

August 2010

ALCATRAZ ISLAND

Challenges and Highlights



National Parks Conservation Association®
Protecting Our National Parks for Future Generations®

STATE
♦ OF THE ♦
PARKS®

STATE ♦ OF THE ♦ PARKS®

Center for State of the Parks ®

More than a century ago, Congress established Yellowstone as the world's first national park. That single act was the beginning of a remarkable and ongoing effort to protect this nation's natural, historical, and cultural heritage.

Today, Americans are learning that national park designation alone cannot provide full resource protection. Many parks are compromised by development of adjacent lands, air and water pollution, invasive plants and animals, and rapid increases in motorized recreation. Park officials often lack adequate information on the status of and trends in conditions of critical resources.

The National Parks Conservation Association initiated the State of the Parks program in 2000 to assess the condition of natural and cultural resources in the parks, and determine how well equipped the National Park Service is to protect the parks—its stewardship capacity. The goal is to provide information that will help policymakers, the public, and the National Park Service improve conditions in national parks, celebrate successes as models for other parks, and ensure a lasting legacy for future generations.

For more information about the methodology and research used in preparing this report and to learn more about the Center for State of the Parks, visit www.npca.org/stateoftheparks or contact: NPCA, Center for State of the Parks, P.O. Box 737, Fort Collins, CO 80522; phone: 970.493.2545; email: stateoftheparks@npca.org.

Since 1919, the National Parks Conservation Association has been the leading voice of the American people in protecting and enhancing our National Park System. NPCA, its members, and partners work together to protect the park system and preserve our nation's natural, historical, and cultural heritage for generations to come.

- * More than 325,000 members
- * Twenty-three regional and field offices
- * More than 120,000 activists

A special note of appreciation goes to those whose generous grants and donations made this report possible: G.D.S. Legacy Foundation, Ray Bingham, Ben and Ruth Hammett, Lee and Marty Talbot, and anonymous donors.

CONTENTS

INTRODUCTION	1
CHALLENGES	4
WHAT'S BEING DONE	8
PARK HIGHLIGHTS	11
WHAT YOU CAN DO TO HELP	13

Cover photo of Alcatraz Island, courtesy of Kelly Courkamp.



INTRODUCTION



REMON RIJPER

Located just four miles east of the entrance to San Francisco Bay, the 22.5-acre Alcatraz Island comprises a fraction of 1 percent of the larger Golden Gate National Recreation Area. Though small in size, Alcatraz is steeped in layers of history and an abundance of resources. Since 1972, the National Park Service has managed these resources—including the famous 600-cell prison, historic gardens dating from the pre-penitentiary period, the guardhouse, the barracks, and the Pacific Coast’s first lighthouse—as

part of Golden Gate National Recreation Area. The island is also home to several species of nesting seabirds, such as western gulls, cormorants, and pigeon guillemots, as well as other waterbirds, such as snowy egrets and black-crowned night herons. An average of 4,000 visitors a day arrive on Alcatraz by ferry to experience the award-winning cellhouse audio tour, participate in ranger-led programs and demonstrations, explore the island and its many historic structures, and bird-watch. The historic sig-

The federal penitentiary on Alcatraz Island once housed some of the country’s most infamous criminals, including Al “Scarface” Capone and Robert “Birdman of Alcatraz” Stroud.



KELLY COURKAMP

A bookstore on the island displays a poster of several prisoners who tried to escape from Alcatraz. There was never a confirmed success. The bookstore also sells a variety of books about the island's history, replica artifacts, and other items.

nificance of Alcatraz Island relates not only to its notorious function as a federal penitentiary, but also to the island's use as a military fortress dating back to the Civil War. In addition, the site holds great importance to American Indian populations, both in pre-history and in relation to the Indian Occupation of 1969–71, which brought the plight of American Indians to the attention of mainstream media, and launched a significant period of Indian activism.

