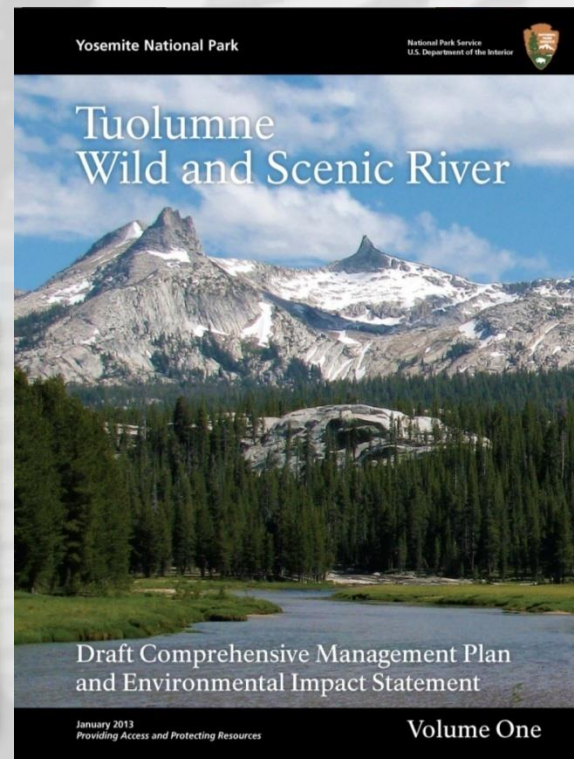




# TUOLUMNE WILD AND SCENIC RIVER

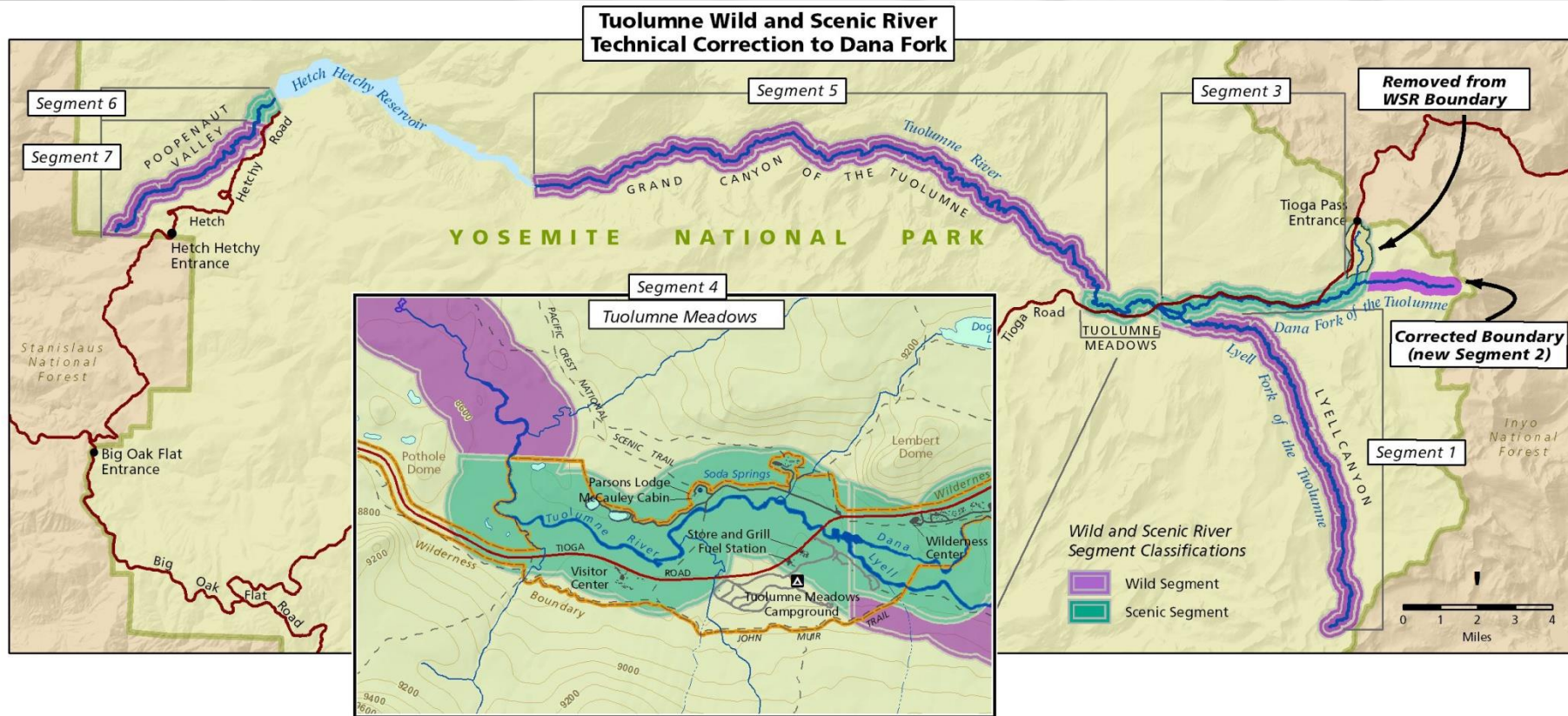
## Draft Comprehensive River Management Plan and Environmental Impact Statement



