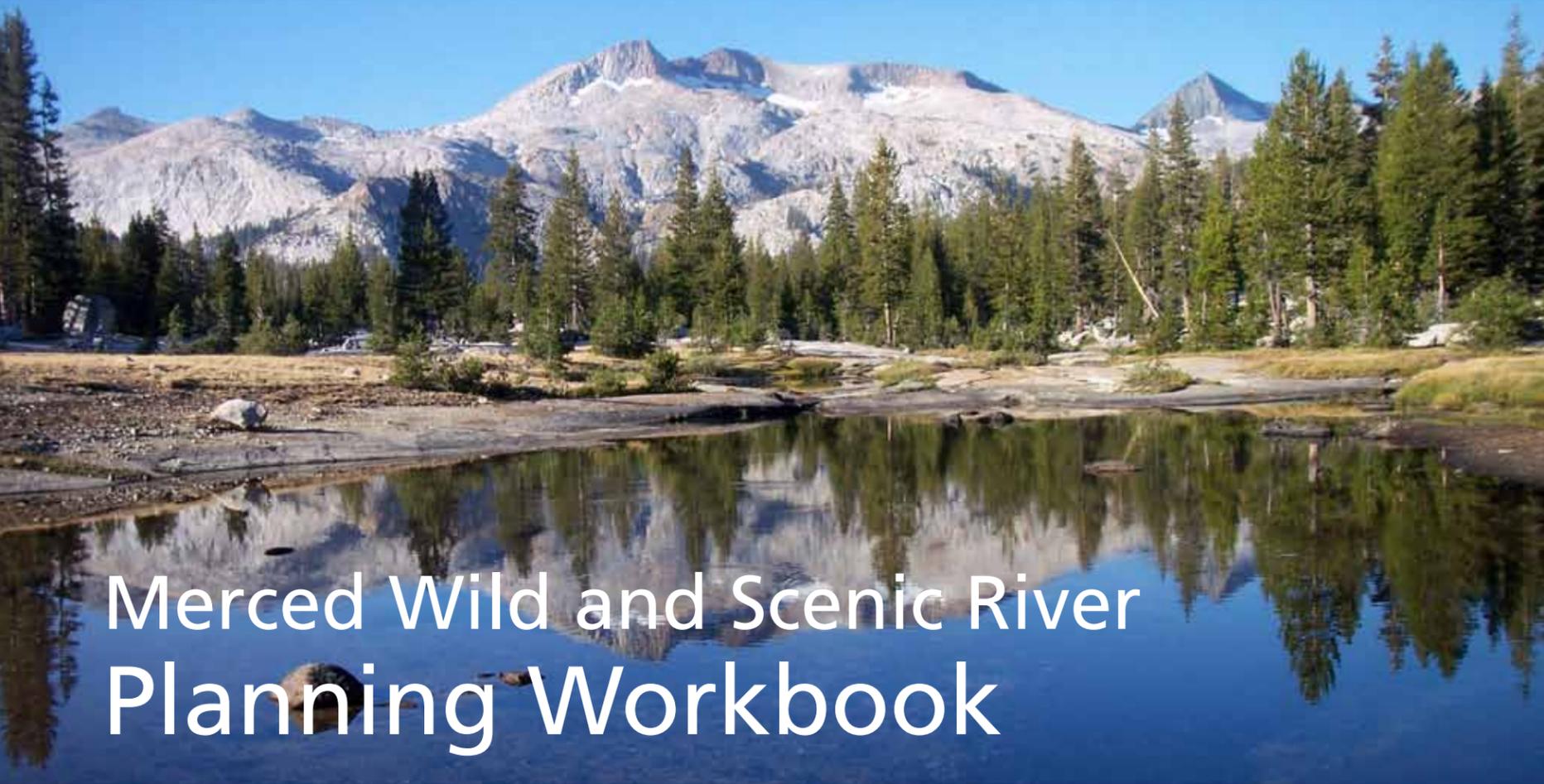
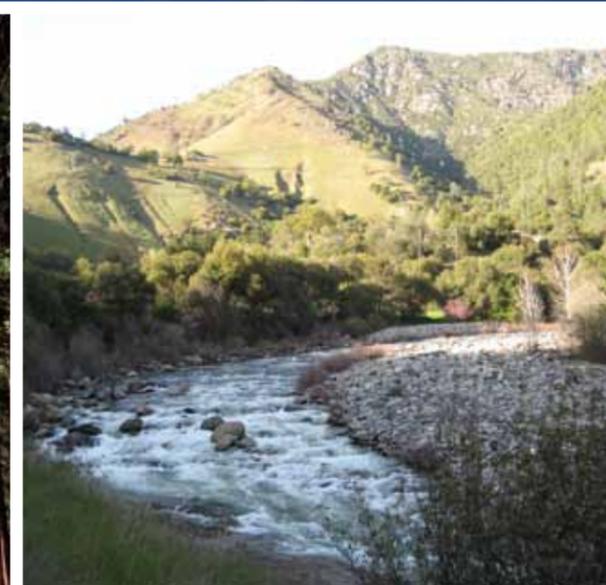


# Yosemite National Park

National Park Service  
U.S. Department of the Interior



## Merced Wild and Scenic River Planning Workbook



# HOW TO USE THIS WORKBOOK

The NPS will use your feedback to help create a range of reasonable and feasible management alternatives to address the primary management challenges and the site-specific issues presented on the following pages. The management considerations in this workbook reflect locations and instances where decisions need to be made and management actions need to be taken to protect and improve river values or visitor experience. We have selected topics for this workbook based on complexity and public interest, or because stakeholders have expressed strongly divergent opinions about the subject. Though an interdisciplinary team of experienced park staff is evaluating hundreds of such considerations, we are highlighting only 35 in this collaborative workbook. A complete list of the management considerations will be available at [www.nps.gov/yose/parkmgmt/mrp.htm](http://www.nps.gov/yose/parkmgmt/mrp.htm).

This workbook provides a window into our process and represents a high degree of transparency. With this opening up of the process, please recognize that our team is in a period of deliberation and exploration as we begin to think about packaging these options into feasible alternatives, and our strategies to address our most significant management challenges.

All of the options we consider in the draft plan must achieve the goals of the Wild and Scenic Rivers Act to protect and enhance river values. In some cases, a “take no action” option may be feasible if that management consideration can be addressed in a different way. The options beginning on page 13 are not ranked in any order of preference and provide different ways to protect the river and its values. We invite you to help us consider how these options might be combined into a range of plan alternatives.

For some of the management challenges for which a specific range of options has not yet been developed, we have asked more open ended questions about how these should be addressed (pages 8–10 and 27).

Suggestions on how you might use the workbook include:

- Read through the management consideration statements and the range of options identified to address them.
- Rank the options in the order you prefer them, or note your top choice.
- Cross out any options that you find unacceptable and note why.
- Describe in writing any new ideas that you might have, or modifications to existing options that are presented.

After you have reviewed all sections of the workbook, consolidate your choices and look at them holistically. Please consider the following questions:

- Do all of your choices work together?
- Are there conflicts between some of the options? If so, how could they be resolved?
- How would you explain your choices to someone else? Is there a theme or a commonality among your choices?

## Share Your Ideas With Us!

Please fill out the interactive comment pages (pages 27-29) at the end of your workbook (River Management Considerations, Your Top Management Options, and Putting The Pieces Together) and return them to us. While we won't be producing an official report on the feedback we receive through the workbook, your feedback will help inform the interdisciplinary planning team as we walk through the same process of developing alternatives. All feedback will be read and considered by the Merced River Planning Team, as your input is the key to the collaborative alternatives development process we are engaged in. The feedback you provide will help us determine a range of alternatives to address the plan's goals. In order to be most helpful in this process we encourage your feedback by **November 30, 2011**.

There are several ways to share your thoughts:

- You can turn the comment pages in at a public meeting.
- Fill it out online at [www.nps.gov/yose/parkmgmt/mrp.htm](http://www.nps.gov/yose/parkmgmt/mrp.htm) and email it to [yose\\_planning@nps.gov](mailto:yose_planning@nps.gov)
- Tear it out and mail it to:  
Superintendent  
Yosemite National Park  
Attn: Merced River Plan  
P.O. Box 577  
Yosemite, CA 95389

**Thank you for your input!**

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# INTRODUCTION

## Geographic Setting

The Merced Wild and Scenic River flows through the heart of Yosemite National Park in the central Sierra Nevada of California. The Merced River's headwater tributaries originate along the crest of the Sierra Nevada and the Clark Range. The Lyell Fork, Triple Peak Fork, Merced Peak Fork, and Red Peak Fork form the main stem of the Merced River on the north side of the watershed divide. The South Fork Merced River flows from the southerly slopes of this divide.

The main stem of the Merced River flows freely from its origin high in the Sierra Nevada, meandering through a landscape of alpine peaks, glacially carved valleys, and exquisite meadows. The river enters Yosemite Valley dramatically, rushing over towering cliffs in cascading waterfalls. The gradient softens as the Merced River snakes through the rich meadow and riparian habitat of the incomparable Yosemite Valley. At the far western end of the Valley, the cliff walls begin to narrow and the river becomes a cascade of continuous rapids through the Merced Gorge. The gradient changes abruptly at the Yosemite National Park

boundary and the river continues its course through the El Portal Administrative Site on its journey to connect with the San Joaquin River in the Great Central Valley of California.

The South Fork Merced River flows southwest from its origin in the Clark Range, through the pristine Yosemite Wilderness, through the community of Wawona, and out of the park to join the main stem of the Merced River west of El Portal in the Sierra National Forest.

## Human Dimension

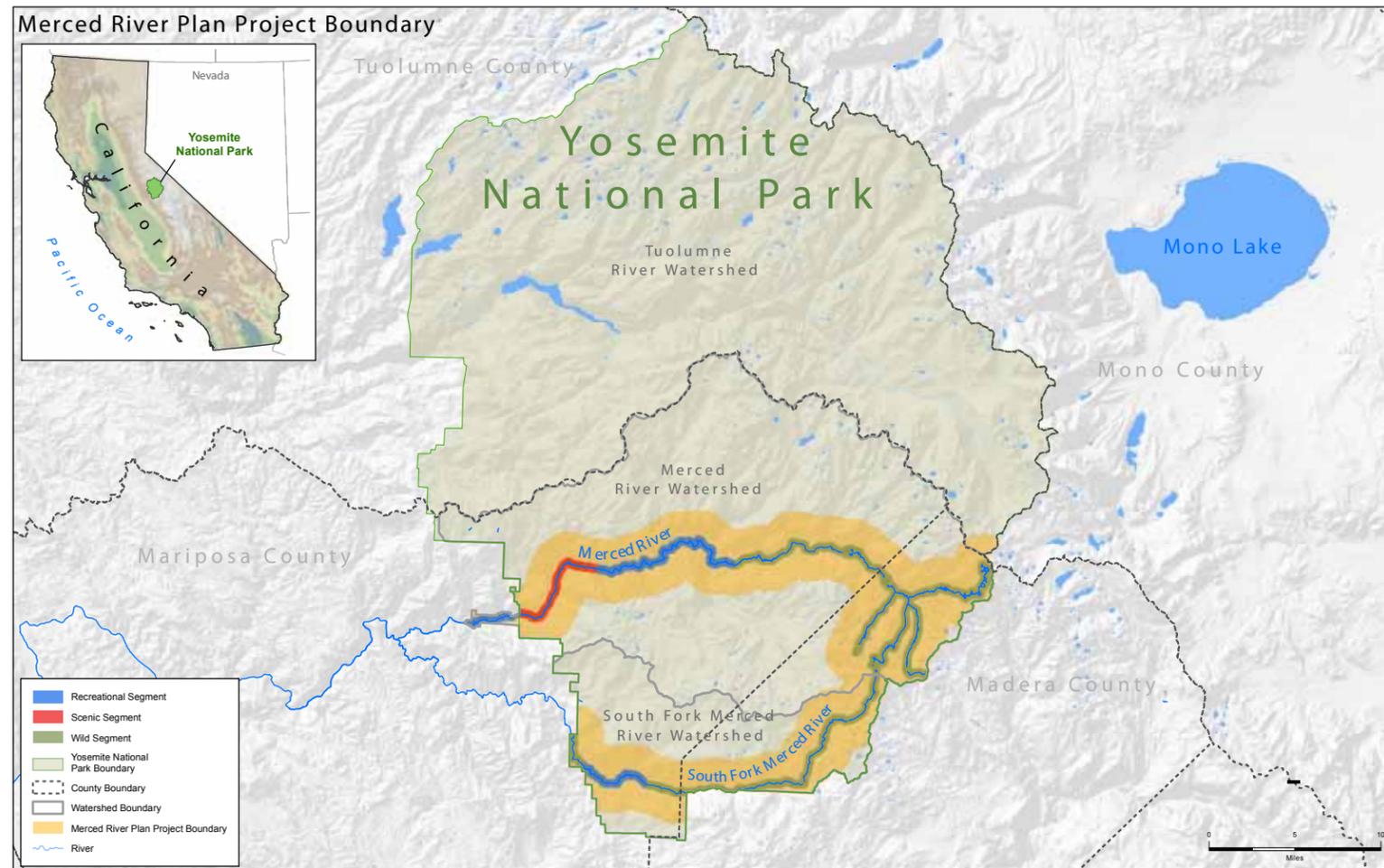
People have sought out the beauty of Yosemite Valley for thousands of years. Prior to European discovery and settlement, American Indians called Yosemite home. The Merced River and surrounding ecological resources provided a rich environment for their long-term survival. These same locations are still some of the most developed and heavily visited areas of Yosemite National Park. Approximately 70% of visitors in 2009 visited Yosemite Valley while only 5% of visitors ventured into designated wilderness. In 2010, four million people came to Yosemite, the highest level of annual visitation since 1996.

## The Merced Wild and Scenic River

The Merced River was designated Wild and Scenic by Congress in 1987. The Wild and Scenic Rivers Act (Act) stipulates that federal land managers must protect and enhance the values that merit a river's designation as wild and scenic. These river values fall under three categories: the river's free-flowing condition, its water quality, and its "outstandingly remarkable values," which are the unique characteristics that make a river worthy of special protection under the Wild and Scenic Rivers Act.

To protect and enhance these river values, the Act directs managers to prepare a comprehensive management plan for each wild and scenic river. The plan must "address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act." As required by the Act and the Interagency Guidelines that interpret it, the Merced Wild and Scenic River Comprehensive Management Plan (Merced River Plan) will:

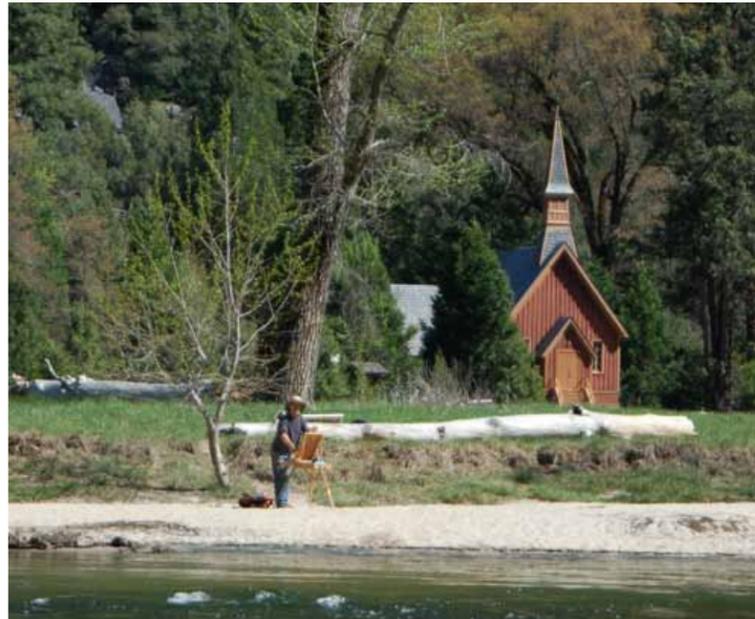
- Document river boundaries and segment classifications as wild, scenic, or recreational (see page 4);
- Provide a clear process for protection of the river's free-flowing condition in keeping with Section 7 of the Wild and Scenic Rivers Act;
- Clearly describe the river's "outstandingly remarkable values" (see page 5);
- Establish a management program to protect and enhance the river's outstandingly remarkable values, free-flowing condition, and water quality;
- Address user capacities; determine the quantity and mixture of recreation and other public use which can be permitted without adversely impacting or degrading river values (see page 6); and
- Determine the type and location of lands and facilities (both current and future) necessary to provide for public use while protecting and enhancing river values.



# INTRODUCTION

## The Merced River Plan

The Merced River Plan will provide overarching guidance for river protection and public use within the Merced Wild and Scenic River corridor inside Yosemite National Park. The National Park Service is committed to a collaborative, interdisciplinary planning approach, rooted in public comment. Our planning process is leveraging the best available science and technology to create an implementable comprehensive management plan that will provide sound guidance for river management today and into the future.



