



# TUOLUMNE RIVER

## Draft Comprehensive River Management Plan and Environmental Impact Statement



February 2013 Public Meetings

# Presentation Outline

1. The Wild and Scenic Rivers Act and the Tuolumne
2. Plan Components
3. Alternatives
4. Conclusion and Discussion

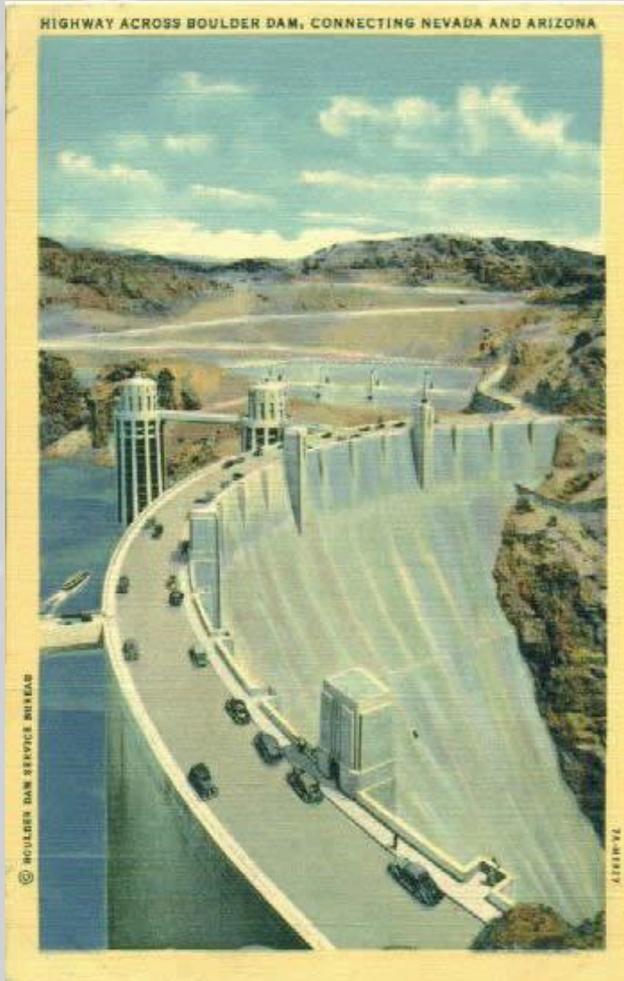


Section One

# THE WILD AND SCENIC RIVERS ACT AND YOSEMITE'S TUOLUMNE RIVER



# The Wild & Scenic Rivers Act



*“ . . . The time has also come to identify and preserve free-flowing stretches of our great rivers . . . ”*

*Lyndon Johnson, 1965*

*“In a country where nature has been so lavish . . . to set aside a few rivers in their natural state should be considered an obligation.”*

*Senator Frank Church, 1968*



# The Wild & Scenic Rivers Act

## River Values

### (The Pillars of the Act)

- Protects free-flowing condition
- Protects water quality
- Protects and enhances the river's *Outstandingly Remarkable Values* – the qualities that make the river worthy of special protection





# The Wild & Scenic Rivers Act

- Requires a Comprehensive Management Plan to provide long-term guidance
- Ensures visitor access and enjoyment
- Addresses user capacity, or the kinds and amounts of visitor use appropriate in the river corridor.





# The Wild and Scenic Rivers Act

- Today 12,598 miles of 203 rivers in 38 states in wild & scenic rivers system
- 0.25% of U.S. river mileage
- 75,000 large dams impound 600,000 miles of river—17% of U.S. river mileage





# Tuolumne Wild and Scenic River

- 83 miles of the Tuolumne River designated Wild and Scenic in 1984
- 54 miles under National Park Service jurisdiction
- Hetch Hetchy Reservoir not eligible for designation