Webinar on ORV Protection and Enhancement and User Capacity  
Thursday, January 31, 2013



# Boundaries and Classifications







# River Value Protection & Enhancement

- Tuolumne meadows
- Poopenaut Valley
- Scenery in Dana Fork, Tuolumne, and Grand Canyon
- Parsons Lodge
- Archeological landscape
- Backcountry recreation
- High country access
- Stairstep river morphology
- Water quality
- Free-flowing



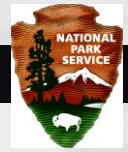


# Planning Framework

“Each [river] will be managed to **protect and enhance** the values for which the river was designated, while providing for public recreation and resource uses which **do not adversely impact or degrade** those values.” (WSRA Guidelines, 1982)







# Adverse Impact and Degradation

- Example: meadow fragmentation
- Based on Stoneman Meadow, 1978
- Degradation: 40% whole
- Adverse Impact: 81% whole
- Management Standard (desired condition): 90% whole

Stoneman Meadow (1978)



## Trail Extent and Fragmentation Results

Values calculated based on the presence of trails in this aerial image and giving all trails a width of 12" (the most common trail width currently observed in Yosemite Valley meadows)

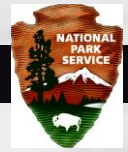
Total length of trails: 3170 m

Largest 5 Patches Index: 40.40%



0 25 50 100 m

Image source: Yosemite Archives; 1978 Transparencies of Yosemite Valley; Aerial Photographs Box 5, Image 2-18 (not yet cataloged)



# Planning Framework

## To protect river values...

**A Comprehensive Management Plan must:**

- (1) Identify baseline conditions for each value;**
- (2) Improve conditions in the river corridor;**
- (3) Outline a monitoring protocol to evaluate conditions over time and take appropriate management actions.**







# Tuolumne Meadows

## Baseline Condition Assessment

- Final Condition assessment released in 2011-- Chapter 5
- Major concerns were:
  - Trampling and social trails from contemporary human use
  - Lingering effects of 1800s sheep grazing



