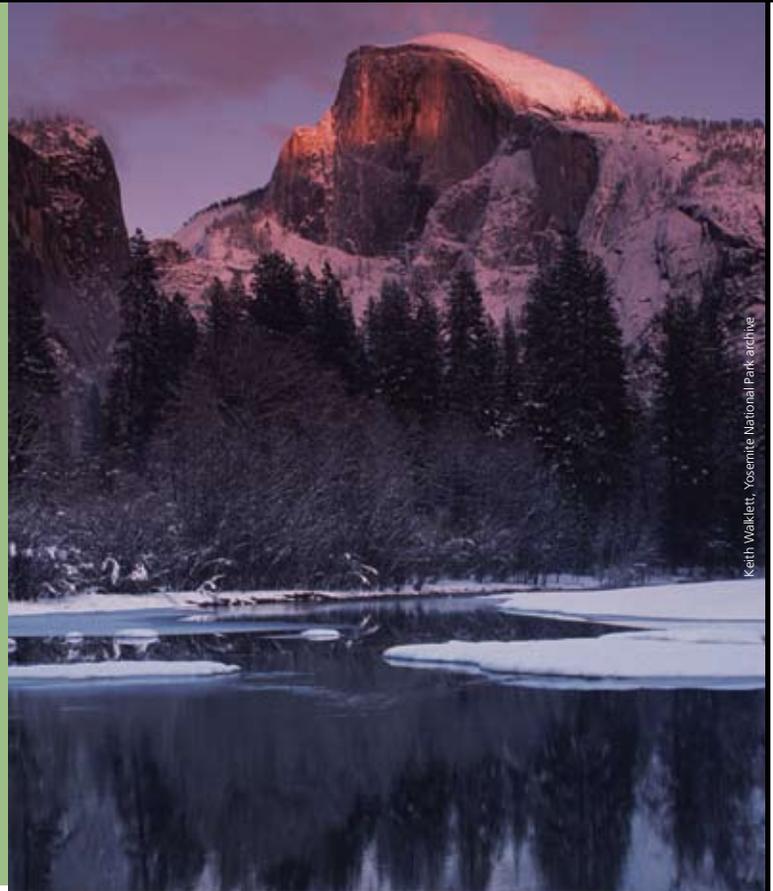




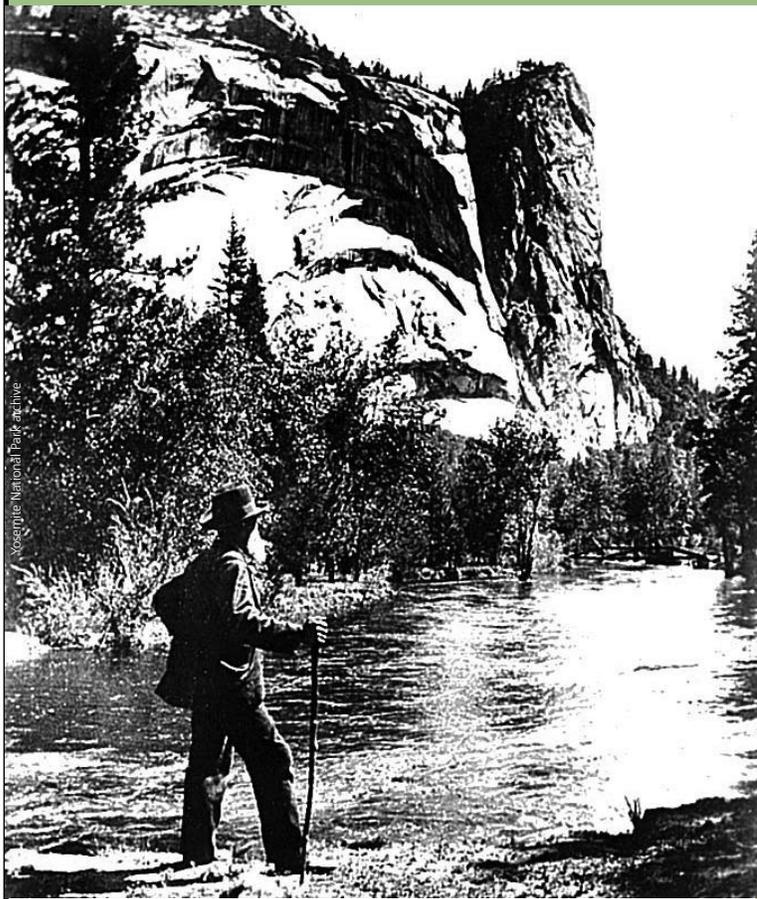
MERCED AND SOUTH FORK MERCED
WILD AND SCENIC RIVERS

**DRAFT
OUTSTANDINGLY
REMARKABLE VALUES
REPORT**

February 2008



Keith Walklett, Yosemite National Park archive



Yosemite National Park archive

*“No two streams are alike.
I fancy I could discriminate
between Merced water
and all others.”*

JOHN MUIR

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Outstandingly Remarkable Values: The Foundation for Wild and Scenic River Management

Outstandingly Remarkable Values (ORVs) are defined by the Wild and Scenic Rivers Act as the unique characteristics that make a river worthy of special protection. In Section 1 of the Wild and Scenic Rivers Act, Congress stated:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, *possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values*, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations [italics added].

Accurately and adequately expressing a river's ORVs provides a foundation for planning, management, and monitoring activities within a Wild and Scenic River corridor. This *Merced and South Fork Merced Wild and Scenic Rivers Outstandingly Remarkable Values, Draft Report* (Draft ORV Report) represents the ORVs for the portion of these Merced Wild and Scenic Rivers within Yosemite National Park.

Guidelines for determining ORVs are provided in the Interagency Wild and Scenic Rivers Coordinating Council's *The Wild & Scenic River Study Process* (Diedrich and Thomas 1999). These guidelines state that a Wild and Scenic River must be free-flowing and possess one or more ORVs. To be assessed as outstandingly remarkable, a value must be:

- river-related AND
- a unique, rare, or exemplary feature that is significant at a comparative regional or national scale

ORVs are not intended to be a static or complete list of important river values. Instead, they are descriptions of values that are open to review and revision if new scientific information or guidance is developed.

