



MERCED RIVER

Comprehensive River Management Plan

...Providing Access and Protecting Resources



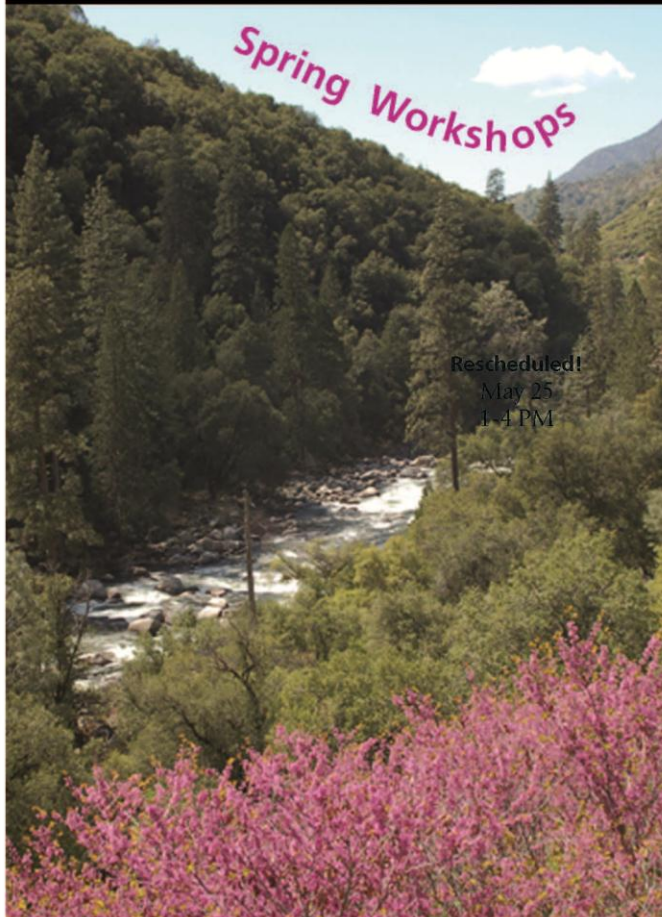
**Preliminary Alternative Concepts
San Francisco Workshop
Spring 2012**



Public Involvement

Yosemite National Park

National Park Service
U.S. Department of the Interior



Upcoming Merced River Planning Events

The Merced River Plan (MRP) team will host a series of workshops and a forum this spring. These workshops are a chance to find out more about the conditions of the river's Outstandingly Remarkable Values (ORVs) and management concerns that will need to be addressed in a successful Merced River Plan. The workshops will focus on transportation, user capacity, and the Merced River's ORVs.

For those unable to attend the workshops in person, they will also be available online via a webinar. Look for more information about how to register and log in to the webinar in the next few weeks at:

http://www.nps.gov/yose/parkmgmt/mrp_meetings.htm

Date Time	Topic Location
New Date! May 25 1-4 PM	Recreation Yosemite Valley Auditorium
Apr 22 1-4 PM	Hydrology/Biology/Geology Yosemite Lodge - Garden Terrace
Apr 26 1-4 PM	Transportation Yosemite Lodge - Garden Terrace
Apr 27 1-4 PM	Cultural Resources Yosemite Valley Auditorium
Apr 29 8AM - 4:30PM	User Capacity Yosemite Lodge - Garden Terrace
May 13 9AM - 2PM	Science Forum Yosemite Lodge - Garden Terrace



Public Involvement

Yosemite National Park
National Park Service
U.S. Department of the Interior



Merced River Plan
Fall Workshops

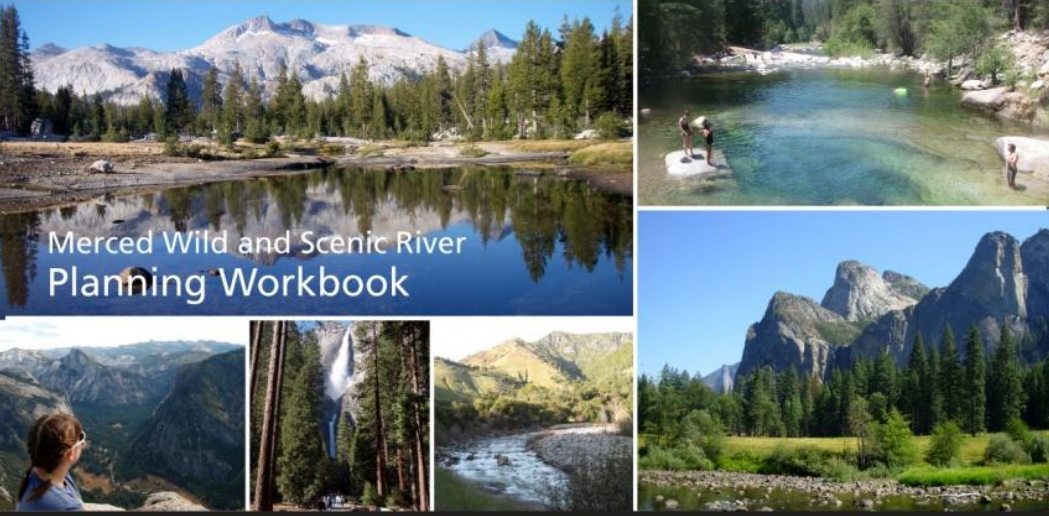
Join us to start shaping the alternatives for the Merced River.
While sometimes the path is clear, there is often more than one way to achieve a goal.

Merced River Plan Fall Workshops

Date	Time	Location
Oct. 27, 2011	5-8 pm	El Portal Community Center El Portal, California
Oct. 28, 2011	1-5 pm	Wawona Community Center Wawona, California
Oct. 29, 2011	10 am – 4 pm	Garden Terrace, Yosemite Lodge Yosemite National Park
Nov. 7, 2011	10 am – 4 pm	Garden Terrace, Yosemite Lodge Yosemite National Park
Nov. 9, 2011	5-8 pm	Fort Mason Conference Center, Golden Gate Room San Francisco, California

For more information about the Merced River Plan visit
www.nps.gov/yose/parkmgmt/mrp.htm

Yosemite National Park
National Park Service
U.S. Department of the Interior



**Merced Wild and Scenic River
Planning Workbook**

Fall 2011



Public Involvement





Section One

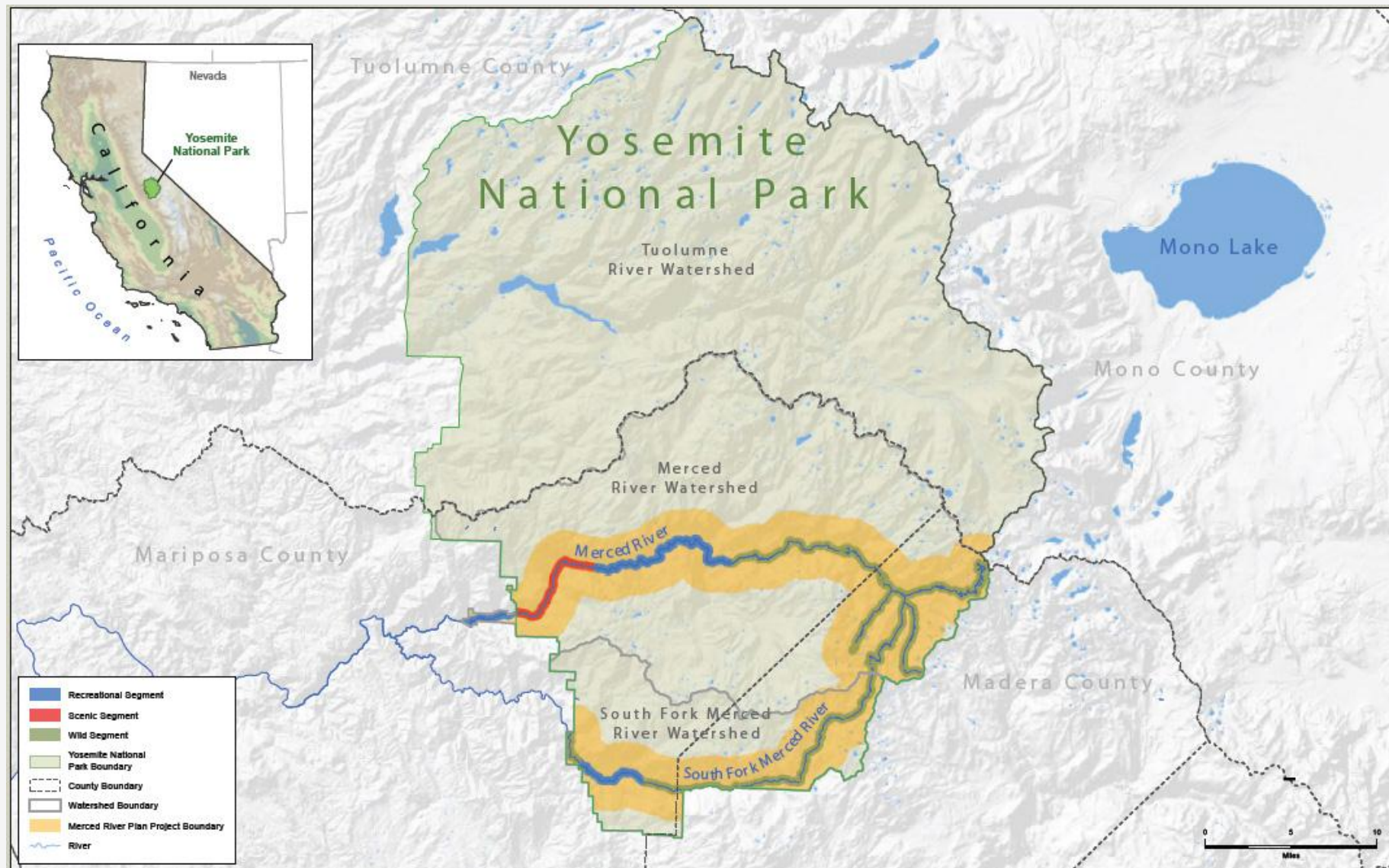
WSRA AND THE MERCED RIVER CORRIDOR



Wild and Scenic Rivers Act 1968

- ☐ 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
- ☐ Ensures visitor access and enjoyment
- ☐ **Requires management plans to be completed to provide long-term guidance**







Section Two

PLANNING FRAMEWORK



Planning Framework

“Each component...shall be administered in such manner as to **protect and enhance the values which caused it to be included in said system.” (WSRA, Sec. 10)**

“Each component 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

For purposes of WSRA.....