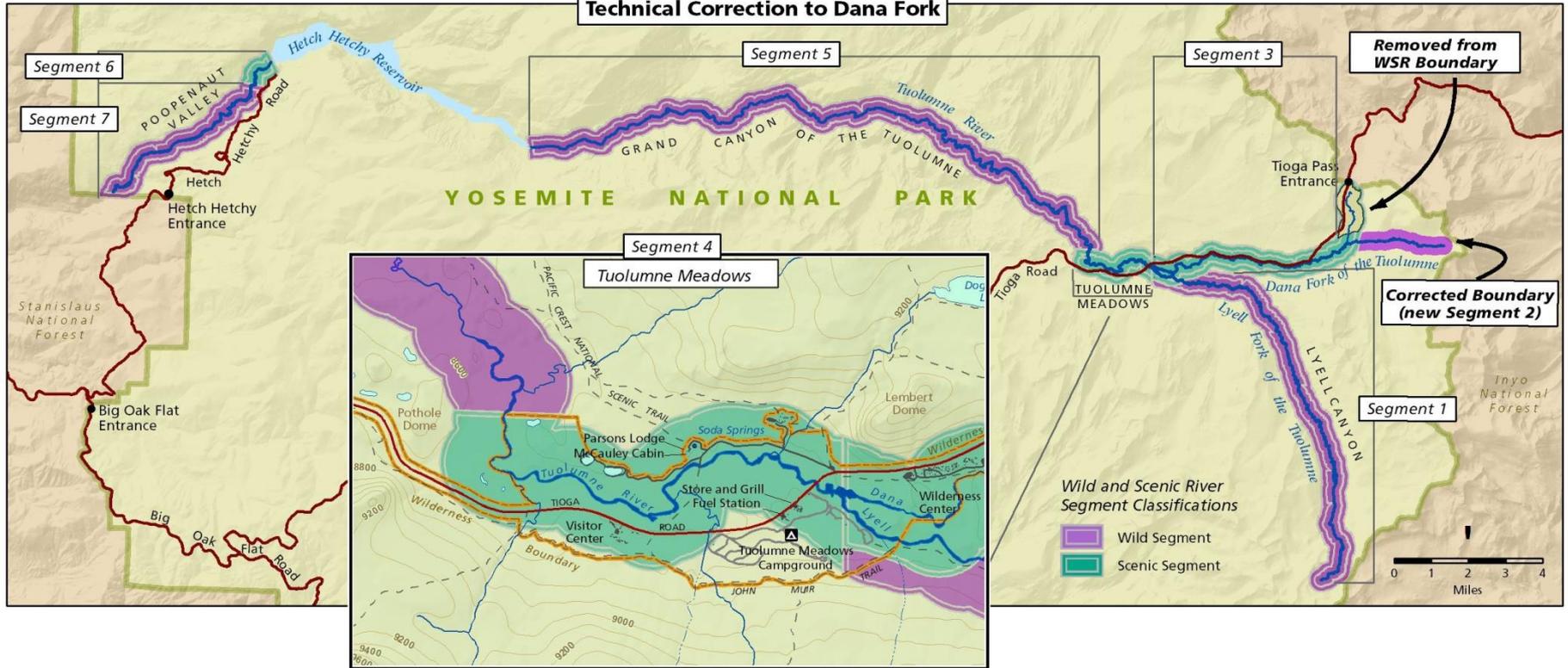
Section Two

# PLAN COMPONENTS



# Boundaries and Classifications

**Tuolumne Wild and Scenic River  
Technical Correction to Dana Fork**



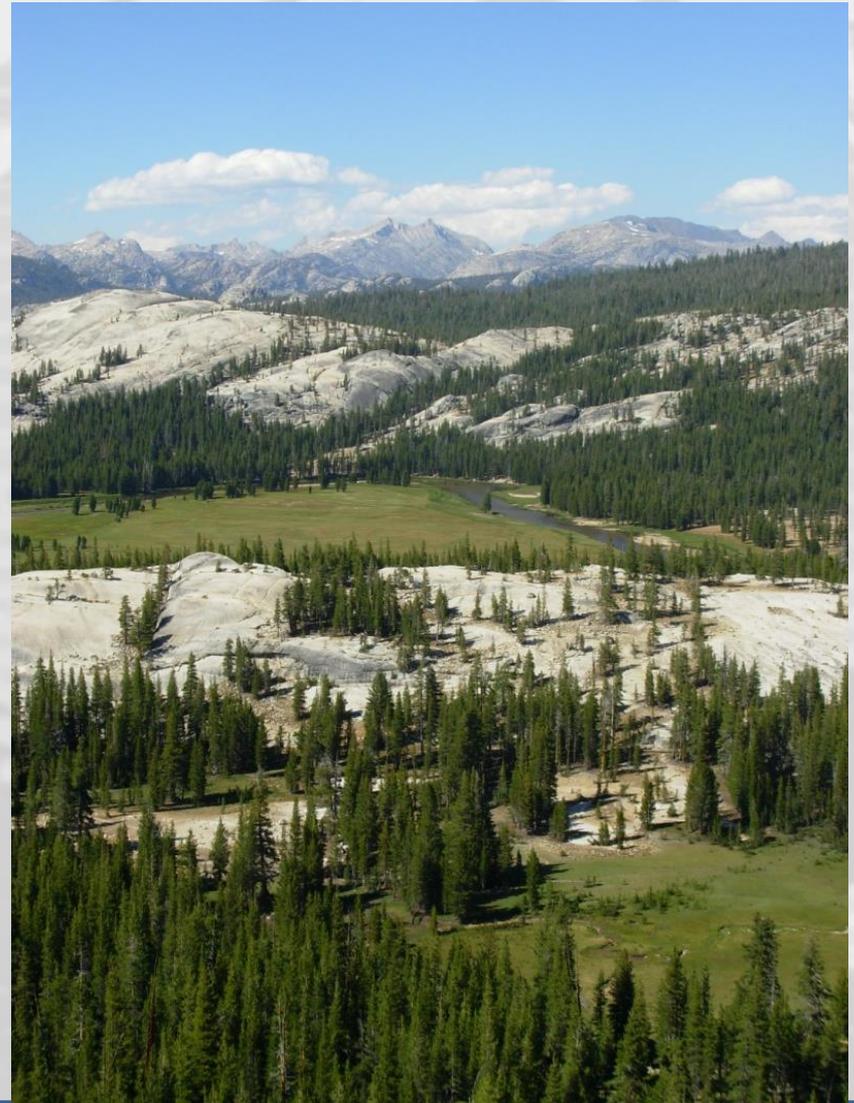


# Outstandingly Remarkable Values

## Interagency WSR Council Criteria

The value must:

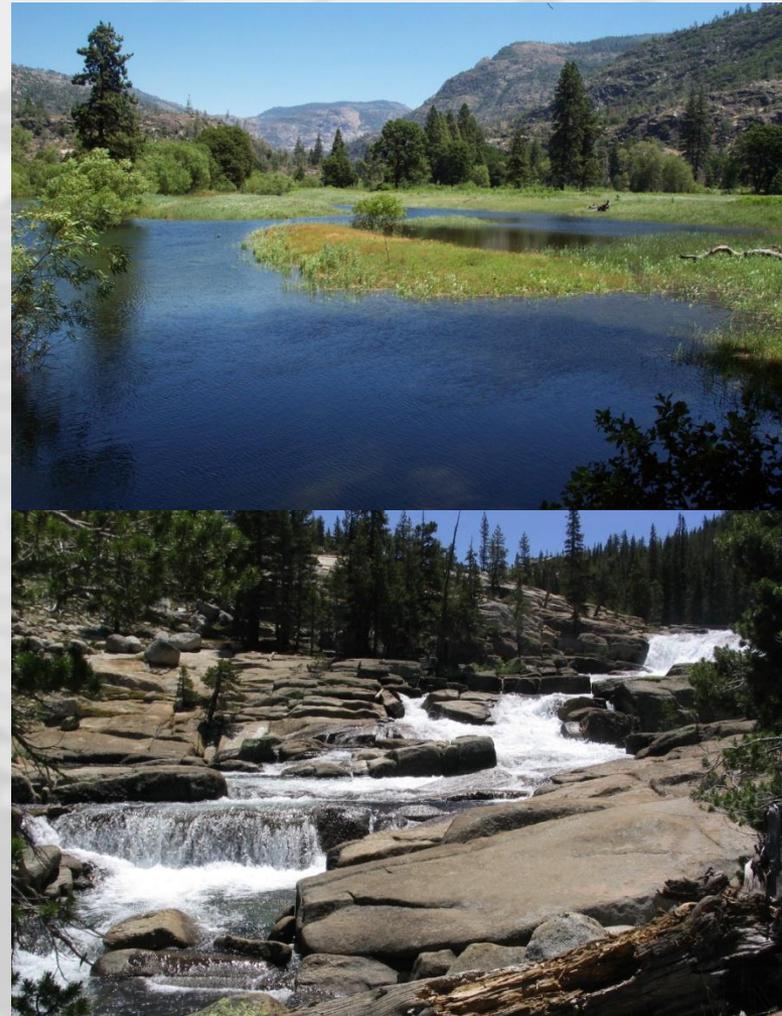
- 1) be river related or river dependent; and
- 2) be rare, unique, or exemplary in a regional or national context.





# Tuolumne ORVs

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



# 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)





# Planning Framework

## To protect river values...

The Tuolumne River Plan must:

- (1) Define, identify and correct any existing adverse impacts or degradation to river values; and
- (2) Prevent future adverse impacts or degradation.

To do these, the river plan must:

- (1) Identify baseline conditions for each river value;
- (2) Improve conditions in the river corridor; and
- (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:**
  - **Lingering effects of 1800s sheep grazing**
  - **Trampling and social trails from contemporary human use**



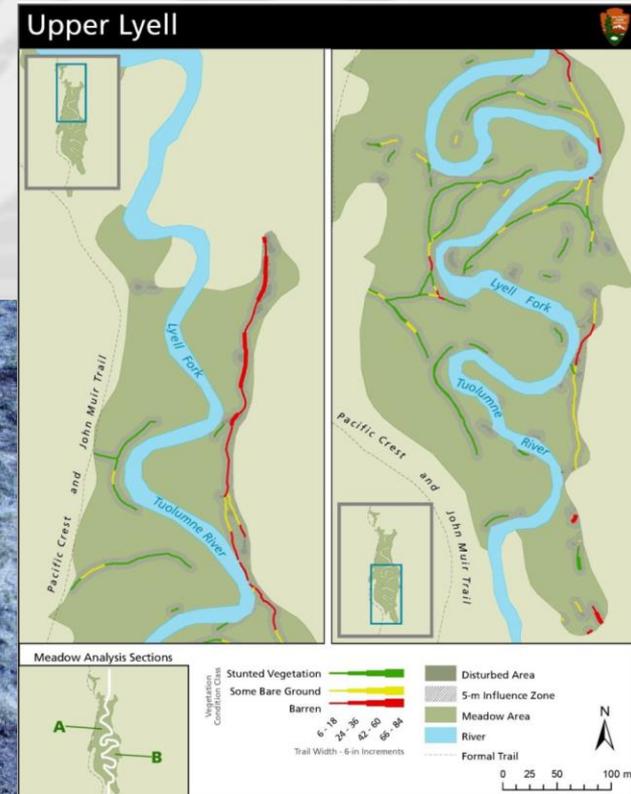
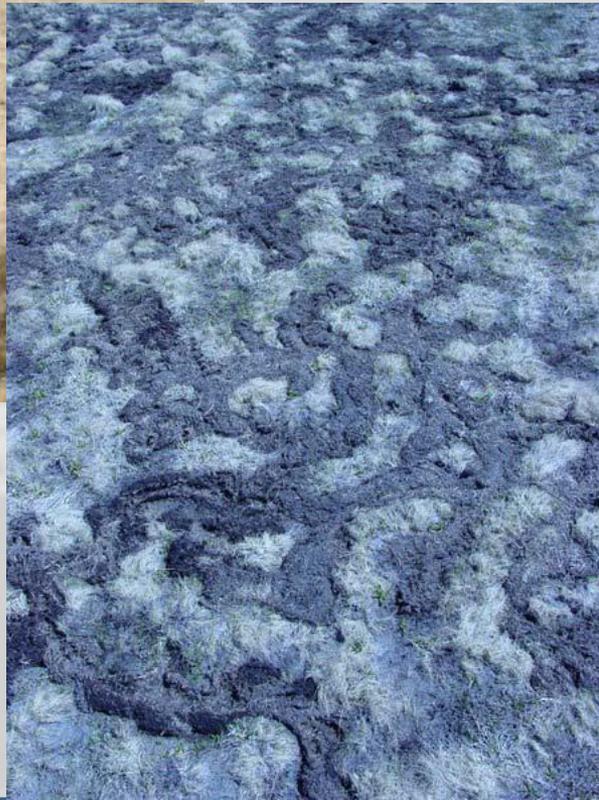