“I urge that this river’s national qualities be fully preserved and always protected; an outstanding American scenic resource, a Wilderness river for all Americans.”

1999 Merced River Plan public comment (#197)

Draft Outstandingly Remarkable Values of the Merced and South Fork Merced Wild and Scenic River

The Merced River and South Fork Merced River were defined as a single Wild and Scenic River in Title 16, *Code of Federal Regulations*, Section 1274(a)(62). The ORVs identified in this report apply to both rivers. They are presented in the following format:

<p>ORV STATEMENT Identifies outstandingly remarkable river resources that need to be protected by long-range planning in the <i>Merced Wild and Scenic River Comprehensive Management Plan</i>.</p>	<p>SUPPORTING EVIDENCE & EXAMPLES The bulleted lists in the sidebars are examples, supporting evidence, and features that more fully explain, illustrate, and contribute to the ORV. They are not intended to be complete lists, but rather are illustrative examples to clarify the intent of the Outstandingly Remarkable Value.</p>
<p>Images are intended to provide a representative visual example of the Outstandingly Remarkable Value and/or supporting evidence and examples.</p>	

Appendix A presents information on the process and criteria that were used to develop the ORVs for the Merced River and South Fork Merced River. A comparison of the current effort with previous identification of ORVs for these rivers is provided in Appendix B.

The National Park Service has identified Draft ORVs for the Merced and South Fork Merced Rivers in six categories that fall within two broad categories of values — natural and socio-cultural values. The following specific ORVs fall within these broader values:

DRAFT NATURAL VALUES

- Geologic Processes ORV
- Hydrologic Processes ORV
- Biologic ORV

DRAFT SOCIO-CULTURAL VALUES

- Cultural ORV
- Scenic ORV
- Recreation ORV

DRAFT Natural Values

From its alpine headwaters, along its steep descent into the long, flat Yosemite Valley, and then through a deeply incised gorge, the Merced River descends 9,000 feet in elevation and spans five major life zones. Approximately 10 miles to the south, this sequence is repeated along the South Fork Merced River, whose dramatic descent is briefly quieted in the Wawona area. Along these courses, the rivers sustain a rare diversity of robust, interrelated, and largely intact ecosystems that result from interactions among geologic, hydrologic, and biologic processes.

The natural values found within these protected river corridors provide exemplary ecological integrity that extends beyond the two river systems. These natural values also offer unique, rare, or exemplary opportunities to conduct scientific research that have regional or national significance.



Keith Walklett, Yosemite National Park archive

The Merced River's geology, hydrology and biology are interrelated

GEOLOGIC PROCESSES ORV



Pam Meierding

Geologic processes are the foundation for the hydrology and biology of the Merced and South Fork Merced rivers

HYDROLOGIC PROCESSES ORV



Yosemite National Park archive

The hydrologic variability of the rivers range from rapids and steep drop-offs to calm meanders

BIOLOGIC ORV



Jen Nergesian

Ecosystems shaped by the Merced and South Fork Merced rivers support diverse and interrelated plants and animals

“Your overriding concern should be sensitivity to environmental matters, strict attention to the recommendations of biologists and other scientists, and an undeviating devotion to the values of protecting the park and preserving its natural features.”

1999 Merced River Plan public comment (#197)

Geologic Processes Outstandingly Remarkable Value

Geology tells the rivers' history through rock. Glacial landforms are the foundation for the hydrology and biology of the Merced River and South Fork Merced River, and the geology dictates the form of the rivers and surrounding area. The glaciers that carved the river valleys left a spectacular concentration of unique geologic features of grand scale, and created the rivers' steep gradients.



Jen Nereselian

The course of the Merced runs through and is shaped by the dramatic U-shaped glacially carved Yosemite Valley



Pam Meierding

Bridalveil Fall "Hanging Valley" was created by glacial processes



Pam Meierding

Glacial polish above Nevada Fall



Jay Semmer

This wild section of the Merced River above Bunnell Point illustrates the relationship between the geology and the course of the river

Supporting evidence and examples of the Geologic Processes ORV include, but are not limited to:

- Glacial processes formed the iconic U-shaped Yosemite Valley.
- The "Giant Staircase," which includes Vernal and Nevada Falls, is one of the finest examples of stair-step river morphology in the Sierra Nevada.
- The corridors of the Merced River and South Fork Merced River contain some of the best evidence of glacial processes in the Sierra Nevada, such as glacial erratics, moraines, rouches mountonnées, and striations, as well as some of the best examples of glacial polish in the United States.
- El Capitan Moraine, located in the western part of the Yosemite Valley, marks the greatest extent of recent glacial advance and dammed the waters of the Merced River, forming a great lake. The flat floor of today's Yosemite Valley is the former lake bottom that resulted from the accumulation of more than 2,000 feet of sediment carried by the Merced River from its upper watershed.
- Active rockfalls occurring along the rivers provide opportunities to observe dynamic and ongoing geologic processes.
- The first glacier identified by John Muir was in the Merced River drainage. John Muir's geologic discoveries, and the dynamic geologic processes in the Merced river corridor have historically been a primary focus of interpretation within the park.

Hydrologic Processes Outstandingly Remarkable Value

On both the Merced River and South Fork Merced River, dramatic changes in the rivers' speed and volume are the result of major changes in elevation. The rivers start in high alpine settings, drop down sheer cliffs and steep gradients at high speeds with large springtime volumes, and then become calm and meandering before tumbling down another steep gradient. This hydrologic variability caused by abrupt elevation changes of the two branches of the Merced River is unique.



