

Visitor Use Management Framework and Tools

December 13, 2023

Drs. Troy Hall, Ashley D'Antonio, and Madeline Aberg Oregon State University







Overview

- 1 Introduction to the IVUM Framework
- 2 Desired conditions, indicators, and measures
- 3 Using VUM data to inform management decisions
- 4 Examples of using the framework with limited resources





An Interagency Approach to Visitor Use Management



Interagency Visitor Use Management Council:
The council's mission is to provide guidance on visitor use management policies and to develop legally defensible and effective interagency implementation tools for visitor use management.









IVUMC Tools

- The Framework (2016)
- Monitoring Guidebook: Evaluating Effectiveness of VUM (2019)
- Visitor Capacity Guidebook (2019)
- Desired Conditions Guidebook: The Heart of VUM (2023)
- Embracing the Public Participation Process for Developing Desired Conditions: Building Relationships for Actionable Knowledge (in review)

The Visitor Use Management Framework



- Build the Foundation: Understand what needs to be done and how to organize the planning effort.
- Define Visitor Use Management Direction:

 Describe the conditions to be achieved or

 maintained and how conditions will be tracked over
 time.
- Identify Management Strategies: Describe strategies to manage visitor use to achieve or maintain desired conditions.
- Implement, Monitor, Evaluate, and Adjust: Implement management actions and adjust them based on monitoring data.

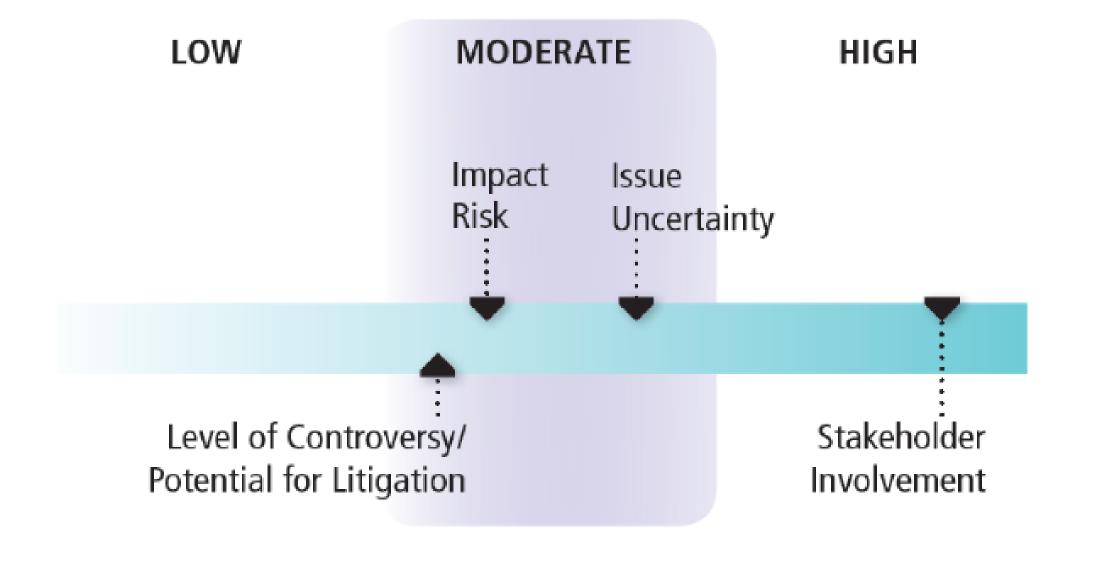
https://visitorusemanagement.nps.gov/VUM/Framework

Universals in the Framework



https://visitorusemanagement.nps.gov/VUM/Framework

The Sliding Scale



Indicates a sliding scale metric. Represents where the project lands on the sliding scale.

https://visitorusemanagement.nps.gov/VUM/Framework



Desired Conditions



- Goal statements about
 - Resource conditions
 - Visitor experience
 - Park facilities
- To write, ask yourself:
 - What experience should visitors in 10 years expect to find?
 - What do you tell people about this place?
 - What is meaningful or appealing about a specific zone that differs from others?