# Baseline Condition Assessment



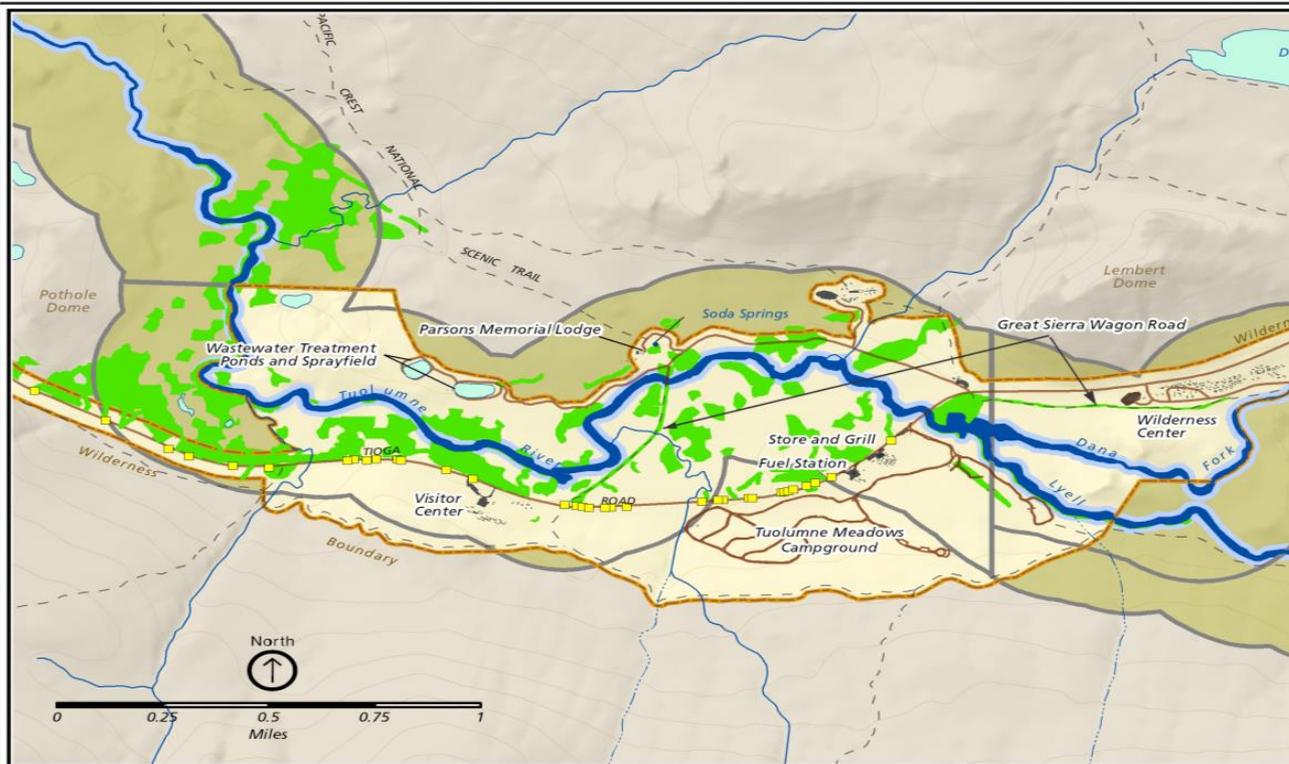


# Baseline Condition Assessment





# Restoration Program



## 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

## Restoration Program

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



# 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





Section Three

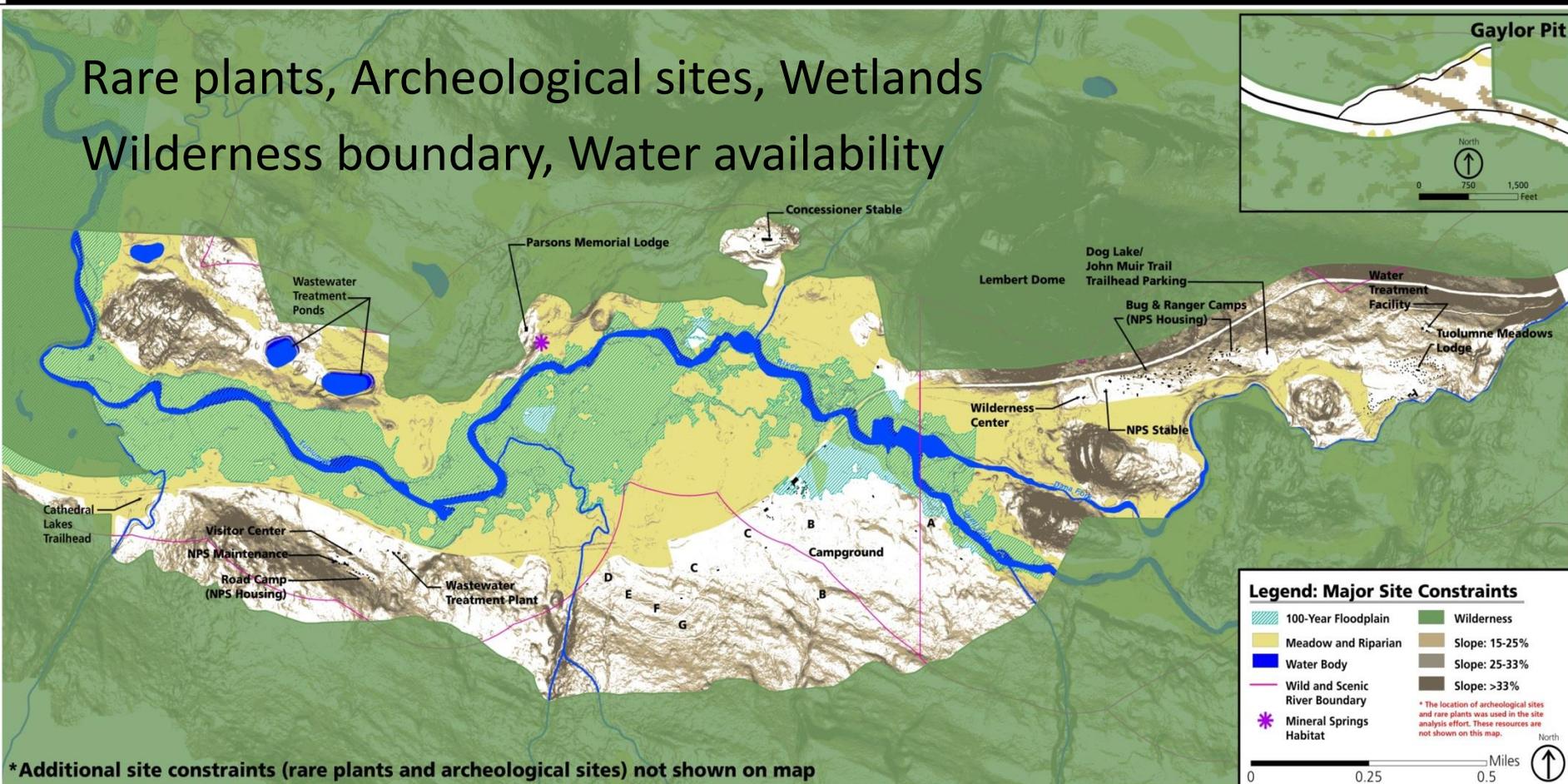
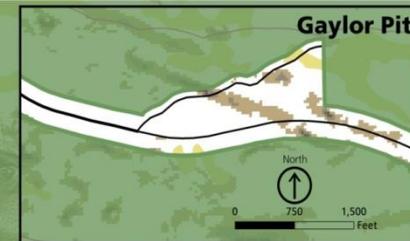
# ALTERNATIVES



# Other Resource Constraints

## Site Suitability: Tuolumne Meadows

Rare plants, Archeological sites, Wetlands  