Adrienne Freeman

Nevada and Vernal Falls form the "Giant Staircase" and illustrate both stairstep river morphology and the variability of the Merced's hydrology due to abrupt elevation changes



Ken Watson

Rushing cascades on the upper Merced above Washburn Lake



Mark Fincher

A gentle stretch of the upper South Fork of the Merced River



Ken Watson

The high alpine Red Devil Lake feeds into the Red Peak Fork of the Merced River



NPS photo

Large boulders shape the character of the river near El Portal

Supporting evidence and examples of the Hydrologic Processes ORV include, but are not limited to:

- Dramatic changes in the rivers' energy that result from variations in their gradients first produce downcutting, then depositional, and again downcutting conditions. The rivers descend steeply from their headwaters at elevations of more than 11,000 feet. When the Merced River encounters the flat gradient of Yosemite Valley at 4,000 feet, it meanders gently over 7 Valley miles, and then tumbles nearly 2,000 feet through the Merced River Gorge. The descent of the South Fork Merced River is similarly slowed by the low gradient of the Wawona area. It then resumes as nearly continuous, white-water cascades in a deep, narrow canyon through a wild environment
- Rapid snowmelt in upper elevations produces powerful, high-volume spring flows that create sensational white water that visitors can experience as sights, sounds, vibrations, and water spray.
- The large-scale, rockfall-driven morphology in such areas as the Merced River Gorge and the valley west of Wawona results in the deposition of enormous boulders. In both rivers, the force of the water moves massive rocks and large woody debris.
- On the Merced River, glacial action removed the slopes across which tributaries had formed, which created hanging valleys with world-renowned waterfalls. These include Yosemite Falls, which is the tallest waterfall in North America.

Biologic

Outstandingly Remarkable Value

The continuum of relatively undisturbed ecosystems along the Merced River and South Fork Merced River provides nearly intact river-dependent habitats for wildlife and vegetation. The high-quality riparian, wetland, meadow, and riverine environments support a diversity of river-related plants and animals, including rare and special-status species.



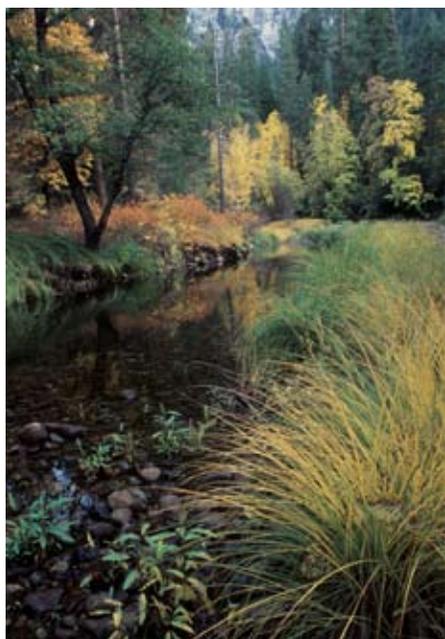
Eleanor Hartney

Because the Sierra Nevada yellow-legged frog population is in substantial decline, it is considered a special-status species. These frogs are dependent on the river corridor's healthy riparian ecosystems.

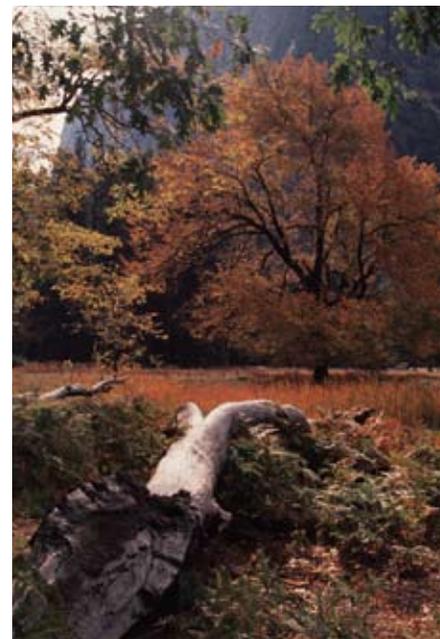


Dan Horner

The harlequin duck breeds near free-flowing mountain streams in the Sierra Nevada. Although sightings were more common in the 1920s, they have become rare until recently—lending hope that they may be staging a comeback.



Keith Walklett, Yosemite National Park archive



Yosemite National Park archive

The Merced and South Fork Merced rivers run through 5 major life zones from alpine to foothill while supporting large areas of riparian, wetland, meadow, and riverine habitats

Supporting evidence and examples of the Biologic ORV include, but are not limited to:

- Both the Merced River and South Fork Merced River support large extents of riparian and wetland habitats that are interconnected throughout virtually the entire lengths of their corridors. These river-dependent terrestrial and aquatic habitats are highly productive. Such intact areas, both as large acreages and extended lengths along rivers, are now regionally rare in the Sierra Nevada.
- Rare and special-status plant and animal species found within the river corridors include the willow flycatcher, Sierra Nevada yellow-legged frog, harlequin duck, black swift, and Tompkin's sedge.
- The Happy Isle fen is a rare example of an intact California fen ecosystem. Its rich growth and variety of plants support a diversity of species.

DRAFT Socio-Cultural Values

The unique combination of traditional cultural resources, prehistoric, historic, scenic, and recreational values of the Merced River and South Fork Merced River distinguishes them from other rivers in the Sierra Nevada and throughout the nation. From prehistoric through modern times, people have developed powerful and enduring relationships with these river corridors.

The socio-cultural values of the river corridors extend back at least 9,000 years. Visible evidence testifies to the river corridors' extraordinarily long continuum of use by American Indians. The corridors continue to have a significant role in maintaining cultural and religious traditions among American Indian peoples.

In a more modern context, the Merced River and South Fork Merced River corridors have become a destination for recreation and leisure, and a place to connect with nature. The corridors engender deep personal connections to the area, and figure prominently in the lives, stories, and traditions of generations of visitors.

The Merced River also played an important role in the birth of the American conservation movement, demonstrating that a symbiotic relationship can occur between conservation and tourism and serving as a proving ground for national park management practices.

Additionally, these socio-cultural values offer unique, rare, or exemplary opportunities to conduct scientific research that has regional or national significance.