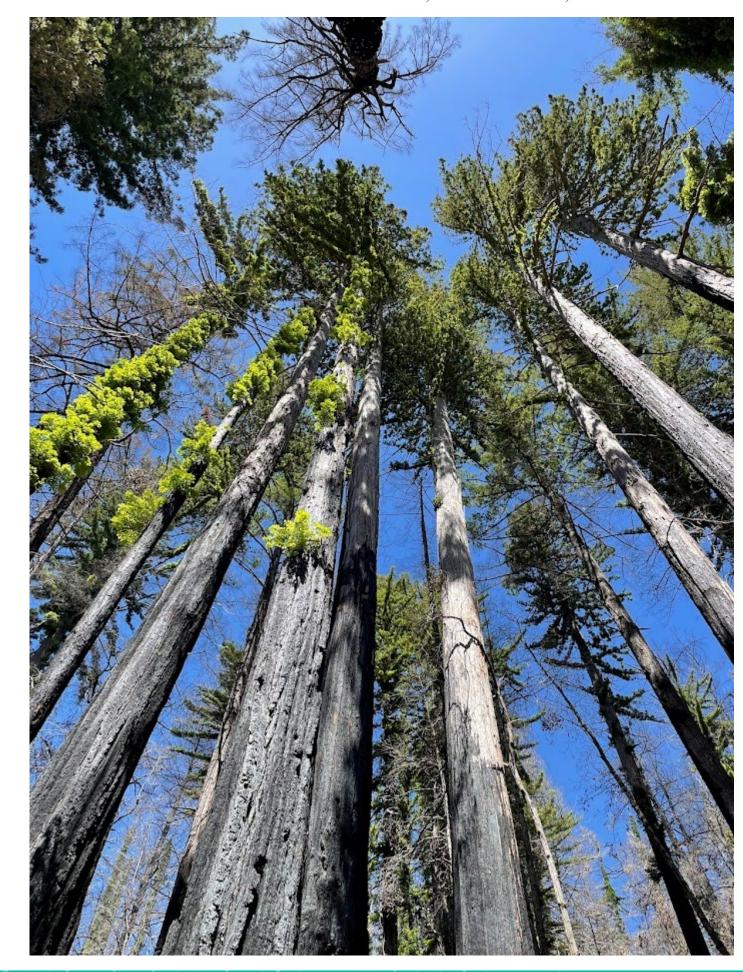
Desired Conditions



Visitors who travel to Big Basin can access the park and experience the redwoods rather than being turned away.

Visitation levels are high and encounters with other visitors are frequent.

Visitors experience the awe and splendor of old growth redwood trees.



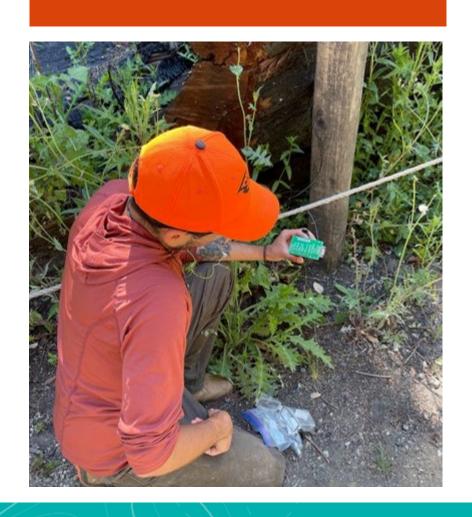


Indicators & Measures ////



- Indicators
 - Variables that can be measured to track desired conditions
 - Social, physical, ecological
- Measures
 - Standard unit