## Merced River Plan Goals

The overall goal of the Merced River Plan is to:

Protect and enhance the values for which the river was designated wild and scenic, leaving the river unimpaired for future generations.

More specifically, the goals of this plan are to:

### **Ecological and Natural Resource Values**

Promote the river's ability to shape the landscape by reducing impediments to free-flow, improving geologic/hydrologic processes, restoring floodplains and meadows, and protecting water quality.

### **Opportunities for Direct Connection to River Values**

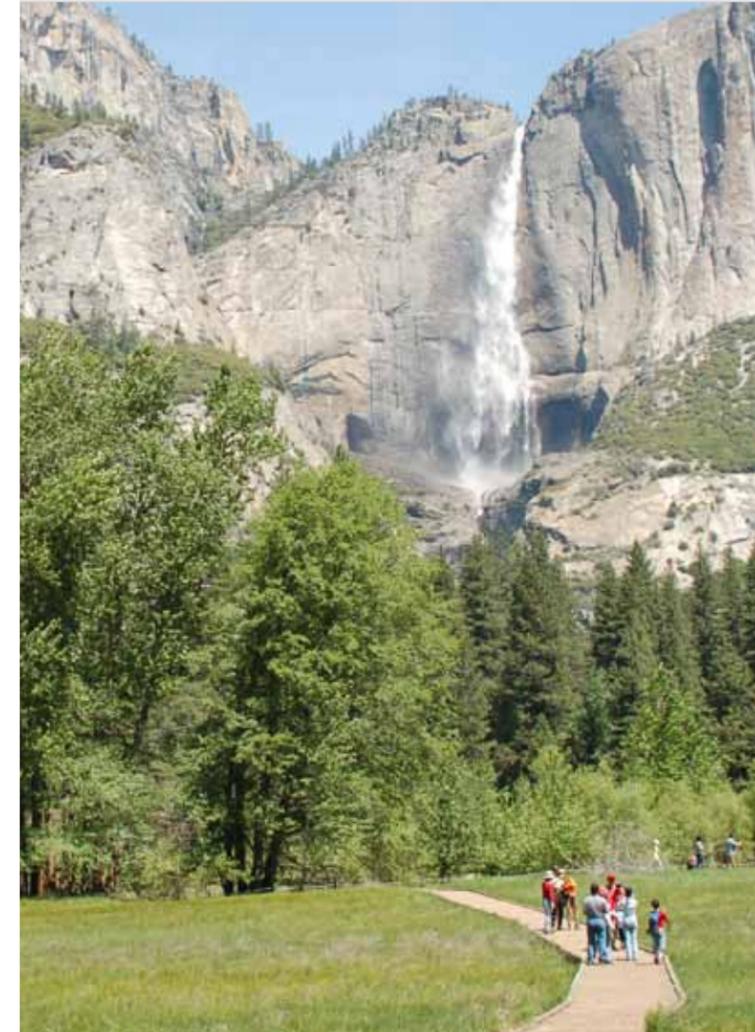
Support opportunities for people to experience and develop direct connections to the Merced River and its unique values as a place of cultural association, education, recreation, reflection, and inspiration.

### **Visitor Use Management Program**

Institute a visitor-use management program that balances the provision of high-quality, resource-related recreational opportunities in the river corridor with the protection and enhancement of natural and cultural river values today and into the future.

### **Land Uses and Associated Developments**

Provide clear direction on land uses and associated developments in the river corridor, allowing for the infrastructure necessary to support the protection and enhancement of river values.



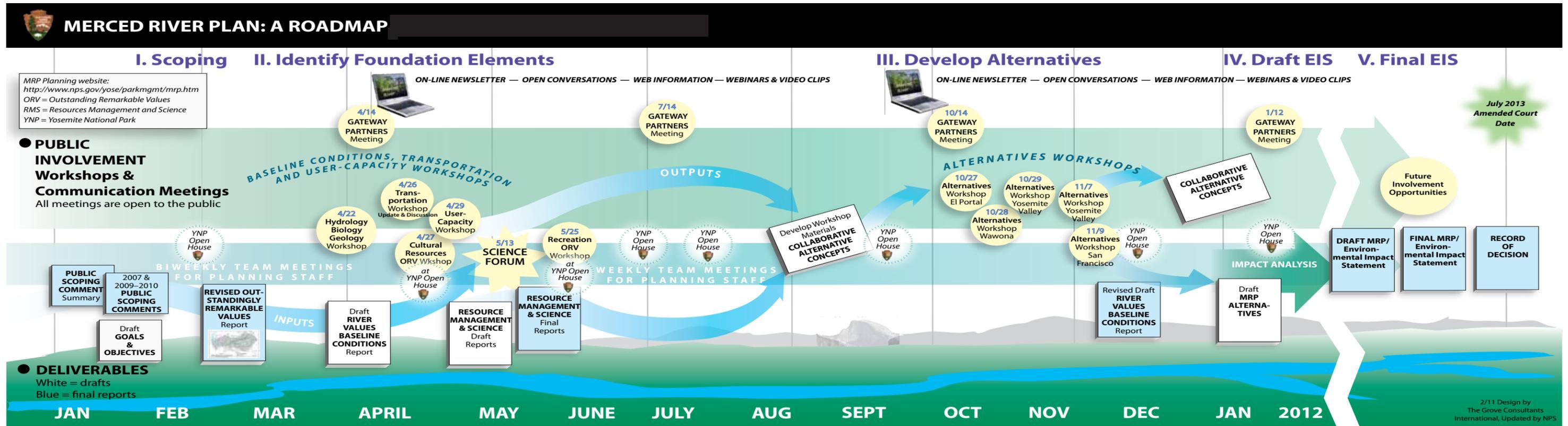
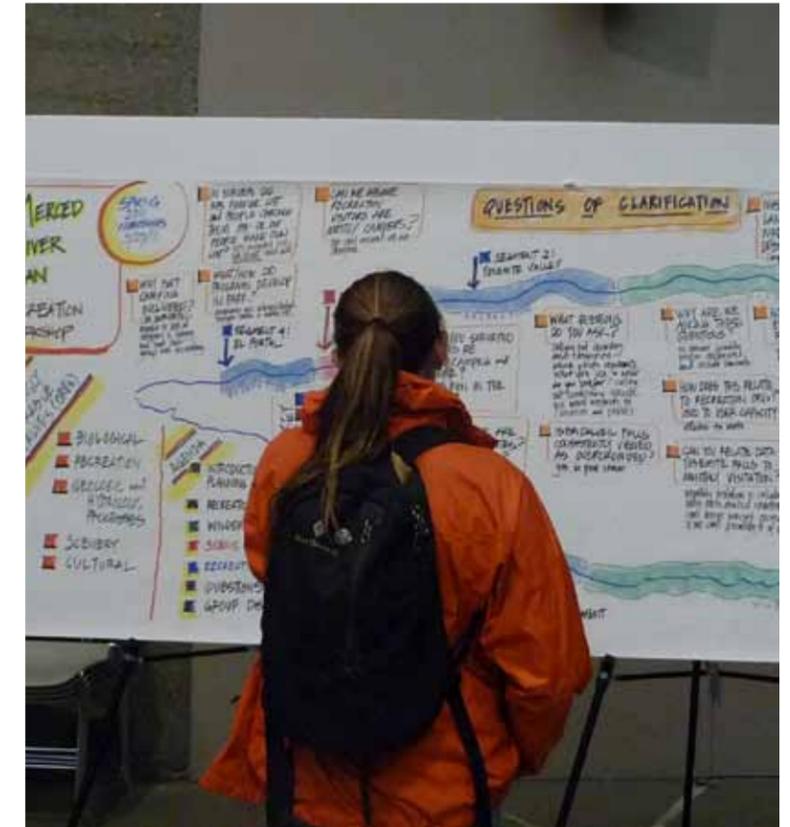
# INTRODUCTION

## Merced Wild and Scenic River Planning Process and Background

The process to develop a comprehensive management plan for the Merced Wild and Scenic River has been underway for more than 15 years. The public and diverse stakeholder groups have been intensely involved with the National Park Service (NPS) planning for the Merced River. Previous efforts to develop a comprehensive management plan ended in litigation. Following court rulings in 2004 and 2006 that found flaws in previous plans, the National Park Service entered into mediation. The litigation was settled in 2009, and the National Park Service began working on the current plan.

While stakeholder involvement is important to the success of any planning effort, the passion and concern people have for Yosemite, combined with the complex issues and high levels of visitation, make stakeholder involvement critical to the success of this effort. This Merced River Plan has provided a renewed opportunity to engage stakeholders in the planning process. This workbook is intended to provide the public with the opportunity to assist us as we explore options for addressing the management considerations raised during public scoping and in the Draft River Values Baseline Conditions Report.

The range of options will form the basis for drafting the management alternatives to be analyzed in the Environmental Impact Statement.



# WILD AND SCENIC RIVERS ACT

In the 1960s, in response to the nation's rivers being dredged, dammed, diverted, and degraded at an alarming rate, Congress established the Wild and Scenic Rivers Act. The Act aims to balance policies of dam building and development of rivers with a law that protects some rivers in their free-flowing state, along with the surrounding land. This law protects water quality and the unique values that make these rivers stand apart from all others in the nation.

A 'wild and scenic river' is one that has been identified as having "outstandingly remarkable values" that make it worthy of special protection for the benefit and enjoyment of present and future generations.

In 1987, Congress designated 122 miles of the Merced River (81 of which are within Yosemite National Park) as part of the National Wild and Scenic Rivers System. The National Park Service is required to prepare a comprehensive management plan for the Merced River. The purpose of this plan is to specify the management needed to protect and enhance the river and its immediate environment.

The Merced River Plan is a programmatic plan that will amend the park's 1980 General Management Plan; other implementation plans will tier off of the Merced River Plan.

## River Segments and Classifications

Section 2 of the Wild and Scenic Rivers Act requires that each segment of the river be classified as Wild, Scenic, or Recreational based on the level of development present in the river corridor at the time of designation. The classification of a river segment indicates the level of development on the shorelines, in the watershed, and the degree of accessibility by road or trail.



### Wild Segments

Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

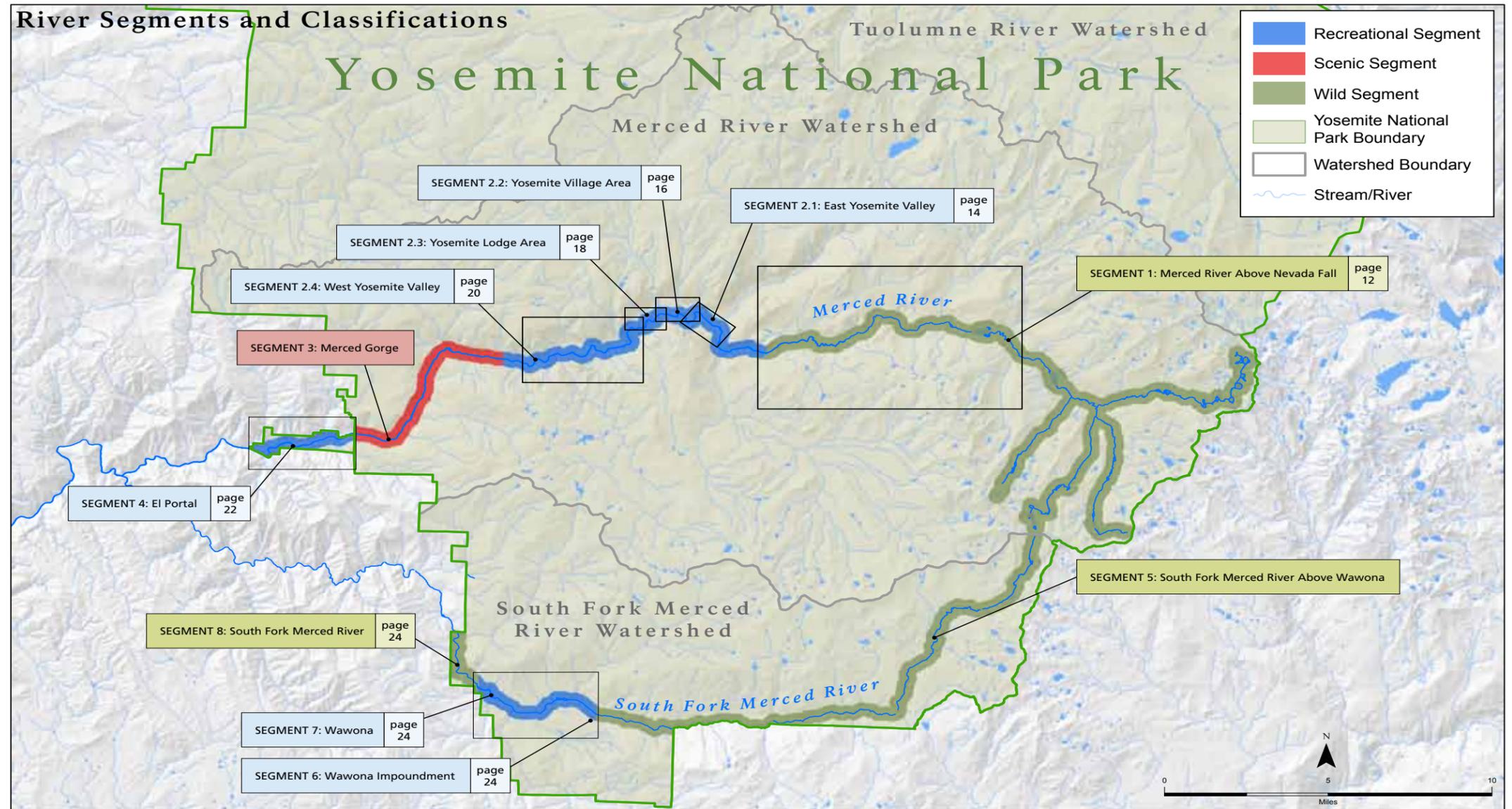
### Scenic Segments

Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

### Recreational Segments

Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The Merced Wild and Scenic River has been classified in eight segments representing the management areas that have been established for the Merced River. The Segment and Classification Map, below, denotes three Wild Segments (Segments 1, 5, 8), one Scenic Segment (Segment 3), and four Recreational Segments (Segments 2, 4, 6, 7).



# WILD AND SCENIC RIVERS ACT

## Protecting and Enhancing River Values

The Wild and Scenic River Act directs land managers to protect and enhance the river's free-flowing condition, water quality, and outstandingly remarkable values; these three things are collectively referred to as "river values."

Outstandingly Remarkable Values (ORVs) are those truly exceptional qualities that merit a river's designation as a Wild and Scenic River. To meet this standard, the value must meet both of two criteria:

- 1) It must be rare, unique, or exemplary at a comparative regional or national scale. As expressed by the Interagency Wild and Scenic River Coordinating Council, this means that "such a value would be one that is a conspicuous example from among a number of similar values that are themselves uncommon or extraordinary" AND
- 2) It must be river-related or dependent. This means that a value must:
  - "Be located in the river or on its immediate shorelands (generally within ¼ mile on either side of the river); or

- Contribute substantially to the functioning of the river ecosystem; or
- Owe [its] location or existence to the presence of the river."