CULTURAL ORV



Yosemite National Park museum collection, photo: Michael Dixon

Human use along the Merced and South Fork Merced rivers reflect trade, travel, settlement patterns, and spiritual use for thousands of years

SCENIC ORV



Yosemite National Park museum collections, Painting by w.w. Armstrong

The extraordinary scenery within the river corridors has inspired countless people to visit and attempt to capture the iconic vistas

RECREATION ORV



Jen Neregian

The Merced and South Fork Merced river corridors offer a diversity of activities within an exemplary landscape

"I feel the river should be for my family and for people like us to enjoy. I understand the environmental concerns, but 'enjoy' certainly does not mean 'destroy.' Maybe efforts could be focused on making sure people use the river responsibly."

1999 Merced River Plan public comment (#196)

Cultural

Outstandingly Remarkable Value

The continuum of human use along the Merced River and South Fork Merced River encompasses thousands of years, a diversity of people and cultures, and a variety of uses. Historic/cultural landscapes, historic structures, and archeological resources along the rivers reflect trade, travel, and settlement patterns from prehistory to present-day. Prehistoric, historic, and modern American Indian uses of the park form a long continuum of cultural, traditional, and spiritual uses and veneration for the area.

Supporting evidence and examples of the Cultural ORV include, but are not limited to:

- Trails along the Merced River served as primary routes for trade and cultural exchange between the Great Basin to the east and the California coastal areas to the west for thousands of years. The location and form of the Merced River watershed structured these trade and transportation routes.
- Cultural landscapes reflect the evolution of the human footprint, such as bridges, historic buildings, campgrounds, trails, and the associated spatial and circulation patterns within the natural environment.
- Archeological sites reflect eons of human use and cultural evolution in relation to the river. These resources include prehistoric and historic American Indian villages and camps, and historic ruins.
- American Indians assign strong spiritual values to the river, and to the Yosemite Valley through which it flows, continuing their sense of place and cultural association with the river that is both a destination and a place of refuge. American Indians have attached names and stories to geologic and other special features in the Merced River corridor, and consider many of these to be sacred or spiritual. American Indians maintain their rights to practice their religion and ceremonies as they have for thousands of years.



Sadie (in cradleboard) and Suzie McGowan in Yosemite Valley in 1901

J.T. Boysen, Yosemite National Park research library



American Indian tribes in Yosemite pounded acorns into rock mortars to process them into food

Yosemite National Park research library



The covered bridge in Wawona was built by Galen Clark in 1868 as an open truss span, and was covered in about 1875

Ralph Anderson, Yosemite National Park research library

Scenic Outstandingly Remarkable Value

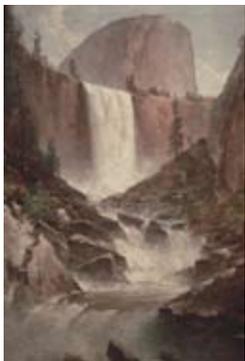
The majestic scenery of the Yosemite Valley draws visitors from around the world. The scale, grandeur, and extraordinary concentration of scenic features in the Merced River watershed inspire emotional connections to the river and surrounding Yosemite National Park.



Jane Gyer | *Yosemite East* | watercolor

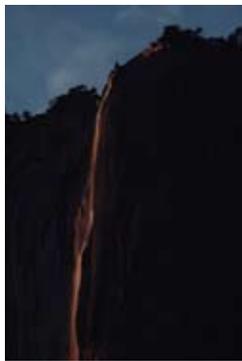
Supporting evidence and examples of the Scenic ORV include, but are not limited to:

- The imposing size of the granite walls and waterfalls of the Yosemite Valley produces iconic scenes that are visible from the Merced River.
- Distant views of El Capitan, Half Dome, Sentinel Rock, Three Brothers, Royal Arches, Yosemite Falls, Bridalveil Fall, and Horsetail Fall create layered vistas with nearby trees, meadows, wildlife, and the meandering Merced River.
- Seasonal and daily changes in lighting on the massive granite walls, domes, meadows, calm water, and rushing cascades create dynamic, awe-inspiring contrasts.
- Views from the river of iconic features such as Half Dome, El Capitan, Bridalveil Fall, and Yosemite Falls are among the principal scenes for which Yosemite National Park was established.
- For more than a century, people have been inspired to paint or photograph the historic views that are recognized as an important component of our national legacy. Some of these historic views include Valley View, Sentinel View, and views of Vernal and Nevada Falls from along the Mist and John Muir Trails.
- Depictions of the Merced River and Yosemite Valley in early tourism posters encouraged the creation of the national park system.
- The scenic experience of the Merced River corridor has historically been a primary focus of interpretation within the park. The location of the Merced River within Yosemite National Park encourages millions of visitors to learn about the history, geology, and ecology of the river.



Yosemite National Park archive

Thomas Hill
Vernal Falls, Yosemite
oil on canvas



John Poiriroo, Yosemite National Park archive

This photo of Horsetail Fall illustrates the inspiring scenic contrasts created by changes in lighting on dramatic granite walls



Yosemite National Park research library

Railroad poster promoting tourism

Recreational Outstandingly Remarkable Value

The Merced River and South Fork Merced River offer diverse, river-related recreation, including the opportunity to recreate in the peerless setting of the Yosemite Valley, the Merced River Gorge, and throughout the entire river corridors. Recreating in these areas is inextricably linked to the dynamic natural processes in the Merced River that have helped form and continue to contribute to the scenery and evocative landscape. Along both rivers, people are able to connect to the natural world while engaging in activities that are enhanced by the quality of the landscape. Within these surroundings, people of all ages and abilities enjoy exemplary experiences that often create personal memories, traditions, and multi-generational bonding among family and friends.