Desired Condition	Indicator	Measure
Visitors who travel to Big Basin can access the park and experience the redwoods rather than being turned away.	VAOT	The vehicles present during a parking lot count
	Visitors turned away	Number of vehicles turned away per day
Visitation levels are high and encounters with other visitors are	PAOT	Number of people present at an attraction
frequent.	Encounters	Number of people encountered on a hiking trail
Visitors experience the awe and	Visitor satisfaction	Mean satisfaction rating
splendor of old growth redwood trees.		% very/extremely satisfied

Thresholds



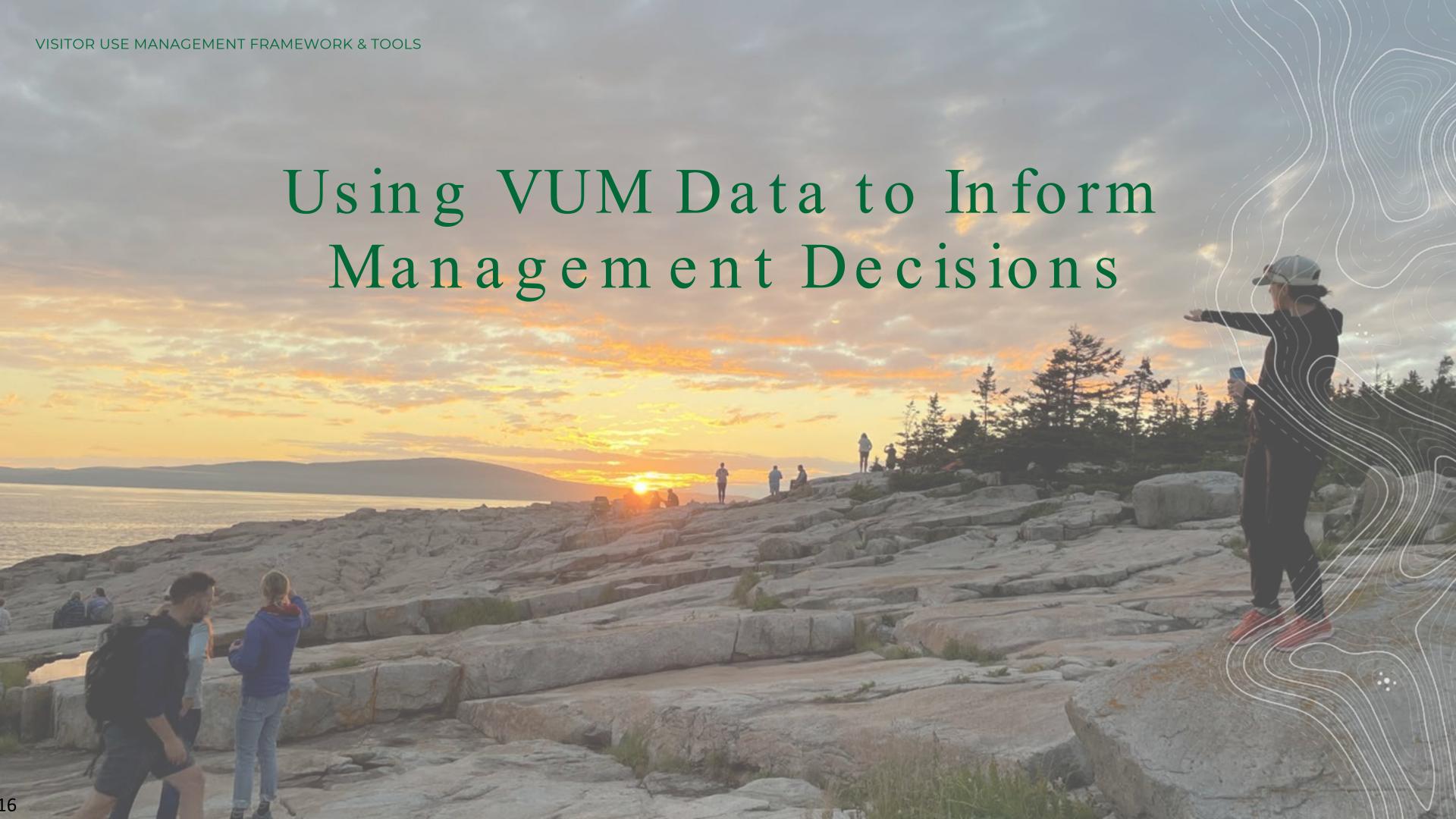
- What is an acceptable level of impact?
- Set at the minimally acceptable conditions for each indicator
- Based on data and professional judgement
- Might also set triggers ahead of the threshold
 - Action to prevent further decline