Prior to the arrival of Europeans, American Indians, such as the Ohlone of present-day San Francisco and the Miwok of present-day Marin County, visited the island and used it for a variety of purposes: as a campsite, a place to gather eggs and shellfish, and a way station or site of social ostracism for those who had violated laws or taboos. According to legend, the first European landed on Alcatraz in 1775. He was Spanish Lieutenant Manuel de Ayala, who named the site *Isla de los Alcatrazes*, or Island of the Pelicans, because of the large

numbers of those seabirds present on the island's rocky crags. After the end of the Mexican-American War in 1848, the United States began construction of a U.S. Army coastal fortress on the island to protect San Francisco Bay. Alcatraz was held by the Union throughout the Civil War. During the Spanish-American War, beginning in 1898, thousands of troops passed through the area on their way to and from the Philippines. At the beginning of the 20th century, the island began serving as a military prison.

The Army left the island in 1933, and in 1934, Alcatraz Island reopened as a maximum-security federal penitentiary. For the next 29 years, Alcatraz established its enduring legacy in public memory as an inescapable fortress where the toughest, most hardened criminals, such as Al "Scarface" Capone, Arthur "Doc" Barker, Alvin "Creepy" Karpis, George "Machine Gun" Kelly, Floyd Hamilton, and Robert "Birdman of Alcatraz" Stroud, were imprisoned. Despite 14 escape attempts, there was never a single confirmed success. Because of the extremely high cost of operations and maintenance, the Federal Bureau of Prisons closed the facility in 1963, and the island lay abandoned until 1969.

On November 20, 1969, in a highly publicized demonstration that attracted national attention, 89 American Indians who called themselves "Indians of All Tribes" landed on Alcatraz Island and began a 19-month occupation, demanding the right to Indian self-determination. The occupation ended on June 11, 1971.

In order to preserve the history of the island, the General Services Administration announced the transfer of administration of the island to the Department of the Interior. Alcatraz Island was later added to the newly established Golden Gate National Recreation Area in 1972, and it opened to



MATT KANIA

the public the following year. It was nominated to the National Register of Historic Places in 1976, and it was designated as a National Historic Landmark in 1986.

Alcatraz has played and still plays an important role in our national history, including national military efforts and national cultural movements. In recognition of the importance of preserving this history, the National Parks Conservation Association's Center for State of the Parks assessed the condition of cultural resources on Alcatraz Island using a peer-reviewed methodology based on the National Park Service's own standards and guidelines. A *Summary of the Occurrence, Population Status, and Management of the Western Gull (Larus occidentalis) on Alcatraz Island* was also completed due to the island's importance as habitat for this colonial seabird.

Despite receiving official recognitions that denote the island's exceptional historical significance and important cultural resources (i.e., listing in the National Register of Historic Places and designation

as a National Historic Landmark), the park's historic elements are being lost at an accelerating rate. Due to a variety of challenges, park staff have not been able to holistically preserve this treasure. The entire surface of Alcatraz is exposed to harsh San Francisco Bay winds, humidity, and sea air. As a result, the historic structures are crumbling, the cultural landscape is eroding into the bay, and artifacts (e.g., documents, furnishings, and pieces of equipment) are deteriorating.

Following is a brief summary of the challenges the Park Service faces in caring for Alcatraz's cultural and natural resources. Also included is information on the work the National Park Service is doing to protect the island's irreplaceable resources into the future.

SHEILA DEE/ONTHECREATIVESIDE.COM



Graffiti reminds visitors of the island's American Indian history. In 1969, a group of American Indians initiated an occupation of the island that lasted 19 months.



CHALLENGES



SERGIO FERIA

Structures such as the warden's house, shown here, have deteriorated over time, largely due to exposure to the elements. Currently, funding requests for historic preservation and maintenance projects on Alcatraz Island exceed \$34 million.