The Merced River's Outstandingly Remarkable Values have been articulated as follows:

### Biological Values

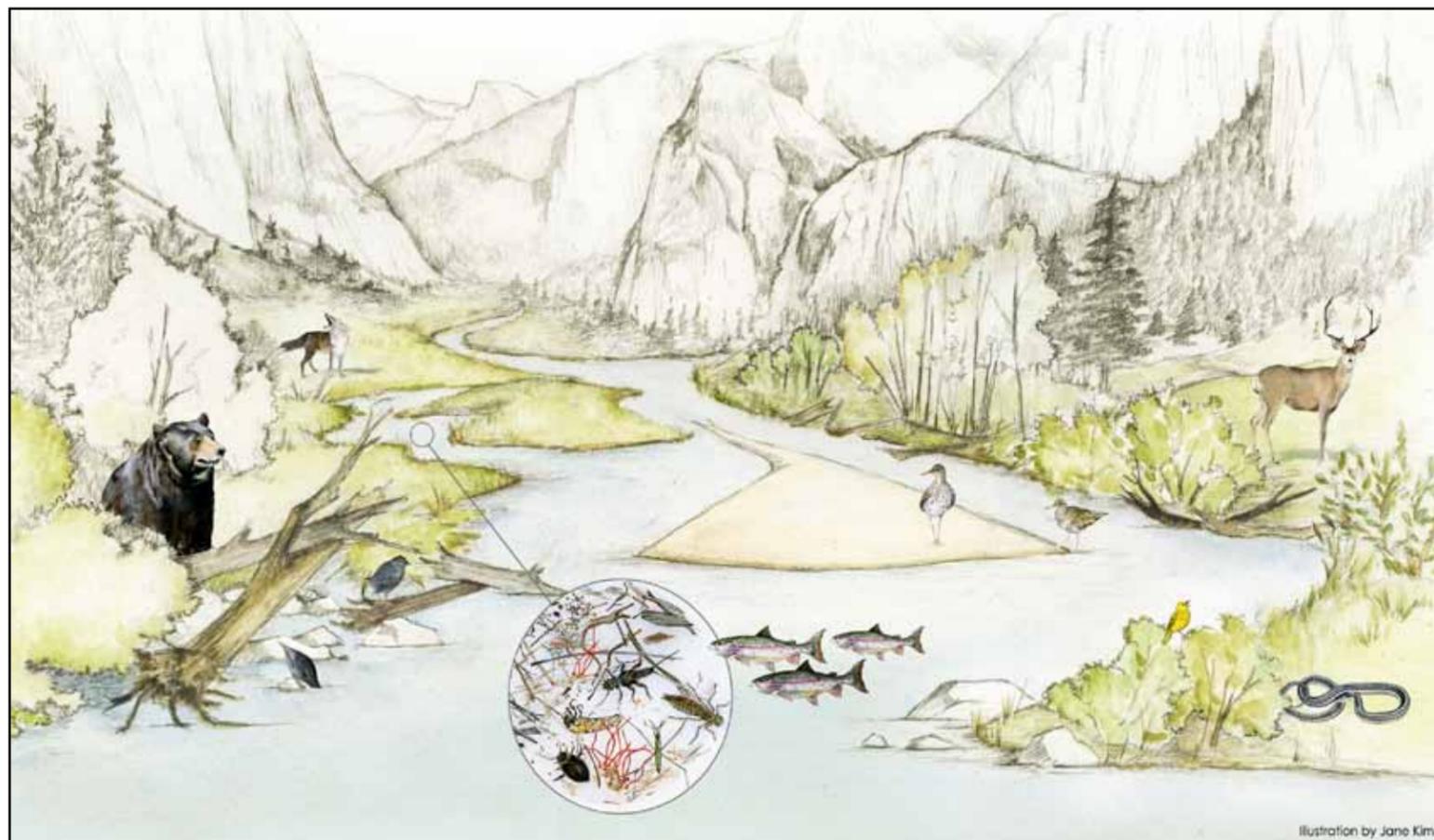
- Segment 1: The Merced River creates numerous, exquisite small meadows and relatively intact adjacent riparian habitats.
- Segment 2: The meadows and riparian communities of Yosemite Valley comprise one of the largest mid-elevation meadow complexes in the Sierra Nevada.
- Segment 4: Valley oaks (*Quercus lobata*), a regionally rare species, occur in the El Portal area.
- Segments 7 and 8: The Sierra sweet bay (*Myrica hartwegii*), is a rare plant found along the South Fork Merced River.

### Geologic/Hydrologic Values

- Segment 1: The upper Merced River canyon is a textbook example of a rare U-shaped canyon that was carved by glaciers.
- Segment 2: The "Giant Staircase," which includes Vernal and Nevada Falls, is one of the finest examples in the western United States of stair-step river morphology.
- Segment 2: The El Capitan Moraine is an extraordinary example of a recessional moraine.
- Segment 2: The Merced River from Happy Isles to the west end of Yosemite Valley provides an outstanding example of a rare, mid-elevation alluvial river.
- Segment 4: The boulder bar in El Portal was created by changing river gradients, glacial history, and powerful floods. These elements have resulted in accumulation of extraordinary, large boulders, which are rare in such deposits.

### Cultural Values

- Segment 2: Yosemite Valley Native American ethnographic resources include a linked landscape of specifically mapped traditional plant gathering areas.
- Segment 2: The Yosemite Valley Archeological District is a linked landscape that contains dense concentrations of resources that represent thousands of years of human settlement along this segment of the Merced River.
- Segment 4: The El Portal Archeological District contains dense concentrations of resources that represent thousands of years of occupation and evidence of continuous, far-reaching traffic and trade. This segment includes some of the oldest deposits in the region and the Johnny Wilson Ranch, a regionally rare historic-era American Indian Homestead.
- Segment 5: The South Fork of the Merced River includes regionally rare evidence of indigenous settlement including prehistoric rock ring features with wooden remains.
- Segments 5, 6, 7 and 8: The Wawona Archeological District encompasses numerous clusters of resources spanning thousands of years of occupation, including evidence of continuous, far-reaching traffic and trade.



# WILD AND SCENIC RIVERS ACT

- Segment 7: In this segment, remains of the U.S. Army Cavalry Camp A. E. Wood document the unique Yosemite legacy of the African-American buffalo soldiers and the strategic placement of their camp near the Merced River.
- Segment 7: The Wawona Covered Bridge is one of the few covered bridges in the region.

## Scenic Values

- Segment 1: Visitors to this Wilderness segment experience scenic views of serene montane lakes, pristine meadows, slickrock cascades, and high Sierra peaks.
- Segment 2: Visitors to Yosemite Valley experience scenic views of some of the world's most iconic scenery, with the river and meadows forming a placid foreground to towering cliffs and waterfalls.
- Segment 3: The Merced River drops 2,000 feet over 14 miles; a continuous cascade under spectacular Sierra granite outcrops and domes.
- Segment 5 and 8: The South Fork Merced River passes through a vast area of natural scenic beauty.

## Recreational Values

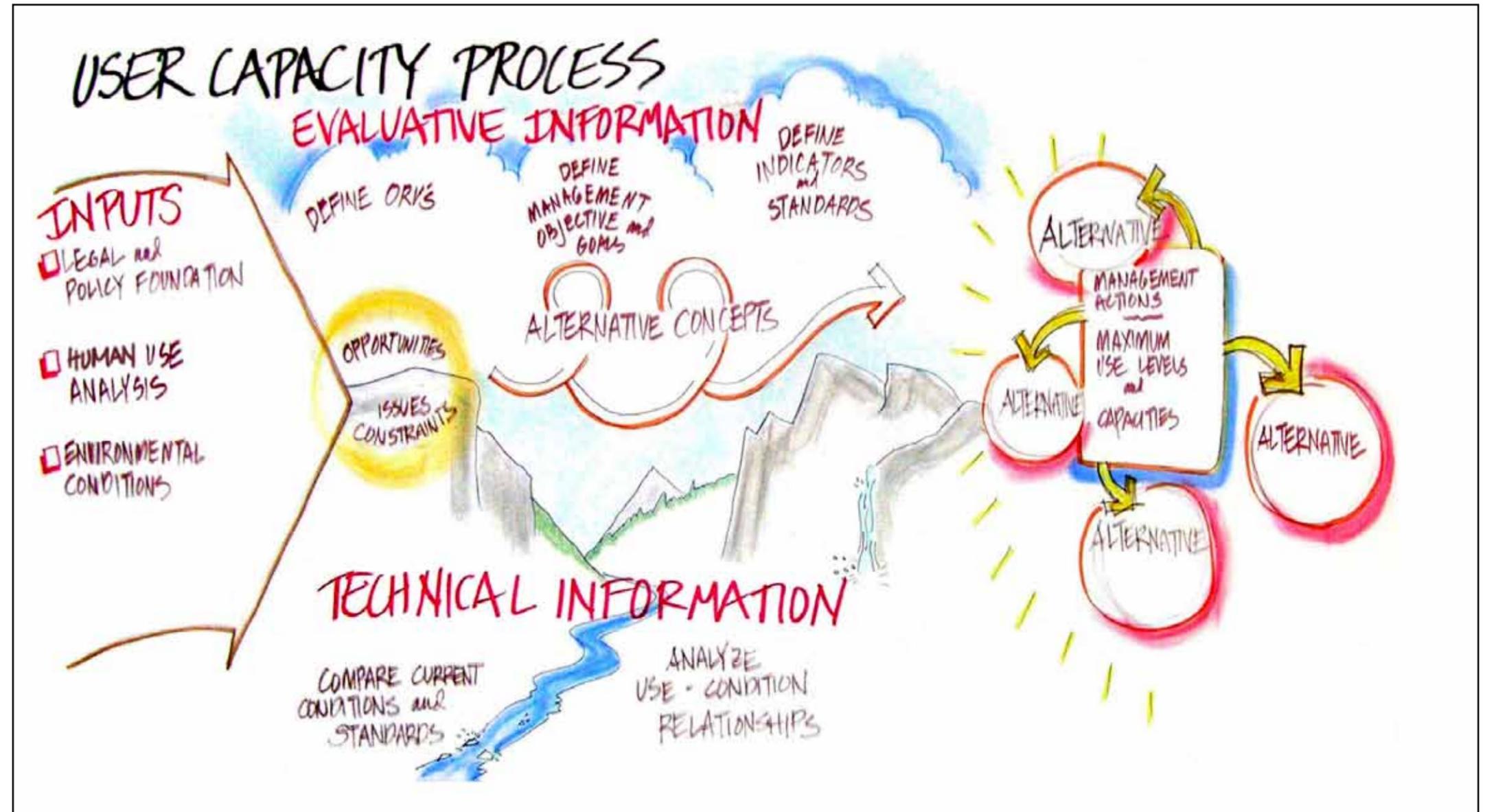
- Segment 1: Visitors to federally designated Wilderness in the corridor engage in a variety of activities in an iconic high Sierra landscape, where opportunities for primitive and unconfined recreation, self-reliance, and solitude shape the experience.
- Segment 2: Visitors to Yosemite Valley enjoy a wide variety of river-related recreational activities in the valley's extraordinary setting along the Merced River.

## User Capacity Overview

According to the Wild and Scenic Rivers Act, comprehensive management plans must address user capacities. User capacity includes the kinds and amounts of human use that a river area can sustain without adverse impact on the outstandingly remarkable values, water quality, and free-flowing character of the river area, the quality of recreation experience, and public health and safety. The plan will therefore identify the activities and associated use levels that are appropriate while continuing to protect and enhance the values for which the river was included in the National Wild and Scenic River System.

Important points about addressing user capacity for the Merced River Plan include:

- In general, planning for and managing visitor use and user capacity of a Wild and Scenic River takes into account what people do, where they do it, how many people can be accommodated, and what effects these uses have on river values.
- Addressing user capacity is not a single mathematical equation, but rather is an integrated part of the comprehensive planning process.
- Managing visitor use and user capacity requires a variety of management strategies and tools.

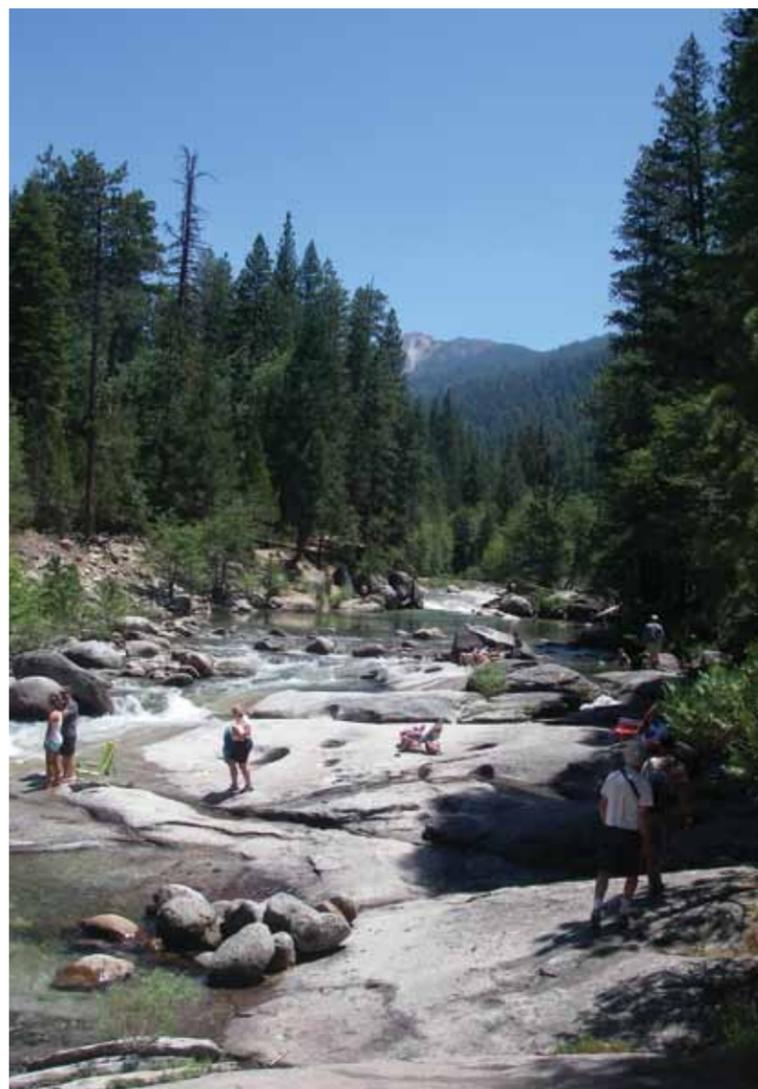


# WILD AND SCENIC RIVERS ACT

## Development of Lands and Facilities

The plan will determine the types and levels of development for each designated river segment (e.g. trails, picnic facilities, lodging, food service, and administrative facilities). These management decisions will reflect each segment's classification—wild, scenic, and recreational—as described on page 4. All existing facilities in the river corridor are being analyzed to ensure they do not adversely impact or degrade river values.

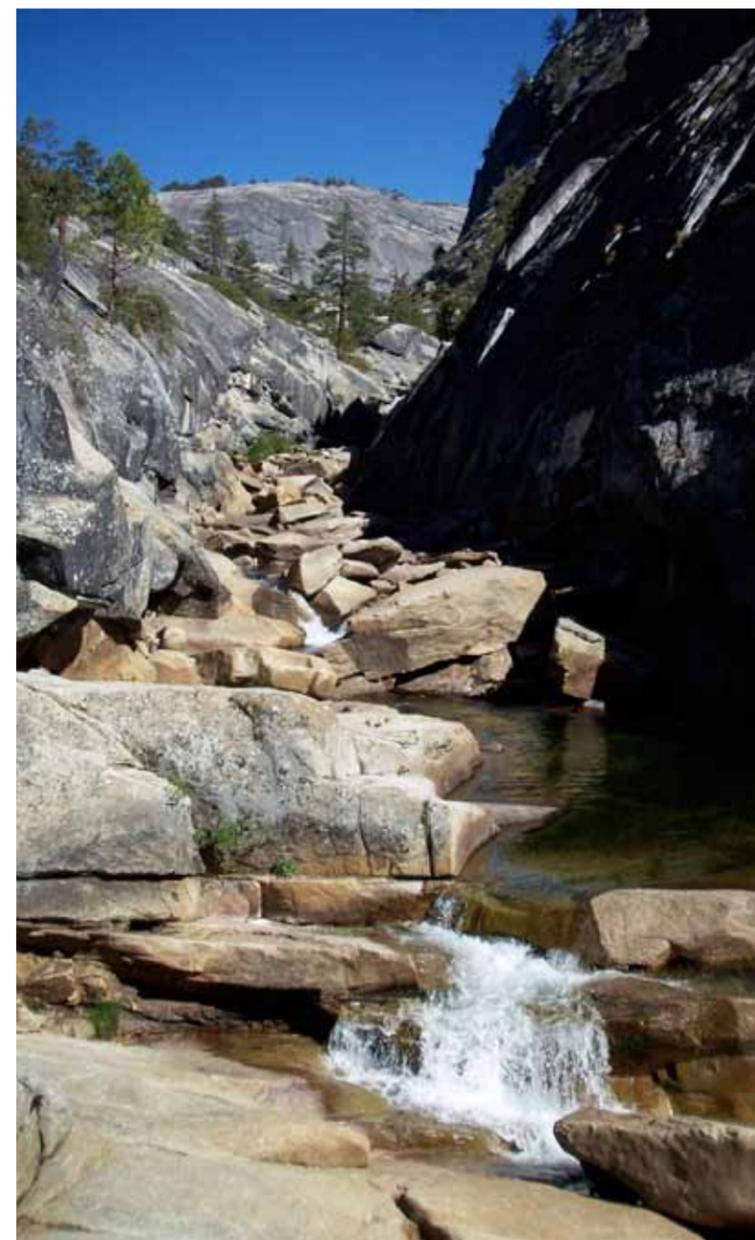
In addition to analyzing existing facilities and development, the planning team is also reviewing previously disturbed areas for potential reuse such as expanded camping, parking, or day use opportunities. Any new development would be designed and constructed to protect the river's free-flowing condition, water quality, and outstandingly remarkable values.



## Legal Framework

Although the Wild and Scenic Rivers Act is the primary driver behind this planning effort, many federal regulations influence the preparation of the Merced River Plan. Ensuring that the overlapping requirements of these primary laws are addressed is important to successful implementation of the plan. Please visit the websites below for more information about each of these laws.