Vernal Fall, photo: Keith Walklett, Yosemite National Park archive



Painter near Chapel, photo: Pam Meierding



Ranger Leland Tamay near Yosemite Falls, photo: Pam Meierding



Backpacking along South Fork, photo: Mandy Varice



Family picnic, photo: Jen Nersesian

The Merced and South Fork river corridors offer a diverse range of activities that are enhanced by the dramatic scenery and opportunity to observe the continuously changing natural world

Supporting evidence and examples of the Recreational ORV include, but are not limited to:

- Recreating within the Merced River corridor evokes a full range of senses, from the awe-inspiring views of the high granite cliffs in Yosemite Valley to the roar and vibrations caused by the wildness of the river during spring runoff in the Merced River Gorge.
- When hiking and backpacking close to the river, such as along the Mist Trail near Vernal and Nevada Falls, visitors can feel the spray and see and hear the plunging waters.
- The Merced River's calm meander through the Yosemite Valley provides opportunities for swimming and floating amidst spectacular scenery, such as Half Dome and Yosemite Falls.
- Within the Merced River and South Fork Merced River corridors, sights and sounds of the water shape the experience of activities such as writing, contemplation, nature study, photography, artistic expression, and fishing.
- Recreating in the river corridors, and participating in Yosemite National Park's education and interpretation programs along the rivers acquaint visitors with river-dependent wildlife and vegetation, as well as the sights, sounds, and energy of flowing water. This creates a connection with the natural world and fosters a stewardship ethic outside the park boundary.
- Camping and picnicking are two of many exemplary experiences within the river corridors that create personal memories, traditions, and multi-generational bonding among families and friends.

APPENDIX A: DRAFT MERCED RIVER OUTSTANDINGLY REMARKABLE VALUES IDENTIFICATION PROCESS AND CRITERIA

The identification of Draft ORVs for the Merced and South Fork Merced River corridors was based on past planning efforts and has been updated to incorporate current data and expertise, as summarized below.

Identifying ORVs is the first stage in developing a Merced and South Fork Merced Wild and Scenic River comprehensive management plan (Merced River Plan). In the *why/what/how* model of tiered decision making adopted by the National Park Service (see figure 1), ORVs describe *why* the Merced River is important enough to be designated and managed as a unit of the National Wild and Scenic Rivers System.

FIGURE 1: USE OF THE WHY/WHAT/HOW MODEL FOR PLANNING FOR THE MERCED RIVER

1. **WHY** was the river designated as a Wild and Scenic River (that is, the ORVs)?
2. **WHAT** natural and cultural resource conditions and visitor experiences should be achieved within the river corridor (described in management prescriptions in the Merced River Plan)?
3. **HOW** will the desired conditions be achieved (in tiered planning documents that implement the vision of the Merced River Plan)?

As the National Park Service develops the Merced River Plan, it will determine *what* combinations of resource conditions and visitor experiences will best protect and enhance the ORVs of the Merced River and South Fork Merced River. Plans that describe *how* these desired resource and visitor experience conditions could be achieved will derive their guidance from the Merced River Plan.

All aspects of the affected environment will be considered during the development of the Merced River Plan. However, particular consideration will be given to those values that have been determined to be outstandingly remarkable.

This Draft ORV Report will guide further development and expression of the rivers' ORVs and serves as a foundational element of the comprehensive river management plan. The ORVs will be described in the draft environmental impact statement (EIS) prepared for the Merced River Plan. Public comments on the draft EIS will be incorporated into the final EIS. In addition to the formal environmental review process, there will be many opportunities for the public to enrich the description of the ORVs.

History of Outstandingly Remarkable Value Development

ORVs were first considered for the Merced River and South Fork Merced River in *The National Rivers Inventory* (NPS 1982). They were revisited in the *Sierra National Forest Draft Land and Resource Management Plan* (U.S. Forest Service 1986), which was intended to establish the eligibility of the Merced River and South Fork Merced River for inclusion in the National Wild and Scenic Rivers System. However, because Congress designated the Merced River and South Fork Merced River as Wild and Scenic Rivers in 1986, the eligibility study and accompanying ORVs were never completed or submitted.

Previous efforts by the National Park Service to define ORVs for the Merced River and South Fork Merced River in Yosemite National Park have included the following.

- The National Park Service initially published ORVs for the Merced River corridor in the *Draft Yosemite Valley Housing Plan* (NPS 1996).
- In *The Merced River Plan / Final Environmental Impact Statement* (NPS 2000), the National Park Service further refined the ORVs based on the application of new scientific information regarding the ecological and hydrologic conditions in the river corridor. The revised ORVs also more accurately reflected the criteria developed by the Interagency Wild and Scenic Rivers Coordinating Council in its guidelines for implementing the Wild and Scenic Rivers Act (Diedrich and Thomas 1999).
- The *Revised Merced River Plan / Environmental Impact Statement* (NPS 2005) incorporated the ORV statements from the 2000 *Merced River Plan / Final Environmental Impact Statement* with some revision to the hydrologic description.

In these prior efforts, the National Park Service identified ORV statements for individual river segments. For the Merced River, these segments were called Wilderness, Yosemite Valley, Gorge, and El Portal. For the South Fork Merced River, the segments were identified as Wilderness, Impoundment, Wawona, and Below Wawona.

The *Revised Merced River Plan / Environmental Impact Statement* (NPS 2006) was legally challenged in 2006, and the U.S. District Court declared the plan invalid and mandated that a new Merced River plan be prepared within three years. As part of the current planning process, the National Park Service reviewed and updated the ORVs identified during previous planning efforts.

The ORV descriptions presented in this report are based on suggestions from the public; consultation with local, state, and federal agencies; and input from resource experts. They reflect new approaches that have been developed by the National Park Service and other agencies for other Wild and Scenic River planning efforts, as well as new information regarding park resources.

Participants and Process

Internal scoping for the Merced River Plan began with extensive discussion of the rivers' ORVs to obtain the broadest possible input from technical experts within the National Park Service and other interested agencies. Between June 2007 and January 2008, the National Park Service conducted deliberation sessions to develop the February 2008, Draft ORV Report, which also includes current guidance provided by the Interagency Wild and Scenic Rivers Coordinating Council.

