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
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
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

Corrective Actions

Management Standard

Adverse impact

Degradation
User Capacity

1) Define River Values
   - Identify ORVs

2) Identify Issues & Constraints
   - Assess condition of river values & identify management concerns
   - Develop maps of site constraints

3) Analyze Kinds of Use
   - Identify river-related recreational ORVs
   - Identify additional public use

4) Develop Preliminary Alternative Concepts
   - Develop preliminary alternatives to address issues and desired conditions

5) Establish User Capacities
   - Infrastructure design, location, capacity
   - Assumptions about use
   - Transportation system analysis

6) Evaluate and Finalize Capacities & Mitigations
   - Relate capacities and use levels to river value conditions and management standards
   - Revise alternatives where needed to ensure protection of river values

7) Monitor & Conduct Ongoing Studies
   - Monitor conditions of river values.
Key Limiting Factors

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

Site Suitability: Tuolumne Meadows

*Additional site constraints (rare plants and archeological sites) not shown on map
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 Capabilities - Across Alternatives

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

<table>
<thead>
<tr>
<th>Overnight Capacity</th>
<th>Action</th>
<th>Units</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuolumne Lodge</td>
<td>Retain Tuolumne Lodge at current cap.</td>
<td>69</td>
<td>276</td>
</tr>
<tr>
<td>Campground</td>
<td>Retain current campground capacity</td>
<td>304</td>
<td>2,034</td>
</tr>
<tr>
<td>Glen Aulin</td>
<td>Reduce Glen Aulin HSC (- 3 units)</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Wilderness</td>
<td>Retain Existing Trailhead Quotas</td>
<td>-</td>
<td>400</td>
</tr>
<tr>
<td><strong>Total Overnight Use (PAOT)</strong></td>
<td></td>
<td></td>
<td><strong>2,730</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day Use Capacity</th>
<th>Action</th>
<th>Units</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. M. Parking Area</td>
<td>Increase day-use parking (+44 spaces)</td>
<td>562</td>
<td>1787</td>
</tr>
<tr>
<td>Bus riders to T. M.</td>
<td>Increase regional public transit</td>
<td>8</td>
<td>360</td>
</tr>
<tr>
<td>Parking Below Dam</td>
<td>Maintain current parking spaces</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Day Use (PAOT)</strong></td>
<td></td>
<td></td>
<td><strong>1,839</strong></td>
</tr>
<tr>
<td><strong>Total Visitor PAOT</strong></td>
<td></td>
<td></td>
<td><strong>4,569</strong></td>
</tr>
</tbody>
</table>
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/trl_deis

Or via mail:
National Park Service
Tuolumne River Plan
P.O. Box 577
Yosemite NP, CA 95389
Or via yose_planning@nps.gov
Tuolumne’s Future