Adverse Impact: A significant reduction in the quality of a river value in relation to baseline conditions as a result of public use or development. Adverse impact is determined at a segment-wide scale and requires immediate attention by the agency.

Park scientists have developed quantitative definitions of **adverse impact** for each of the Merced's 24 specific river values.

Current conditions have been reviewed against this definition to determine where actions to “protect” river values are necessary.



Planning Framework

For purposes of WSRA.....

Degradation: The state in which a river value has been fundamentally altered by public use or development to the point that its value is lost for at least 10 years.

A river value has been degraded when recovery is only possible through a sustained change in park management and a significant investment of financial and natural capital.

Degradation is a segment-wide condition and may be detected by the baseline condition assessment, by periodic monitoring, or by other means.



Planning Framework

To Enhance ORVs...

The Merced River Plan must:

1. Identify baseline conditions for each river value; and
2. Improve conditions in the river corridor

Thus, each of the alternatives will include actions to address management concerns even if they are not significant enough to be considered “adverse impacts.”

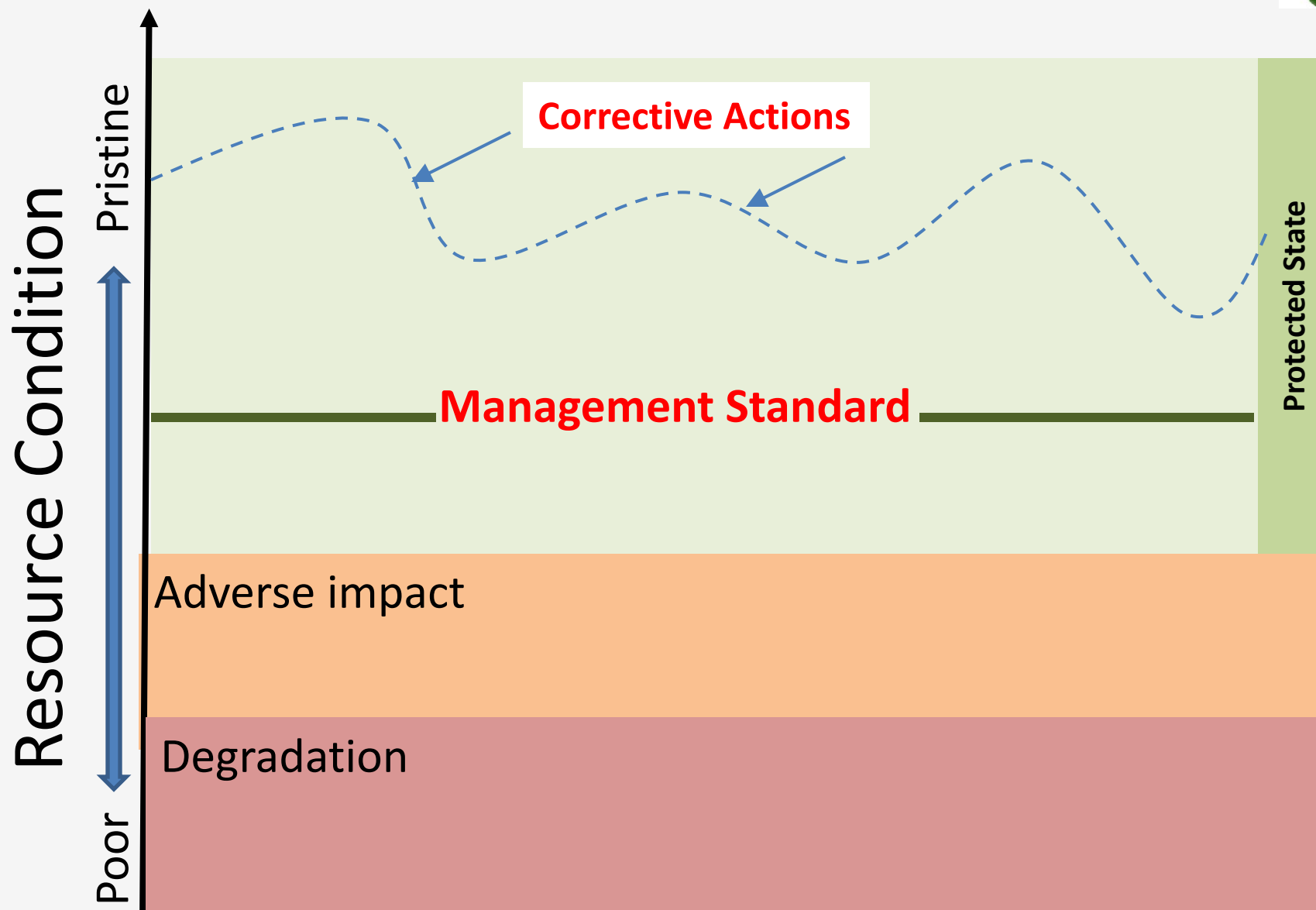
These actions have been linked with proactive restoration measures to form a **comprehensive restoration program** for the Merced River corridor.



Planning Framework

What about avoiding future impacts?

We are developing a series of monitoring protocols to evaluate conditions over time and set thresholds for taking appropriate management actions.





Potential Meadow Restoration and Protection Actions

- Increased monitoring
- Increased education
- Increased enforcement
- Trail delineation
- Removal of informal trails
- Recontour topography
- Soil decompaction
- Fences
- Boardwalks
- Adjust roadside parking
- Manage access



El Capitan Meadow in 2000 before installation of parking curbs.



Section Three

FACILITIES AND SERVICES



Facilities and Services

Major Facilities: “Major public use facilities such as developed campgrounds, major visitor centers and administrative headquarters will, where feasible, be located outside the river area. If such facilities are necessary to provide for public use and/or protect the river resource, and location outside the river area is infeasible, such facilities may be located within the river corridor provided they do not have an adverse effect on the values for which the river area was designated.” (WSRA Guidelines, 1982)



Facilities and Services

IDT Review of All Facilities in Merced River Corridor:

1. Is it a **major** facility?
2. Is it **necessary** for public use?
3. Is it **feasible** to relocate outside the corridor?
4. Are there **adverse impacts** to river values that need to be mitigated?

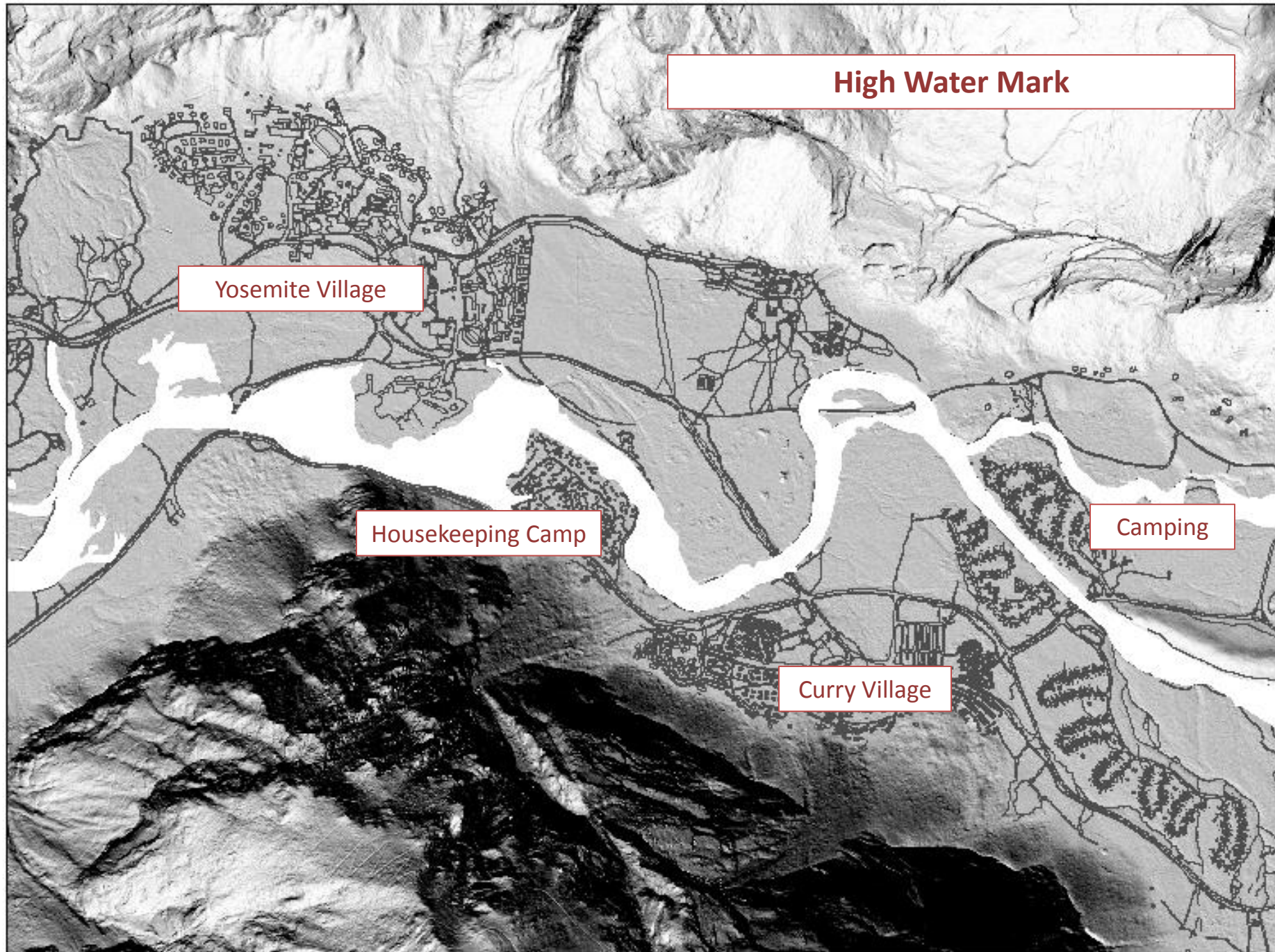
Yosemite Valley and Merced River

Yosemite Village

Housekeeping Camp

Curry Village

Camping



A grayscale topographic map of a mountainous region. The map shows a river winding through the landscape, with several settlements and camps marked. The 100-year floodplains are shaded in a light gray color. The settlements are marked with small squares and lines representing buildings and roads. The camps are marked with small circles and lines representing tent sites. The map is oriented with North at the top.