Park Planning and Research: The primary focus of interpretation on Alcatraz Island is the federal penitentiary period, and this era has been well documented through a detailed historic resource study. However, this study only addresses the island's history until 1963 when the prison closed, and in order to fill the significant gap in history (1963 to the present) and expand the park's interpretive themes, the park needs to update this study. In addition, Alcatraz suffers from a lack of base-

line data documenting the conditions of, and management recommendations for, cultural resources (e.g., historic structures, cultural landscapes, and archaeology). An archaeological overview and assessment for Golden Gate National Recreation Area was completed in 2003 but did not include an evaluation of sites on Alcatraz. In addition, the park does not have a complete cultural landscape inventory, nor complete historic structure reports for the island's historic structures, many of which are suf-

fering from disrepair. Finally, a historic furnishings report is needed to guide interpretation of the Hospital Wing. Without these data, park staff cannot develop adequate management and preservation strategies or expand the park's interpretive themes beyond the federal penitentiary period.

Cultural Landscapes: A cultural landscape report for Alcatraz is under way. Historical research and documentation of existing resource conditions is done, and recommendations for treatment have been drafted. But until the documentation and management recommendations are approved, park staff are not able to adequately manage the cultural landscapes where there are competing resource values (especially in areas that are difficult to reach due to nesting birds or natural geography), nor identify funding for the many landscapes that are worthy of preservation and rehabilitation. When complete and finalized, however, the report can provide much-needed guidance for management and treatment of the park's cultural landscapes, adding richness to the park's interpretive programs.

Gardens first planted during the island's military era and tended by inmates through the prison era are a major feature of the Alcatraz landscape. Though the park has partnerships with The Garden Conservancy and the Golden Gate National Parks Conservancy to rehabilitate and maintain the historic gardens on the island, several areas have not yet been inventoried. The park currently receives funding through the Save America's Treasures program to aid in garden restoration. The funding from this Park Service-administered federal matching grant program has been critical to leveraging private donations, but funding will end in 2010.

Being located on an island presents a number of unique challenges to park staff

who maintain the cultural landscape and provide visitor services at Alcatraz. Diesel generators currently provide electricity, and drinking water must be brought in from the mainland. The Park Service is working to make the park's operations more sustainable, including the use of solar power to replace the diesel generators (see page 9). Projects such as a desalinization plant and a system for capturing and treating greywater are also needed. Because the island is a National Historic Landmark, such projects must be done with this consideration in mind.

Historic Structures: A number of historic structures on Alcatraz Island are in need of rehabilitation, which is often expensive. Funding requests for historic preservation and maintenance projects on Alcatraz Island exceed \$34 million. The park, however, lacks some critical historic structure reports, without which park staff cannot create comprehensive management strategies



WAYNE ANDERSON

The Garden Conservancy and Golden Gate National Parks Conservancy help rehabilitate and maintain the island's historic gardens, which were once tended by prison inmates.

to successfully improve specific structural resource conditions.

Because many of the buildings on Alcatraz Island suffer from the effects of weather, neglect if not in use, and subsequent deterioration, one of the best ways to aid the preservation of historic structures is to reuse them where feasible and practical by expanding park administrative and visitor uses into these spaces. By actively using historic structures where it is safe and appropriate to do so, park staff can ensure critical preservation management strategies can be implemented and are better able to compete for funding for repairs. By incorporating preservation and rehabilitation activities into interpretation, park staff can also demonstrate to visitors the process of historic restoration, which often enhances the knowledge, satisfaction, and experience of visitors.

At Alcatraz, competing resource values (i.e., bird nesting) and different stages of decay and ruin make it difficult or inappropriate to completely rehabilitate all of the historic structures. A tiered approach to preserving the most significant structures would be a practical and reasonable approach to ensuring Alcatraz's history is available to future generations.

Archaeological Resources: The 2003 archaeological overview and assessment for Golden Gate National Recreation Area did not produce a definitive statement about the previous work, expected sites, and current needs of the archaeology of Alcatraz, and there are no systematic or comprehensive surveys of archaeological sites on the island. Surveys completed in the 1970s and 1980s have only incomplete or scattered data, and they are not sufficient to assess the significance of the sites. Most archaeological sites have been discovered by accident or

through compliance projects, and information on these sites is incomplete, insufficient, or out of context. The lone archaeologist for Golden Gate National Recreation Area cannot devote enough time to resources on Alcatraz. As a result, archaeological sites are at risk from natural processes (e.g., wind and water erosion), illegal collecting, and general visitor activities. An archaeological survey and interpretation of the significance of Alcatraz's archaeological resources are needed to better inform preservation and management during other project work.