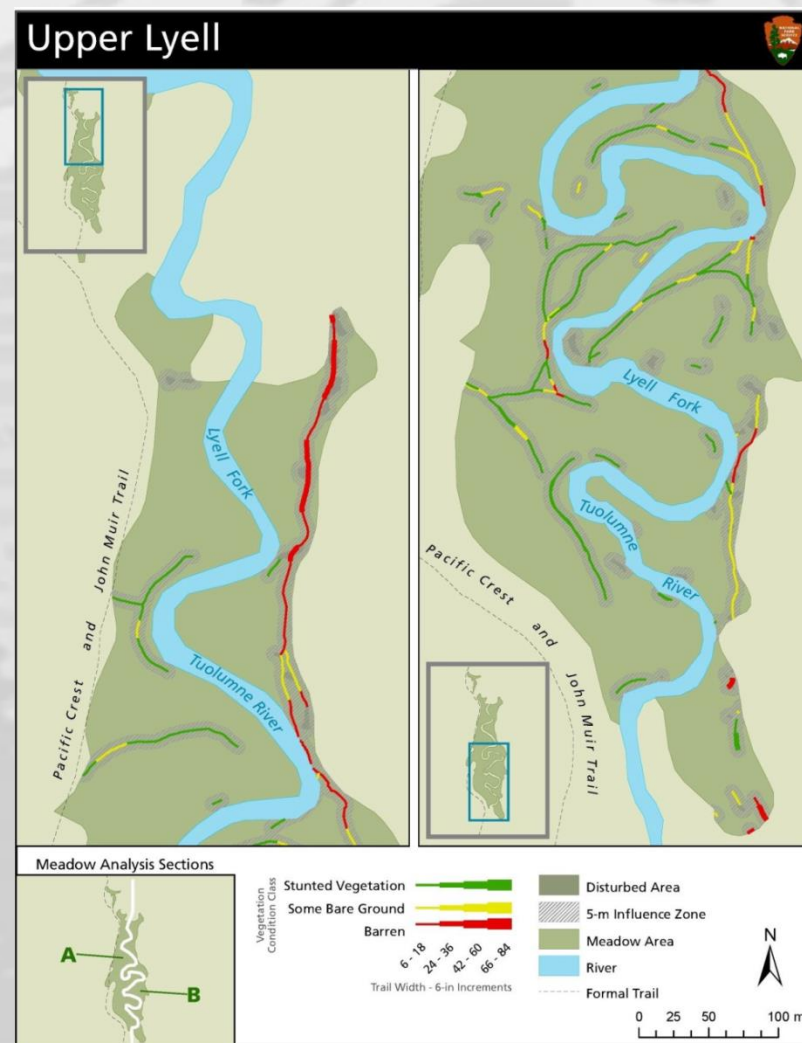


# Baseline Condition Assessment, cont'd

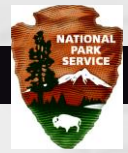
Social trailing occurs throughout Tuolumne Meadows.

Weighted mean is 82.3% fragmented—just above (better than) the 81% threshold.

But—well below the 90% management standard.



