November 2012

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FROM POST TO POND: HOW THE PUBLIC CREATED THE PRESIDIO’S CRISSY FIELD MARSH

DEBORAH BARDWICK*

I. INTRODUCTION

Brian O’Neill, the late Superintendent of the Golden Gate National Recreation Area, said that the unifying theme of the Presidio is that of “humans in the natural environment, understood in its broadest context.”¹ This Article explores the critical role that the public played in creating Crissy Field Marsh, a unique feature of the Presidio in the Golden Gate National Recreation Area. Public involvement is always critical to the operation of the National Park Service. In nearly every new project, members of the public are involved in every step, including but not limited to lobbying politicians, commenting on environmental documents, raising money, and volunteering. Individuals and groups engage in projects at National Parks from the beginning of a project through its completion. But the transformation of a former Army trash dump into a thriving wildlife habitat at Crissy Field Marsh illustrates an extraordinary level of public involvement and collaboration. Organizations and individuals were fully engaged with the design of the


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marsh and, in particular, with the archeological and engineering challenges involved. Nonprofit organizations, private foundations, and a huge number of individuals contributed time and money to fund the restoration of Crissy Field Marsh and then to plant it with native vegetation. The restoration of Crissy Field Marsh is an extraordinary example of the power of public participation in public projects.

II. A HISTORY OF THE PRESIDIO

For 220 years, the Presidio was an army base under the Spanish, Mexican, and American flags. In 1776, Spanish colonial officials decided to establish a fortified garrison, or presidio, on the Northern California frontier. Under these orders, Lieutenant Colonel Juan Bautista de Anza led 240 men, women, and children and 1,000 animals north across both desert and mountains, from Mexico to the San Francisco Bay.

The military garrison established in San Francisco became the northernmost outpost of Spain’s New World Empire. Beginning in the 1790s, the garrison fortified the entrance to the bay with a dozen heavy artillery guns. Although the garrison was small, Spain’s national flag helped discourage Russia and Great Britain from attempting to seize the Presidio.

The ownership and conditions surrounding the leadership of the Presidio changed dramatically in the nineteenth century. In 1822, the Spanish garrison accepted the authority of Mexico. In 1846, control of California passed from Mexico to the United States, and the American flag was raised over the Presidio in 1847. In 1849, the Gold Rush created a large population boom in California. To protect the strategic location of the harbor from inevitable population growth and expansion, the United States decided to build Fort Point, a brick fortress, which still remains in the Presidio.

3 HALLER, supra note 2, at 2.
4 Id. at 2–3.
5 Id. at 3.
6 Id.
7 Id. In fact, the Royal Spanish coat of arms, which symbolized Spanish Rule in the eighteenth century, was kept as the Post’s crest until the United States Army turned the Presidio over to the National Park Service two centuries later. Id.
8 Id.
9 Id. at 4–5.
10 Id. at 4.
In 1861, as the Civil War broke out, California became an essential asset to the Union due to its gold mines, quicksilver deposits and access to Comstock Lode silver. Union strategists considered both the Presidio and Fort Point as critical defenses against the Confederacy’s plans to control California and the Pacific Coast. The architectural influences of the Civil War Era are reflected especially in the Main Post area of the Presidio. The houses, the garrison chapel, the powder magazine, the post hospital, the street grid, and the landscape date from the 1860s.

In 1898, the Presidio became a focus of national attention in the Spanish-American War, as it was converted into the principal point of departure for troops bound for the Philippines. After the Great San Francisco Earthquake of 1906, the Presidio provided a base from which American troops restored order in the city and provided shelter and relief to the citizens. The area, which would later be known as Crissy Field, consisted largely of wetlands and lagoons until the early 1900s. Starting in 1909, to celebrate the recovery of the city after the 1906 earthquake, the Panama Pacific International Exposition Company filled in 114 acres of the wetlands along the bay with stone and building rubble, creating the site for the 1915 World’s Fair.