100 Year Floodplain

Yosemite Village

Housekeeping Camp

Camping

Curry Village

An aerial photograph of a river valley, likely the Yosemite Valley, showing a winding river and surrounding mountainous terrain. A large white semi-circular area is superimposed on the map, representing a quarter-mile river corridor boundary. Several locations are labeled with red-bordered boxes: Yosemite Village in the upper left, Housekeeping Camp in the center left, Curry Village in the lower right, and Camping on the right side. The map shows various geographical features like roads, trails, and vegetation.

Quarter-mile River Corridor Boundary

Yosemite Village

Housekeeping Camp

Camping

Curry Village

Quarter-mile Boundary and Edge of Talus



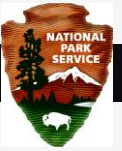
The map displays four distinct areas, each represented by a grey-shaded region with black outlines indicating boundaries and features. Yosemite Village is in the upper left, showing a dense cluster of buildings and roads. Housekeeping Camp is in the center, showing a more open area with some structures. Curry Village is in the lower center, showing a small cluster of buildings. Camping is in the upper right, showing a long, narrow area with some structures. Each area is labeled with a text box.

Yosemite Village

Housekeeping Camp

Curry Village

Camping



Facilities and Services

5 “To illustrate the level of degradation already experienced in the Merced and maintained under the regime of interim limits proposed by NPS, we need look no further than the dozens of facilities and services operating within the river corridor, including but not limited to, the many swimming pools, tennis courts, mountain sports shops, restaurants, cafeterias, bars, snack stands, and other food and beverage services, gift shops, general merchandise stores, an ice-skating rink, an amphitheater, a specialty gift shop, a camp store, an art activity center, rental facilities for bicycles and rafts, skis and other equipment, a golf course and a dining hall accommodating 70 people.” *(Friends of Yosemite v. Kempthorne, 9th Circ., 2008)*



Facilities and Services

Facilities Removed Under All Preliminary Alternatives

- Ahwahnee Pool
- Ahwahnee Tennis Court
- Former Ahwahnee Golf Course
- Yosemite Lodge Pool & Snack stand
- Yosemite Lodge Post Office
- Yosemite Lodge NPS Volunteer Bldg.
- Yosemite Lodge Housing (1000's cabins)
- Yosemite Lodge Highland Court Housing
- Happy Isles Snack Stand
- Wawona Concessions Stables
- Curry Village Ice Rink
- NPS Finance Trailer (El Portal)



Facilities and Services

Facilities Relocated, Repurposed, Reduced.....

- Residence 1
- Concessions Service Garage
- Concessions General Office
- Yosemite Lodge Housekeeping Bldg.
- Bicycle and Raft Rentals
- Yosemite Village Sports Shop
- Convenience/Nature Shops
- Camp 6 Day-Use Parking
- Wawona Campground
- Lower Pines Campground
- Curry Village Residential Area
- Yosemite Valley Backpacker's Campground



Section Four

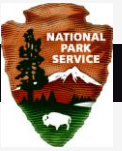
MANAGEMENT SITUATION: USER CAPACITY AND TRANSPORTATION



Key Points – User Capacity Process

- Integrated into overall river planning process.
- Not a single number.
- Is an outcome of the planning process, not predetermined.
- Involves both science and value judgments.
- Identifies kinds and amounts of use appropriate.
- Applies monitoring to ensure that use does not adversely effect or degrade river values.





Addressing User Capacity

“the *kinds* and *amounts* of public use which the river area can sustain without impact to the values for which it was designated.”

— 1982 Secretarial Guidelines for the Wild and Scenic Rivers Act



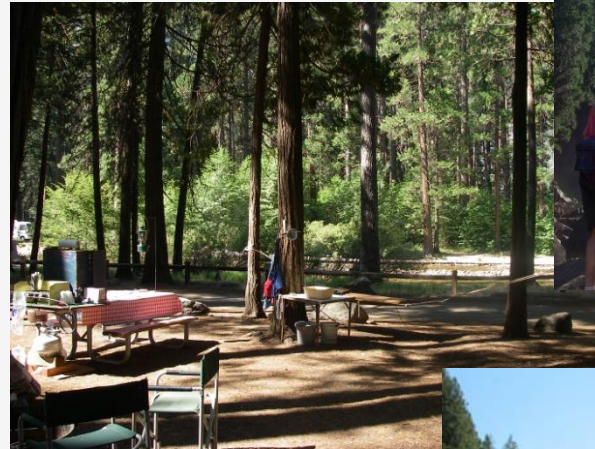
Recreational ORV

WILDERNESS ABOVE NEVADA FALL:

- Hiking
- Backpacking
- Swimming

YOSEMITE VALLEY:

- Viewing Scenery
- Swimming
- Hiking
- Camping
- Paddling
- Picnicking
- River Interpretation and Education





Analyzing the Kinds and Amounts of Use

- 1) Is there a potential effect on river values?
- 2) Which values may be affected?
- 3) Cause of effect
 - a) Kinds of use
 - b) Amounts of use
 - c) Location or timing of use
 - d) Infrastructure



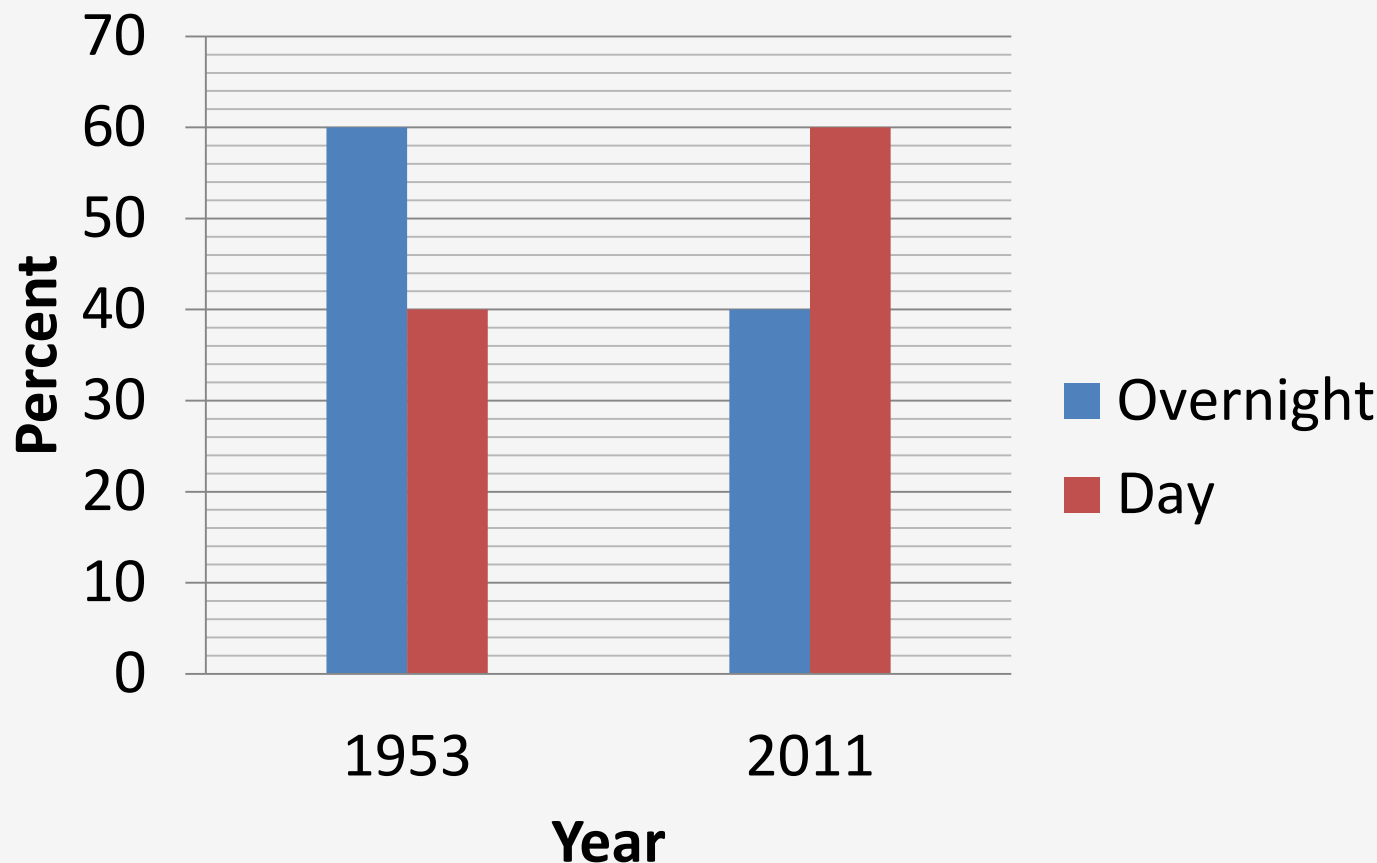
Photo: July 15, 2011
Chapel Straight, Yosemite Valley