- **Wild and Scenic Rivers Act of 1968** (PL 90-542; [www.rivers.gov](http://www.rivers.gov))
- **National Environmental Policy Act (NEPA) of 1970** (PL 91-190; <http://ceq.hss.doe.gov>)
- **Wilderness Act of 1964** (PL 88-577; [www.wilderness.net/](http://www.wilderness.net/))
- **The Yosemite (1890) and NPS (1916) Organic Acts** (Public Act # 159; [www.nps.gov/yose/parkmgmt/enabling\\_leg.htm](http://www.nps.gov/yose/parkmgmt/enabling_leg.htm); and PL 64-235; [www.nps.gov/legacy/organic-act.htm](http://www.nps.gov/legacy/organic-act.htm))
- **Endangered Species Act of 1973** (PL 93-205; [www.fws.gov/endangered/laws-policies/index.html](http://www.fws.gov/endangered/laws-policies/index.html))
- **National Historic Preservation Act of 1966, as amended** (PL 89-665, [www.achp.gov/nhpp.html](http://www.achp.gov/nhpp.html))
- **Concessions Management Improvement Act of 1998** (PL 105-391, <http://concessions.nps.gov/docs/OMNIBUS1998.pdf>)



# MERCED RIVER MANAGEMENT CHALLENGES

The overarching goals of the Merced River Plan embody the spirit of both the Wild and Scenic Rivers Act and the National Park Service Organic Act. Both acts require the protection of resources, but also allow for the enjoyment of those same resources by current and future generations. This need to balance protection and enjoyment is one of the reasons the Merced River Plan must propose a range of alternatives. The alternatives will explore different ways to address the overall goal of the plan:

Protect and enhance the values for which the river was designated wild and scenic, leaving the river unimpaired for future generations.

The alternatives will also explore different ways to address the four specific goals of the plan: protecting ecological and natural resource values, providing opportunities for direct connection to river values, providing a visitor-use management program, and addressing the development of lands and facilities.

The following section is provided to help you understand the challenges of balancing resource protection with visitor access and enjoyment – challenges that park management must address to meet the Merced River Plan goals. This section also provides the context for the site-specific management considerations that are highlighted on the map pages beginning on page 12. Finally, this section initiates a dialogue about how the NPS should address these overarching management considerations.

Please consider these management challenges and the central questions they raise for planning the future as you study the map pages and ultimately return your feedback to us on the interactive comment pages at the end of this workbook.



## Ecological and Natural Resource Values

### Goal

Promote the river’s ability to shape the landscape by reducing impediments to free-flow, improving geologic/hydrologic processes, restoring flood plains and meadows, and protecting water quality.

### Management Challenges:

- Protecting and restoring free-flowing conditions and hydrologic function
- Protecting and enhancing water quality
- Conserving limited water supply
- Protecting, enhancing, and restoring the structure and function of riparian and meadow communities and floodplains

**Ecological and Natural Resources:** Past human use and management of the river, riparian zone, meadows, and floodplain have had persisting effects that continue today. Examples of past actions that have affected the ecosystem include: road and bridge construction; removal of large woody debris from the river channel; riprap revetment; ditching, plowing and grazing of meadows; introduction of invasive plants; and vegetation trampling. These actions have led to changes in hydrologic regime; channelization; river widening; decreased structural complexity and diversity of vegetation; reduced meadow extent; riverbank erosion; and reduced habitat quality. Restoration will focus on improving the river’s free-flowing condition and hydrologic function, and reducing impacts to meadow and riparian complexes.

→ **Think About:** How can we protect and restore free-flowing conditions and hydrologic function? How should we protect and restore meadow and riparian habitat? Which areas are a high priority for ecological restoration?

**Water Conservation:** At Wawona, the NPS withdraws water from the South Fork Merced River, a river that experiences very low flows in late summer. Conservation of our limited water supply will

help ensure aquatic habitat and water quality are not impacted by water withdrawals.

→ **Think About:** How can we conserve our limited water supply?

**Water Quality:** Water quality in Yosemite is very high. The primary challenges associated with water quality relate to the need for best management practices to protect water quality.

→ **Think About:** What best management practices must be in place to protect water quality?

## Opportunities for Direct Connection to River Values

### Goal

Support opportunities for people to experience and develop direct connections to the Merced River and its unique values as a place of cultural association, education, recreation, reflection, and inspiration.

### Management Challenges:

- Protecting cultural resource integrity, including archeological and ethnographic resources
- Providing appropriate river access to visitors that will protect resources.

**Cultural Resources:** The majority of archeological sites in Yosemite retain a high degree of integrity, reflecting cumulatively low to moderate disturbance severity levels. Archeological resource integrity is the ability of a site to demonstrate its significance, answer questions about past inhabitants, and provide a tangible link to ancestral heritage. Resource integrity, like the resources themselves, is nonrenewable. Some park infrastructure and visitor use have affected some archeological sites in

# MERCED RIVER MANAGEMENT CHALLENGES

Yosemite; park managers must ensure that future uses do not impact the integrity of cultural resources.

Intensive visitor use and infrastructure is co-located with culturally significant plant populations and ancestral villages, causing trampling and disturbance to ethnographic resources. Park managers have a responsibility to protect and enhance ethnographic resources.

→ **Think About:** What measures should be taken to continue to protect cultural resource integrity, including archeological and ethnographic resources?

**Direct Connection:** Yosemite is a place where people can experience and develop direct connections to the Merced River and its unique values as a place of inspiration, reflection, and cultural association.

→ **Think About:** How can we ensure that people have opportunities to experience quality connections to the river in ways that are protective of the river?

## Visitor Use Management Program

### Goal

Institute a visitor-use management program that balances the provision of high-quality, resource-related recreational opportunities in the river corridor with the protection and enhancement of natural and cultural river values today and into the future.

### Management Challenges:

- Ensuring a diversity of resource-related recreational opportunities while protecting and enhancing river values
- Managing traffic congestion
- Providing a supply of vehicle parking that will meet visitor needs while protecting resources
- Managing crowding during periods of peak visitation to protect resources and the quality of the visitor experience

**Transportation, Crowding and User Capacity:** The transportation system is essential for providing visitor access to the Merced River corridor and is directly tied to managing visitor use levels and related capacities.

The park receives high levels of use during the peak summer season (Memorial Day to Labor Day) and the current inventory of designated parking spaces, along with the road circulation system in the river corridor, often cannot accommodate all the visitors. Choices to address this challenge include increasing parking, redistributing or limiting vehicle use, and increasing alternative transportation options (shuttle buses and regional transit). Annual growth patterns in visitation (about 3% per year over the last 20 years) suggest that there will be greater demand for parking in the future. Under the Wild and Scenic Rivers Act, the park must ensure that these high levels of visitation do not adversely affect or degrade river values.

**Parking Supply and Demand:** If the park were to meet *current demand* in Yosemite Valley, parking would need to be formally delineated and/or expanded in order to protect river values. Additional and existing parking locations under consideration for formal delineation include the Day Use Parking Area (sometimes referred to as Camp 6) or the Curry Village day use parking area. An undeveloped site that could be considered for expansion is the area near the El Capitan Meadow (Taft Toe).

→ **Think About:** If the National Park Service were to expand the existing parking inventory, by how much and at which locations would be appropriate?

**Regional Transit, Shuttle Buses and Remote Parking:** Public transit options, such as park shuttles and regional bus services, can also be expanded to reduce the number of private vehicles entering the river corridor while continuing to ensure visitor access to the park. For example, voluntary bus service could be provided on other travel corridors giving visitors an alternative means of access to the park.

In order to continue providing visitor access to the Yosemite Valley on days when parking is full, satellite parking areas could be established and shuttle services could bring visitors into the Valley.

→ **Think About:** Would you support bus services along new routes into the park? If there were such services, would you use them? Why or why not? Would you support remote parking and shuttle services? Why or why not?

**Day Use Reservation Systems:** Options to manage visitor parking include a parking permit system. Visitors with private vehicles as well as commercial tour vehicles entering Yosemite Valley for the day during peak use periods would need to obtain a permit. Such a system could be used to allocate the limited supply of day use parking spaces, assuring that visitors with permits have a designated place to park. This would minimize traffic and congestion associated with finding a parking place, and assure that parking occurs in designated areas developed to protect river values.

→ **Think About:** If day use vehicular access were to be limited, are day use reservations appropriate? Would you support a day use parking/vehicle permit system?

**Recreation Diversity:** In order to meet the user capacity and protection and enhancement mandates of the Wild and Scenic Rivers Act, the National Park Service must provide for visitor enjoyment of resources while ensuring those resources are not adversely impacted or degraded. Providing diverse, river-related recreational visitor use opportunities is a goal of this Merced River Plan.

→ **Think About:** What types of recreation are appropriate in the river corridor? What is needed to support these recreation opportunities?

# MERCED RIVER MANAGEMENT CHALLENGES

## Land Uses and Associated Developments

### Goal

Provide clear direction on land uses and associated developments in the river corridor, allowing for the infrastructure necessary to support the protection and enhancement of river values.

### Management Challenges:

- Providing a range of day use and overnight accommodations
- Providing and locating visitor services and amenities to support public use and also protect river values
- Providing the necessary infrastructure (such as housing and office space) to support operations and visitor services, including public safety and resource protection

**Day Use and Overnight Accommodations:** The proportion of day use and overnight visitation has changed since the 1980 General Management Plan was signed, and is currently approximately 60% day use and 40% overnight use. As day use has increased, infrastructure to support this use (such as day use parking and picnic facilities) has not increased proportionately. Additionally, the number of campsites in Yosemite Valley has decreased over time, and public comment strongly advocates increasing the availability of camping opportunities in Yosemite. As of 2010, the total number of people per night that can be accommodated in public campgrounds in Yosemite Valley during the peak season is approximately 3,000, and the number who can be accommodated in lodging is about 4,800. So, roughly 38% of overnight use is camping, and 62% is lodging.

→ **Think About:** How can the National Park Service support the current mix of day use and overnight visitation? How can we increase the availability of camping while ensuring that river values are protected?

**Levels of Services:** The types and amounts of facilities and services, including commercial services and administrative use, will be addressed in the Merced River Plan and will be commensurate with the level of visitor services and resource protection for each of the plan's alternatives. In addition to identifying the amounts and types of facilities and services, the plan must provide clear direction regarding where these facilities and services are located in the river corridor (i.e. land uses and associated developments).

This plan will also evaluate and determine the type and amount of visitor services to be provided in the river corridor, including those provided by park concessioners. The variety of hospitality services available within the Merced Wild and Scenic River corridor includes lodging, food and beverage, retail, guest recreation, interpretation, and transportation.

→ **Think About:** What types of services and amenities are necessary to provide for both resources protection and management of user capacity in the Merced Wild and Scenic River corridor?

**Administrative Infrastructure:** Infrastructure such as housing and office space are necessary to support operations and ensure visitor safety and resource protection. The availability of space for these and other uses is limited in Yosemite. For decades, the park's goal has been to relocate non-essential administrative infrastructure out of Yosemite Valley and to the El Portal Administrative Site. As a part of this Merced River planning process, the park will evaluate each major administrative facility to ensure that the facility does not adversely impact river values.

→ **Think About:** How can we consolidate functions to increase the efficiency of administrative land use in Yosemite Valley? How can we prioritize land use for visitors while still ensuring operational needs associated with visitor and resource protection are met?

While it is a challenge to balance protection of resources with the enjoyment of these resources, with your support, we will meet this challenge. The actions called for in the final plan will protect park resources and provide for visitor enjoyment now and into the future.



# HOW TO USE THIS WORKBOOK

## How To Use This Workbook

The NPS will use your feedback to help create a range of reasonable and feasible management alternatives to address the primary management challenges discussed in the previous section and the site-specific issues presented on the following pages. The management considerations in this workbook reflect locations and instances where decisions need to be made and management actions need to be taken to protect and improve river values or visitor experience. We have selected topics for this workbook based on complexity and public interest, or because stakeholders have expressed strongly divergent opinions about the subject. Though an interdisciplinary team of experienced park staff is evaluating hundreds of such considerations, we can highlight only a select few in this collaborative workbook. A complete list of the management considerations will be available at [www.nps.gov/yose/parkmgmt/mrp.htm](http://www.nps.gov/yose/parkmgmt/mrp.htm).

This workbook provides a window into our process and represents a high degree of transparency. With this opening up of the process, please recognize that our team is in a period of deliberation and exploration as we begin to think about packaging these options into feasible alternatives, and our strategies to address our most significant management challenges.

All of the options we consider in the draft plan must achieve the goals of the Wild and Scenic Rivers Act to protect and enhance river values. In some cases, a “take no action” option may be feasible if that management consideration can be addressed in a different way. The options on the following pages are not ranked in any order of preference and provide different ways to protect the river and its values. We invite you to help us consider how these options might be combined into a range of plan alternatives.

For some of the management challenges for which a specific range of options has not yet been developed, we have asked more open ended questions about how these should be addressed.

Suggestions on how you might use the workbook include:

- Read through the management consideration statements and the range of options identified to address them.
- Rank the options in the order you prefer them, or note your top choice.

- Cross out any options that you find unacceptable and note why.
- Describe in writing any new ideas that you might have, or modifications to existing options that are presented in the following sections.

After you have reviewed all sections of the workbook, consolidate your choices and look at them holistically. Please consider the following questions:

- Do all of your choices work together?
- Are there conflicts between some of the options? If so, how could they be resolved?
- How would you explain your choices to someone else? Is there a theme or a commonality among your choices?

## How To Read and Interpret the Maps

The major planning areas for the Merced River Plan, not the entire wild and scenic river corridor, are portrayed in this workbook. These maps are provided to help you understand the geographic context of the river and its unique values and challenges.

The data used to create these maps are the best currently available but may contain errors. Data are derived from different sources, and have different scales of precision. For example, some data are collected in the field with highly accurate instruments, but other data are derived from aerial imagery and thus has a different level of precision. Some data (such as vegetation data) portrayed on the maps may have changed since the time it was created. Some of our considerations in the planning process are not spatially definable, such as the experiential elements of the Recreation ORV. Other data that we analyze in our deliberations are sensitive data that we cannot, by law, share with the public, such as archeological and utilities data. We use all these data to increase our understanding and inform our planning process, but please recognize that maps are ultimately only a representation of actual conditions.

## Map Legend

An annotated legend, or map key, to help you read and understand the maps is provided to the right.

	Existing Parking Area
	Potential Parking Area
	Existing Camping Area
	Potential Camping Area
	Road bridge
	Footbridge
	Covered Bridge
	Trailhead
	Picnic Area
	Ranger Station
	Shuttle Stop
	Waterfall
	Historic Landmark
	Stream/River
	Valley Loop Trail
	Bike Path
	Boardwalk
	Trail
	Informal trail
	Rock fall hazard line
	Calculated
	Inferred
	Recreational Segment Corridor Classification
	Wild Segment Corridor Classification
	Scenic Segment Corridor Classification
	California Black Oak Alliance
	Meadow Vegetation
	Riparian Vegetation
	Valley Oak Woodland Alliance
	100 Year Flood Boundary
	Potential Wilderness Addition
	Designated Wilderness
	El Portal Administrative Site
	Yosemite National Park Boundary
	Archeological District
Building/Functional Use	
	Employee Housing
	Management Activities and Services
	Utilities
	Visitor Based Activities and Services
	Private Buildings on Private Land

# SEGMENT 1: Merced River Above Nevada Fall



**Description:** Originating in the Clark Range above the timberline, Segment 1 encompasses the Main Stem of the Merced River as it flows westward to Nevada Fall. This segment is inaccessible except by trail. The river's shoreline is essentially primitive and its water unpolluted.