During World War I, the Presidio operated a massive officer training camp, in addition to serving as a base for training and mobilizing troops. At that time, Letterman Army Hospital pioneered the Army’s use of women nurses and of physical therapy as a treatment.

From 1921 through 1936, the Presidio, and Crissy Field in particular, became a center for the use of airpower in military operations. The Army turned the airfield over to the newly created Air Service on June 24, 1921; later, the airfield was named after Major Dana Erwin N. Thompson & Sally B. Woodbridge, Nat’l Park Serv., Special History Study, Presidio of San Francisco: An Outline of Its Evolution as a U.S. Army Post, 1847–1990 (1992), available at www.archive.org/stream/presidioofsanfra00deparich/presidioofsanfra00deparich_djvu.txt; The Way California Could Be: The Panama-Pacific International Exposition, berkeley.edu, bancroft.berkeley.edu/Exhibits/Looking/waycacouldbe.html (last updated Apr. 6, 2001).

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11 Id.
12 Id. at 4–5.
13 Id. at 5.
14 Id. at 8.
15 Id.
18 Haller, supra note 2, at 8.
19 Id.
20 Id. at 11.
Crissy, who was killed in a transcontinental flight in 1924. Oddly, the airfield was never formally named, but has been called Crissy Field ever since. Crissy Field was the site of many innovations—the first “dawn-to-dusk” transcontinental flight, the first successful “round-the-world flight,” aerial photography, and even the use of aircraft to search for forest fires. Crissy Field was the only Army airfield in continuous operation during those years, and it remains the only Coast Defense Air Station in the nation.

Following the bombing of Pearl Harbor in December 1941, the Presidio became a critical center for the United States’ military to prepare and guard against an attack by the Japanese. At the same time, the Presidio was also involved in one of the most shameful episodes of American history. The Presidio’s Western Defense Command at the Presidio supervised the implementation of Executive Order 9066, which relocated and interned all persons of Japanese descent in the United States. In a cruel irony, at the same time that members of their families were suffering internment, Japanese-Americans were secretly serving the United States in the Pacific Theater, receiving training in translation, battlefield interrogation skills, decoding documents, and interpreting commands at the post’s Military Intelligence Service Language School. The Presidio also played a role in the end of World War II by hosting the signing of two critical documents that marked the end of the war in the Pacific: the joint security alliance among Australia, New Zealand and the United States, and the Joint Security Pact between Japan and the United States.

The Presidio was designated a national historic landmark in 1962. Designation as a national historic landmark served the purpose of providing protection for the Presidio’s buildings and grounds; from that point on, any modification to individual buildings or features within the Presidio would have to be conducted only after an analysis of the impacts

22 THOMPSON & WOODBRIDGE, supra note 17, at 144.
23 HALLER, supra note 2, at 11.
24 Id.
25 Id. at 15.
26 Id.
28 HALLER, supra note 2, at 15.
29 NAT’L PARK SERV., supra note 1, at 5.
of construction under the National Historic Preservation Act of 1966. In 1992, the Presidio was upgraded from a national historic landmark to a National Historic Landmark District, which provided greater levels of protection for particular buildings and features, and, in addition, created protection for the Presidio as an entire district. Eventually, the Presidio’s period of historic importance, or “period of significance,” extended from 1776 to 1945, meaning that all of the buildings or features constructed within that broad time period are subject to protection and preservation.

In 1989, the Army announced that it would close the post and transfer the Presidio to the Golden Gate National Recreation Area (GGNRA) by 1995. Although the story of the creation of the GGNRA is outside the scope of this article, GGNRA itself was created by a coalition of citizens and politicians in 1972. By legislation drafted in 1972, forty-five acres of the shoreline were transferred to the National Park Service (NPS) for recreational use, and the NPS was allowed to “passively manage” it (that is, to monitor the resource but to consciously decide not to intervene in the natural ecological processes). In 1972, Congressman Philip Burton and Senator Alan Cranston included Crissy Field within the GGNRA legislation. In fact, the inclusion of Crissy Field was the result of clever maneuvering by Congressman Burton. The Congressman knew that the golf course was highly prized by the Army and deliberately included it in the legislation, correctly anticipating that the Army would be willing to trade the golf course for Crissy Field (which the Congressman had already decided was more appropriate for