Preliminary Alternative
Concepts Workshops:
March 27-April 13, 2012



Overnight vs. Day Use





Arriving to the Park

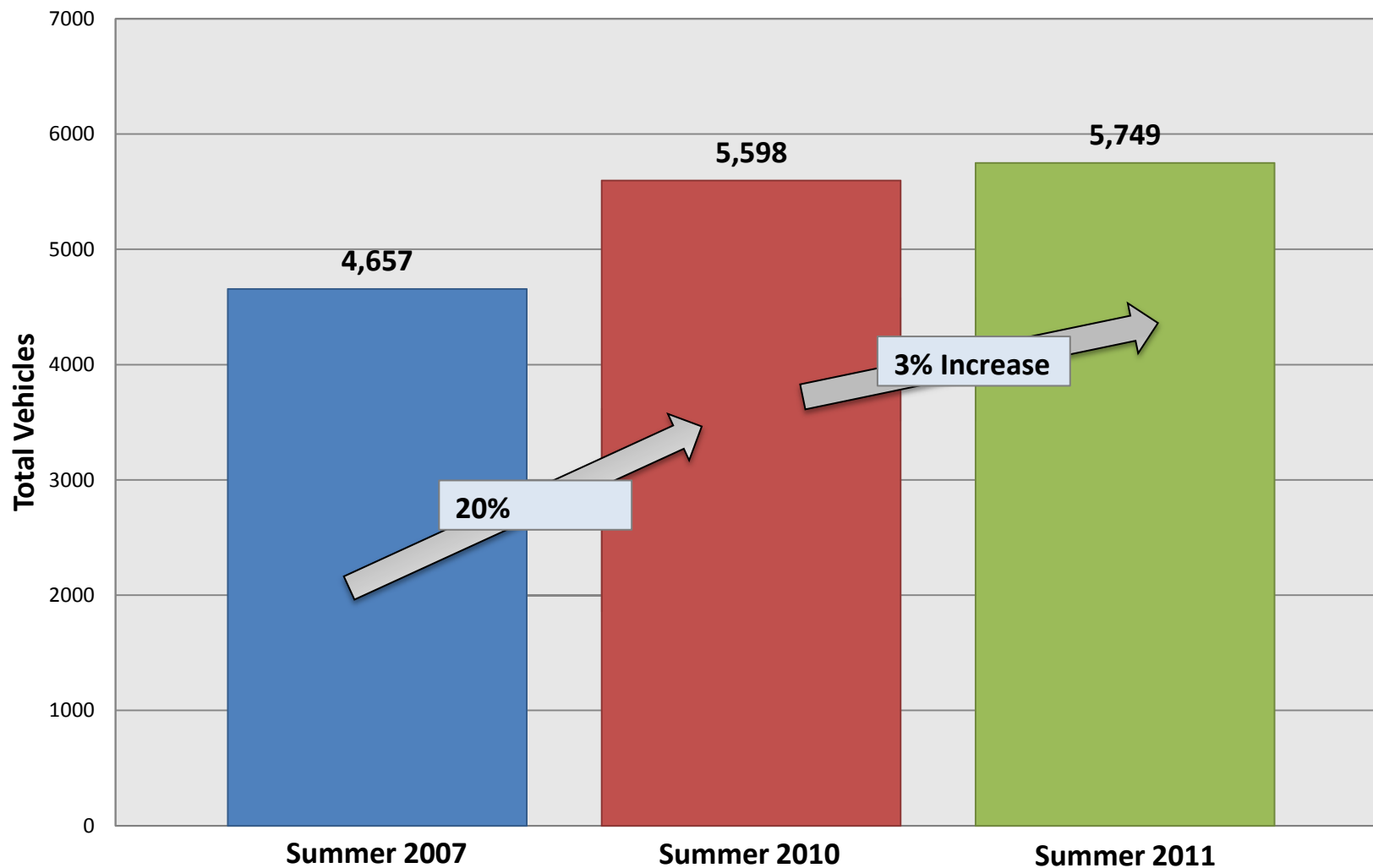
(70% of All Visitors to Yosemite Valley)

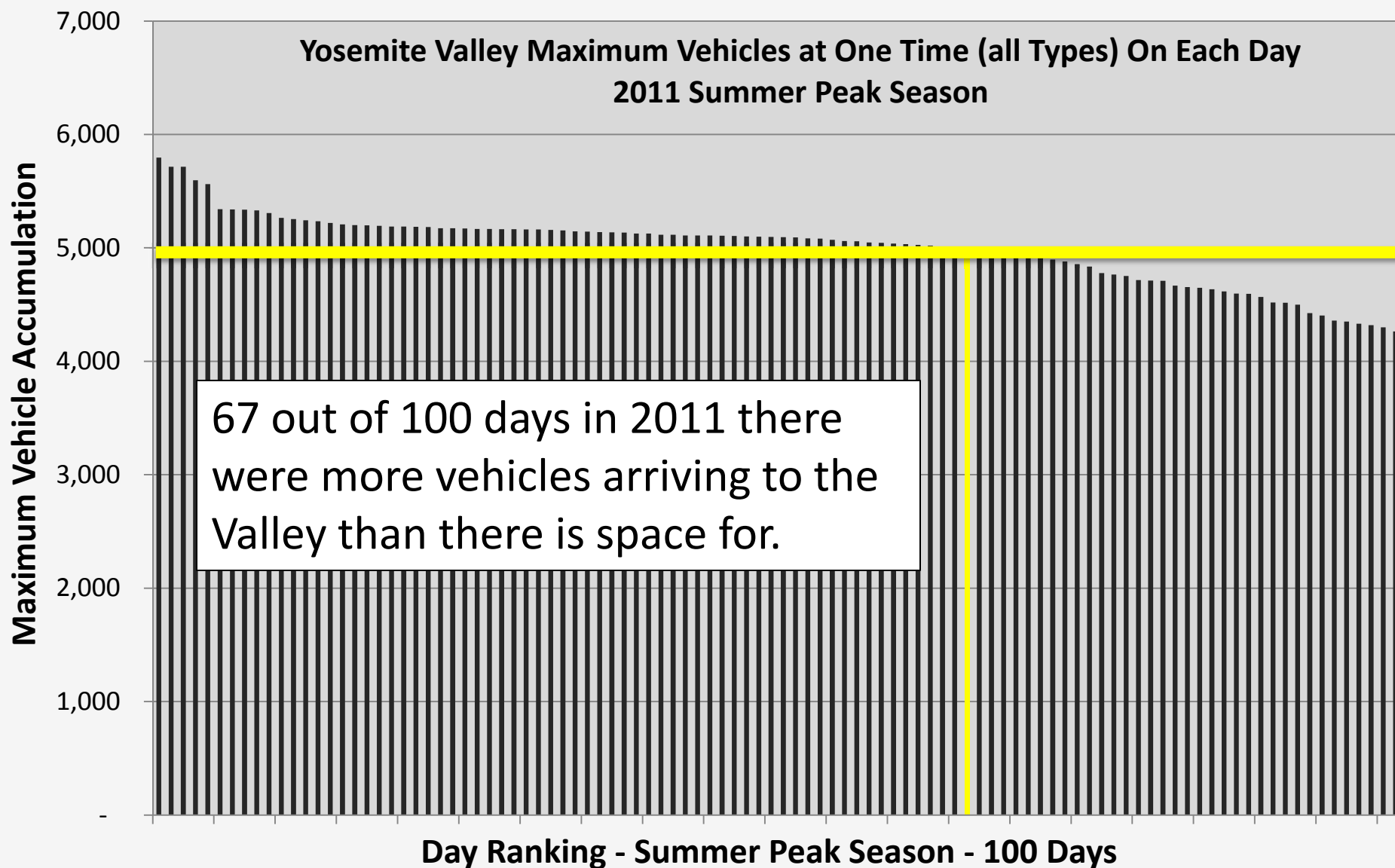
- Personal Vehicle = 84.4%
- Commercial Tour Bus = 4.8%
- RV = 3.2%
- YARTS = 1.3%
- Motorcycle = 1.1%
- Bicycle = 0.2%
- Walk = 0.6%
- Other = 4.4%





Average Daily Vehicles Arriving in Yosemite Valley

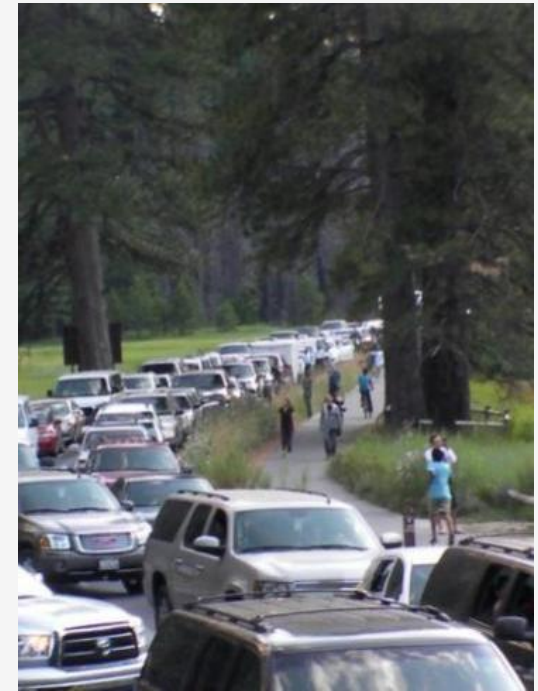






Traffic and Parking Management

- Extra staff processing vehicles at entrances
- Pass-thru traffic at entrance gates
- Traffic management staff at intersections
- Directed parking at day use lot
- HOV lanes in East Valley
- Traffic diversions at El Cap cross-over



Type – roadside vs. lot parking

Unintended use - “Overnight overflow”

Parking:

Supply vs. Demand

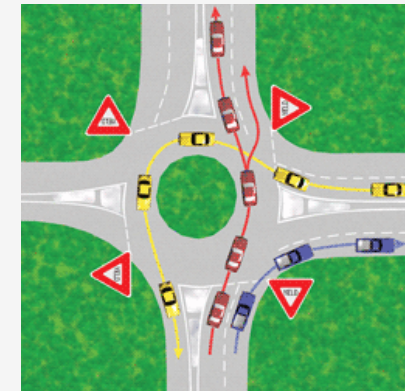
Acreage – development footprint

Viewscape - sense of naturalness



Intersections:

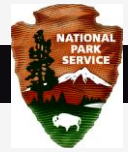
Vehicles vs. Pedestrians



Roundabout

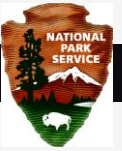


Pedestrian Underpass



Section Five

PROTECTING RIVER VALUES



Scientific Basis for Resource Actions

- Draft Baseline Conditions Report based on best available science
- Specific studies conducted to inform the planning process: e.g., meadows, riparian, sensitive species, bridges, archeology sites
- Yosemite is one of the most intensively studied parks in the National Park System



Actions to Protect River Values Common to All Alternatives

- Remove riverside riprap
- Retain large woody debris in river channel
- Re-vegetate denuded riverbanks
- Establish riparian buffers
- Remove ditches from meadows
- Remove informal trails from wet meadows
- Direct visitor use to more stable and resilient river access points