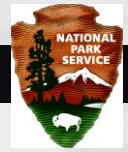




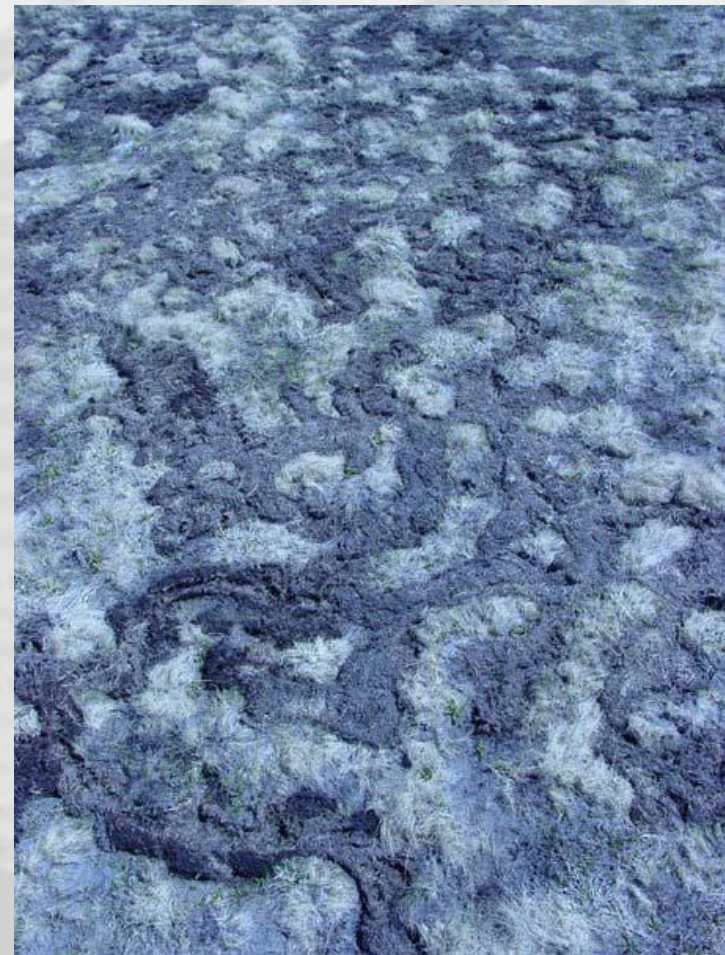
# Baseline Condition Assessment







# Baseline Condition Assessment



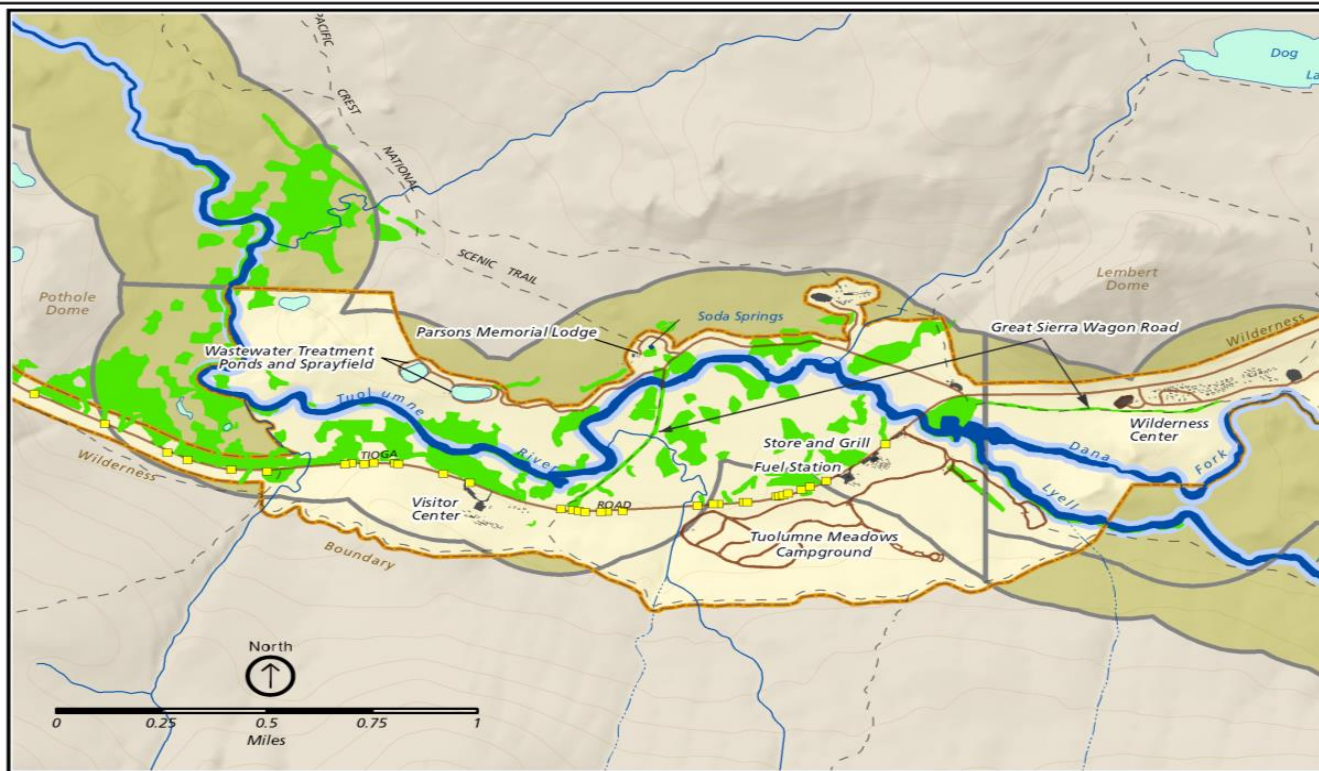




# Improving Conditions in Tuolumne Meadows

## Restoration Program:

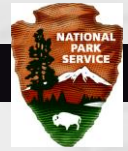
- 1) Eliminate informal trails
- 2) Remove structures from riverbanks & wetlands
- 3) Restore riparian vegetation along riverbanks
- 4) Mitigate effects of Tioga Road culverts
- 5) Mitigate effects of Great Sierra Wagon Rd
- 6) Mitigate stock use effects
- 7) Conduct additional research