**Classification:** Wild

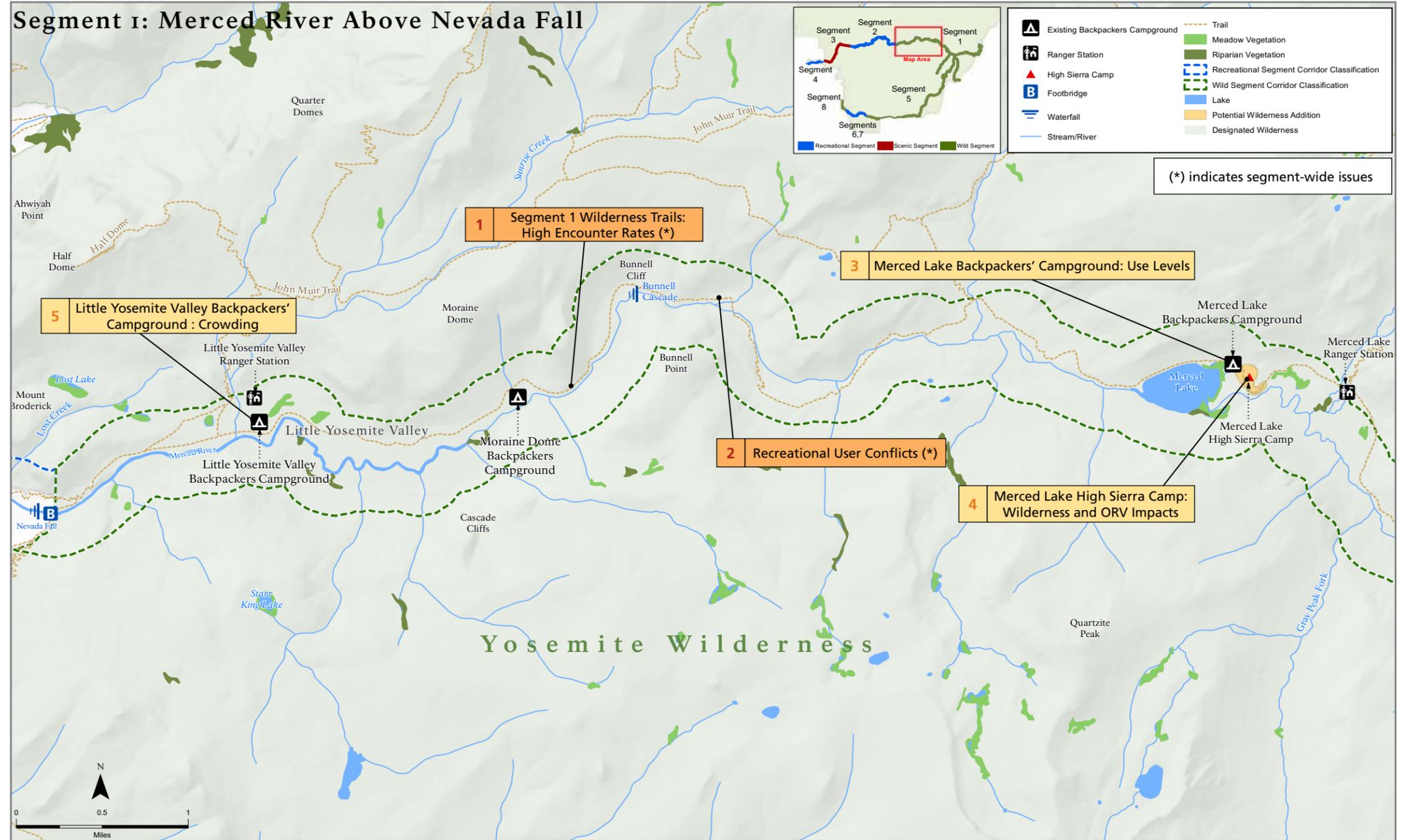
**Outstandingly Remarkable Values:**

**Biological:** The Merced River creates numerous, exquisite small meadows and relatively intact adjacent riparian habitats.

**Recreation:** Visitors to federally designated Wilderness in the corridor engage in a variety of activities in an iconic high Sierra landscape, where opportunities for primitive and unconfined recreation, self-reliance, and solitude shape the experience.

**Geologic and Hydrologic Processes:** The upper Merced River canyon provides a textbook example of a rare U-shaped canyon that was carved by glaciers.

**Scenic:** Visitors to this segment experience scenic views of serene montane lakes, pristine meadows, slickrock cascades and high Sierra peaks.



# SEGMENT 1: Management Considerations and Potential Management Options



## VISITOR USE MANAGEMENT PROGRAM

### 1 Segment 1 Wilderness Trails: High Encounter Rates

High encounter rates on trails between Little Yosemite Valley and Merced Lake indicate Wilderness experience integral to Recreation ORV in this segment is impacted temporally and spatially.

#### Management Options:

- 1A: Reallocate Wilderness permits to decrease use on this trail.
- 1B: Incorporate High Sierra Camp use into trailhead quotas.
- 1C: Your Ideas?

### 2 Recreational User Conflicts

Recreational user conflicts between hikers and stock users has been highlighted in public comment and has implications for visitor experience and the Recreation ORV in this segment. Most of the concern pertains to stock impacts, including concentrations of manure, on trails.

#### Management Options:

- 2A: Reduce the extent of trails maintained for stock in this area, thus reducing the number of stock needed to maintain them.
- 2B: Use helicopters instead of stock to reduce user conflicts.
- 2C: Close or reduce Merced Lake High Sierra Camp capacity (to 42 beds or less) to limit concessioner stock use.
- 2D: Your Ideas?



## LAND USES AND ASSOCIATED DEVELOPMENTS

### 3 Merced Lake Backpackers' Campground: Use Levels

High levels of use affect Wilderness character and the Wilderness experience integral to the Recreation ORV in this segment.

#### Management Options:

- 3A: Reduce use by lowering quotas for trailheads that lead to the Merced Lake area.
- 3B: Allow only limited dispersed camping at Merced Lake.
- 3C: Retain Backpackers' Campground so that visitor use is concentrated. This strategy helps to protect resources and address human waste concerns.
- 3D: Your Ideas?

### 4 Merced Lake High Sierra Camp: Wilderness and ORV Impacts

Merced Lake High Sierra Camp affects Wilderness character and the Wilderness experience integral to the Recreation ORV in this segment and is a visual impact on the Scenery ORV.

#### Management Options:

- 4A: Reduce capacity from 60 beds to 42 beds (equal to that of the next largest camp (Vogelsang)).
- 4B: Reduce amenities such as shower facilities to accommodate only staff members; eliminate food service for hike-ins; convert food service to cold meals only.
- 4C: Convert Merced Lake High Sierra Camp to an outfitter's camp, in which all structures are temporary and removed in the fall.
- 4D: Retain camp as is. Monitor and restructure operations towards minimizing impact and improving visitor experience.
- 4E: Continue Best Management Practices being used now (zero waste management, delineated pathways, etc.).
- 4F: Close Merced Lake High Sierra Camp and restore to natural conditions.
- 4G: Your Ideas?

### 5 Little Yosemite Valley Backpackers' Campground: Crowding

Crowding at Little Yosemite Valley Campground impacts Wilderness character and the Wilderness experience integral to the Recreation ORV in this segment.

#### Management Options:

- 5A: Reduce trailhead quota 25%; retain composting toilet.
- 5B: Retain Backpackers' Campground so that visitor use is concentrated. This strategy helps to protect resources and address human waste concerns.
- 5C: Convert to dispersed camping and remove compost toilets, which will necessitate a ~75% reduction in trailhead quotas and associated zone capacity.
- 5D: Your Ideas?



## SEGMENT 2.1: East Yosemite Valley



### Description:

After cascading over Vernal Falls, the river begins winding its way past campgrounds and Curry Village. This segment provides a multitude of recreational opportunities.

**Classification:** Recreational

### Outstandingly Remarkable Values:

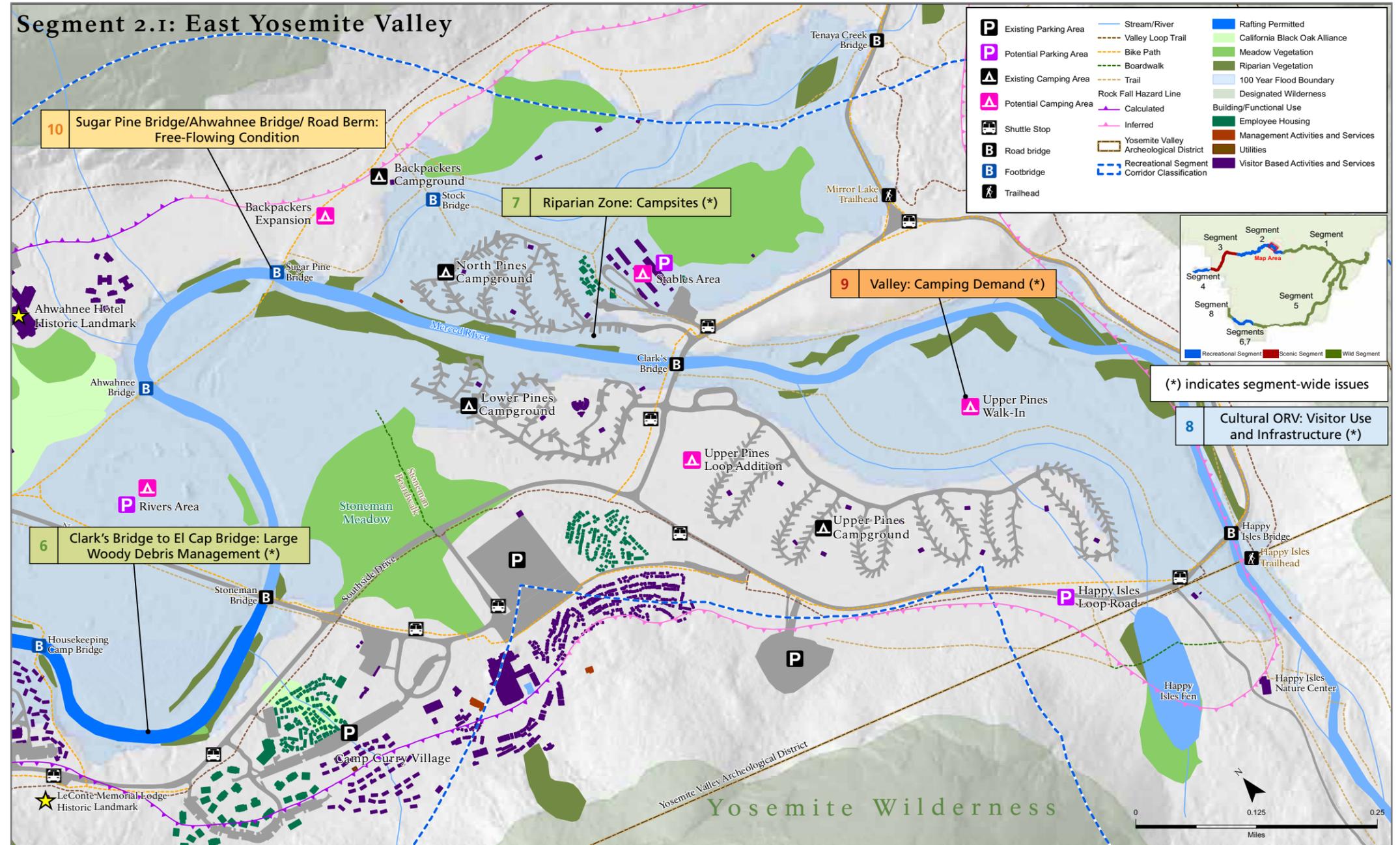
**Biological:** The meadows and riparian communities of Yosemite Valley comprise one of the largest mid-elevation meadow complexes in the Sierra Nevada.

**Recreation:** Visitors to Yosemite Valley enjoy a wide variety of river-related recreational activities in the valley's extraordinary setting along the Merced River.

**Geologic and Hydrologic Processes:** The "Giant Staircase," which includes Vernal and Nevada Falls, is one of the finest examples in the western United States of stair-step river morphology. ♦ The El Capitan Moraine is an extraordinary example of a recessional moraine. ♦ The Merced River from Happy Isles to the west end of Yosemite Valley provides an outstanding example of a rare, mid-elevation alluvial river.

**Scenic:** Visitors to Yosemite Valley experience scenic views of some of the world's most iconic scenery, with the river and meadows forming a placid foreground to towering cliffs and waterfalls.

**Cultural:** Yosemite Valley Native American ethnographic resources include a linked landscape of specifically mapped traditional plant gathering areas. ♦ The Yosemite Valley Archeological District is a linked landscape that contains dense concentrations of resources that represent thousands of years of human settlement along this segment of the Merced River.



## SEGMENT 2.1: Management Considerations and Potential Management Options



### ECOLOGICAL AND NATURAL RESOURCE VALUES

#### 6 Clarks Bridge to El Cap Bridge: Large Woody Debris Management

Long-term removal of large woody debris from the river to facilitate boating, between Clark's Bridge and El Cap Bridge, has reduced channel complexity and compromised riparian structure and aquatic habitat.

##### Management Options:

- 6A: Discontinue removal of large woody debris. Allow boating seasonally. Educate visitors about risk of river use and allow seasonal closures to protect visitor safety.
- 6B: Continue the removal of large woody debris for safety reasons and to protect infrastructure. Where possible, tie cables around logs in stream to temporarily protect bridges and release material at low water flows. This option will mitigate removal elsewhere in the river.
- 6C: Actively restore large woody debris or use engineered log jams where there is a lack of channel complexity, such as up-stream of Stoneman Bridge.
- 6D: Your Ideas?

#### 7 Riparian Zone: Campsites

High visitor use at Upper and Lower Pines Campgrounds has resulted in vegetation trampling and riverbank erosion, impacting both water quality and riparian habitat. Excess erosion is caused by high flows on bare soil. Additionally, the proximity of campsites to the water precludes riparian vegetation development.

##### Management Options:

- 7A: Relocate or remove campsites (where possible), that are within the ordinary high water mark and the riparian zone. Design river access points in resilient locations and restore riparian areas to natural conditions.
- 7B: Manage visitor use at existing campsites by delineating parking and tent pads and locating this infrastructure as far away from the river as possible to prevent vegetation trampling and erosion. Design river access points in resilient locations and restore riparian areas to natural conditions.
- 7C: Your Ideas?

### OPPORTUNITIES FOR DIRECT CONNECTION TO RIVER VALUES

#### 8 Cultural ORV: Visitor Use and Infrastructure

Intensive visitor use and infrastructure are co-located with specifically defined culturally significant plant populations. This can cause trampling and disturbance to ethnographic resources.

##### Management Options:

- 8A: Relocate visitor use areas where feasible to remove potential threats and disturbances to traditional cultural practices and values.
- 8B: Partner with traditional practitioners to restore areas important for traditional and spiritual use.
- 8C: Conduct on-going consultation and data collection to ensure the protection of ethnographic resources. Partner with traditional practitioners to conduct regular condition assessment monitoring.
- 8D: Your Ideas?

### VISITOR USE MANAGEMENT PROGRAM

#### 9 Valley: Camping Demand

Public comment indicated a desire to have more camping opportunities in Yosemite Valley.

##### Management Options:

- 9A: Develop new campgrounds in places such as, north of Upper Pines Campground (Upper Pines Walk-in), between Southside Dr. and the Upper Pines Campground (Upper Pines Loop Addition), at the concessionaire stable north of North Pines Campground (Stables Area) and/or expanding Backpackers' Campground to the west.
- 9B: In addition to Option 1, identify new campground locations or expand existing campgrounds outside of the Valley.
- 9C: Retain the existing number of campsites in Yosemite Valley; and do not add campsites.
- 9D: Your Ideas?

### LAND USES AND ASSOCIATED DEVELOPMENTS

#### 10 Sugar Pine Bridge/Ahwahnee Bridge/Road Berm: Free-Flowing Condition

Sugar Pine Bridge severely impacts the free-flowing condition of the Merced River and causes localized impacts to hydrologic function.

##### Management Options:

- 10A: Remove Sugar Pine Bridge, road berm, and Ahwahnee Bridge and re-route road/trail to the north bank of the river.
- 10B: Remove Sugar Pine Bridge and road berm, but leave Ahwahnee Bridge to provide access to Lower and Upper Pines Campgrounds. (A multi-use trail could be redirected across Ahwahnee Bridge and through Lower Pines Campground.)
- 10C: Replace both existing bridges with foot bridges designed to protect and enhance the free-flowing condition of the river.
- 10D: Your Ideas?



## SEGMENT 2.2: Yosemite Village Area



### Description:

Starting at the Ahwahnee Bridge, the river is joined by several small tributaries as it continues to meander through the Valley. Many visitor services, administrative facilities (residential and operational), and the Ahwahnee National Historic Landmark are located here.