Healthy riverbank riparian vegetation



Denuded and riprapped riverbank



Devil's Elbow, pre-restoration, 1993



Devil's Elbow, post-restoration, 1995



Potential Meadow Restoration and Protection Measures

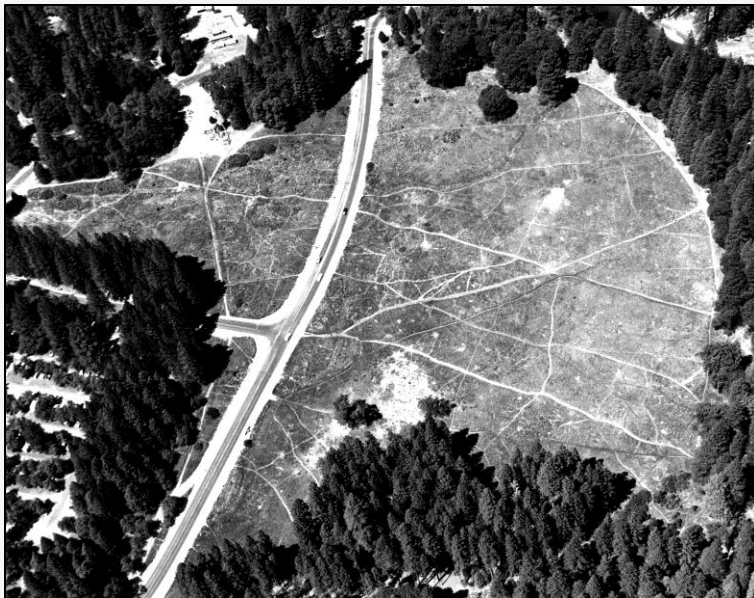
- Increased monitoring
- Increased education
- Increased enforcement
- Trail delineation
- Removal of informal trails
- Recontour topography
- Soil decompaction
- Fencing
- Boardwalks
- Adjust roadside parking
- Manage access



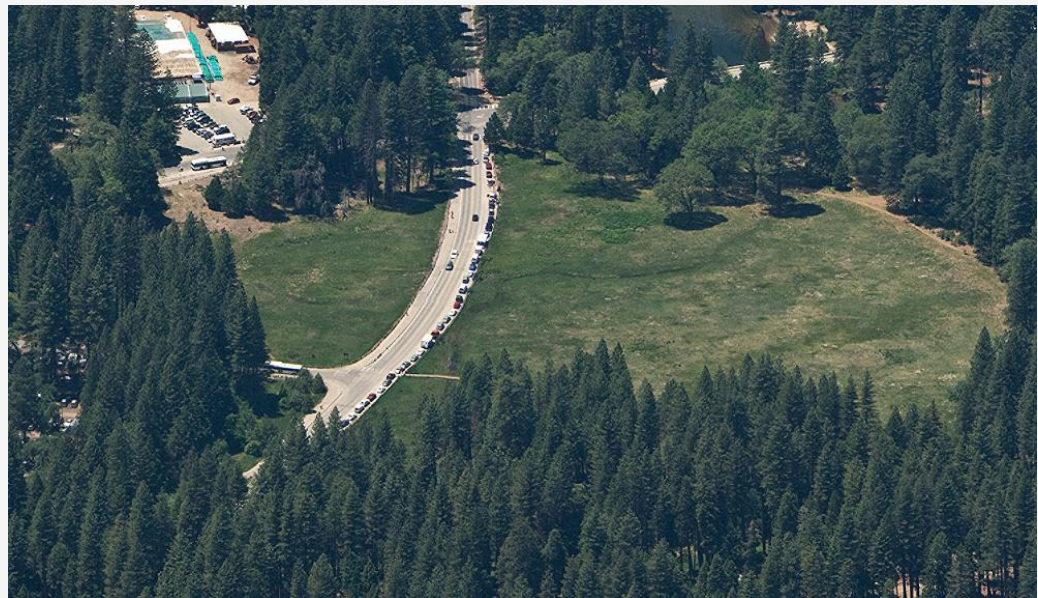
El Capitan Meadow in 2000 before installation of parking curbs.



Removing informal trails in Stoneman Meadow



Stoneman Meadow in 1987 before restoration, showing informal trail network



Stoneman Meadow in 2008 after restoration and boardwalk installation



Ditches in Ahwahnee Meadow



Ahwahnee Meadow ditch

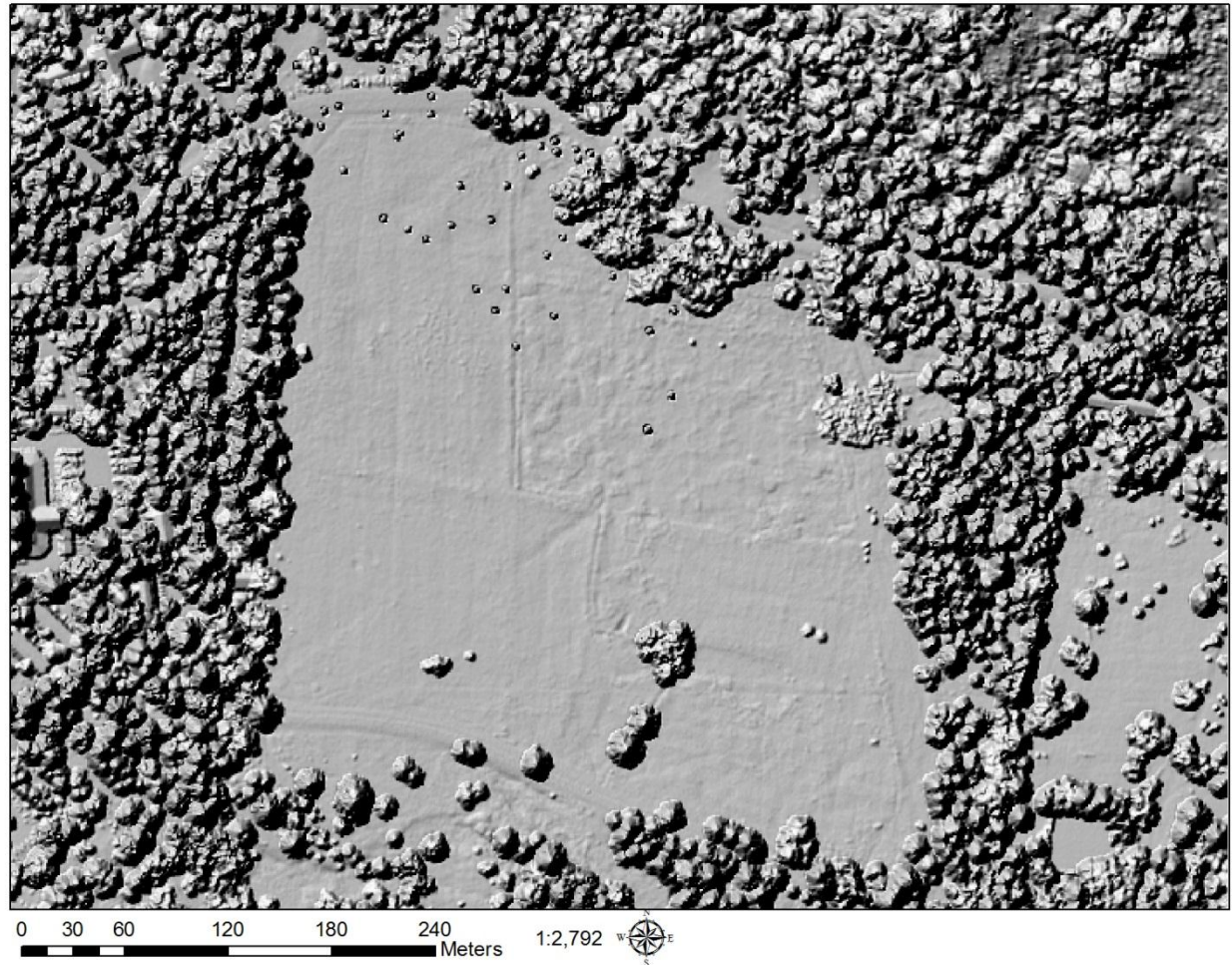




Ditches in Ahwahnee Meadow



Ahwahnee Meadow ditch





Actions That Vary by Alternative

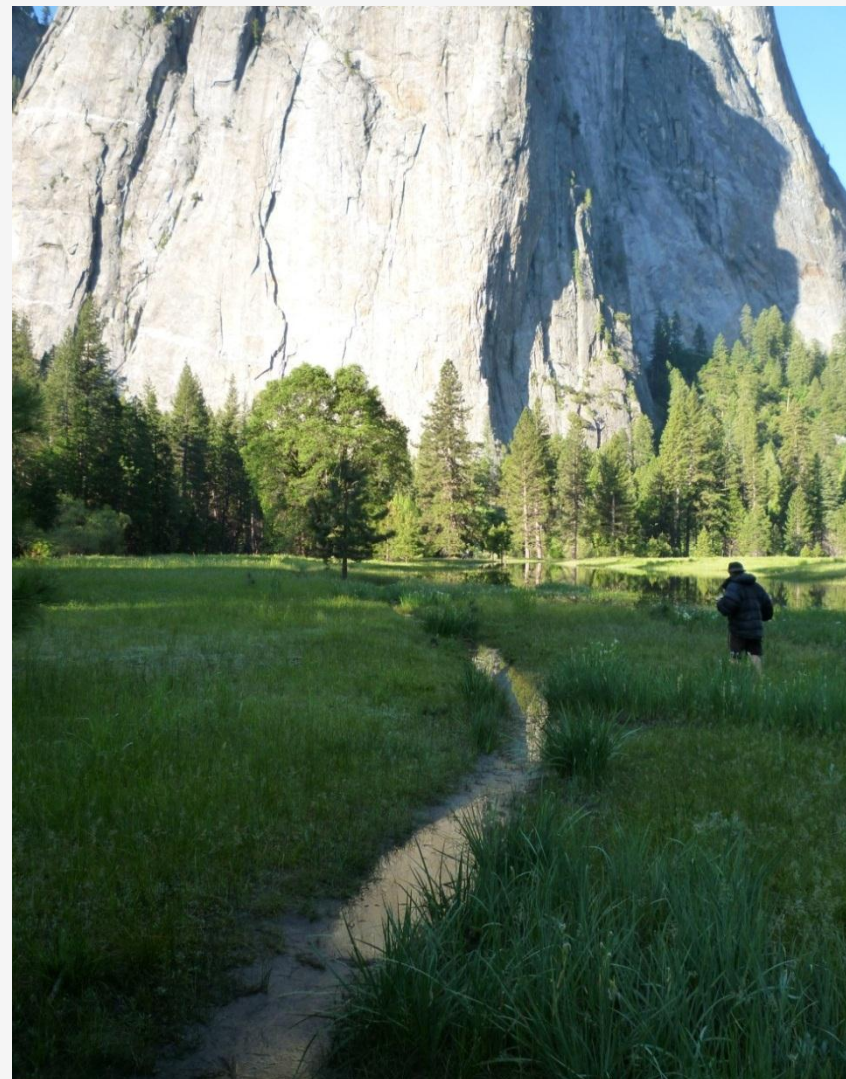
- Degree of ecological restoration:
 - El Capitan Meadow
 - Camp 6 parking area
 - Housekeeping Camp
 - Former Rivers Campgrounds
- Remove or replace some east Valley bridges, or provide engineered mitigations