**Tuolumne Wild and Scenic River  
Comprehensive Management Plan  
Ecological Restoration Priority Locations**

- Priorities for Ecological Restoration
- Culvert Repair/Replacement
- Riverbank Restoration, Corridorwide as Needed

- Wild and Scenic River Corridor Boundary
- Yosemite Wilderness
- Non-Wilderness

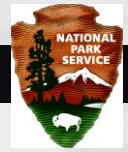


# Monitoring Program

- **Indicators:** measure of river value condition
- **Triggers:** points at which NPS takes action to keep river value condition from dropping below the management standard. A “Management Concern” occurs when a trigger is exceeded.
- **Management responses:** the specific actions we will take







# Meadow Triggers and Management Responses

## Meadow Indicators:

- Fragmentation
- Bare soil
- Streambank Stability

## Triggers (for fragmentation):

- Increase in fragmentation, to below 90% for 1 year, and then for 3 years, for an *individual* meadow (not segment-wide).

## Management Response

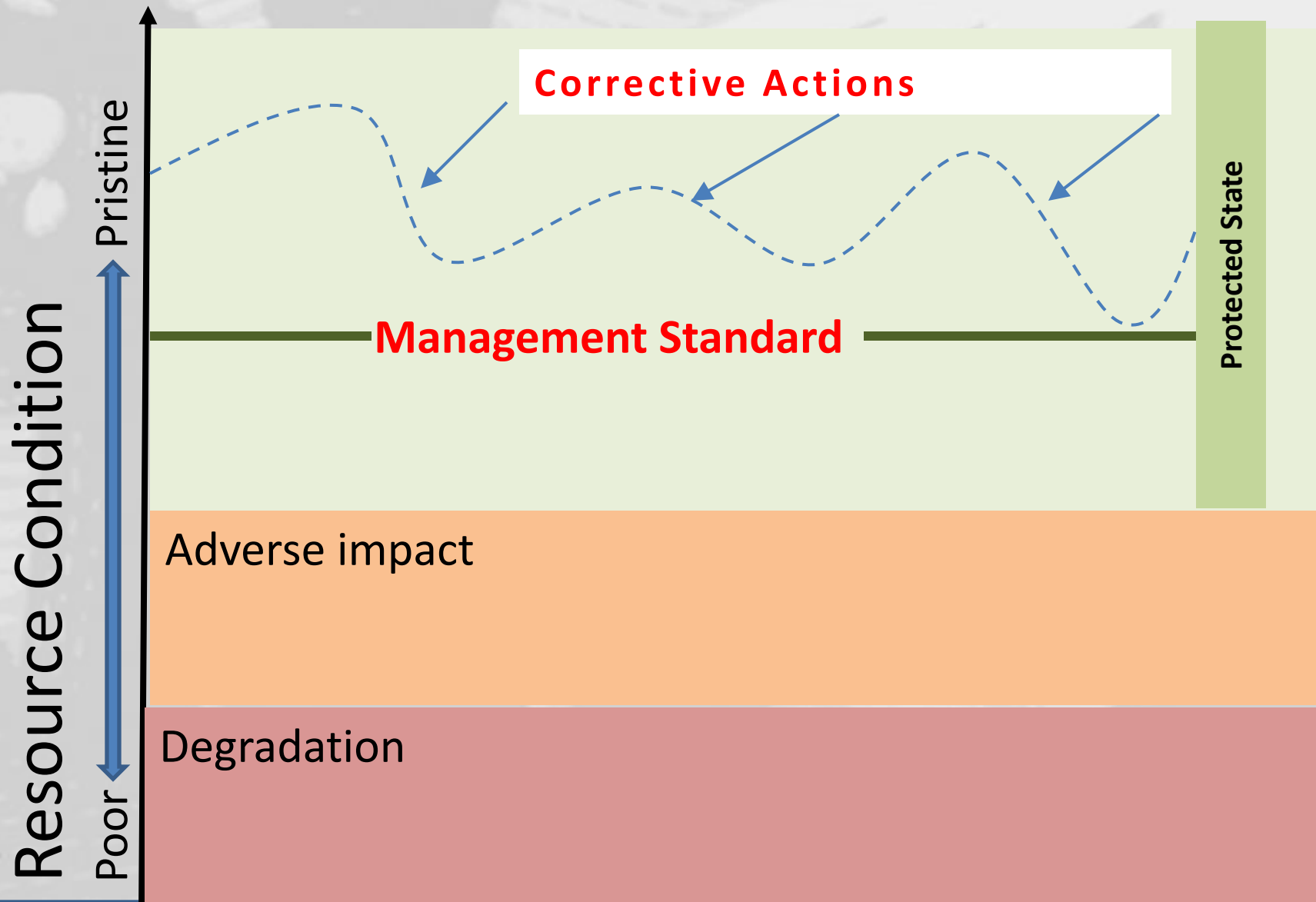
- Increased visitor use management
- Restore meadows (techniques identified on p. 5-36).