Wilderness boundary, Water availability



**Legend: Major Site Constraints**

100-Year Floodplain	Wilderness
Meadow and Riparian	Slope: 15-25%
Water Body	Slope: 25-33%
Wild and Scenic River Boundary	Slope: >33%
Mineral Springs Habitat	

\* The location of archeological sites and rare plants was used in the site analysis effort. These resources are not shown on this map.

0 0.25 0.5 Miles

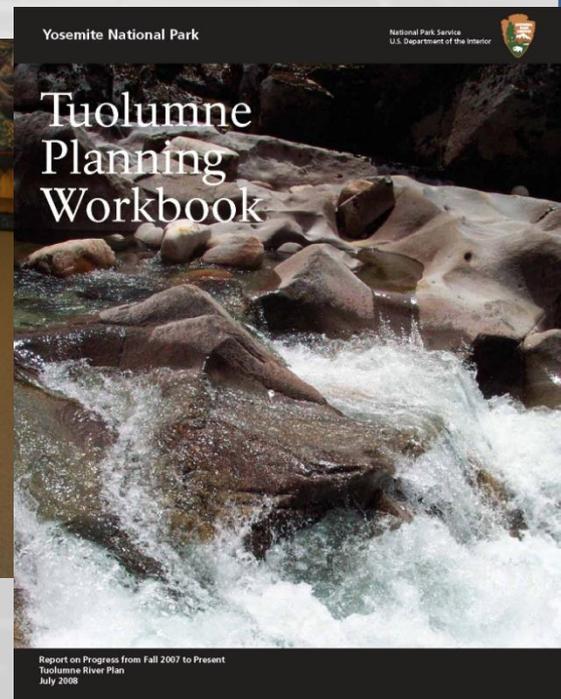
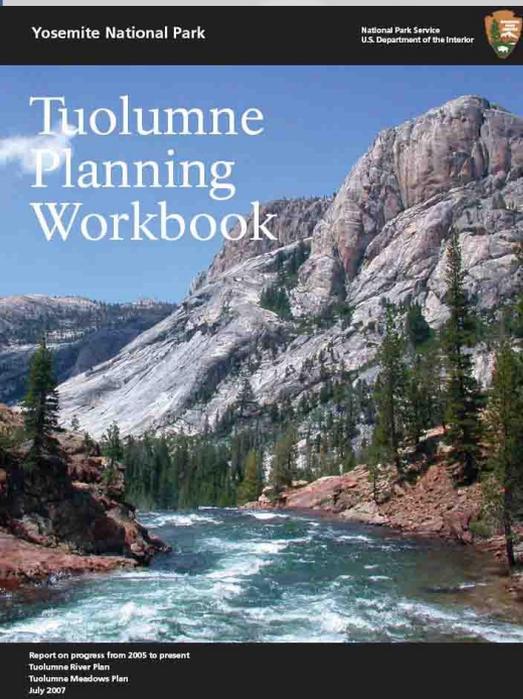
North ↑