Sugar Pine Bridge



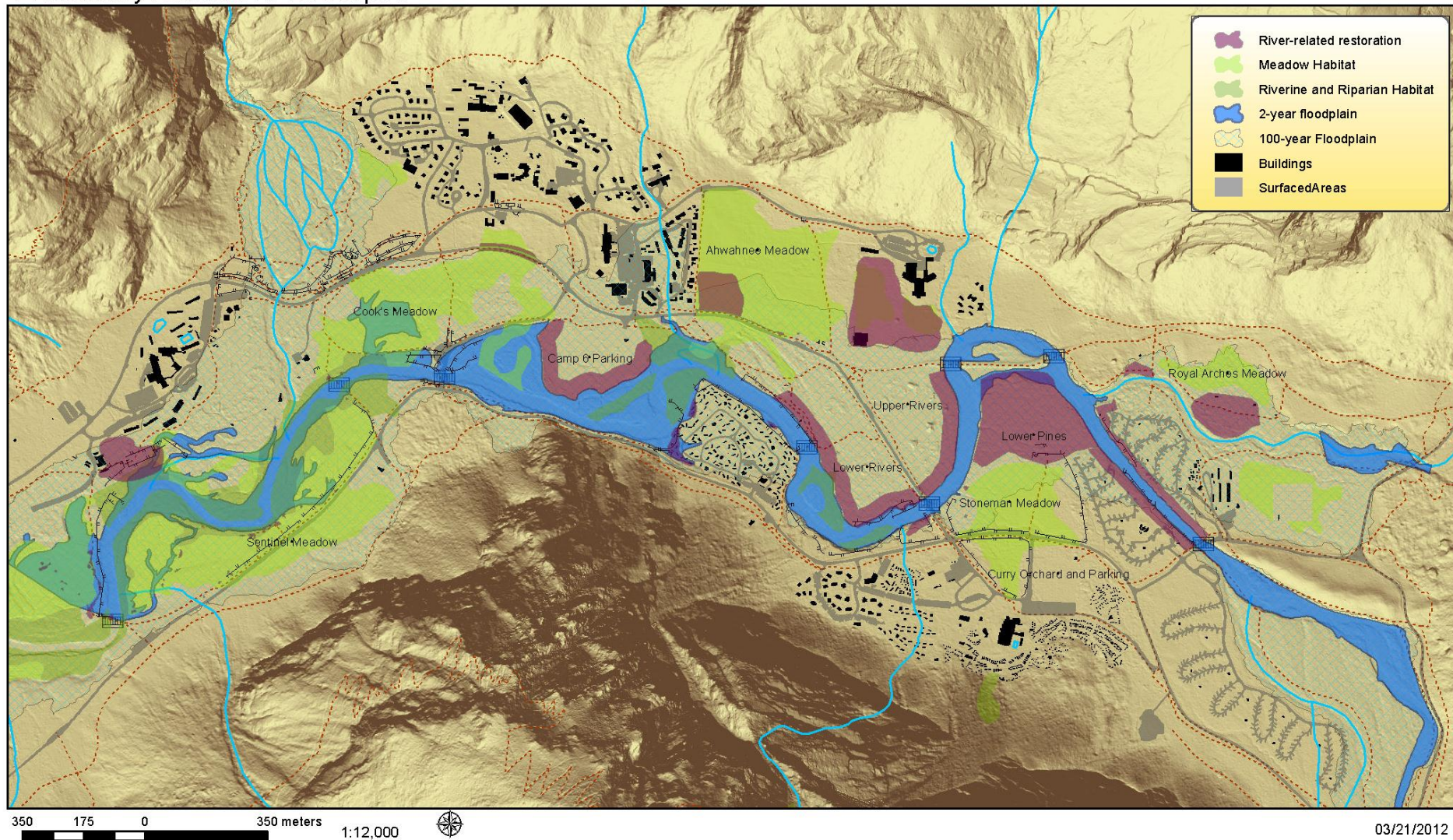
Stoneman Bridge



Flooded informal trail in El Capitan Meadow



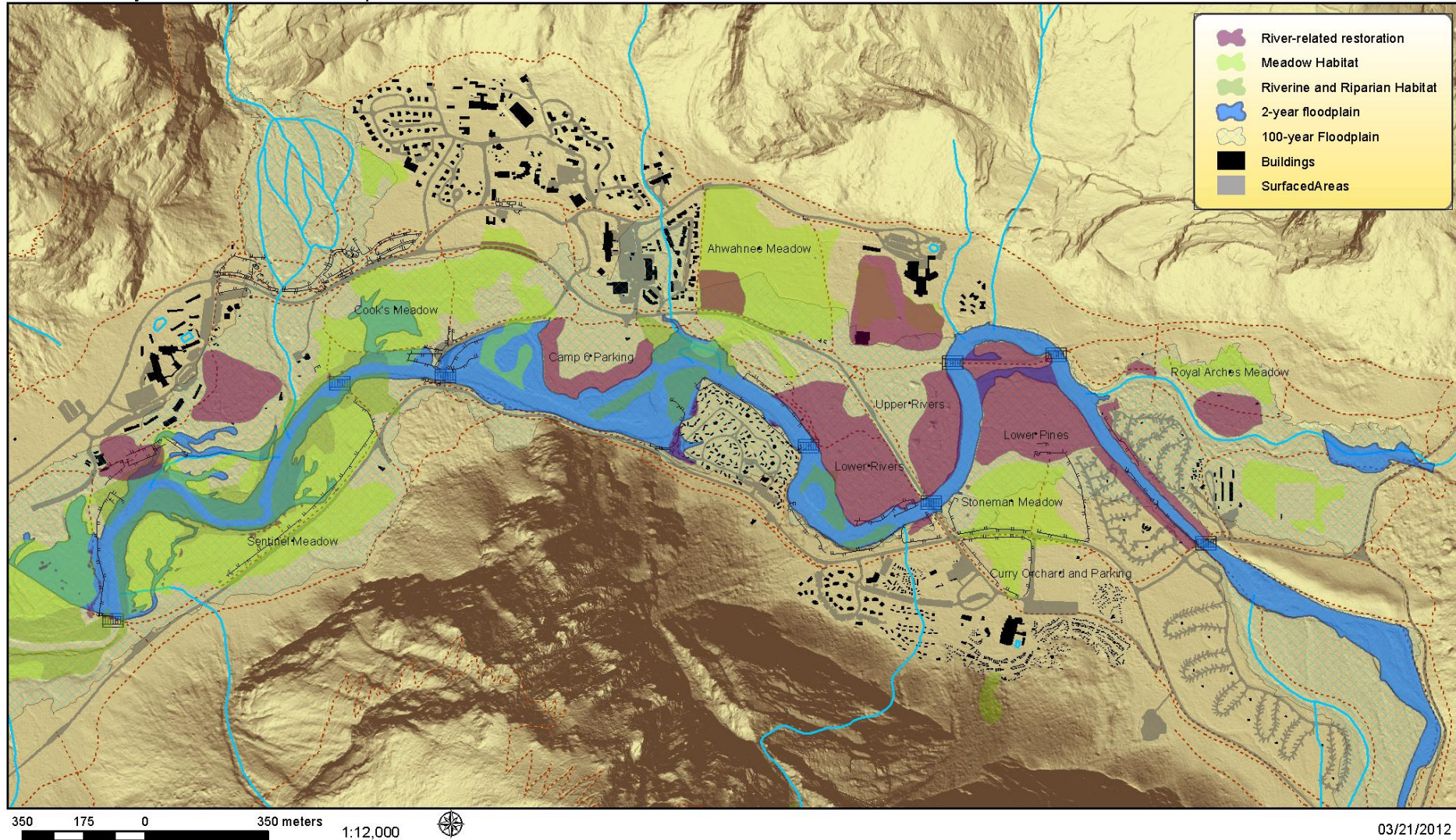
Preliminary Alternative Concept 5



03/21/2012



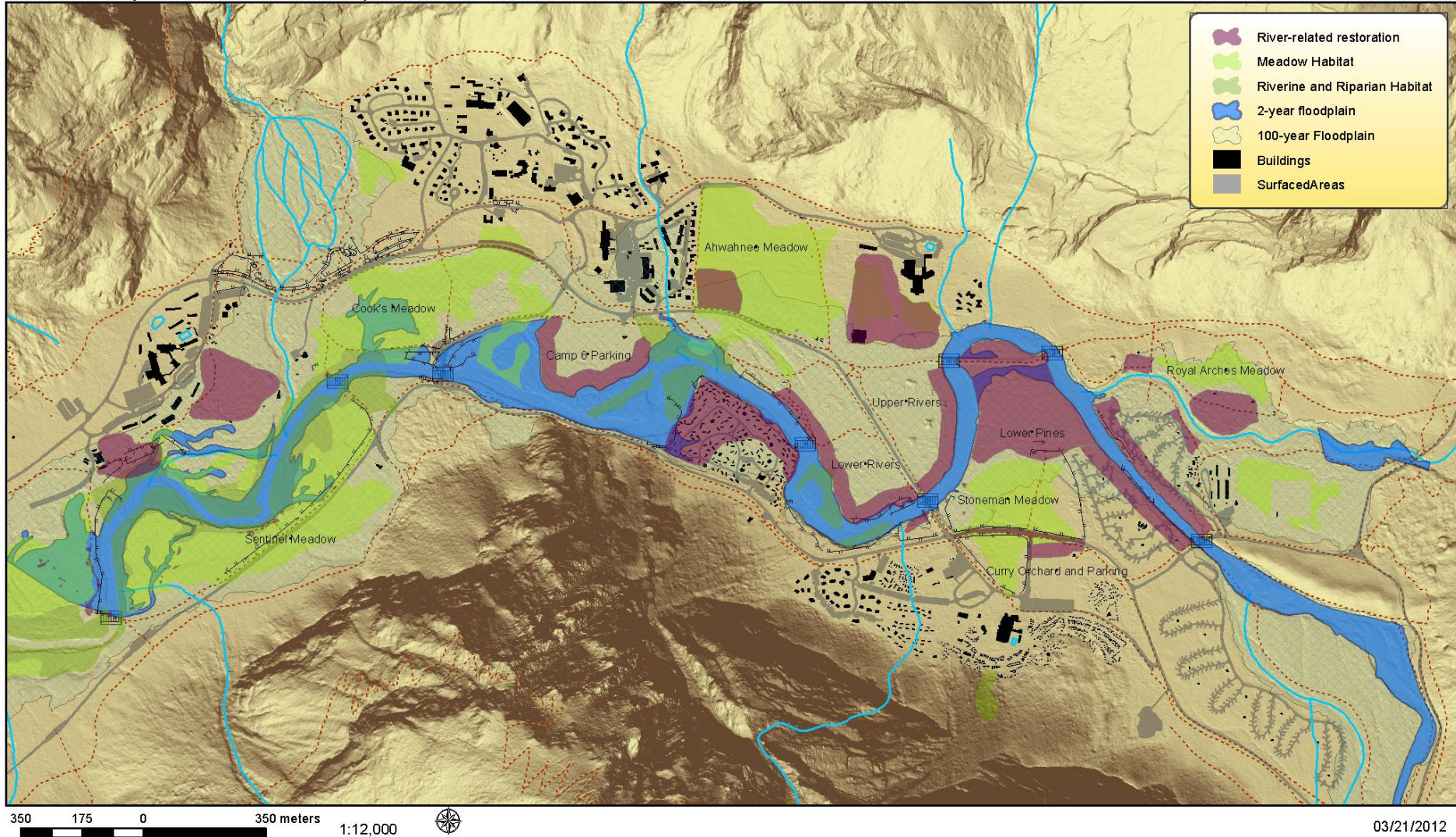
Preliminary Alternative Concept 4



03/21/2012



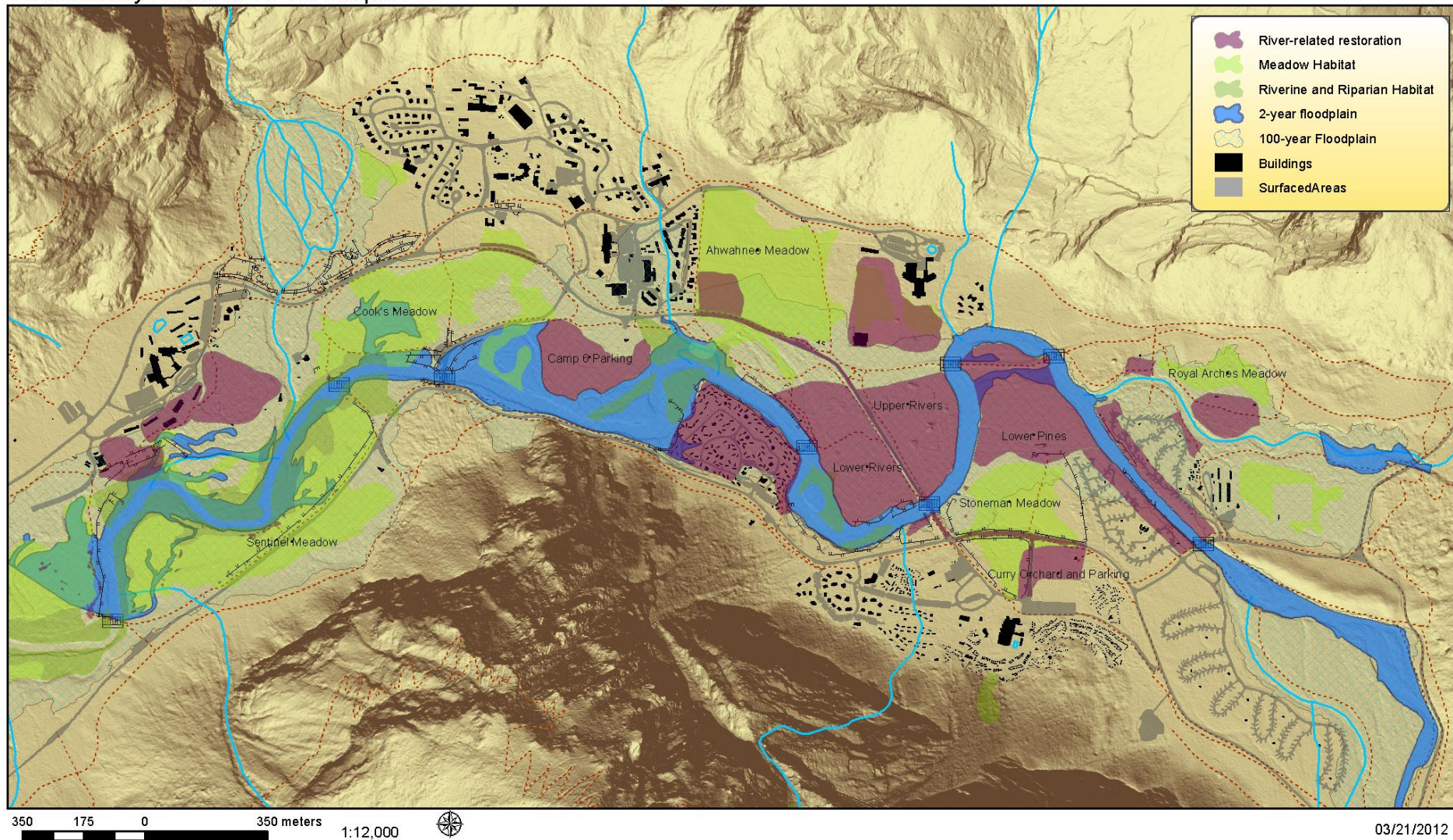
Preliminary Alternative Concept 3



03/21/2012



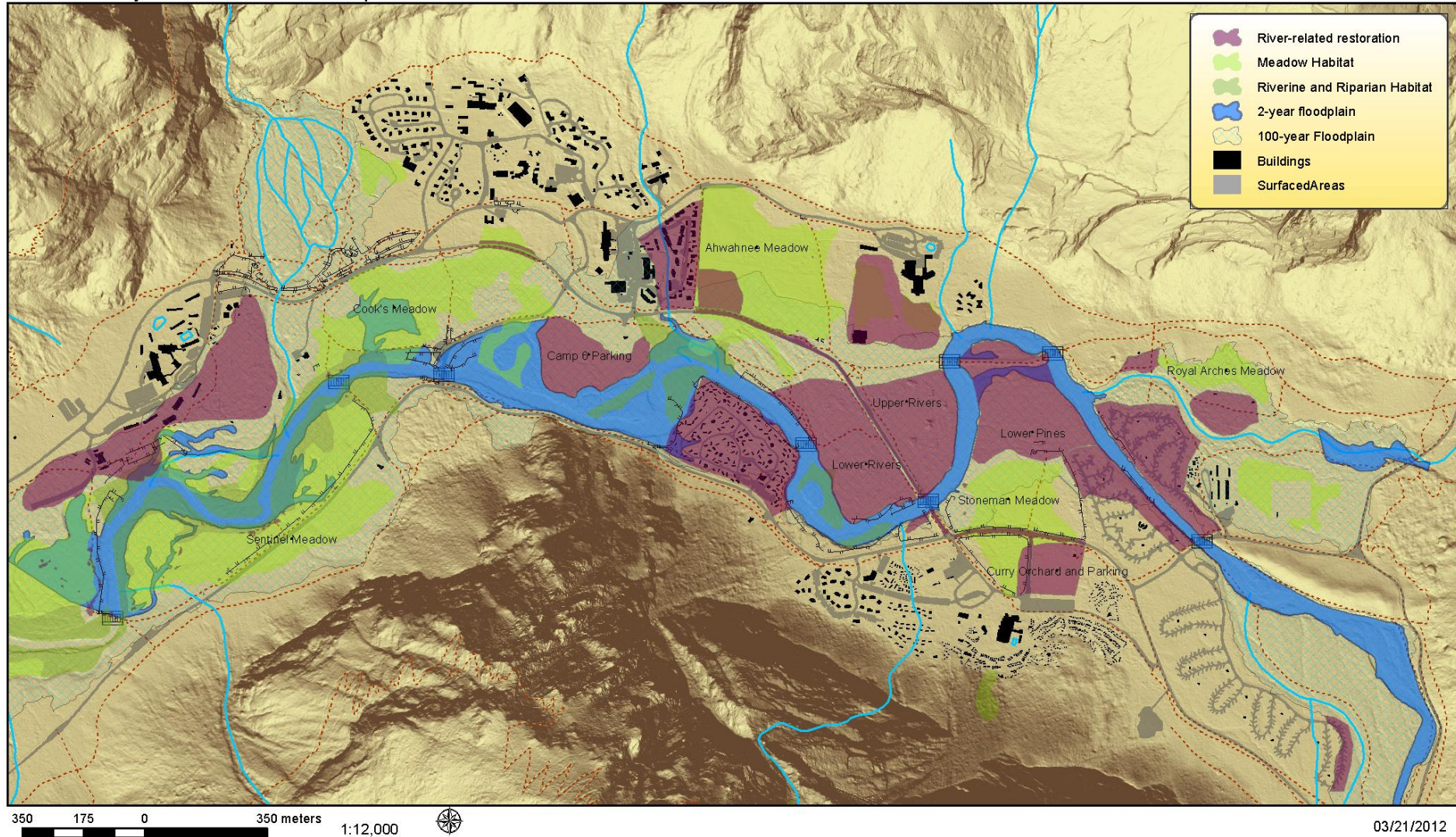
Preliminary Alternative Concept 2



03/21/2012



Preliminary Alternative Concept 1



03/21/2012



Section Six

OVERVIEW OF CONCEPTS



Alternative Concept 1

Self-reliant Experience within the 100-year floodplain

Major restoration within the 100-year floodplain

Accommodates lowest visitor use levels

Significant reduction in facilities and services



336 acres
restored



3 bridges and
6,700 linear
feet rip-rap
removed

-27%



Valley Peak
Parking
Capacity
4,000

-1%



Valley
Camping
Inventory
460

-55%



Valley
Lodging
Inventory
480

-31%



Valley Peak
Use Levels
14,200

** Workbook pg. 17*



Alternative Concept 2

Dispersed Visitor Experiences and Extensive Riverbank Restoration

Significant restoration within 150 feet of the river

Accommodates lower visitor use levels than today

Marked reduction in visitor facilities and services



293 acres
restored



3 bridges and
6,100 linear
feet rip-rap
removed

-19%



Valley Peak
Parking
Capacity
4,400

+3%



Valley
Camping
Inventory
480

-35%



Valley
Lodging
Inventory
700

-27%



Valley Peak
Use Levels
14,900

** Workbook pg. 19*



Alternative Concept 3

Resource-based Experiences and Targeted Riverbank Restoration

Targeted restoration within 150 feet of the river

Accommodates slightly lower visitor use levels than today