**Similar triggers and management responses identified for bare soil and streambank stability, and for all other river values.**

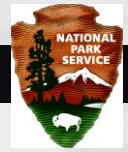




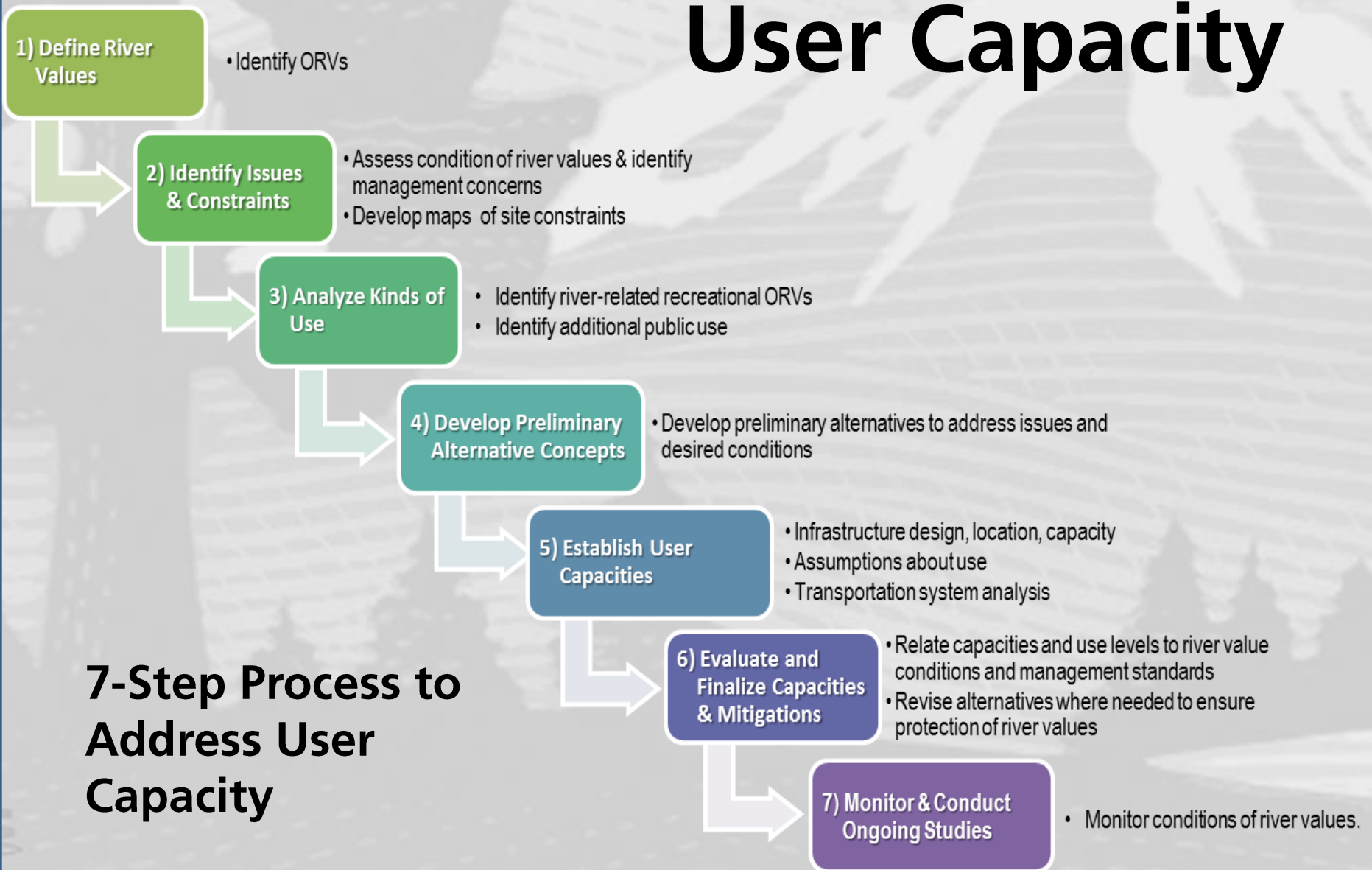
# Summary of ORV Protection and Enhancement







