



National Park Service
U.S. Department of Interior

NPS Cosco Busan Recreational Use Program

South Rodeo Beach Access Improvement Project: Final Programmatic Report

September, 2018

Recipient Park Unit: Golden Gate National Recreation Area
Project Location: South Rodeo Beach, Marin County, CA
Date Approved: January 14, 2013
Project Period: March – April, 2014
Award Amount: \$37,000
Matching Contribution: \$0
Matching Fund Source: NA
Total Expended: \$37,000
Project Number: PXP0202250A

1. Summary of Accomplishments

South Rodeo Beach is a popular Marin County destination for visitors to Golden Gate National Recreation Area (GGNRA), and for education programs that are based in the Marin Headlands. Access to the beach via the South Rodeo Beach Trail was dangerous due to erosion and washout of the stairs that provided beach access at the base of the cliffs. This project, completed in conjunction with rehabilitation of the South Rodeo Beach Trail, removed the dilapidated stairs and installed a galvanized metal staircase with a concrete footing at the base of the cliffs to provide safe beach access. While these stairs functioned well for approximately 3 years, an important lesson was learned in that even galvanized metal cannot withstand the marine environment on the outer coast. The stairs were replaced again, this time with a wooden staircase, in the Fall of 2017, with National Park Service (NPS) cyclic maintenance funds. Before and After Photos are included at the end of this report, as well as photos of the subsequent replacement with a wooden stairway.

2. Project Activities & Outcomes

The South Rodeo Beach Access Improvement Project was originally planned for construction by GGNRA's Trail Crew in Spring, 2012, but the Cosco Busan Trustee Council was not established until early in 2012, making that timeline impossible to meet. This was one of the first projects submitted by the NPS for funding, which was approved by the Trustee Council in January 2013, with funds received by GGNRA in Spring, 2013. The Trail Crew generally schedules their work program a year in advance, resulting in the project being scheduled for construction in March-April, 2014. The work was planned to coincide with rehabilitation of the South Rodeo Beach Trail.

The Trail Crew demolished the old stairway, re-graded the slope to accommodate the new stairs, poured a concrete footing for the new stairway, purchased materials for the new staircase and pre-fabricated the staircase, which was then transported to the site, and anchored into place. Some ground disturbance and vegetation removal was necessary in the project vicinity. Erosion control best management practices, including installation of fiber erosion matting, were employed to stabilize and restore the site. The trail was closed during construction, with signage posted at the trailhead, and notification given to park offices, programs, partners and stakeholders of the closure dates and times. The project was completed with approximately a \$250 budget overrun, which was covered using other funds.

3. Benefits

The rebuilt beach access stairway provided for safe access to the beach for approximately 4,500 students participating in outdoor education programs at the Point Bonita YMCA, and an additional 1,750 participants in conferences and family programs at the YMCA. Nature Bridge serves 11,000 participants in outdoor education programs at the Marin Headlands, of which a significant number also visit South Rodeo Beach via the South Rodeo Beach Trail and rebuilt stairway. There is no trail counter to determine the number of park visitors who use the trail and stairway, but the number has likely increased with the improved trail, a newly redesigned parking lot, and new vault toilet at the trailhead.

4. Lessons Learned

The most critical lesson learned is that galvanized metal cannot withstand the marine environment on the outer coast for an extended period of time. While the new stairway did provide safe access to the beach for 2-3 years, it became its own safety hazard in a little over 3 years' time, due to corrosion and metal failure. The concrete footing for the metal staircase is still in excellent condition and continues to serve as the footing for the new wooden stairway. The original stairway (pre-Cosco Busan), in generally the same location as the current stairway, was poorly constructed and undermined by coastal

erosion; it will be interesting to watch how the more solidly constructed wooden staircase survives the coastal environment.

5. Project Documents

See Before, After and subsequent reconstructed stairway photos below.

The administrative record file for this project includes the project proposal and budget, Cosco Busan Trustee Council resolution 13-2 approving the project, the funding allocation request, environmental and historic preservation compliance documents, Status of Funds reports documenting expenditures, additional before and after photos, the Project Management Information System statement, and the January 2015 Cosco Busan Trustee Council News Update that included a description of this completed project.

6. Funding acknowledgement

Funding for this recreational use restoration project was provided by the Cosco Busan Trustee Council comprised of the California Department of Fish and Wildlife, the California State Lands Commission, the National Oceanic and Atmospheric Administration, and the Department of the Interior through the U.S. Fish and Wildlife Service and the National Park Service.

South Rodeo Beach Project Location
Marin Headlands, Golden Gate National Recreation Area



South Rodeo Beach Access – Before Cosco Busan Project, 2012



South Rodeo Beach Access – Before Cosco Busan Project, 2012



South Rodeo Beach Access – New Cosco Busan-funded access stairs, 2014



South Rodeo Beach Access Project – Metal Staircase Failure, September 2017



South Rodeo Beach Access – Reconstruction of access stairway with NPS funds
September 2017



South Rodeo Beach Access – Reconstruction of access stairway with NPS funds
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