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32 PRAETZELLIS ET AL., supra note 31, at 5.
33 NAT’L PARK SERV., supra note 1, at 2.
III. PUBLIC INVOLVEMENT IN THE ENVIRONMENTAL PLANNING FOR CRISSY FIELD

The Park Service Organic Act of 1916 states that the “fundamental purposes of . . . parks . . . is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” This section discusses how the public was instrumental in restoring Crissy Field Marsh.

Two governing statutes coincided to bring about the planning of the Crissy Field Marsh Restoration. The first statute is the National Environmental Policy Act of 1969 (NEPA). Its purpose is:

To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

NEPA and its implementing regulations mandate that every federal agency prepare an in-depth study of the impacts of any major federal action having a significant effect on the environment by thoroughly exploring both the proposed action and other alternatives to the action. NEPA requires that the agency make its findings an integral part of its decision. NEPA also requires that agencies make a diligent effort to involve the interested and affected public before they make decisions affecting the environment. In addition, federal agencies must specifically assess whether their actions have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

38 Id.
44 Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994); NAT’L PARK SERV., supra
The second statute governing NPS’s planning, known as the Organic Act, governs the administration of the National Parks.45 Each park unit, including GGNRA, is required to have a General Management Plan (GMP), which is intended to serve as a basis for resource protection and visitor services.46 According to the relevant part of the Organic Act, general management plans for each unit shall include, but not be limited to: (1) measures for the preservation of the area’s resources; (2) indications of types and general intensities of development (including visitor circulation and transportation patterns, systems and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs; (3) identification of and implementation commitments for visitor carrying capacities for all areas of the unit; and (4) indications of potential modifications to the external boundaries of the unit, and the reasons therefor.47

The NPS directive that governs the creation of GMPs requires that the relevant portions of a GMP meet NEPA standards.48 As a result, park planners are able to use the GMP to “tier off” analyses of individual projects, as if they had undergone an analysis under NEPA directly.49 For a given park, this means that, instead of having to do a separate NEPA analysis every time a new project is contemplated, the planners may treat projects that have already been included within the GMP as if a NEPA analysis had already been completed.50 Ultimately, this is how the environmental analysis of Crissy Field Marsh was accomplished.

Both NEPA and the GMP standards require extensive public participation. For example, the GMP standard requires that:

Public involvement will be adequate to learn about the concerns, issues, expectations, and values of existing and potential visitors, park neighbors, people with traditional cultural ties to lands within the park, concessioners, cooperating associations, other partners, scientists and scholars, and other government agencies. Through public involvement, the National Park Service will share information about the planning process, issues, and proposed management actions; learn

note 43, at 40.
46 16 U.S.C.A. § 1a-7(b) (Westlaw 2012).
47 Id.
49 See 40 C.F.R. § 1508.28 (Westlaw 2012).
50 See id.
about the values placed by other people and groups on the same resources and visitor experiences; and build support among local publics, visitors, Congress, and others for implementing the plan. 51

In planning for the Presidio, NPS stated that the goal of the planning process was to “reach out to people and create a sense of ownership in the Presidio.” 52 In fact, NPS was so committed to reaching out to people that it enlisted Sunset magazine to provide contact information and invited its readers to engage in “public planning for the Presidio’s future.” 53

In 1980, GGNRA approved the first General Management Plan. 54 In October 1993, the park released an update called Draft General Management Plan and Environmental Impact Statement (DGMPA). 55 The DGMPA proposal for restoring wetlands along Crissy Field was modest: “if feasible, to restore a portion of the once abundant wetlands along the bay shore to increase native habitat.” 56 The DGMPA was amended in July 1994 by the Final General Management Plan Amendment and Environmental Impact Statement (FGMPA). Restoring Crissy Field, including Crissy Field Marsh, emerged as a priority and was included as a key element of the Proposed Action in the FGMPA. 57 Under the Proposed Action, Crissy Field would be managed to enhance opportunities for recreation (walking, jogging, running, biking, picnicking and scenic viewing), and the historic airfield structures would be preserved in keeping with their status within a National Historic Landmark District. 58 In particular, the FGMPA’s Proposed Action included restoring twenty to eighty acres of the former wetlands to the bay and creating a tidal marsh with a channel to the bay to “provide