Nesting Seabirds and Waterbirds: Since 1975, growing populations of western gulls, Brandt's cormorants, and other colonial waterbirds have occupied a large portion of Alcatraz Island, including developed areas that have historic structures. The nesting habitat provided by Alcatraz is considered of significant importance in the larger San Francisco Bay Area because development and pollution have decreased suitable nesting areas elsewhere. Alcatraz supports the second-largest nesting population of western gulls along the north-central coast of California. Because birds are present on much of the island and can affect cultural resources (e.g., bird excrement can damage structures), their presence has caused significant management challenges as the Park Service attempts to protect this important nesting site for colonial waterbirds, while also meeting the cultural resources management requirements associated with Alcatraz's designation as a National Historic Landmark. The park would benefit from a management strategy that achieves a balance among various interests, including the significance of the western gull population on the island; the difficulty, and sometimes impossibility, of conducting routine mainte-

nance and major rehabilitation projects due to active nesting sites; negative visitor interaction with bird populations; and restricted access to historic structures or sites of interpretive interest due to the presence of nesting birds. Additional planning, monitoring, and targeted research would lead to balanced recommendations on preserving historic structures and cultural landscapes, as well as the visitor experience, while protecting bird populations that are significant on a regional and even global scale.

Staffing: Historically, resource management staff for Alcatraz were supported by project funds, meaning natural or cultural resource staff were assigned to work on the island in conjunction with specific projects. Ideally, however, Alcatraz Island requires more staff that are specifically assigned to its routine resource management and maintenance, given the importance of the island's history, its exposure in the middle of San Francisco Bay, and its use by colonial waterbirds. For example, hiring a part-time museum specialist dedicated to the routine care and interpretation of Alcatraz's museum collection and archives would help preserve and protect those one-of-a-kind artifacts that serve as kernels of its rich history. Without a museum specialist, documentation that guides the management and protection of the museum collection is out-of-date, and new and effective preservation and management plans cannot be developed.

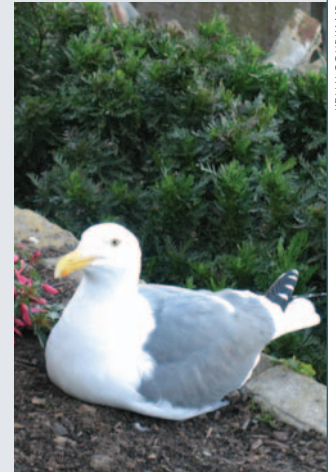
Cultural resource staff are needed in other positions as well. The addition of a full-time historical landscape architect is necessary to ensure rehabilitation projects comply with historic preservation and environmental regulations, and to ensure the results are historically accurate and in compliance with rehabilitation standards that apply to National Historic Landmarks. The

historical landscape architect is also needed to implement the treatment recommendations that will come out of the completed cultural landscape report. As long as Alcatraz's structures are in critical need of stabilization, rehabilitation, or adaptive use, the park would also greatly benefit from a full-time historical architect dedicated to historic structures. A part-time archaeologist could oversee much-needed research on the archaeological resources of Alcatraz Island, as well as provide additional interpretive strategies and management expertise on protection and preservation of sites.

For natural resources, one additional part-time biologist is needed to manage western gulls, both to minimize their effects on cultural resources and to adequately protect other colonial nesting birds, such as the Brandt's cormorants, whose eggs and chicks may be preyed upon by the gulls.

The park currently has ten interpretive staff members (five are permanent, two are term, and three are seasonal), but because they also cover other duties such as volunteer management and program development, these interpretive rangers are not always accessible to visitors. The park could use an additional interpretive ranger dedicated to further developing interpretive programs; it would also be helpful to have a full-time, permanent interpretive ranger present on the dock to welcome visitors to the island.