\* Additional site constraints (rare plants and archeological sites) not shown on map



# Developing Alternatives and Public Input

- 2006: Public Scoping
- 2007: Early concepts developed
- 2008: Alternatives formulation
- 2009-12: Plan refinement & preparation





# TRP's Range of Alternatives

**Alternative 1:** Emphasizing a Self-Reliant Experience

**Alternative 2:** Expanding Recreational Opportunities

**Alternative 3:** Celebrating the Tuolumne Cultural Heritage

**Alternative 4:** Improving the Traditional Tuolumne Experience





# Alternative 1: Emphasizing a Self-reliant Experience



- Lodge eliminated
- Store, grill, & gas station removed
- Visitor contact station consolidated into wilderness center
- Stables & trail rides removed
- Glen Aulin HSC removed
- Campground capacity: 237 sites (304 now)
- Parking capacity: 481 (533 now)
- Overnight capacity: 2,032 (2,742 now)
- Day use limit: 1,033 (1,774 now)
- Employee housing: 100 (150 now)
- Water use: 33,000 gpd (64,000 now)



## Alternative 2: Expanding Recreational Opportunities

- Lodge retained as is
- Store, grill, & gas station retained
- New visitor contact station near store; wilderness center retained
- Trail rides reduced to 2-2 hr rides, with stables moved to near existing WWTP
- Glen Aulin HSC retained but converted to temporary outfitter camp
- Campground capacity: 345 sites (304 now)
- Parking capacity: 982 (533 now)
- Overnight capacity: 2,988 (2,742 now)
- Day use limit: 1,913 (1,774 now)
- Employee housing: 174 (150 now)
- Water use: 70,000 gpd (64,000 now)





## Alt. 3: Celebrating the Tuolumne Cultural Heritage



- Lodge downsized to 34 cabins (69 now)
- Store & grill retained; gas station removed
- Visitor contact station & wilderness center retained
- Trail rides reduced to 2-2 hr rides, with stables retained at existing locations
- Glen Aulin HSC downsized to 28 beds (32 now)
- Campground capacity kept at 304 sites
- Parking capacity: 813 (533 now)
- Overnight capacity: 2,598 (2,742 now)
- Day use limit: 1,568 (1,774 now)
- Employee housing: 124 (150 now)
- Water use: 64,000 gpd (same as now)



## Alternative 4 (Preferred): Improving the Traditional Tuolumne Experience

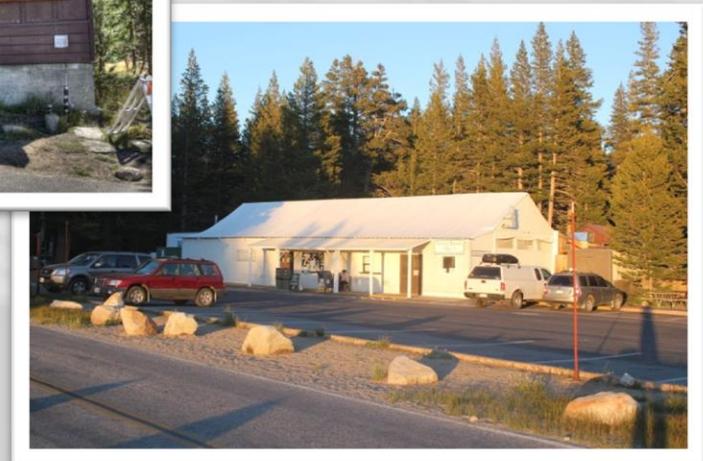
- Retain traditional Tuolumne experience
- Restore Tuolumne Meadows
- Consolidate development
- Make visitor use more sustainable
- Provide meaningful introduction to meadows for short-term visitors