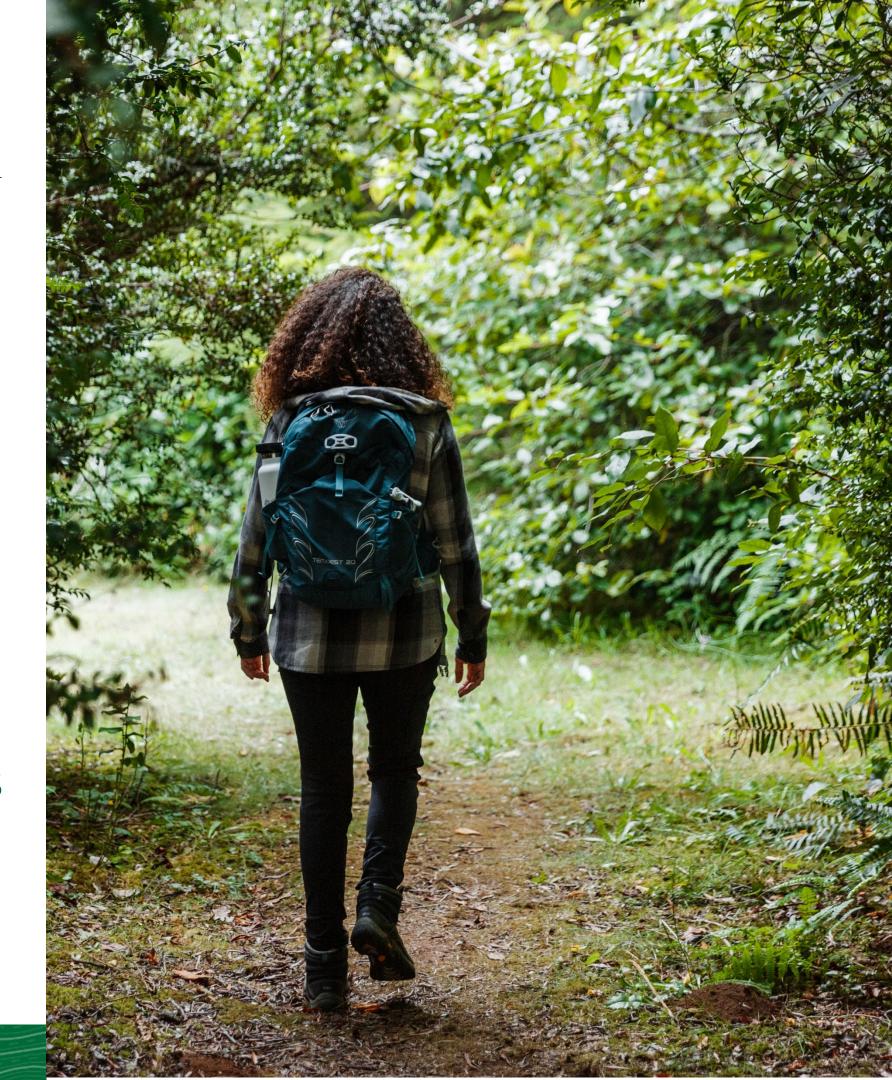
IVUMC 2016

Desired Condition	Indicator	Measure	Threshold
Visitors who travel to Big Basin can access the park and experience the	VAOT	The vehicles present during a parking lot count	The parking lot is less than 85% full on 90% of days
redwoods rather than being turned away.	Visitors turned away	Number of vehicles turned away per day	Less than 10% of high use season days with 5 or more vehicles are turned away
Visitation levels are high and encounters with other visitors are frequent.	PAOT	Number of people present at an attraction	Less than 100 people are present 90% of the days
	Encounters	Number of people encountered on a hiking trail	Less than 30 people encountered 90% of the season
Visitors experience the awe and splendor of old growth redwood trees.	Visitor satisfaction	Mean satisfaction rating	Mean satisfaction of 1.0 or higher on -2 to 2 scale
		% very/extremely satisfied	90% or more satisfied