Finally, two additional maintenance staff would help address the need for a proactive preventive maintenance program, and they would provide support for a regular repair and rehabilitation program for many deteriorating historic structures.



Alcatraz provides important nesting areas for seabirds, supporting the second-largest nesting population of western gulls along California's north-central coast.



WHAT'S BEING DONE



The park's staff has submitted a request for Park Service funds to stabilize the Sallyport, which is the guardhouse entrance through which most visitors pass.

Park Planning and Research: Golden Gate National Recreation Area is presently developing a general management plan to guide resource preservation and visitation for the whole park over the next 20 years. The management strategy proposed for Alcatraz will focus on preserving and interpreting the resources that contribute to the island's National Historic Landmark designation. This could entail rehabilitating and restoring key structures and landscape features in ways that communicate the island's layered histo-

ry and minimize impacts on island bird populations. The ongoing cultural landscape report is being integrated with Golden Gate National Recreation Area's development of the general management plan, in order to provide a finer level of detail and a focus on the human-scale features critical to the island's historic character. Approval of the general management plan and a record of decision for the accompanying environmental impact statement are expected in 2012. A historic resource study, building on the cul-

tural landscape report currently under way, will be done the following year. Then the island's National Historic Landmark status will be updated to include information on the park's history post-1963.

Cultural Landscapes: The park is making strides in protecting and restoring its cultural landscapes. As noted above, a cultural landscape report for the island is in progress and should be completed by 2011. This report will inform future projects, especially those focusing on small-scale landscape features, such as retaining walls, walkways, garden areas, and fencing.

Through a partnership with Lutsko Associates, the Olmsted Center, the Golden Gate National Parks Conservancy, and The Garden Conservancy, the park has completed a survey of the surviving garden plants, a landscape stabilization and maintenance plan for selected garden areas, and the creation of the Alcatraz Garden Project, which puts dedicated volunteer crews to work in the gardens. In 2009, the garden project had 613 volunteers who provided almost 7,000 hours of service. Two treatment plans for rehabilitation of Alcatraz's gardens have also been completed. The Main Road landscape plan was approved and implemented in 2005–2006, and the Officers' Row plan was approved and implemented in 2006–2007. Work is progressing on the Rose Garden, Cellhouse Slope, and West Side Gardens. Volunteers have constructed a water catchment system to use rainwater for garden irrigation, and they have constructed a greenhouse in the Rose Garden on the site where a similar structure once stood. In 2009, the Alcatraz Garden Project received awards from the California Preservation Foundation, and in 2010 it was recognized by the Association of Partners for Public Lands and by the National Trust for Historic Preservation.

Historic Structures: The park has a planning framework to guide various stabilization and rehabilitation projects to protect the integrity of the park's historic structures. Though the structures continue to have significant rehabilitation and preservation needs that should be addressed through comprehensive planning documents, the park has begun to implement some discrete projects. A project to stabilize the water tower has been funded for this year. Park staff have identified several other proposed projects related to historic structures as high priorities for funding in the next five years. Projects to stabilize the Sallyport (the guardhouse entrance through which most visitors pass) and the exterior walls of the cellhouse have been submitted for funding. The park is studying projects to stabilize the cliff at the warden's house and the officers' club. A project to install solar panels on the roofs of the main cell block and laundry building has received funding from the American Reinvestment and Recovery Act. Period restoration of select areas in Building 64, such as the former post office, canteen, and a guard apartment, and the rehabilitation of the former laundry building for educational and special events, have been identified in the park's general management plan as examples of ways the park could further integrate adaptive reuse with preservation objectives.