Reduced commercial services with large increases in camping



218 acres
restored



2 bridges and
6,100 linear
feet rip-rap
removed

-4%



Valley Peak
Parking
Capacity
5,300

+57%



Valley
Camping
Inventory
730

-17%



Valley
Lodging
Inventory
890

-17%



Valley Peak
Use Levels
17,000

** Workbook pg. 21*



Alternative Concept 4

Enhanced Visitor Experiences and Essential Riverbank Restoration

Essential restoration within 100 feet of the river

Accommodates current peak use levels of today

Reduced commercial services with moderate increase in camping



201 acres
restored



2 bridges and
6,100 linear
feet rip-rap
removed

+7%



Valley Peak
Parking
Capacity
5,900

+25%



Valley
Camping
Inventory
580

-5%



Valley
Lodging
Inventory
1,000

0%



Valley Peak
Use Levels
20,500

** Workbook pg. 23*



Alternative Concept 5

Diversified Visitor Experiences and Selective Riverbank Restoration

Limited restoration within 100 feet of the river

Allows for some increase to in peak visitor use levels

Expanded facilities and services with largest increase in camping



168 acres
restored



6,000 linear
feet rip-rap
removed

+19%



Valley Peak
Parking
Capacity
6,500

+85%



Valley
Camping
Inventory
860

+21%



Valley
Lodging
Inventory
1,300

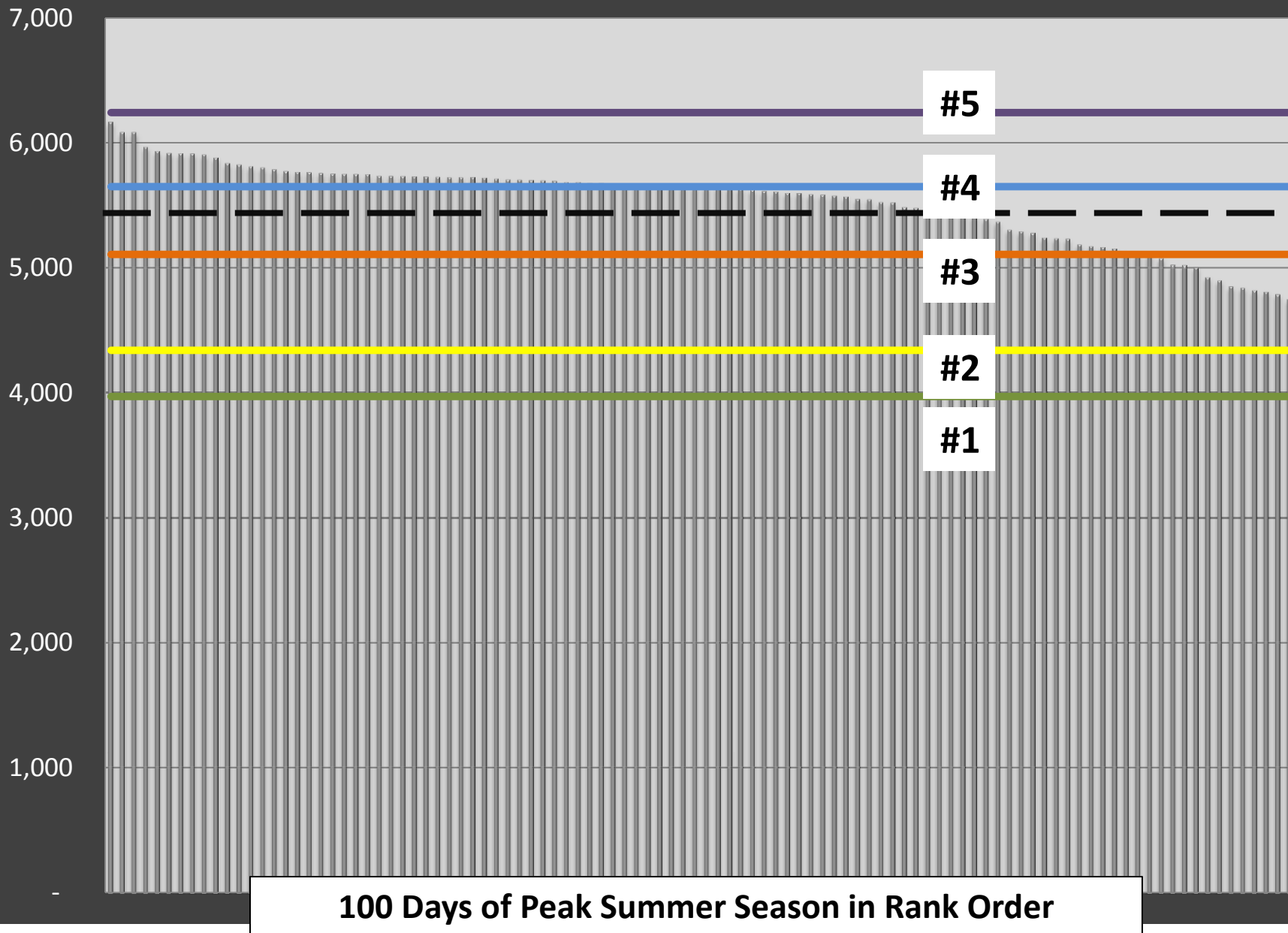
+17%



Valley Peak
Use Levels
24,000

** Workbook pg. 25*

Yosemite Valley Vehicle Accumulation (Parking and Driving on Roadways) Compared to Parking Capacity of Alternatives





Summary Statistics

Concept	No Action	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
Visitor Use Levels in Yosemite Valley						
Day Visitors to Valley	14,600	10,200	10,200	10,600	14,100	15,500
Overnight Visitors to Valley	5,900	3,900	4,700	6,400	6,400	8,500
Overall Visitation to Valley	20,500	14,200	14,900	17,000	20,500	24,000
