HAPPY ISLES GAUGING STATION BRIDGE REMOVAL PROJECT

environmental Assessment

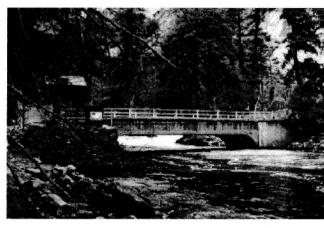
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I. Purpose and Need

Background

History of the Happy Isles Gauging Station Bridge



The Happy Isles Gauging Station Bridge (Happy Isles footbridge) is located on the main stem of the Merced River in Yosemite National Park, at the east end of Yosemite Valley near the Nature Center at Happy Isles (see figure I-1). The Happy Isles Gauging

Station Bridge is a reinforced-concrete girder bridge that was built in 1921. The Tis-sa-ack Bridge, a predecessor to the Happy Isles Gauging Station Bridge, was located on this site as early as 1883, and by 1909 was called the Power House Bridge after an electrical plant was built on one of the Happy Isles in 1902. In 1920, the Power House Bridge was determined to be in a "very marked state of decay" (NPS 1999b). In replacing the Power House Bridge, the Happy Isles Gauging Station Bridge was originally intended to serve as a primary road bridge. However, it was soon determined that the bridge could not adequately serve vehicle traffic levels, and in 1929 the National Park Service designed and constructed a new bridge 500 feet downstream, called the Happy Isles Vehicle Bridge (NPS 1999b). After development of the Happy Isles Vehicle Bridge for vehicular traffic, the Happy Isles Gauging Station Bridge was predominantly used for pedestrian traffic, pack animals, and service vehicles until 1997. The Happy Isles Gauging Station Bridge also served as an approach to the trailhead for the John Muir Trail between Yosemite Valley and the high country.

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evaluating cumulative impacts. If the National Park Service determines that a new bridge is necessary, appropriate site-specific evaluation pursuant to the National Environmental Policy Act will be conducted.

Do Not Replace Happy Isles Gauging Station Bridge. This issue is beyond the scope of this project. The proposed action is to remove the Happy Isles Gauging Station Bridge. As noted in the previous paragraph, replacing the bridge is beyond the scope of this project.

Repair the Happy Isles Gauging Station Bridge. The National Park Service in consultation with the Federal Highway Administration determined that the existing bridge structure has been weakened and compromised in the vicinity of the river-left abutment due to the extent of concrete cracking, crushing, and displacement evidenced by the bridge. Damage to the bridge is sufficiently extensive such that any attempted repair scenario would require complete removal and replacement of the concrete for the entire west abutment, wingwalls, and a portion of the affected superstructure. The National Park Service further determined that repair of the bridge would require extensive bank armoring to protect the structure from further erosion. The consequent hazards to public health and safety and adverse impacts to natural resources resulting from potential collapse of the bridge are considered too severe such that repair is not reasonable within the expedited time frame under which the National Park Service would like to address the collapsing bridge. Therefore, repair of the bridge has been eliminated from detailed consideration as a reasonable alternative in this Environmental Assessment.

Allow pedestrians to use the Happy Isles Gauging Station Bridge in its damaged condition. This issue is inconsistent with the purpose of and need for the proposed action. One purpose for the proposed action is to protect public health and safety by removing the failing bridge. The need for the project is due to the extensive flood damage sustained by the bridge and the continued deterioration subsequent to the 1997 flood. In 1997, the National Park Service closed the bridge to public use on the recommendation of the Federal Highway Administration. Allowing public access to the bridge could jeopardize public health and safety. As a result, public access to the Happy Isles Gauging Station Bridge will continue to be prohibited.

Relocate the Happy Isle Gauging Station. Leave the Happy Isles Gauging Station on the river-right side of the Merced River. Assess whether the gauging station can be supported on top of a foundation composed of alluvial material. These comments addressing the Happy Isles Gauging Station are beyond the scope of this project. The proposed action is specifically focused on the removal of the Happy Isles Gauging Station Bridge. The possible relocation of the Happy Isles Gauging Station is a reasonably foreseeable future project that has been identified in Appendix A. This comment will be considered in subsequent planning efforts for the Happy Isles Gauging Station.