51 Nat’l Park Serv., supra note 48, at 3.3.1.7.
52 Ives, supra note 1, at 25.
53 The Presidio: Another Great Park for San Francisco?, SUNSET, Nov. 1989, available at findarticles.com/p/articles/mi_m1216/is_n5_v183/ai_8065917/.
54 Creating a Park for the 21st Century, from Military Post to National Park: Final General Management Plan Amendment, Presidio of San Francisco, supra note 1, at 3; Rothman, supra note 37, at 62–63.
57 Id. at 89–91.
valuable habitat for shorebirds and water birds.\(^59\)

In June of 1996, NPS “tiered off” an Environmental Assessment for the Crissy Field Plan (EA) from the GGNRA Final General Management Plan Amendments and Final Environmental Impact Statement.\(^60\) An Environmental Assessment is intended to be a useful planning tool in determining whether the proposed action might have a potential for significant effect.\(^61\) It enables the agency to briefly provide sufficient evidence and analysis for determining whether to prepare a more detailed environmental assessment (Environmental Impact Statement) or a document explaining why the action will have no significant effects on the human environment (Finding of No Significant Impact).\(^62\) The 1996 EA focused exclusively on the rehabilitation of the 100-acre Crissy Field site.\(^63\) The EA analyzed improvements to the 100 acres of Crissy Field for largely recreational use, as well as restoration of a tidal marsh.\(^64\) In discussing recreational opportunities, the EA was enthusiastic: “[B]ecause much of Crissy Field is currently inaccessible to the public, an opportunity exists for greatly enhancing use of Crissy Field by improving its recreational amenities and incorporating features that will unify Crissy Field with the rest of the Presidio.”\(^65\) In contrast, the tone of the EA in describing the marsh restoration was tentative: “Favorable conditions could be recreated at Crissy Field for a tidal marsh that would have both educational and ecological value.”\(^66\) Perhaps this was because of the conditions that faced the designers at the beginning of the project: the EA flatly admitted that not only was there no current tidal marsh at Crissy Field, but that “the former tidal marsh was completely obliterated.”\(^67\) Nonetheless, the Park had made clear that establishing the tidal marsh was one of the critical goals of the rehabilitation of Crissy Field.\(^68\)

Informally, popular opinion about Crissy Field at that time was less than positive. Newspapers claimed that Crissy Field was essentially a dump.\(^69\) Crissy Field was described as the “Presidio’s industrial backyard

\(^{59}\) Id.


\(^{61}\) NAT’L PARK SERV., supra note 43, at 69.

\(^{62}\) See 40 C.F.R. § 1508 (Westlaw 2012).

\(^{63}\) JONES & STOKES ASSOCS., supra note 60, at 1-2.

\(^{64}\) Id. at 1-9–1-10.

\(^{65}\) Id. at 1-2.

\(^{66}\) Id.

\(^{67}\) Id. at 1-9.

\(^{68}\) Id. at 1-7.

\(^{69}\) Telephone Interview with Carol Prince, Golden Gate Conservancy (Oct. 25, 2011);
of run-down buildings and asphalt.”

Some members of the public called Crissy Field a “swamp” and expressed fears of mosquitoes, disease, and alligators that would eat people’s dogs, while local neighbors worried about safety and the possible construction of homeless shelters.

The management and staff of GGNRA were committed to formally assessing the public’s thoughts and perspectives in the 1990s. In 1995, the GGNRA held two workshops, each of which attracted more than 130 people. Interagency group meetings brought together NPS, United States Environmental Protection Agency Region 9, the United States Fish and Wildlife Service, the United States Army Corps of Engineers, the Bay Conservation and Development Commission, and the California Department of Health Services.