Land Use and Development Capacities						
Yosemite Valley						
Valley Lodging Totals	1,100	480	700	890	1,000	1,300
Valley Camping Totals	470	460	480	730	580	860
Valley Parking Totals	5,500	4,000	4,400	5,300	5,900	6,500
Corridor-wide Totals						
Lodging Totals	1,200	590	810	990	1,100	1,400
Camping Totals	570	520	540	790	660	940
Parking Totals	7,800	6,500	6,700	7,700	8,400	9,200

** Workbook pg. 26-27*



Day Use Capacity Choices

ALT 1	ALT 2	ALT 3	ALT4	ALT 5
Significantly reduced day use parking capacity → Day use reservation system managed at gates	Reduced day use parking capacity → Day use reservation system managed onsite	Day use parking accommodates current average use demand → Transportation parking fees and real-time traffic management and formal diversions	Day use parking accommodates current peak use demand → Transportation entrance fees and real-time traffic management and diversions	Provides enough day use parking to meet some future demand → Phased in day use management over time using all choices

** Workbook pg. 26-27*



Section Seven

STAY INVOLVED



Public Involvement

NEXT STEPS:

- Preliminary Alternative Concepts workbook and public workshops – March 2012
- Comments most useful if received by April 20, 2012
- Draft Plan/EIS and public comment Fall 2012
- FEIS and ROD – Summer 2013

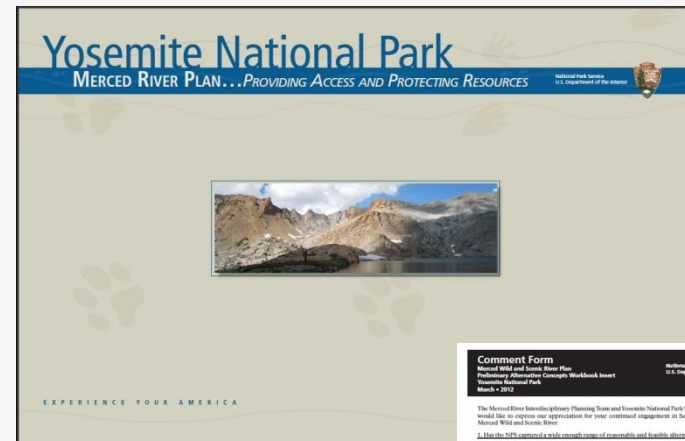


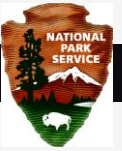


Please STAY involved!

How to get involved today

- Read through the workbook
- Ask rangers at each of the display boards about the five alternative concepts
- Fill out a paper comment form to turn in now or mail by April 20
- Comment electronically through April 20 at <http://parkplanning.nps.gov/MRPAAlternatives>





THANK YOU