Conduct and document ongoing monitoring, and evaluate the effectiveness of management actions in achieving desired conditions.

#14 Adjust management actions if needed to achieve desired conditions, and document rationale.
http://parkplanning.nps.gov/OZAR_RTplan
Visitation Trends

- 2.68 million in 2010
- 3.66 million in 2015
- 4.3 million in 2016
- 4.5 million in 2017 & 2018

The majority of visitors go to Zion Canyon - a 7-mile narrow corridor along the Virgin River.
Key Issues

• Heavy strain on park facilities and operations.
• Effects to and from adjacent communities.
• Increase in visitor complaints about their experience: up to two hours waits to enter the park and board shuttles.
• Rapidly growing visitation and changing use patterns.
• Natural and cultural resource impacts.
• Diminishing quality of the visitor experience.
• Visitor safety and public health in high use areas: 76% increase in emergency calls (went from 389 in 2011 to 686 in 2015)
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Civic Engagement

Collaboration Clinic, 2015

Listening Sessions May and June, 2016

Public Scoping October and November, 2016

Review of preliminary alternative concepts July and August, 2017

Cooperating Agencies, Ongoing
#1. Plan Purpose
Establish a **visitor capacity** for frontcountry zones and implement strategies to manage visitor use & access during high use periods throughout the year to mitigate crowding, protect park resources, and maintain a high quality visitor experience.
#2. Review area’s purpose and applicable legislation, agency policies, and other management direction.

- 2013 Foundation Document
- 2013 Wild and Scenic River Plan
- 2007 Backcountry Management Plan
- 2001 General Management Plan
#3. Assess and summarize existing information and current conditions

**Data Collection**
- Transportation
- Trail Use
- Bus Monitoring
- Soil Surveys
- Cultural Landscape Inventories
- Visitor Surveys at key locations
- Natural Resource Condition Assessments and Technical Reports
- Public Health Assessments
#4. Develop a project action plan

- Develop a project agreement, clearly define team goals and responsibilities
- Establish key project milestones/adjust dates as needed (and as external factors dictate)
- Regular team meetings
- Established plan goals and objectives
- Communication strategy
- MOUs with Cooperating Agencies
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#5. Define desired conditions for the project area.

#6. Define appropriate visitor activities, facilities, and services.

**Frontcountry High Development Zone**

- **Resource Condition:** Natural processes and the landscape will be greatly alerted to accommodate visitors and support park operations.
- **Visitor Experience:** generally, the experience will be highly social with frequent interactions among visitors and park staff.
#6. Define appropriate visitor activities, facilities, and services.
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*Zion General Management Plan, 2001*

**FRONTCOUNTRY HIGH DEVELOPMENT ZONE:** This zone will provide visitors with highly structured opportunities to enjoy and learn about the park by means of motorized, primary roads. In essence, visitors will feel that they are in a pocket of civilization surrounded by the park’s natural beauty.

**FRONTCOUNTRY LOW DEVELOPMENT ZONE:** Visitors will have a fairly structured, rural experience oriented around motorized sightseeing on secondary roads, camping, picnicking, and taking short walks.

**TRANSITION ZONE:** The main purpose of this zone will be to allow visitors to view or directly access many of the park’s prime resources by means of nonmotorized, well-developed, high use trails.
#7. Select indicators and establish thresholds

**Potential Indicators**
- Visitor-created social trails
- Encounter rates on trails
- Soil loss
- Presence of human waste
- Incidents of vandalism to cultural resources
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#8. Compare and document the differences between existing and desired conditions.

#9. Identify visitor use management strategies and actions to achieve desired conditions.

- Released preliminary alternatives July 2017
- Public comments July 2017
- Potential Management Strategies
  - Reservation system
    - entry into the park
    - specific sites
  - Modify shuttle stops, including express buses
  - New short trails and picnic areas
#10. Where necessary, identify visitor capacities and additional strategies to manage use levels.

- Workshop April 2017
- Data collection Summer 2017
- In process
#11. Develop a monitoring strategy.

#12. Implement management actions.

#13. Conduct and document ongoing monitoring, and evaluate the effectiveness of management actions in achieving desired conditions.

#14 Adjust management actions if needed to achieve desired conditions, and document rationale.
Questions and Discussion