Nesting Seabirds and Waterbirds: Park staff are currently implementing strategies to manage nesting bird populations on Alcatraz Island. The first step was to complete an overarching management strategy. *The Bird Conservation and Management Strategy for Historic Alcatraz Island*, prepared by the Park Service and the Golden Gate National Parks Conservancy, recommends that the park create a population model for each waterbird species to estimate popula-

tion size, structure, and the carrying capacity of the island. This would allow park staff to better manage populations, particularly of western gulls, and their effects on other natural and cultural resources. In addition, *The Bird Conservation and Management Strategy for Historic Alcatraz Island* states the need for park staff to develop a management approach that will achieve a balance between various natural and cultural resource interests to maintain the integrity of historic structures, health of the natural ecosystem, and a positive visitor experience.

The park is actively investigating possible detrimental effects on other colonial waterbirds from western gull predation to determine how to best manage these populations. The natural and cultural resources staff are working together to manage the nesting sites, conduct an annual census, and adjust management strategies to best preserve these important populations. Additionally, park staff have requested funding for projects

related to managing wildlife to protect historic structures and enhance observation opportunities, protecting seabirds in a changing climate, and enhancing habitat while protecting breeding and nesting waterbirds on the island.

The Park Service is moving forward with the U.S. Geological Survey and PRBO Conservation Science in seeking funding for a multispecies model of bird populations on the island. In addition, park staff are seeking funding to evaluate long-term trends in Brandt's cormorants and western gull populations. If funded, this study would help resource specialists better understand the factors controlling these populations. However, the park has not been able to keep pace with the contracted cost of regular bird monitoring programs conducted by PRBO Conservation Science and the U.S. Geological Survey, and may lose these services, which provide critical data for management.

Park staff are seeking funding for projects to protect seabirds and waterbirds, including the Brandt's cormorants shown here.



CHRIS CHAPMAN



PARK HIGHLIGHTS



CHRIS CHAPMAN

Excellent Interpretation: Alcatraz serves 1.4 million visitors annually. As part of the experience, the vast majority of visitors take an audio tour of the cellhouse, which provides an award-winning discussion of historical themes from Alcatraz Island's penitentiary period and creates an insightful visitor experience. About 110,000 visitors take part in formal ranger-led interpretive programs featuring other areas of the island. Park staff offer guided tours of many of the historic structures on the island, while staff

from the Golden Gate National Parks Conservancy, a nonprofit partner that supports and assists the Golden Gate National Recreation Area, offer evening programs during the peak summer season. Docent tours and signage in the gardens interpret both the historical significance of the gardens and the related restoration project. Bird walks provided by docents focus on the importance of Alcatraz as colonial shorebird habitat. Alumni Weekend (when former prisoners, correctional officers, and their

Visitors use ear-phones to listen to an audio tour of the cellhouse. The Golden Gate National Parks Conservancy produced the tour with help from the Park Service.

families return), living-history Civil War Day, and annual Indian sunrise services are among the special themed events on the island. Night tours consistently sell out, reaching 100,000 visitors each year. A dynamic orientation video, produced in partnership with the Discovery Channel, is shown every half hour. Most exhibits are kept up-to-date through grant funding and support from the Golden Gate National Parks Conservancy. Wayside exhibits throughout the island further illustrate the stories of the island's special natural and cultural resources.

Partnerships: As a major partner of Golden Gate National Recreation Area, the Golden Gate National Parks Conservancy provides both grant funding and complementary staffing that further support the year-round

operation of Alcatraz. Their staffing averages at least 75 full-time equivalents who support visitor services, including administration of the audio tour, staffing of the museum and retail bookstores, transportation of visitors with mobility needs (Sustainable Easy Access Transport program), supplementary custodial support, and the offering of an extended-hours interpretation program. Grants provided by the conservancy assist in funding various interpretive and resource projects. The award-winning audio tour of the Alcatraz cellhouse was produced by the conservancy with the assistance of the Park Service.

Various other special programs help bring the island's history to life while providing both interpretive and stewardship support. These include a partnership with the Federal Bureau of Prisons, which brings

Night tours of Alcatraz Island are very popular and provide a different atmosphere for visitors to envision what life was like on the island during its days as a prison.