Three rounds of external scoping have been conducted, in 1999, 2004, and 2007, to identify concerns from agencies and the public regarding management of the Merced River and South Fork Merced River. During the internal scoping described above, the public and agency comments from all three rounds of external scoping were reviewed to identify all comments that potentially related to ORVs. Public comments from all scoping periods informed the development of the draft ORVs presented here.

On August 16, 2007, the NPS planning team hosted a work session with an interagency team of technical experts and community leaders. Participants included representatives from the National Park Service, U.S. Forest Service, Bureau of Land Management, state

and local agencies, and local governments. The seven associated American Indian Tribes also were invited. The purpose of the work session was to review the ORVs identified in previous planning efforts and to identify possible additions, deletions, or other improvements to the descriptions of the ORVs. Work session participants were given the ORVs from:

- the five previous Merced River planning efforts (described under “History of Outstandingly Remarkable Value Development”)
- the current Tuolumne Wild and Scenic River planning effort
- recent management plans for other Wild and Scenic Rivers around the nation, including the Mississippi Scenic Waterway (Minnesota), Musconetcong River (New Jersey), Niobrara National Scenic River (Nebraska), Sespe Creek Wild and Scenic River (California), Wild and Scenic Snake River (Idaho and Oregon), and Wilson Creek National Wild and Scenic River (North Carolina)

Participants were asked to develop and critically evaluate candidate river values against the two criteria specified by the Interagency Wild and Scenic Rivers Coordinating Council, which are described below.

Participants also were asked to identify specific elements, including specific locations if appropriate, that contribute to the ORVs. During their review of the ORVs from the previous Merced River planning efforts, participants were further tasked with providing justification for why some of the earlier statements should *not* be considered in this current effort as outstandingly remarkable.

Work session results were recorded and used to develop a preliminary version of this Draft ORV Report. The preliminary version was distributed to interested agencies and local governments for review. A workshop to receive their comments and suggestions for improvements was held in Yosemite National Park on December 12, 2007. This February 2008 draft report incorporates the input from that workshop.

Throughout review and refinement activities, values and elements that are important, but did not meet the criteria for being *outstandingly remarkable* have been identified. These components will be incorporated into later stages of the Merced River planning process.

General Criteria for Determining Outstandingly Remarkable Values

The Wild and Scenic Rivers Act states that ORVs can include scenery, recreation, geology, fish and wildlife, history, culture, and other similar values. More specific guidance on identifying ORVs is provided by the Interagency Wild and Scenic Rivers Coordinating Council (Diedrich and Thomas 1999, pages 12 through 15) and is summarized as follows:

- I. The value must be river related. To be considered river related, a value must
 - Be located in the river or on its immediate shorelands (generally within a quarter- mile on either side of the river) and
 - Contribute substantially to the functioning of the river ecosystem or
 - Owe its location or existence to the presence of the river

2. The value must be rare, unique, or exemplary in a regional or national context. To be considered rare, unique, or exemplary, a value should be a conspicuous example from among a number of similar values that are themselves uncommon or extraordinary.

The Interagency Wild and Scenic Rivers Coordinating Council provides additional criteria for assessing each ORV category listed in the Wild and Scenic Rivers Act, noting that the criteria may be modified to make them more meaningful to a particular river. The council also notes that while no specific national evaluation guidelines have been developed for the “other similar values” mentioned in the Wild and Scenic Rivers Act, agencies may assess additional river- related values, including but not limited to, hydrology, paleontology, and botany. Specific criteria for identifying ORVs are included below.

Specific Criteria for Outstandingly Remarkable Values by Category

The National Park Service has identified draft ORVs for the Merced River and South Fork Merced River in six categories. These have been grouped into two broad concepts, natural and socio- cultural, which express the outstanding features of the river corridor as a whole.

Resource specialists familiar with the Merced River have emphasized that the rivers’ remarkable values include synergistic interactions among the biological systems, physical features, and enduring (often multi- generational) connections that people have formed with the river corridors over time. These synergies are among the characteristics that distinguish the Merced and South Fork Merced River corridors from all other rivers in the Sierra Nevada and the nation.

Table A- 1 provides the specific criteria used to assess values in each of the ORV concepts and categories.

TABLE A-1: DRAFT OUTSTANDINGLY REMARKABLE VALUE CRITERIA FOR THE MERCED WILD AND SCENIC RIVER

Concept/Category	Outstandingly Remarkable Value Criteria
Draft Natural Values	The ecology of the Merced River and South Fork Merced River corridors is represented by geological, hydrological, and biological processes that have exceptionally high integrity in that they are relatively intact and undisturbed throughout the entire length of the river corridor. This results in relatively untouched ecosystems that are rare, unique, or exemplary in the Sierra Nevada and nationally. These natural values offer unique, rare, and exemplary opportunities to conduct scientific research that have regional or national significance.
<i>Geologic Process Values</i>	Examples of geologic features, processes, or phenomena are unique or rare within the Sierra Nevada and/or nationally, either individually or in combination.
<i>Hydrologic Values</i>	Hydrologic features are unique, rare, or exemplary within the Sierra Nevada, either individually or in combination. Hydrologic processes are relatively undisturbed and have exceptionally high integrity, contributing to healthy ecosystems that are regionally rare, unique, or exemplary.
<i>Biologic Values^{a/}</i>	The area within the river corridor provides exceptionally high- quality and nearly continuous habitat for plants or animals of national or regional significance and/or a remarkable diversity of habitats.
Draft Socio-Cultural Values	Socio- cultural values and characteristics span prehistoric, historic, scenic, and recreational values of the river corridor, and distinguish the Merced River and South Fork Merced River from other rivers in the Sierra Nevada. These socio- cultural values offer unique, rare, and exemplary opportunities to conduct scientific research that have regional or national significance.
<i>Scenic Values</i>	Landscape elements visible from the river and its banks result in notable views that characterize the Merced River in Yosemite National Park.
<i>Recreational Values</i>	River- related recreational opportunities are, or have the potential to be, rare or popular enough to attract visitors from around the world.
<i>Cultural Values</i>	<p>Archeological sites and traditional cultural properties are listed (or are eligible for listing) in the National Register of Historic Places and have unique or rare characteristics, have regionally significant research potential, or have importance for American Indians as a tangible link to their ancient heritage. Traditional cultural properties and other resources play a significant role in the perpetuation of cultural and religious traditions among groups of American Indian people associated with the Merced River and/or South Fork Merced River.</p> <p>Historical structures, buildings, and landscapes are listed (or are eligible for listing) in the National Register of Historic Places, have either national or regional significance, and do not impede or divert the free flow of the river.</p>

a/ The “fish and wildlife” category in the Wild and Scenic River Act is widely interpreted to include all plants and animals.