# User Capacity

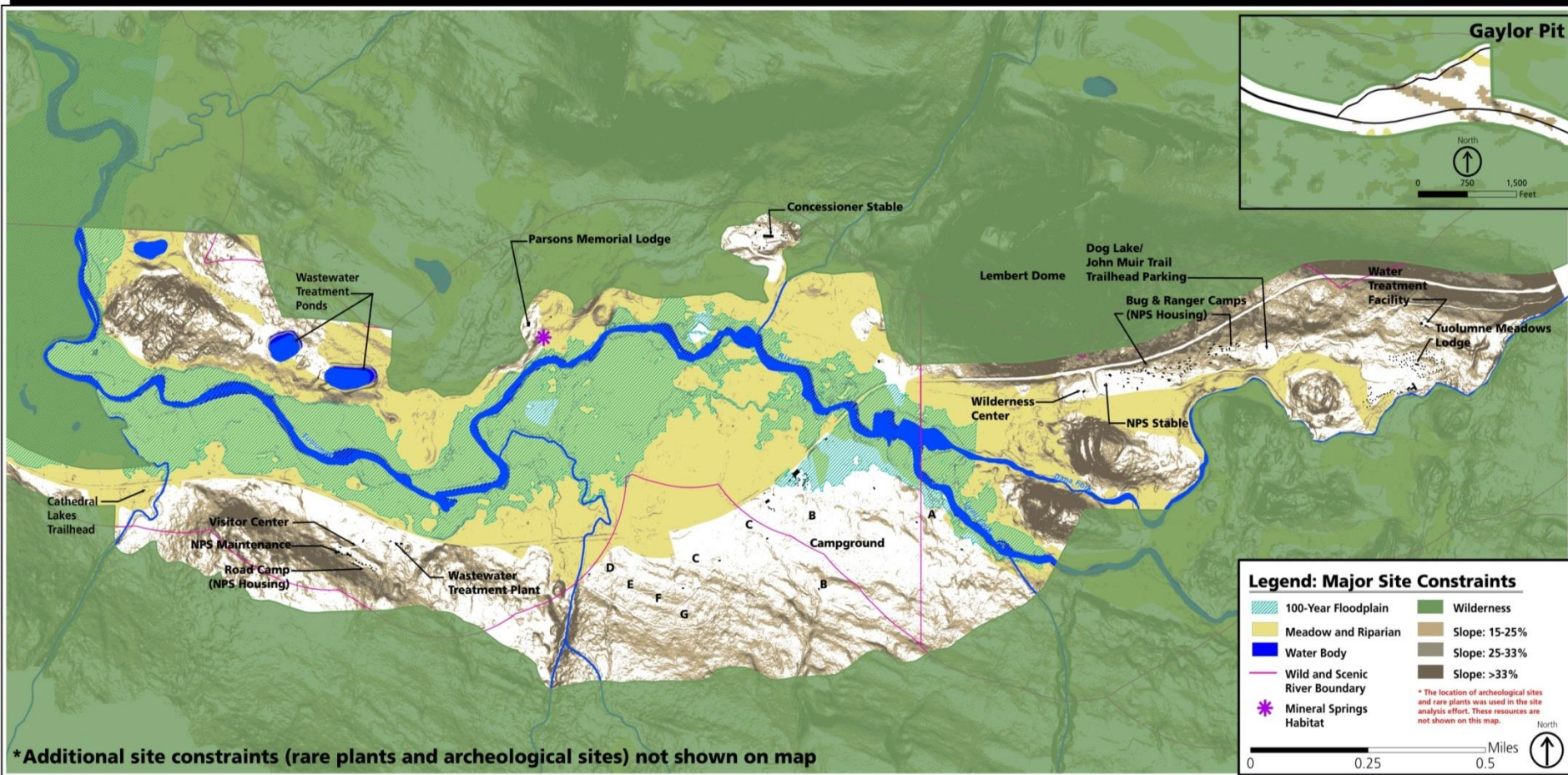




# Key Limiting Factors

Water Consumption, Resource Constraints and Site Suitability, Level of Development, and Wilderness Experience

## Site Suitability: Tuolumne Meadows



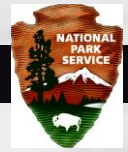




# Establishing User Capacities

- **Types of Use**
  - Overnight Users
  - Day Users
  - Administrative Users
- **Amounts of Use & Mitigation Measures**
- **Preliminary Alternative Concepts identified in 2007**
- **Refined & analyzed 2007-2012**





# User Capacities- Across Alternatives

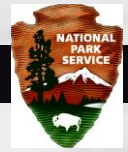
Visitor Use Capacity by Type and Location	No Action	Alt 1	Alt 2	Alt 3	Preferred
Total Overnight Capacity in Corridor (PAOT)	2,742	2,032	2,988	2,598	<b>2,730</b>
Total Day Use Capacity in Corridor (PAOT)	1,774	1,033	1,913	1,568	<b>1,839</b>
<b>Total Visitor Capacity in Corridor (PAOT)</b>	<b>4,516</b>	<b>3,065</b>	<b>4,901</b>	<b>4,166</b>	<b>4,569</b>
Administrative Capacity (PAOT)	262	102	286	236	<b>274</b>
<b>Total People at One Time (PAOT)</b>	<b>4,778</b>	<b>3,167</b>	<b>5,187</b>	<b>4,402</b>	<b>4,843</b>
Total Water Use (gpd)	64,000	36,000	70,000	60,000	<b>67,000</b>





# Preferred Alternative Capacities

Overnight Capacity	Action	Units	# People
Tuolumne Lodge	Retain Tuolumne Lodge at current cap.	69	276
Campground	Retain current campground capacity	304	2,034
Glen Aulin	Reduce Glen Aulin HSC (- 3 units)	5	20
Wilderness	Retain Existing Trailhead Quotas	-	400