**Classification:** Recreational

### Outstandingly Remarkable Values:

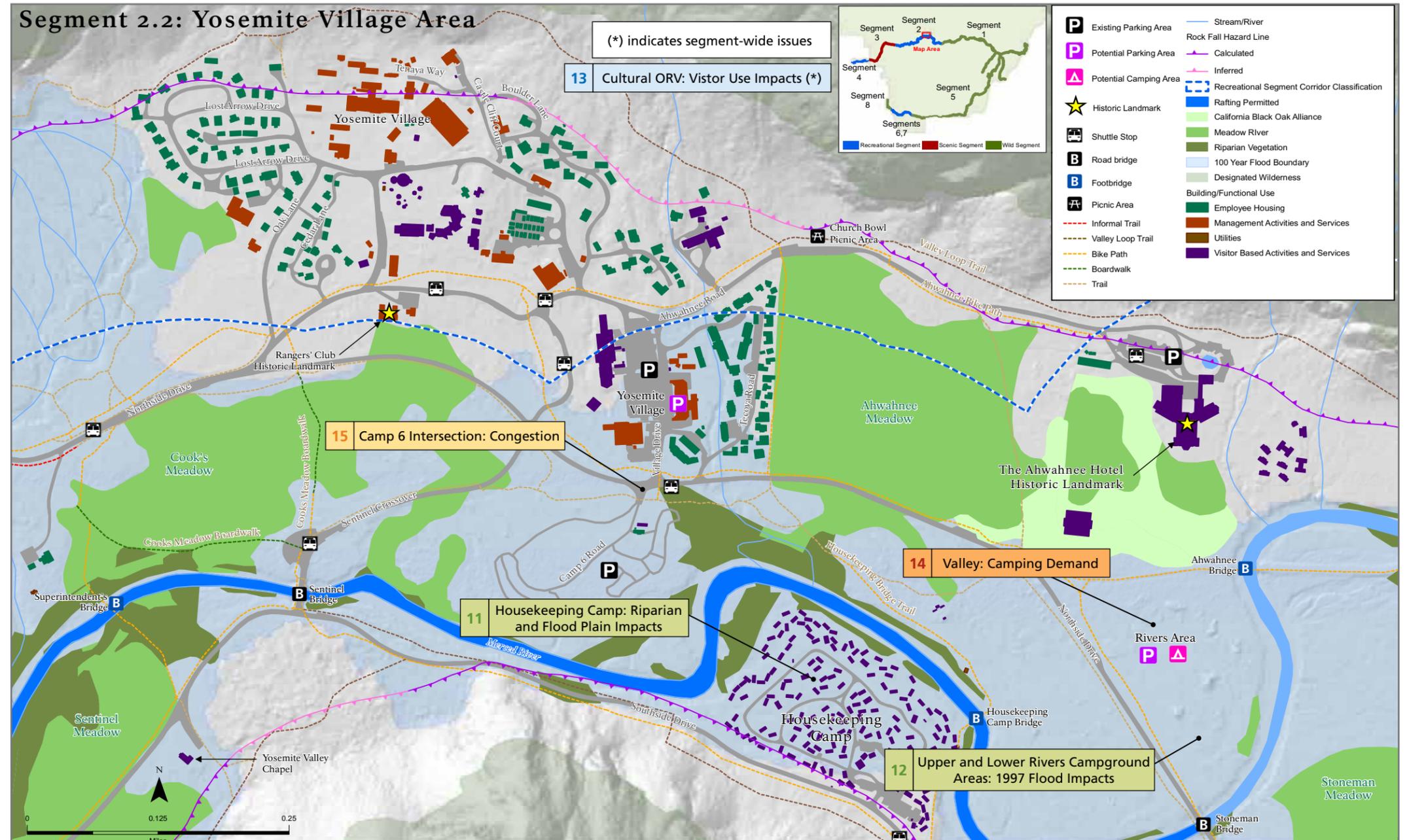
**Biological:** The meadows and riparian communities of Yosemite Valley comprise one of the largest mid-elevation meadow complexes in the Sierra Nevada.

**Recreation:** Visitors to Yosemite Valley enjoy a wide variety of river-related recreational activities in the valley's extraordinary setting along the Merced River.

**Geologic and Hydrologic Processes:** The "Giant Staircase," which includes Vernal and Nevada Falls, is one of the finest examples in the western United States of stair-step river morphology. ♦ The El Capitan Moraine is an extraordinary example of a recessional moraine. ♦ The Merced River from Happy Isles to the west end of Yosemite Valley provides an outstanding example of a rare, mid-elevation alluvial river.

**Scenic:** Visitors to Yosemite Valley experience scenic views of some of the world's most iconic scenery, with the river and meadows forming a placid foreground to towering cliffs and waterfalls.

**Cultural:** Yosemite Valley Native American ethnographic resources include a linked landscape of specifically mapped traditional plant gathering areas. ♦ The Yosemite Valley Archeological District is a linked landscape that contains dense concentrations of resources that represent thousands of years of human settlement along this segment of the Merced River.



## SEGMENT 2.2: Management Considerations and Potential Management Options



### ECOLOGICAL AND NATURAL RESOURCE VALUES

#### 11 Housekeeping Camp: Riparian and Flood Plain Impacts

Several Housekeeping Camp units are located in the two to ten year floodplains and impede hydrologic function. Additionally, high visitor use at the camp has resulted in vegetation trampling and riverbank erosion, impacting both water quality and riparian vegetation. Excess erosion is caused by high flows over parking areas, around tent cabins and down roadways and foot trails.

##### Management Options:

- 11A: Strategically remove up to 93 lodging units currently located within the riparian area. Where possible, relocate these lodging units to another more resilient location within Yosemite Valley. Replace riprap with bioengineered stabilization.
- 11B: Keep all sites and delineate river access in resilient locations and restore the riparian area to natural conditions.
- 11C: Remove 68 lodging units adjacent to the river, as outlined in the 1980 *General Management Plan*.
- 11D: Remove all lodging units, infrastructure and riprap and restore the floodplain and riparian ecosystem to natural conditions.
- 11E: Your Ideas?

#### 12 Upper and Lower Rivers Campground Areas: 1997 Flood Impacts

This area is critical to providing hydrologic connectivity Ahwahnee and Stoneman Meadows; however, it is currently not functioning as a healthy riparian and floodplain ecosystem due to lost topography (graded landscape and filled drainages), compacted soils, existing (amphitheater) and abandoned infrastructure, and invasive plant infestations.

##### Management Options:

- 12A: Provide visitor use opportunities and access (such as camping, parking, and picnic areas) to only the northern portion of the former campgrounds, away from the riparian and floodplain ecosystem. Restore eroded riverbanks and riparian

corridor. Delineate river access points in resilient locations.

- 12B: Restore visitor use opportunities (such as camping, parking and picnic areas) throughout the entire area of the former Upper and Lower Rivers Campgrounds. Ensure protection of river values by locating infrastructure above the high water mark and outside of the riparian area. Restore eroded riverbanks and impacted riparian vegetation.
- 12C: Fully restore the floodplain and riparian ecosystems and designate river access points to manage visitor use and minimize future impacts.
- 12D: Your Ideas?

### OPPORTUNITIES FOR DIRECT CONNECTION TO RIVER VALUES

#### 13 Cultural ORV: Visitor Use Impacts

Visitor uses like hiking, pack stock use, camping, theft, and vandalism have adversely affected some archeological sites potentially affecting the integrity of the Yosemite Valley Archeological District.

##### Management Options:

- 13A: Relocate visitor use areas where practicable to avoid ongoing threats and disturbances. Conduct regular condition assessment monitoring.
- 13B: Stabilize archeological sites where practicable to prevent additional loss of data. Construct fencing or other deterrent to discourage visitor activities on sensitive locations within the sites. Conduct regular condition assessment monitoring.
- 13C: Conduct data recovery as a mitigation measure for potential threats and disturbances. Develop site-specific treatments to minimize ongoing and prevent future degradations. Conduct regular condition assessment monitoring.
- 13D: Your Ideas?

### VISITOR USE MANAGEMENT PROGRAM

#### 14 Valley: Camping Demand

Public comment indicated a desire to have more camping opportunities in Yosemite Valley.

##### Management Options:

- 14A: Reestablish camping at the former Rivers Campground.
- 14B: In addition to Option 14A, identify new campground locations or expand existing campgrounds inside the park but outside of Yosemite Valley.
- 14C: Do not add more camping to Yosemite Valley.
- 14D: Your Ideas?

### LAND USES AND ASSOCIATED DEVELOPMENTS

#### 15 Camp 6 Intersection: Congestion

Throughout the peak summer season, significant delays in outbound traffic flow occur at the intersection of the Camp 6 parking lot and Northside Drive.

##### Management Options:

- 15A: Design a roundabout and pedestrian under-crossing to address intersection performance. Due to space considerations, this would likely require moving the Concessioner Headquarters.
- 15B: Redesign parking area to protect riparian zone and improve operational efficiency.
- 15C: Relocate pedestrian crossing to northwest corner of parking area to avoid intersection issues. Relocate information kiosk within the lot so that it is easier to find.
- 15D: Install temporary, seasonal electronic pedestrian crossing signals.
- 15E: Realign intersection to be a true four-way stop. Allow inbound access to parking area along utility corridor from Sentinel Drive. Include pedestrian under-crossing and relocate other pedestrian crossing to northwest corner of parking area to avoid intersection issue. Relocate information kiosk within the lot so that it is easier to find.
- 15F: Your Ideas?

## SEGMENT 2.3: Yosemite Lodge Area



### Description:

Starting at Sentinel Bridge, the high water table and seasonal flooding in this segment supports Cook's, Sentinel, and Leidig Meadows. Yosemite Lodge and Camp 4 are located in this segment.

**Classification:** Recreational

### Outstandingly Remarkable Values:

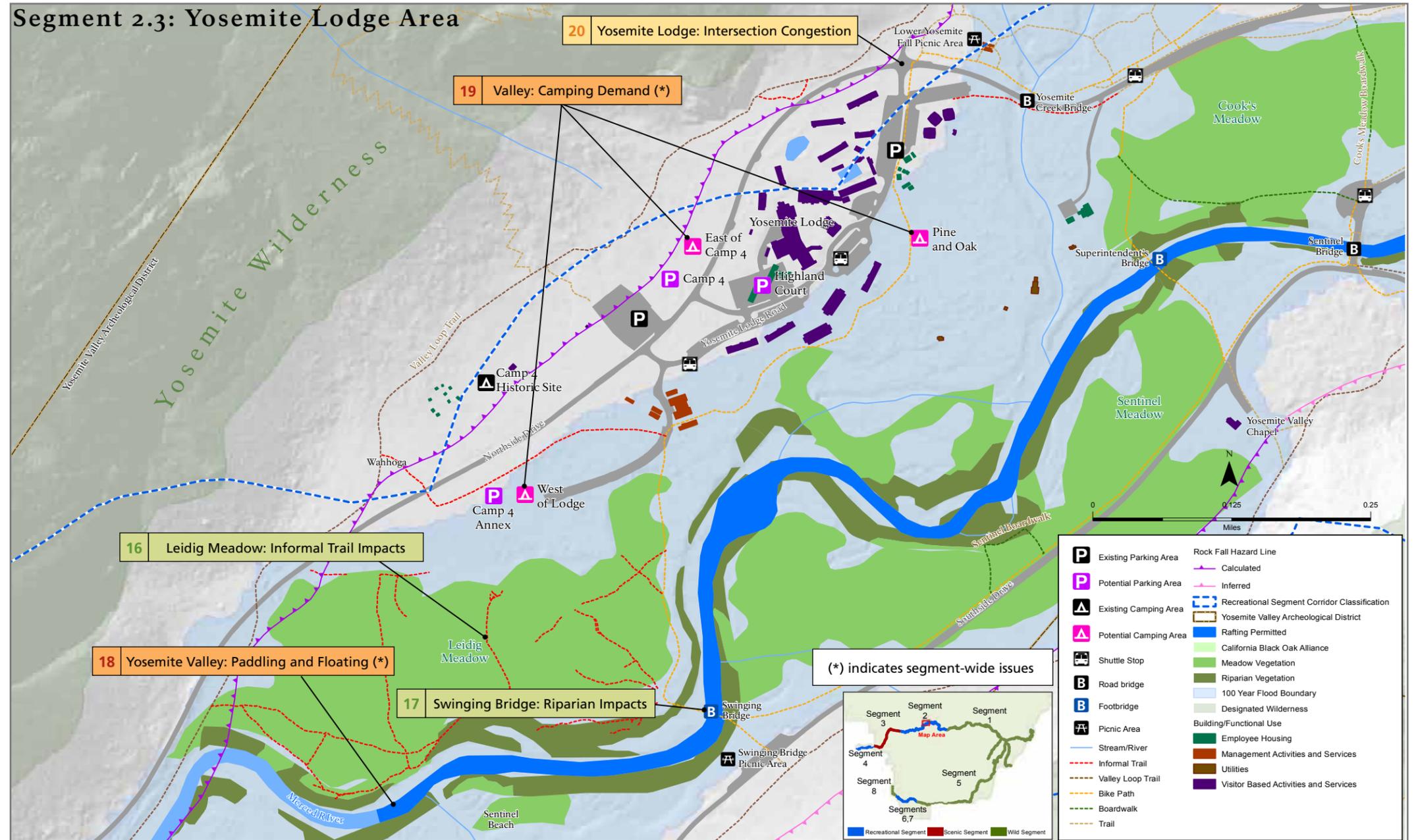
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## SEGMENT 2.3: Management Considerations and Potential Management Options



### ECOLOGICAL AND NATURAL RESOURCE VALUES

#### 16 Leidig Meadow: Informal Trail Impacts

Informal trails in Leidig Meadow cause habitat fragmentation and impact the Biological ORV.

##### Management Options:

- 16A: Remove social trails and restore meadows. Install boardwalks to prevent future impacts. Fence bike path on north side of Swinging Bridge.
- 16B: Remove social trails and restore meadow. Install fencing and place signs to educate visitors about human impacts to meadows.
- 16C: Your Ideas?

#### 17 Swinging Bridge: Riparian Impacts

Visitor use at the Swinging Bridge Designated Picnic Area exceeds the design capacity. Trampling and soil compaction have resulted in riverbank erosion and loss of vegetative cover throughout the picnic area.

##### Management Options:

- 17A: Redesign picnic area in its current location to better manage visitor use. Identify additional parking on the south side of South Side Drive. Designate the area as a formal river access point, fence off sensitive areas, redirect use to more resilient areas, and reestablish riparian vegetation. Remove riprap and replace with brush layering (bioengineering) to promote the establishment of riparian vegetation.
- 17B: Retain existing picnic area. Designate the area as a formal river access point. Fence off sensitive areas, redirect use to more resilient areas and reestablish riparian vegetation. Remove riprap and replace with brush layering (bioengineering) to promote the establishment of riparian vegetation.
- 17C: Remove existing picnic area and parking lot. Relocate bathrooms to Sentinel Beach area; expand picnicking at Sentinel and Cathedral beaches. Designate river access via bike and footpath. Designate the area as a formal river access point.

- 17D: Fence off sensitive areas, redirect use to more resilient areas and reestablish riparian vegetation. Remove riprap and replace with brush layering (bioengineering) to promote the establishment of riparian vegetation.
- 17E: Your Ideas?

### VISITOR USE MANAGEMENT PROGRAM

#### 18 Yosemite Valley: Paddling and Floating

Public comments suggest expanding paddling and floating to include a longer stretch of the Merced River in Yosemite Valley. Other comments suggest variations on allowing or prohibiting commercial or private paddling and floating.

##### Management Options:

- 18A: Allow paddling and floating in a limited section of the river that has minimal resource impact concerns. Allow both private and commercial use. Require permits for all paddling vessels (both private and commercial) within season. Limit the number of both private and commercial vessels to a specified capacity (boats per day or at one time). No restrictions on swimming and water play throughout the summer. Designate put-in and take-out points (and stopping points along the way).
- 18B: Same as Option 18A, but allow paddling and floating on a longer stretch of river to El Cap Crossover. Allow private floating only by permit. Open a longer stretch of the river for this use (from Clark's Bridge to Pohono Bridge.) Allow use throughout the year as long as water conditions are suitable. Prohibit commercial floating. To limit resource impacts, designate vessel put-in and take-out locations.
- 18C: Similar to Option 18A, but would only allow commercial floating opportunities in a limited stretch of river with designated put-ins and take-outs. Limit number of vessels on the river per day or at one time. Allow limited season. Continue educational and safety program. Prohibit private floating of vessels. Swimming and water play would continue.
- 18D: Prohibit all paddling and floating (all vessels) in the Valley. Swimming and water play would continue to be allowed.
- 18E: Your Ideas?

#### 19 Valley: Camping Demand

Public comment indicated a desire to have more camping opportunities in Yosemite Valley.

##### Management Options:

- 19A: Develop new campgrounds in one or more of the following areas: 1) east of Camp 4, 2) south of Northside Drive and across from Camp 4 (West of Lodge), 3) on the eastside of Yosemite Lodge (Pine and Oak).
- 19B: In addition to Option 18A, identify new campground locations or expand existing campgrounds inside the park but outside of Yosemite Valley.
- 19C: Do not add more camping to Yosemite Valley.
- 19D: Your Ideas?

### LAND USES AND ASSOCIATED DEVELOPMENTS

#### 20 Yosemite Lodge: Intersection Congestion

Throughout the peak summer season, significant delays in outbound traffic flow are experienced at the pedestrian crossing from Yosemite Lodge to Lower Yosemite Falls.

##### Management Options:

- 20A: Relocate lodge entrance and replace with pedestrian promenade and underpass for pedestrian access to Lower Yosemite Falls.
- 20B: Implement an electronically controlled intersection for both vehicles and pedestrians.
- 20C: Construct a pedestrian overpass as primary road crossing. Provide for accessibility requirements by maintaining a secondary crossing at surface level.
- 20D: Your Ideas?

## SEGMENT 2.4: West Yosemite Valley



### Description:

Starting west of Leidig Meadow, this segment is largely undeveloped. Picnic areas, beaches and Bridalveil Fall attract visitors to this area.