APPENDIX B: COMPARISON WITH PREVIOUS OUTSTANDINGLY REMARKABLE VALUES

Based on the then- current practices for river planning, the efforts for Merced Wild and Scenic River planning in 1996, 2000, and 2005 (see “History of Outstandingly Remarkable Value Development”) identified ORVs for *each* river segment in *each* the following categories: scientific, scenic, geologic processes and conditions, recreation, biological, cultural, and hydrologic processes. This approach produced considerable redundancy among segments, and resulted in the identification of some values that were less than outstandingly remarkable, as planners attempted to identify values for every category in every segment. The results of this approach, from the *Revised Merced River Plan / Environmental Impact Statement* (NPS 2005), are provided in Table B- 1.

The current effort had benefited from the experience of others in applying the ORV identification approach defined in *The Wild & Scenic River Study Process* (Diedrich and Thomas 1999). As a result, ORVs are now described primarily at a river- corridor- wide level, with specific examples, supporting evidence , and features that more fully explain, illustrate, and contribute to the ORV. This approach will improve the ability of the National Park Service to focus future management on the specific elements of the Merced River and South Fork Merced River that truly contribute to the ORVs.

The Draft ORVs presented in this report are a result from the interagency review and are largely consistent with those from previous planning, but with two notable changes:

- The hydrologic process of continuous rapids in El Portal has been determined not to be outstandingly remarkable in a regional context.
- The impoundment along the South Fork Merced River is not consistent with the basis of the Wild and Scenic River designation and is not outstandingly remarkable.

TABLE B-1: 2005 PLAN OUTSTANDINGLY REMARKABLE VALUES OF THE MERCED RIVER

Segment Number and Name	Outstandingly Remarkable Values (by category)
Main Stem Merced River	
1. Wilderness	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment includes views from the river and its banks of the glaciated river canyon, exposed bedrock riverbed, Merced Lake and Washburn Lake, the Bunnell Cascades, the confluence of tributaries, a large concentration of granite domes, and the Clark and Cathedral Ranges.</p> <p><i>Geologic Processes/Conditions</i> – This segment traverses a U-shaped, glacially carved canyon separated by cascades and soda springs below Washburn Lake.</p> <p><i>Recreation</i> – This segment provides outstanding opportunities for solitude along the river, with primitive and unconfined recreation. There is a spectrum of levels of recreational use. River-related recreational opportunities include day hiking, backpacking, horseback riding and packing, camping, and enjoyment of natural river sounds. Untrailed tributaries provide enhanced opportunities for solitude.</p> <p><i>Biological</i> – This segment includes a nearly full range of intact Sierran riverine environments; high-quality riparian, meadow, and aquatic habitats (such as the meadow at Washburn Lake); and special-status species such as mountain yellow-legged frog.</p> <p><i>Cultural</i> – This segment includes portions of a prehistoric trans-Sierra route in use for thousands of years and many prehistoric sites. There are many historic resources such as homestead sites, trails, river crossings, High Sierra Camp sites, and structures.</p> <p><i>Hydrologic Processes</i> – The segment is characterized by a free-flowing river and excellent water quality. The river gradient drops from 13,000 to 6,000 feet in elevation. There are examples of natural conditions, including glacial remnants, a logjam in Little Yosemite Valley that is hundreds of years old, and numerous cascades.</p>

Segment Number and Name	Outstandingly Remarkable Values (by category)
2. Yosemite Valley	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment provides magnificent views from the river and its banks of waterfalls (Nevada, Vernal, Illilouette, Yosemite, Sentinel, Ribbon, Bridalveil, and Silver Strand), rock cliffs (Half Dome, North Dome/Washington Column, Glacier Point, Yosemite Point/Lost Arrow Spire, Sentinel Rock, Three Brothers, Cathedral Rock, and El Capitan), and meadows (Stoneman, Ahwahnee, Cook’s, Sentinel, Leidig, El Capitan, and Bridalveil). There is a scenic interface of river, rock, meadow, and forest throughout the segment.</p> <p><i>Geologic Processes/Conditions</i> – This segment contains a classic, glaciated, U-shaped valley, providing important examples of a mature meandering river; hanging valleys such as Yosemite and Bridalveil Creeks; and evidence of glaciation (e.g., moraines below El Capitan and Bridalveil Meadows).</p> <p><i>Recreation</i> – This segment offers opportunities to experience a spectrum of river-related recreational activities, from nature study and sightseeing to hiking. Yosemite Valley is one of the premier outdoor recreation areas in the world.</p> <p><i>Biological</i> – Riparian areas and low-elevation meadows are the most productive communities in Yosemite Valley. The high quality and large extent of riparian, wetland, and other riverine areas provide rich habitat for a diversity of river-related species, including special-status species, neotropical migrant songbirds, and numerous bat species.</p> <p><i>Cultural</i> – This segment contains evidence of thousands of years of human occupation reflected in a large number of archeological sites and continuing traditional use today. Nationally significant historic resources are found here, such as designed landscapes and developed areas, historic buildings, and circulation systems (trails, roads, and bridges) that provide visitor access to the sublime views of natural features that are culturally valuable.</p> <p><i>Hydrologic Processes</i> – This segment is characterized by a meandering river, world-renowned waterfalls, an active flood regime, oxbows, unique wetlands, and fluvial processes.</p>
3. Gorge ^a	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment provides views from the river and its banks of the Cascades, spectacular rapids among giant boulders, Wildcat Fall, Tamarack Creek Fall, the Rostrum, and Elephant Rock.</p> <p><i>Geologic Processes/Conditions</i> – This segment is characterized by a classic V-shaped river gorge with a continuous steep gradient.</p> <p><i>Recreation</i> – This segment provides a spectrum of river-related recreational opportunities, such as picnicking, fishing, photography, and sightseeing.</p> <p><i>Biological</i> – This segment is characterized by diverse riparian areas and associated special-status species that are largely intact and almost entirely undisturbed by humans.</p> <p><i>Cultural</i> – This segment contains cultural resources, including prehistoric sites and historic sites and structures such as those relating to historic engineering projects.</p> <p><i>Hydrologic Processes</i> – This segment is characterized by exceptionally steep gradients (2,000-foot elevation drop in approximately 6 miles).</p>