TIM BROWN/TPBROWN@GMAIL.COM



Volunteers from The Garden Conservancy mix cement to restore a raised planting bed in the historic gardens.

a team of inmates to the island twice a week to perform much-needed maintenance work. The Friends of Civil War Alcatraz occasionally has docents conduct programs on the Civil War history of the island. Former inmates, correctional officers, and family members annually offer an Alumni Weekend on the island in August with seminars, lectures, and related events to provide a peek back into what life was like at Alcatraz.

To give a sense of the significant support provided by park partners, 1,771 volunteers contributed 28,628 hours in 2009 in support of Alcatraz programs and stewardship.

WHAT YOU CAN DO TO HELP

- **Participate in park planning efforts:** The public is invited to provide input on all park plans and studies. Check www.nps.gov/alca and www.nps.gov/goga for information on park planning work and ways to participate.
- **Support or become a member of a group helping to protect the park:** Golden Gate National Parks Conservancy (www.parksconservancy.org) or NPCA (www.npca.org/support_npca).
- **Volunteer in the parks.** Many parks are looking for dedicated people who can lend a helping hand. To learn about opportunities for volunteering at Alcatraz Island, contact Golden Gate National Recreation Area (www.nps.gov/goga/supportyourpark/volunteer.htm or 415.561.4755) or visit the Golden Gate National Parks Conservancy online (www.parksconservancy.org).
- **Become an NPCA activist and learn about legislative initiatives and protection projects affecting parks.** When you join our activist network, you will receive *Park Lines*, a monthly electronic newsletter with the latest park news and ways you can help. Join by visiting www.npca.org/takeaction.

	No. of Volunteers	No. of Volunteer Hours
Alcatraz Gardens	613	6,994
Bird Monitoring & Management	126	4,819
Interpretive Docents	888	11,601
Building Preservation & Maintenance	144	5,214
Totals	1,771	28,628

ACKNOWLEDGMENTS

NPCA thanks the staff of Golden Gate National Recreation Area and the Golden Gate National Parks Conservancy who reviewed the factual accuracy of information used in this report. We also thank peer reviewers for their valuable comments and suggestions.

For more information about the **Center for State of the Parks®** and this and other program reports, contact:

**National Parks Conservation Association
Center for State of the Parks®**

PO Box 737
Fort Collins, CO 80522
Phone: 970.493.2545

E-mail: stateoftheparks@npca.org
Or visit us at www.npca.org/stateoftheparks/

**National Parks Conservation Association
Pacific Regional Office**

Ron Sundergill, Senior Director
Phone: 415.989.9921
Email: rsundergill@npca.org

Researchers: Patrick J. King and Estep Environmental Consulting
Writer: Kat Byerly
Copy Editor: Kelly Senser
Design/Layout: Paul Caputo

Center for State of the Parks Staff:
Dr. James Nations, Vice President
Dr. Gail Dethloff, Director

Dr. Guy DiDonato, Natural Resources Program Manager
Catherine Moore, Cultural Resources Program Manager
Elizabeth Meyers, Publications Manager
Daniel Saxton, Publications Coordinator

Copyright 2010
National Parks Conservation Association

**CENTER FOR STATE OF THE PARKS®
ADVISORY COUNCIL**

Carol F. Aten
Washington, DC

Ray Bingham
General Atlantic Partners

Keith Buckingham
Design Engineer

Dr. Dorothy Canter
Dorothy Canter Consulting, LLC

Dr. Francisco Dallmeier
Smithsonian Institution

Dr. Elizabeth A. Hadly
Stanford University

Bruce D. Judd
Architectural Resources Group

Karl Komatsu
Komatsu Architecture

Dr. Thomas Lovejoy
H. John Heinz III Center for Science,
Economics, and the Environment

Dr. Kenton Miller
World Resources Institute, World
Commission on Protected Areas

Alec Rhodes
Austin, Texas

Dr. Roger Sayre
United States Geological Survey

Dr. Douglas Schwartz
School for Advanced Research

Martha "Marty" Hayne Talbot
McLean, Virginia

Dr. Lee Talbot
George Mason University

de Teel Patterson Tiller
National Park Service (retired)