### Classification:

Recreational

### Outstandingly Remarkable Values:

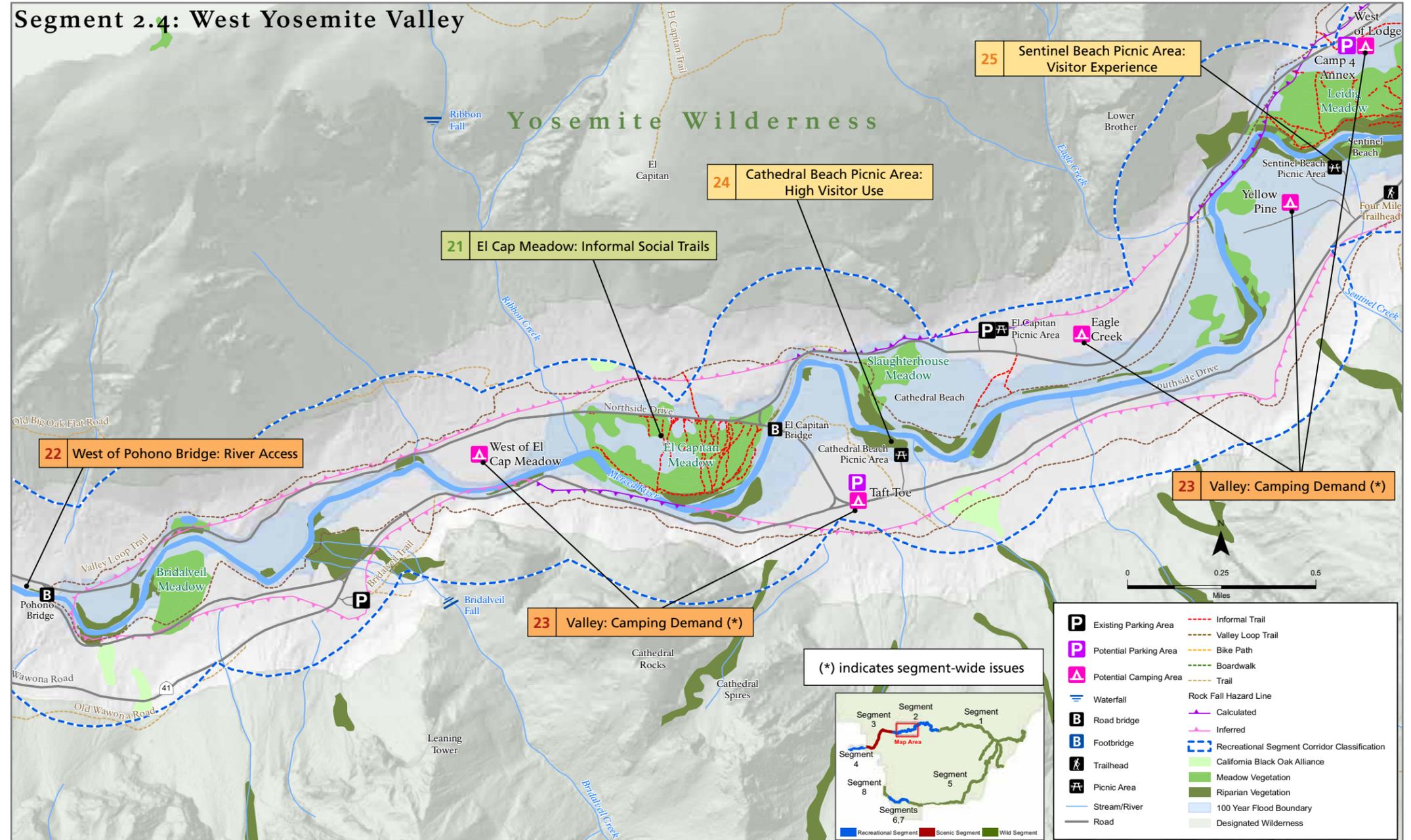
**Biological:** The meadows and riparian communities of Yosemite Valley comprise one of the largest mid-elevation meadow complexes in the Sierra Nevada.

**Recreation:** Visitors to Yosemite Valley enjoy a wide variety of river-related recreational activities in the valley's extraordinary setting along the Merced River.

**Geologic and Hydrologic Processes:** The "Giant Staircase," which includes Vernal and Nevada Falls, is one of the finest examples in the western United States of stair-step river morphology. ♦ The El Capitan Moraine is an extraordinary example of a recessional moraine. ♦ The Merced River from Happy Isles to the west end of Yosemite Valley provides an outstanding example of a rare, mid-elevation alluvial river.

**Scenic:** Visitors to Yosemite Valley experience scenic views of some of the world's most iconic scenery, with the river and meadows forming a placid foreground to towering cliffs and waterfalls.

**Cultural:** Yosemite Valley Native American ethnographic resources include a linked landscape of specifically mapped traditional plant gathering areas. ♦ The Yosemite Valley Archeological District is a linked landscape that contains dense concentrations of resources that represent thousands of years of human settlement along this segment of the Merced River.



## SEGMENT 2.4: Management Considerations and Potential Management Options



### ECOLOGICAL AND NATURAL RESOURCE VALUES

#### 21 El Cap Meadow: Informal Social Trails

Informal trails and vegetation trampling in the El Cap Meadow negatively impact native plant species and fragment habitat integral to the Biological ORV.

##### Management Options:

- 21A: Use restoration fencing to limit foot traffic into the meadow and designate appropriate access routes using boardwalks and viewing platforms.
- 21B: Use restoration fencing to limit foot traffic into the meadow and designate appropriate meadow access points in more resilient locations.
- 21C: Selectively remove vegetation that is blocking roadside views of El Capitan.
- 21D: Limit most roadside parking to search-and-rescue and other emergency use. Consolidate visitor roadside parking along the west end of the meadow; keep parking open for search-and-rescue and other administrative traffic.
- 21E: Your Ideas?



### VISITOR USE MANAGEMENT PROGRAM

#### 22 West of Pohono Bridge: River Access

There are no designated river access points in this reach; visitor experience and resource protection are not optimal under existing conditions.

##### Management Options:

- 22A: Pave limited parking area(s) and designate access to the river; use curbing to formalize parking. Use rocking or curbing to limit additional informal parking.
- 22B: Close this access point; block parking access on both sides of the road (access to river is available at other sites in the corridor).
- 22C: Designate river access and use boulders to limit parking in unpaved parking areas.
- 22D: Your Ideas?

#### 23 Valley: Camping Demand

Public comment indicated a desire to have more camping opportunities in Yosemite Valley.

##### Management Options:

- 23A: Develop new campgrounds in one or more of the following areas: 1) along Southside Drive at El Capitan Crossover (Taft Toe), 2) along Northside Drive east of the El Capitan Picnic Area, 3) on the southside of Northside Drive west of El Capitan Meadow (Eagle Creek), 4) Yellow Pines.
- 23B: In addition to Option 1, identify new campground locations or expand existing campgrounds inside the park but outside of Yosemite Valley.
- 23C: Do not add more camping to Yosemite Valley.
- 23D: Your Ideas?

### LAND USES AND ASSOCIATED DEVELOPMENTS

#### 24 Cathedral Beach Picnic Area: High Visitor Use

The Cathedral Beach Designated Picnic Area is affected negatively by high visitor use, exceeding the design of the existing infrastructure. The resulting loss of riparian vegetation contributes to riverbank erosion.

##### Management Options:

- 24A: Redesign picnic area to better manage the level of visitor use and designate the area as a formal river access point, fence off sensitive areas, redirect use to more resilient areas, and reestablish riparian vegetation.
- 24B: Retain existing picnic area; designate the area as a formal river access point. Fence off sensitive areas, redirect use to more resilient areas, and reestablish riparian vegetation.
- 24C: Your Ideas?

#### 25 Sentinel Beach Picnic Area: Visitor Experience

The Sentinel Beach picnic area is not well-delineated to provide for optimal visitor experience and resource protection. Elements of rafting operations, such as idling buses, conflict with visitors' picnic experience.

##### Management Options:

- 25A: Redesign picnic area in its current location to accommodate picnicking and rafting; formalize vehicle access and parking; designate river access.
- 25B: Remove raft take-out access to accommodate expansion of picnicking; formalize vehicle access and parking; designate river access.
- 25C: Relocate picnic/day use sites to accommodate raft take-out only; formalize vehicle access and parking; designate river access.
- 25D: Redesign picnic area to expand picnicking and rafting; formalize vehicle access and parking; designate river access.
- 25E: Your Ideas?

## SEGMENT 4: El Portal



### Description:

The 1,400-acre El Portal Administrative Site, located adjacent to Yosemite National Park, was established in 1958 with the intent of relocating administrative functions and residences from Yosemite Valley to El Portal. This vibrant residential community is comprised of both government housing and private employee residences located on federal land.

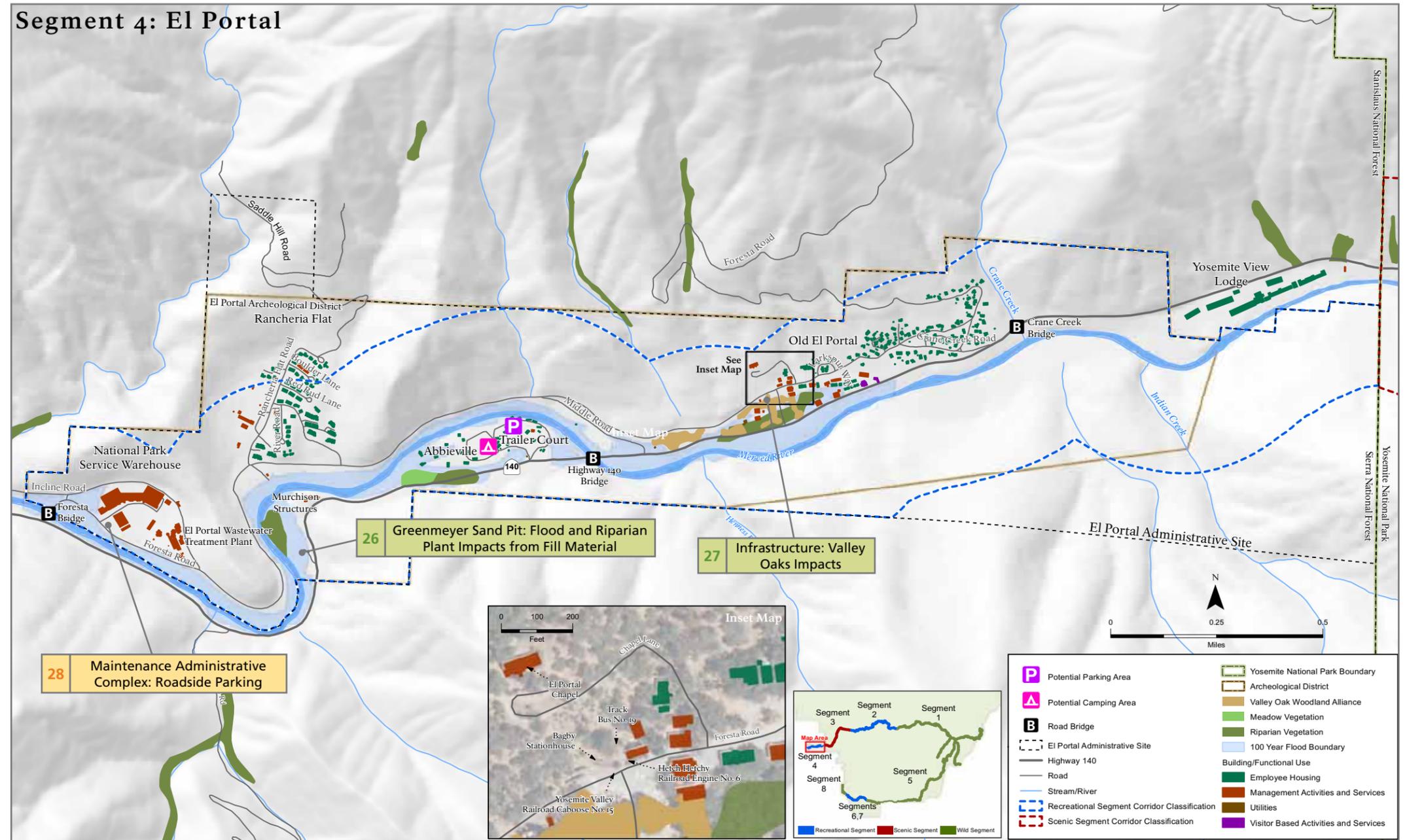
**Classification:** Recreational

### Outstandingly Remarkable Values:

**Biological:** Valley oaks (*Quercus lobata*), a regionally rare species, occur in the El Portal area.

**Geologic and Hydrologic Processes:** The boulder bar in El Portal was created by changing river gradients, glacial history, and powerful floods. These elements have resulted in accumulation of extraordinary large boulders, which are rare in such deposits.

**Cultural:** The El Portal Archeological District contains dense concentrations of resources that represent thousands of years of occupation and evidence of continuous, far-reaching traffic and trade. This segment includes some of the oldest deposits in the region and the Johnny Wilson Ranch, a regionally rare historic-era American Indian Homestead.



## SEGMENT 4: Management Considerations and Potential Management Options



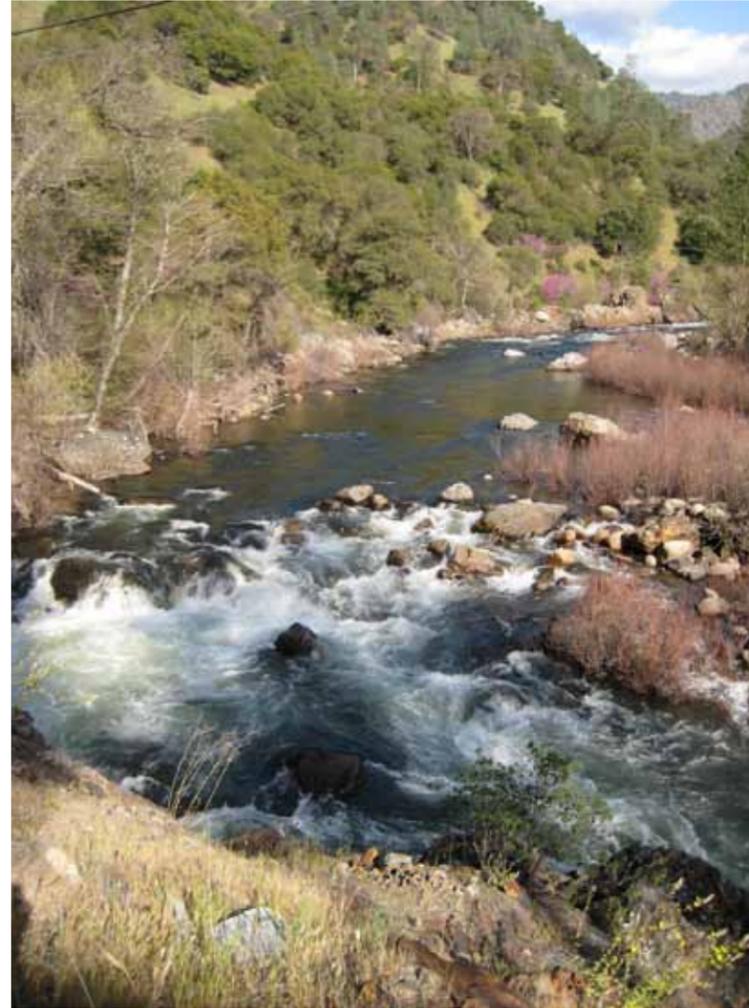
### ECOLOGICAL AND NATURAL RESOURCE VALUES

#### 26 Greenmeyer Sandpit: Flood and Riparian Plant Impacts from Fill Material

The Greenmeyer Sandpit contains fill material that precludes natural flooding and regeneration of riparian plant communities.

##### **Management Options:**

- 26A: Restore to natural conditions; remove fill material and recontour.
- 26B: Cultivate fill material to allow flooding cycles and other natural processes to flush the site gradually and reclaim the flood plain.
- 26C: Using best management practices, continue administrative functions including staging and biomass management.
- 26D: Your Ideas?



#### 27 Infrastructure: Valley Oaks Impacts

Infrastructure (such as facilities and parking) sit among the Valley oaks precluding seedling recruitment in its footprint.

##### **Management Options:**

- 27A: Remove all facilities and restore the understory.
- 27B: Repurpose sites as needed. Restore area where infrastructure is removed to natural conditions.
- 27C: Retain facilities but create another seedling recruitment area in a different location.
- 27D: Your Ideas?

### LAND USES AND ASSOCIATED DEVELOPMENTS

#### 28 Maintenance Administrative Complex: Roadside Parking

The off-street and roadside parking areas located between the Merced River and Foresta Road were not designed or built to prevent water quality contamination from automotive fluids, surface water runoff or sediment transport.

##### **Management Options:**

- 28A: Implement mitigation measures (Best Management Practices) and formalize existing parking area to maximize visitor and employee parking within the existing footprint.
- 28B: Relocate parking from the river's edge. Build new parking east of Foresta Road at the Administrative Facility (west of office/warehouse building or in front of waste water treatment plant). Restore sites between Foresta Road and the river.
- 28C: Your Ideas?