Total Overnight Use (PAOT)			2,730
Day Use Capacity	Action	Units	# People
T. M. Parking Area	Increase day-use parking (+44 spaces)	562	1787
Bus riders to T. M.	Increase regional public transit	8	360
Parking Below Dam	Maintain current parking spaces	4	12
Total Day Use (PAOT)			1,839
Total Visitor PAOT			4,569



# User Capacity Enforcement

- **Camping and lodging:** limited by # of rooms or sites
- **Day users:** limited by # of parking spots and by # of bus runs
- **Admin use:** limited by # of beds
- **Plan includes provisions** if demand for day use parking sites is regularly exceeded
- **Plan applies monitoring** to ensure that use does not adversely effect or degrade river values.

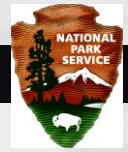




# What's Next

- **Public Meetings:**
  - Feb. 19, San Francisco
  - Feb. 20, Groveland
  - Feb. 21, Yosemite Valley
  - Feb. 23, Mammoth Lake
  - Feb. 27, Yosemite Valley
- **Comment Analysis - March and April 2013**
- **Final Plan – Summer/Fall 2013**
- **Decision – Summer/Fall 2013**





# Public Review & Comment Periods

## Tuolumne River Plan:

- 70-day review period
- Comment period closes March 18

## Comment on-line on PEPC:

[http://parkplanning.nps.gov/trp\\_deis](http://parkplanning.nps.gov/trp_deis)

## Or via mail:

National Park Service  
Tuolumne River Plan  
P.O. Box 577  
Yosemite NP, CA 95389

Or via [yose\\_planning@nps.gov](mailto:yose_planning@nps.gov)





# Tuolumne's Future