# Retain Traditional Tuolumne Experience

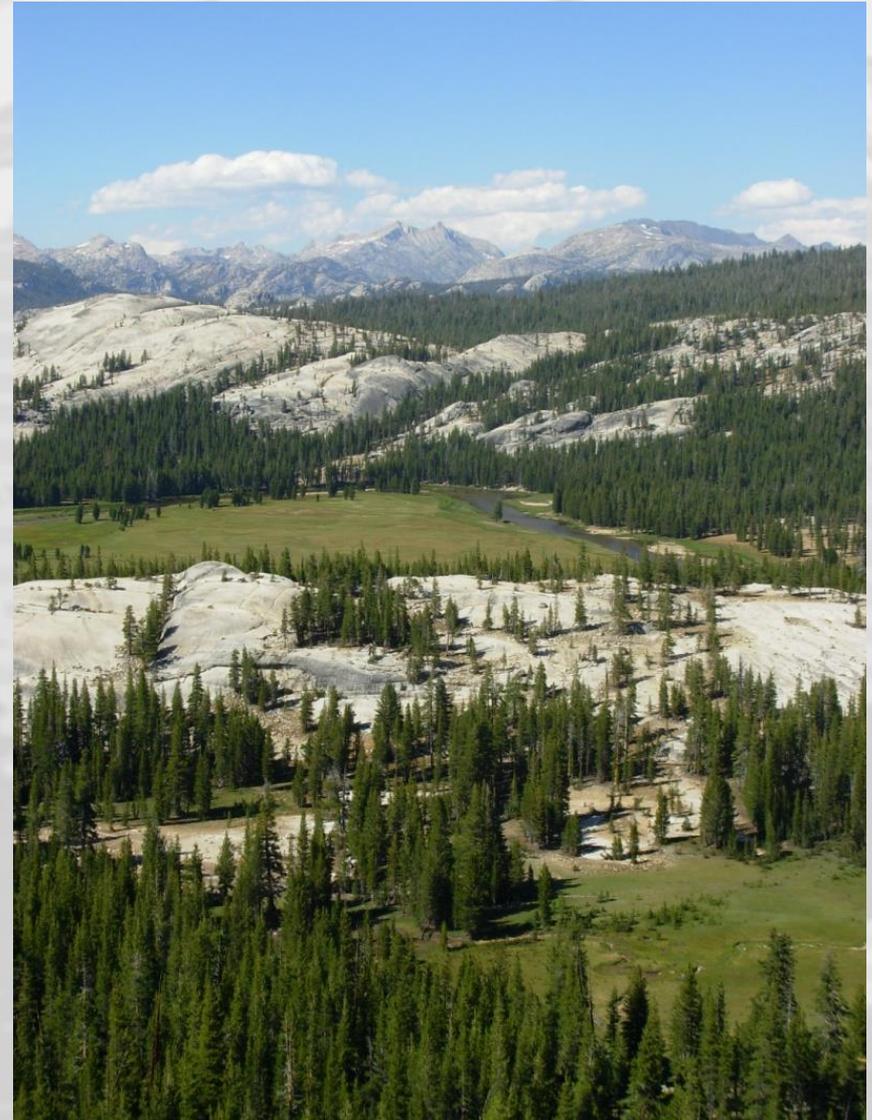
- Lodge, wilderness center, store & grill retained
- Campground overhauled
- Highway 120 (Tioga Road) to remain open without restrictions





# Protecting Resources

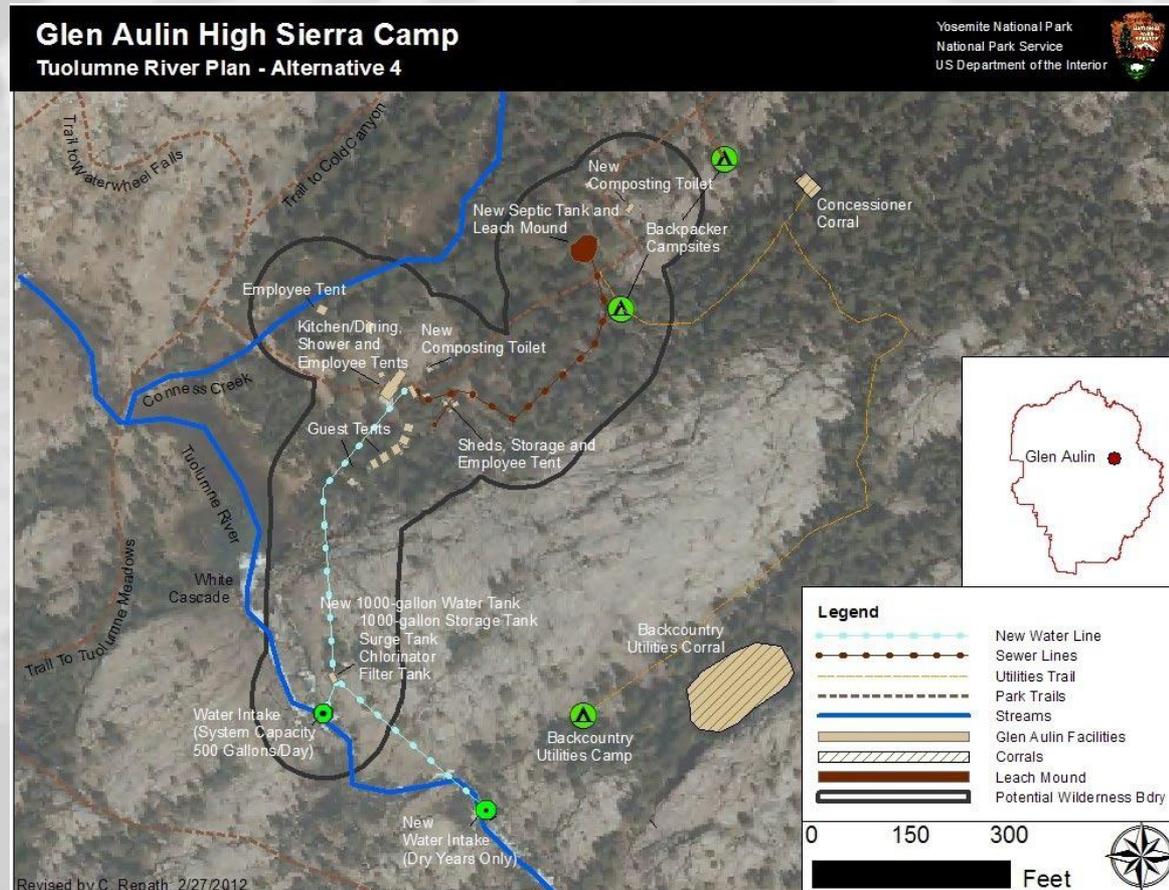
- **Eliminate roadside parking**
- **Move three cabins at lodge away from river**
- **Move all concessioner housing away from river & wetlands**
- **Limit water withdrawals at Tuolumne**
- **Remove gas station**
- **Stabilize “Little Blue Slide”**
- **Limit stock grazing in Lyell Canyon to 192 stock nights per year**