# SEGMENTS 5, 6, 7 AND 8: South Fork Merced River Wawona



**Description:** The South Fork Merced River flows southwest from its origin in the Clark Range, through the pristine Yosemite Wilderness, through the community of Wawona, and out of the park to join the main stem of the Merced River west of El Portal in the Sierra National Forest. In the diverse community of Wawona in Segment 7, there is a combination of government and private housing alongside administrative facilities. Visitor services such as the Wawona Store, stables, Wawona Campground, as well as multiple trails, also exist throughout this segment.

**Classification:** Wild (Segments 5, 6, and 8)  
Recreational (Segment 7)

**Outstandingly Remarkable Values:**

**Biological:** The Sierra sweet bay (*Myrica hartwegii*) is a rare plant found on river along the South Fork Merced River. (Segments 7 and 8).

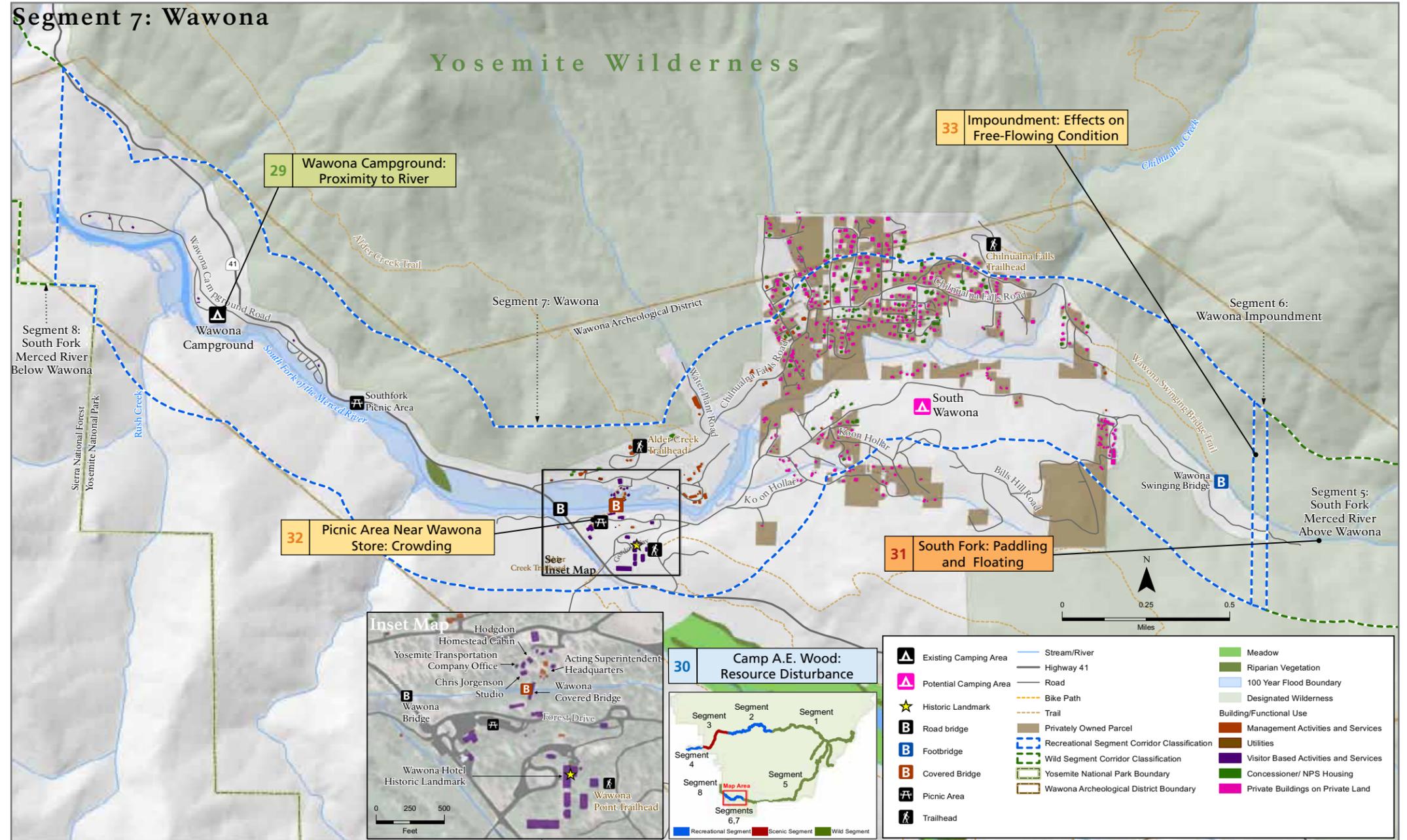
**Scenic:** The South Fork Merced River passes through a vast area of natural scenic beauty. (Segments 5 and 8)

**Cultural:** In this segment, remains of the U.S. Army Cavalry Camp A. E. Wood document the unique Yosemite legacy of the African-American buffalo soldiers and the strategic placement of their camp near the Merced River. (Segment 7)

The Wawona Archeological District encompasses numerous clusters of resources spanning thousands of years of occupation, including evidence of continuous, far-reaching traffic and trade. (Segment 7)

The Wawona Covered Bridge is one of few covered bridges in the region. (Segment 7)

This segment includes regionally rare evidence of indigenous settlement along the South Fork of the Merced River, including prehistoric rock ring features with wooden remains. (Segment 8)



## SEGMENT 5, 6, 7 AND 8: Management Considerations and Potential Management Options



### ECOLOGICAL AND NATURAL RESOURCE VALUES

#### 29 Wawona Campground: Campground Activity Near River

The proximity of camp sites to the river causes trampling and riverbank erosion that inhibits riparian vegetation growth.

##### Management Options:

- 29A: Relocate or close camp sites that are too close to the river.
- 29B: Designate access points to the river to reduce resource impacts.
- 29C: Your Ideas?



Courtesy of the Bruce Family Collection

### LAND USES AND ASSOCIATED DEVELOPMENTS

#### 32 Picnic Area Near Wawona Store

The existing picnic area at Wawona is overcrowded and demand exceeds capacity for visitor use and parking.

##### Management Options:

- 32A: Redesign picnic area in its current location; designate river access.
- 32B: Relocate picnicking to a different location; designate river access in this area.
- 32C: Your Ideas?

### OPPORTUNITIES FOR DIRECT CONNECTION TO RIVER VALUES

#### 30 Camp A.E. Wood

Visitor use such as camping and administrative use such as facility maintenance causes ongoing threats and disturbances to archeological resources at Camp A.E. Wood.

##### Management Options:

- 30A: Stabilize archeological remains of Camp and preserve in situ by minimizing ongoing visitor use impacts. Provide interpretive display highlighting the importance of Camp A.E. Wood as an example of African-American soldiers in park history as well as archeological stewardship.
- 30B: Conduct data recovery of archeological remains of Camp. Provide interpretive display highlighting the importance of Camp A.E. Wood as an example of African-American soldiers in park history.
- 30C: Your Ideas?

### VISITOR USE MANAGEMENT PROGRAM

#### 31 South Fork: Paddling and Floating

Public comment has expressed interest in continuing to allow paddling and floating opportunities in this segment.

##### Management Options:

- 31A: Continue to allow paddling and floating in this segment without any management of large woody debris. The Superintendent's Compendium currently allows floating of non-motorized vessel downstream from the Swinging Bridge. No limits on the number of floaters or boats. No designated put-in or take-out.
- 31B: Continue to allow paddling and floating in this segment with designated put-in and take-out for boating in the section through Wawona proper and limits on the number of boats per year. No limits on recreational floating and related water play.
- 31C: Your Ideas?

#### 33 Impoundment: Effects on Free-Flowing Condition

Surface water withdrawals and impoundment affect the free-flowing condition of the river; excessive water withdrawals will limit aquatic life.

##### Management Options:

- 33A: Investigate reasonable options, such as water system development from Biledo Spring or Big Creek. Retain the impoundment remains until other options are developed.
- 33B: Your Ideas?



## NEXT STEPS



### Share Your Ideas With Us!

Please fill out the interactive comment pages (pages 27-29) at the end of your workbook (River Management Considerations, Your Top Management Options, and Putting The Pieces Together) and return them to us. Your feedback will help inform the interdisciplinary planning team as we walk through the same process of developing alternatives. All feedback will be read and considered by the Merced River Planning Team, as your input is the key to the collaborative alternatives development process we are engaged in. The feedback you provide will help us determine a range of alternatives to address the plan's goals. In order to be most helpful in this process we encourage your feedback by **November 30, 2011**.

There are several ways to share your thoughts:

- You can turn it in at a public meeting.
- Fill it out online at [www.nps.gov/yose/parkmgmt/mrp.htm](http://www.nps.gov/yose/parkmgmt/mrp.htm) and email it to [yose\\_planning@nps.gov](mailto:yose_planning@nps.gov)
- Tear it out and mail it to:  
Superintendent  
Yosemite National Park  
Attn: Merced River Plan  
P.O. Box 577  
Yosemite, CA 95389

### Next Steps

The Merced River Planning Team will continue to work on the alternatives for the Merced River Plan during the winter of 2011-12. While the public workshops and this workbook focus on just a few of the management considerations and range of options, the Draft Environmental Impact Statement must analyze fully-developed alternatives that offer a range of ways to meet the requirements of the Wild and Scenic Rivers Act.

### Coming Next Year

In early 2012, we will publish a newsletter containing the draft alternatives. These alternatives will be analyzed in detail in the Draft Environmental Impact Statement. The newsletter will give you a preview of what will be in the Draft Environmental Impact Statement (DEIS). There will be a 30-day comment period and we look forward to hearing your feedback on the analysis and range of alternatives during that time.

### How to Stay Involved

There are numerous ways to stay informed about the plan via the Internet, park electronic newsletter, open houses and Facebook. The park has a website devoted to the Merced River Plan located at [www.nps.gov/yose/parkmgmt/mrp.htm](http://www.nps.gov/yose/parkmgmt/mrp.htm). At that website, you can sign up for our electronic newsletter. The newsletter provides information and announcements on all park planning, in addition to specific announcements for this plan. The electronic newsletter will announce the content at the open houses hosted by Yosemite National Park, which typically occurs on the last Wednesday of the month. We also have a facebook page located at [www.facebook.com/YosemiteNPS](http://www.facebook.com/YosemiteNPS) so please friend us.

### Thank You!

The Merced River Planning Team and the Superintendent, Don Neubacher, would like to express our sincere appreciation for your participation in this collaborative alternative development process.



# RIVER MANAGEMENT CHALLENGES: YOUR IDEAS

<p><b>Ecological and Natural Resource Values</b></p>	<ul style="list-style-type: none"> <li>• How can we protect and restore free-flowing conditions and hydrologic function?</li> <li>• How should we protect and restore meadow and riparian habitat?</li> <li>• Which areas are a high priority for ecological restoration?</li> </ul>	<ul style="list-style-type: none"> <li>• How can we conserve our limited water supply?</li> <li>• What best management practices must be in place to protect water quality?</li> </ul>
<p><b>Opportunities for Direct Connection to River Values</b></p>	<ul style="list-style-type: none"> <li>• What measures should be taken to continue to protect cultural resource integrity, including archeological and ethnographic resources?</li> </ul>	<ul style="list-style-type: none"> <li>• How can we ensure that people have opportunities to experience quality connections to the river in ways that are protective of the river?</li> </ul>
<p><b>Visitor Use Management Program</b></p>	<ul style="list-style-type: none"> <li>• If the National Park Service were to expand the existing parking inventory, by how much and at which locations would be appropriate?</li> <li>• Would you support bus services along new routes into the park? If there were such services, would you use them? Why or why not?</li> <li>• Would you support remote parking and shuttle services? Why or why not?</li> </ul>	<ul style="list-style-type: none"> <li>• If day use vehicular access were to be limited, are day use reservations appropriate?</li> <li>• Would you support the use of a day use parking/vehicle permit? Does this mean 1) Would you use a day use parking/vehicle permit? OR 2) Would you support a day use parking/vehicle permit system?</li> <li>• What types of recreation are appropriate in the river corridor? What is needed to support these recreation opportunities?</li> </ul>
<p><b>Land Uses and Associated Developments</b></p>	<ul style="list-style-type: none"> <li>• How can the National Park Service support the current mix of day use and overnight visitation?</li> <li>• How can we increase the availability of camping while ensuring that river values are protected?</li> <li>• What types of services and amenities are necessary to provide for both resources protection and management of user capacity in the Merced Wild and Scenic River corridor?</li> </ul>	<ul style="list-style-type: none"> <li>• How can we consolidate functions to increase the efficiency of administrative land use in Yosemite Valley?</li> <li>• How can we prioritize land use for visitors while still ensuring operational needs associated with visitor and resource protection are met?</li> </ul>

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# YOUR TOP SEGMENT MANAGEMENT OPTIONS

Please list the top management options you selected for each river segment. If there are actions you would add or actions you are not in favor of, please note them. When making your choices, think about whether the options work together and if there is a theme or commonality among them.

SEGMENT 2: Yosemite Valley



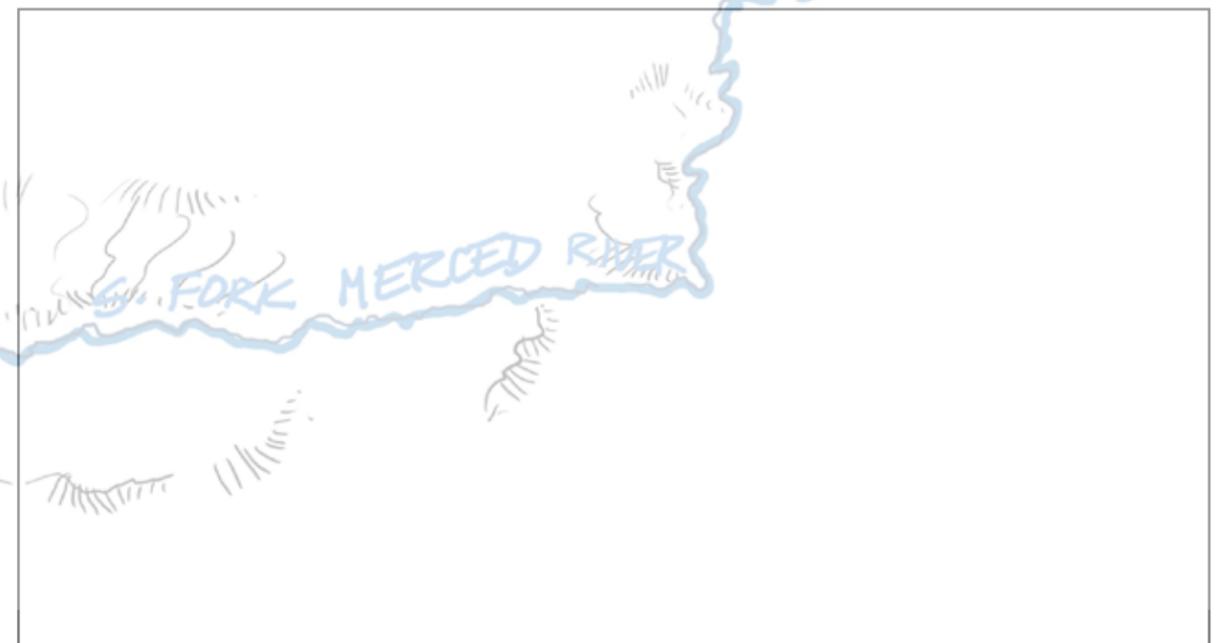
SEGMENT 1: Merced River Above Nevada Fall



SEGMENT 4: El Portal



SEGMENT 5, 6, 7 and 8: South Fork Merced River Wawona



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## PUTTING THE PIECES TOGETHER

Please answer the questions below.  
Think about what the future looks like in your vision.  
What is different? What remains the same?

### Ecological and Natural Resource Values

How do we promote the river's ability to shape the landscape, reduce impediments to free flow, improve geologic/hydrologic process, restore flood-plains and meadows, and protect water quality?

### Your Vision

Is there a theme or a commonality among your choices?  
Can your suggestions be implemented? Are they realistic and feasible?

### Visitor Use Management Program

How do we manage visitor use in a way that balance opportunities for high quality, resource-related experiences in the river corridor with the protection and enhancement of natural and cultural river values today and into the future?

### Opportunities for Direct Connection to River Values

How do we support opportunities for people to experience and develop direct connections to the Merced and its unique values as a place of cultural association, education, recreation, reflection, and inspiration?

### Land Uses and Associated Developments

What structures and development are appropriate in the river corridor and support the protection and enhancement of river values?

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We value your input. Please fill out and tear out the last two pages of this workbook and upon completion, fold the pages into quarters. Tape edges and mail back to Yosemite National Park.

Fold along dotted line

↑  
Tape edge

→  
Tape edge

Fold along dotted line

From:

Place a 44¢  
U.S. Postage  
Stamp  
Here

To: Superintendent  
Yosemite National Park  
Attn: Merced River Plan Alternatives  
P.O. Box 577  
Yosemite, CA 95389