Using Visitor Use Monitoring to Inform Management Decisions

- POAT ———— Communications
- Dogs off leash More staff
- Social Trails Restoration priorities







Visitor Use and Resource Monitoring at Yellowstone National Park

- Community Science Initiative
 - Yellowstone National Park
 - Yellowstone Youth Conservation
 Corps Crews
 - Oregon State University

Challenges

- Different group each week
- Only worked weekdays (8 am 4 pm)
- Break between sessions in mid-July

Addressing Challenges

- Hired a consistent intern
- Automatic, continuous trail counter data
- Scaled monitoring to skill level





Most Dog-Friendly National Park>

Learn more about where you can enjoy the park with your furry friends.

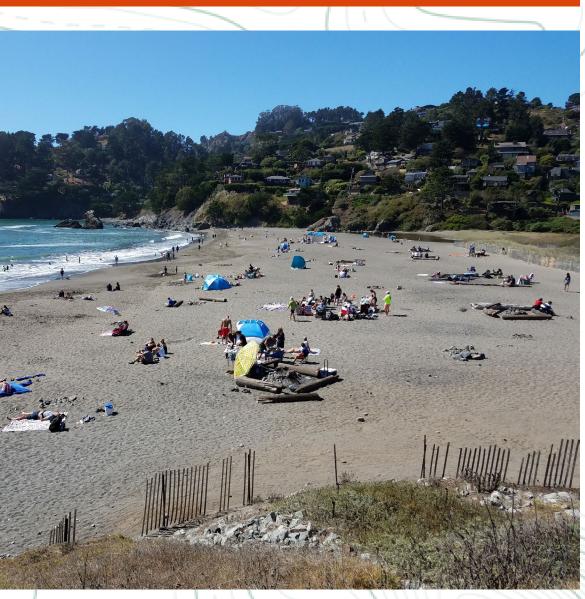


Image: Levi Clancy, CC BY-SA 4.0, via Wikimedia Commons

Golden Gate National Recreation Area

- High use area with visitor conflict and sensitive habitats
- Addressed the need for monitoring by:
 - Reviewing literature
 - Specialist consultations
 - Identifying indicators and potential measures





Golden Gate National Recreation Area

Monitoring program development:

- Tested & refined selected measures
- Drafted reliable protocols
- Established a feasible data collection plan

Challenges

- 23 park units
- Using existing staff
- Public controversy
- Rare events

Addressing Challenges

- Used publicly acceptable techniques
- Selected key locations
- Ensured reliable field techniques
- Phased intensity of monitoring
- "Packaged" measures



VUM TOOLKIT

- Webinar recordings
 - Mobile Data & Big Data
 - Surveys 101
 - Attendance Data
- Fact sheets
- Catalog of visitor use monitoring protocols
- Case studies
- Links to resources





Connect with our team:

Troy Hall, Oregon State University, <u>Troy.Hall@oregonstate.edu</u>
Ashley D'Antonio, Oregon State University, Ashley.D'Antonio@oregonstate.edu
Becky Rittenburg, Parks California, <u>brittenburg@parkscalifornia.org</u>
Will Fourt, California State Parks and Parks California, <u>Will.Fourt@parks.ca.gov</u>
Garret Hammack, California State Parks, <u>Garret.Hammack@parks.ca.gov</u>
Madeline Aberg, Oregon State University, <u>abergm@oregonstate.edu</u>



