

Wild and Scenic Rivers Act – Section 7 Determination

(Version: AUG06)

Compliance Tracking Number: **2006-044**

PEPC Project Number: **15156**

Merced WILD AND SCENIC RIVER

Happy Isles Footbridge Replacement, Merced River, Yosemite National Park

The Merced River in Yosemite National Park is a component of the National Wild and Scenic Rivers System. Projects that involve construction in the bed or on the banks of the Merced River are water resources projects that require review under Section 7 of the Wild and Scenic Rivers Act. The river bank sites for the placement of bridge abutments are within the bed and banks of the Main Stem-Valley (East Valley) segment of the Merced Wild and Scenic River; therefore, construction of the bridge abutments for the replacement footbridge must not intrude upon or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date the Merced River was designated as a component of the Wild and Scenic Rivers System.

A. PROJECT INFORMATION

Title: Happy Isles Footbridge Replacement (Bridge to Wilderness)

Location: Yosemite Valley, Mariposa County, California

Project Manager: Steve Quimby, Project Management, Yosemite National Park

Project Manager: Kirstie Kari, Yosemite Fund

Project Description: The historic Happy Isles Footbridge has experienced several iterations over the past century. The first wood-truss bridge, made of massive milled timbers, was constructed in 1883. Replacement bridges were constructed in 1910 and 1929. The concrete reinforced bridge, often referred to as the “Old Happy Isles Footbridge,” remained in place until 2001. It was removed as a result of being damaged beyond repair by the 1997 Flood and a subsequent rockfall from Glacier Point.

Since the removal of the Happy Isles Footbridge in 2001, access to the John Muir and Half Dome Trailheads, by way of the Yosemite Valley Loop Trail, is no longer available. As a result, circulation in the Happy Isles area has become confusing. River banks between the Happy Isles Vehicle Bridge and the site of the old Happy Isles Footbridge have become damaged and are experiencing accelerated erosion due to visitors trying to access the John Muir Trailhead.

The proposed action would replace the Happy Isles Footbridge in its original location using the selection alternative, a steel-girder bridge with a wood deck (see the accompanying Compliance Determination Memo-to-File), thus re-establishing the historic connection, from the Yosemite Valley Loop Trail and Happy Isles Nature Center, to the John Muir Trail and Yosemite Wilderness. The new footbridge would span the 100-year floodplain—i.e., new bridge abutments would be placed above the Ordinary Highwater Mark thereby protecting and enhancing the free-flowing condition of the Merced River. No construction equipment would be used within the bed and banks of the river.

B. ANALYSIS OF POTENTIAL IMPACTS

Impacts and Mitigations:

This section identifies each potential impact, emphasizing those affecting river "Outstandingly Remarkable Values", and discusses its relationship to and potential impact on the river and how each impact will be avoided or mitigated.

A comprehensive management plan for the Merced Wild and Scenic River has not yet been completed for the Merced Wild and Scenic River. However, the Merced Wild and Scenic River planning effort to date indicates that the likely classification of Main-Stem Yosemite Valley segment would be "Recreational," and identifies a complete range of Outstandingly Remarkable Values, as follows:

- Scientific
- Scenic
- Geologic Processes/Conditions
- Recreation
- Biological
- Cultural
- Hydrological Processes

Summary of Impacts

Table 1. Project Impacts on the River's Free Flow and Water Quality

| Section 7 Considerations | Short Term Impacts | Long Term Impacts |
|---|--|--|
| Free flow characteristics <ul style="list-style-type: none"> • Channel width/depth • Vertical drop • Channel form | <ul style="list-style-type: none"> • None: all new construction would be done outside of the Ordinary High Water Mark. | <ul style="list-style-type: none"> • The free-flowing condition of the river would be protected and enhanced by construction of the bridge and its abutments above the Ordinary Highwater Mark. |
| Water Quality <ul style="list-style-type: none"> • Turbidity • Temperature • Nutrient availability | <ul style="list-style-type: none"> • None: no construction would take place and no construction equipment would work below the Ordinary Highwater Mark; best management practices would be used to ensure construction activities do not affect water turbidity, temperature, or nutrient availability. | <ul style="list-style-type: none"> • Water quality would be protected and enhanced by removal of bridge related structures from the river and construction of the new bridge above the Ordinary Highwater Mark. |

Table 2. Project Impacts on the Outstandingly Remarkable Values for which the River was Designated Wild and Scenic

| River ORVs | Project Impacts |
|--------------------------------------|--|
| <i>Scenic</i> | <ul style="list-style-type: none"> Scenic resources would be protected and enhanced because the new bridge would follow the guidance provided in <i>A Sense of Place: Design Guidelines for Yosemite Valley</i>. |
| <i>Geologic Processes/Conditions</i> | <ul style="list-style-type: none"> There would be no effect on geologic processes or conditions. |
| <i>Recreation</i> | <ul style="list-style-type: none"> Recreation resources would be protected and enhanced by re-establishing the direct connection from the Yosemite Valley Loop Trail and the Happy Isles Nature Center to the John Muir Trail and Yosemite Wilderness. |
| <i>Biological</i> | <ul style="list-style-type: none"> Terrestrial biological resources would be protected and enhanced by allowing direct access to the John Muir Trail and removing the incentive for hikers to cut down the riverbanks and across the river itself. Aquatic biological resources would be protected and enhanced by having the bridge and abutments constructed above the Ordinary Highwater Mark. |
| <i>Cultural</i> | <ul style="list-style-type: none"> Cultural resources would be protected and enhanced by replacing the historic connection between the Yosemite Valley Loop Trail and Happy Isles Nature Center with the John Muir Trail and Yosemite Wilderness with a bridge designed to fit the historic landscape. |
| <i>Hydrologic Processes</i> | <ul style="list-style-type: none"> Hydrologic processes would be protected and enhanced by constructing the new footbridge above the Ordinary Highwater Mark. |

C. SECTION 7 DETERMINATION

Although within the bed and banks and designated corridor of the Merced Wild and Scenic River the proposed project will not intrude on or unreasonably diminish the scenic, geologic process, recreational, biological, cultural, or hydrologic process values present in the area on the date the Merced River was designated a component of the Wild and Scenic Rivers System.

Mark A. Butler
 Recommended by Mark Butler, Compliance Program Manager

9/18/06
 Date

Michael J. Tollefson
 Approved by Michael J. Tollefson, Superintendent

9/18/06
 Date