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Segment Number and Name	Outstandingly Remarkable Values (by category)
4. El Portal	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Geologic Processes/Conditions</i> – This segment contains a transition from igneous to metasedimentary rocks (metasedimentary rocks are among the oldest in the Sierra Nevada).</p> <p><i>Recreation</i> – This segment provides a range of river-related recreational opportunities, in particular whitewater rafting and kayaking (class III to V) and fishing.</p> <p><i>Biological</i> – This segment contains riverine habitats such as riparian woodlands and associated federal and state special-status species, including Tompkin’s sedge and Valley elderberry longhorn beetle and its habitat^b (elderberry shrub). Expanses of north-facing habitat allow unlimited access to the riparian zone for wildlife species.</p> <p><i>Cultural</i> – This segment contains some of the oldest archeological sites in the Yosemite area, as well as many historic Indian villages and traditional gathering places. River-related historic resources include structures related to early tourism and industrial development.</p> <p><i>Hydrologic Processes</i> – This segment is characterized by seasonally^b continuous rapids.</p>
South Fork Merced River	
5. Wilderness	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment provides views from the river and its banks of unique river features, including large pothole pools within slickrock cascades, old growth forest, and meadows.</p> <p><i>Geologic Processes/Conditions</i> – This segment is characterized by glaciated valleys in the high country and V-shaped canyons above Wawona. Moraine meadows and soda springs above Gravelly Ford are also unique, river-related geologic features.</p> <p><i>Recreation</i> – This segment provides outstanding opportunities for river-related solitude, enjoyment of natural river sounds, and primitive and unconfined recreation. This segment of the river is predominantly without trails, with the exception of four bridgeless trail crossings in the upper reaches of the segment.</p> <p><i>Biological</i> – This segment includes a nearly full range of riverine environments typical of the Sierra Nevada. Examples of river-related federal and state special-status species include Wawona riffle beetle and mountain yellow-legged frog.</p> <p><i>Cultural</i> – This segment includes river-related prehistoric sites and resources and reflects historic stock use and cavalry activities.</p> <p><i>Hydrologic Processes</i> – This segment is characterized by a free-flowing river and excellent water quality.</p>

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Segment Number and Name	Outstandingly Remarkable Values (by category)
6. Impoundment (would become part of segment 7 Wawona if an alternative water source were secured and impoundment were removed)	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment provides views from the river and its banks of the river and Wawona Dome.</p> <p><i>Hydrologic Processes</i> – This segment has excellent water quality.</p>
7. Wawona	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment provides views from the river and its banks of Wawona Dome.</p> <p><i>Recreation</i> – This segment offers opportunities to experience a spectrum of river-related recreational activities, from nature study and photography to hiking.</p> <p><i>Biological</i> – This segment contains a diversity of river-related species, wetlands, and riparian habitats. There are federal and state special-status species in this segment, including Wawona riffle beetle.</p> <p><i>Cultural</i> – This segment contains evidence of thousands of years of human occupation, including numerous prehistoric and historic Indian villages, historic sites, structures, and landscape features related to tourism, early Army and National Park Service administration, and homesteading.</p>
8. Below Wawona	<p><i>Scientific</i> – These segments of the river corridor constitute a highly significant scientific resource because the watershed is largely within designated Wilderness in Yosemite National Park.</p> <p><i>Scenic</i> – This segment provides views from the river and its banks of continual whitewater cascades in the deep and narrow river canyon in an untrailed, undisturbed environment.</p> <p><i>Geologic Processes/Conditions</i> – This segment contains a transition from Paleozoic Era igneous to Cretaceous Period metasedimentary rocks (metasedimentary rocks are among the oldest in the Sierra Nevada).</p> <p><i>Recreation</i> – This segment provides outstanding opportunities for river-related solitude, enjoyment of natural river sounds, and primitive and unconfined recreation in an untrailed, undisturbed environment. River-related recreational opportunities include hiking, fishing, and whitewater kayaking.</p> <p><i>Biological</i> – This segment is characterized by diverse riparian areas that are intact and largely undisturbed by humans. River-related federal and state special-status species in this segment include Wawona riffle beetle.</p> <p><i>Cultural</i> – This segment contains archeological sites and historic resources such as trail segments representing early cavalry activity.</p> <p><i>Hydrologic Processes</i> – This segment is characterized by a free-flowing river with continual whitewater cascades.</p>

Source: NPS 2004c

Notes:

- a The Cascades Diversion Dam was removed in 2004. The segment that was formerly designated as 3a has been combined with the segment formerly designated 3b and this entire area forms segment 3.
- b This wording has been changed as a technical correction as described in Merced River Plan, Outstandingly Remarkable Values, above.

REFERENCES CITED

Diedrich and Thomas

1999 *The Wild & Scenic River Study Process: Technical Report of the Interagency Wild and Scenic Rivers Coordinating Council.* Portland OR and Anchorage, AK.

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

1982 *The National Rivers Inventory.* Washington, D.C.

1996 *Draft Yosemite Valley Housing Plan.*

2000 *Merced River Plan/Final Environmental Impact Statement.*

U.S. Forest Service, Department of Agriculture

1986 *Sierra National Forest Draft Land and Resource Management Plan.*