# Protecting Resources: Glen Aulin

- Downsize Glen Aulin High Sierra Camp (32 to 20 beds)
- Replace Glen Aulin flush toilets with composting toilet
- Replace Glen Aulin backpacker composting toilet with new one
- Eliminate meals-only service
- Eliminate wood stoves





# Consolidate Development

## Parking situation:

- Extensive road shoulder parking
- Affects Biological & Scenic ORVs
- Side effect of meadow trampling
- Unacceptable safety concerns

## Proposed solution:

- Formalize & expand parking lots at Lemberg Dome, Pothole Dome, store, Dog Lake Trailhead, Wilderness Center, existing visitor center
- Construct new centralized lot at new visitor contact station

## Consolidate other development :

- Wastewater treatment plant
- Employee housing
- Stables





# Make Visitor Use More Sustainable

- Upgrade wastewater treatment plant to modern codes
- Downsize Glen Aulin to be within wastewater treatment capacity
- Replace employee housing with code-compliant, efficient units
- Consolidate parking
- Connect visitor services with walking paths/trails
- Implement water conservation measures





# Provide Meaningful Introduction to Tuolumne Meadows

- Construct new visitor contact station
- Provide parking at that location
- Improve trail to Parson's Lodge
- Eliminate roadside parking
- Eliminate commercial day trail rides





# The Numbers

- **Campground capacity kept at 304 sites**
- **Parking capacity: 914 formal sites—44 more than the current total of 533 formal sites & 337 informal sites**
- **Overnight capacity: 2,730 (2,742 now)**
- **Day use limit: 1,839 (1,774 now)**
- **Employee housing: 163 beds (150 now)**
- **Water use: 67,000 (64,000 now)**





# TRP's Preferred Alternative Capacities

Overnight Capacity	Action	Units	# People
Tuolumne Lodge	Retain current Tuolumne Lodge capacity	69	276
Campground	Retain current campground capacity	304	2,034
Glen Aulin	Reduce Glen Aulin HSC (- 3 units)	5	20
Wilderness	Trailhead Quotas Maintained	-	400
Total Overnight Use (PAOT)			2,730
Day-Use Capacity	Action	Units	# People
T. M. Parking	Increase day-use parking (+222 formal 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
<b>Total Visitor PAOT</b>			<b>4,569</b>

Employee housing: 274 beds (+5%, 262 beds now) / Water use: 67,000 gpd (+5%, 64,000 gpd now)



# TRP's Range of Alternatives

Actions	No Action	Alt 1	Alt 2	Alt 3	Alt 4 (Preferred)
Acres Restored	0	233	175	176	173
Total Visitor Capacity Corridorwide (PAOT)	4,516	3,065	4,901	4,166	4,569
Total Overnight Capacity Corridorwide (PAOT)	2,742	2,032	2,988	2,598	2,730
Total Day Use Capacity in Corridor (PAOT)	1,774	1,033	1,913	1,568	1,839
Tuolumne Meadows Lodging Units	276	0	276	136	276
Tuolumne Meadows Campsites	304	237	345	304	304
Tuolumne Meadows Employees (NPS and Concessioner)	262	102	286	236	274
Parking Spaces in Tuolumne Meadows	870	481	982	813	914
Total Water Use (gallons per day)	64,000	36,000	70,000	60,000	67,000
Total Project Cost (\$M)		\$47	\$71	\$50	\$66



# User Capacity Management

- **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.





Section Four

# CONCLUSION AND DISCUSSION



# Public Review & Comment Period

- 60+ day review period
- Comment period closes  
March 18, 2013
- Comment on-line  
[http://parkplanning.nps.gov/yose\\_trp](http://parkplanning.nps.gov/yose_trp)
- Or via mail:  
National Park Service  
Tuolumne River Plan  
P.O. Box 577  
Yosemite NP, CA 95389





# What's next

- Comment analysis in March and April
- Revise spring and summer
- FEIS in mid- to late-2013
- Record of Decision in late 2013



# The Future of Tuolumne Meadows & the Entire River Corridor



EXPERIENCE YOUR AMERICA