The park met with groups such as the San Francisco Recreation and Park Department, the California Coastal Conservancy, the Neighborhood Association for Presidio Planning, the Society for the Prevention of Cruelty to Animals and Crissy Field dog-walking groups, the San Francisco Boardsailing Association, People for the Presidio, and the GGNRA Advisory Commission Presidio Committee.

Not surprisingly, environmental and preservation groups were keenly interested in the rehabilitation of Crissy Field. NPS met with environmental groups ranging from the Marin and Audubon Societies, Point Reyes Bird Observatory, Gulf of the Farallones National Marine Sanctuary, National Parks Conservation Association, Sierra Club Presidio Task Force, and People for a GGNRA. Preservation groups involved in the scoping process included the San Francisco Landmarks Preservation Board, the Fort Point and Presidio Historical Association, the American Aviation Historical Society, the National Trust for Historic Preservation, and the American Institute of Architects, San Francisco.

The EA considered the Proposed Action, which included tidal marsh construction, and two other alternatives, a Dune Alternative and a No-Action Alternative, neither of which included a marsh. Potential...
consequences of the tidal marsh portion of the alternative were considered under geomorphology and soil impacts (less than significant) and water resource impacts (less than significant or beneficial).\textsuperscript{78} In addition, the EA considered impacts on human health, safety and the environment, such as whether the creation of the marsh would increase mosquito populations. This risk was also determined to be less than significant.\textsuperscript{79}

The next step in the environmental review was the release of an NPS Staff Report in September 1996. The Staff Report summarized the public comments, identified the issues raised by the public, discussed and responded to those issues, and considered whether the next step should be an Environmental Impact Statement or a Finding of No Significant Impact.\textsuperscript{80} It also made recommendations to the Superintendent of GGNRA regarding which alternative should be chosen and what modifications should be made to the proposed action, based on the public comments.\textsuperscript{81}

The report listed thirty-six agencies and organizations that were generally supportive of the plan, ranging from the United States Fish and Wildlife Service to the San Francisco Boardsailing Association.\textsuperscript{82} The Cow Hollow Association, a San Francisco neighborhood association, was the only organization that supported the Dune Alternative, which did not include the tidal marsh.\textsuperscript{83} An additional nineteen agencies or organizations made specific comments without stating a preference for any particular alternative.\textsuperscript{84} These included the San Francisco Yacht Club, the San Francisco Bureau of Environmental Health Management, and Bicycle Mass.\textsuperscript{85} The Staff Report summarized and responded to the public comments, dividing them into categories such as Scope of the EA and the NEPA Process, Traffic and Parking, Mason Street Bike Path Width, Helipad, Airfield Restoration, Vegetation, Coastal Processes/Impacts to St. Francis Yacht Club/Harbor and Neighborhood, Dogs, and Environmental Cleanup.\textsuperscript{86}

Regarding the marsh restoration specifically, the NPS characterized

\textsuperscript{78} Id. at 4-4.
\textsuperscript{79} Id. at 4-7.
\textsuperscript{80} NAT’L PARK SERV., GOLDEN GATE NAT’L RECREATION AREA, CRISSY FIELD ENVIRONMENTAL ASSESSMENT: STAFF REPORT 1 (1996).
\textsuperscript{81} Id. at 1.
\textsuperscript{82} Id. at 2.
\textsuperscript{83} Id. at 3.
\textsuperscript{84} Id.
\textsuperscript{85} Id.
\textsuperscript{86} See id. at 3–25.
the public comments as reflecting strong support. More than forty-five agencies and organizations and nearly 200 individuals commented in favor of either the marsh restoration or the proposed alternative (which included the marsh component). Several members of the public suggested design modifications, including relocating the marsh channel, or relocating paths or a boardwalk to limit access to the marsh. NPS responded by stating that, except for considering moving an access road, no further modifications were necessary because the EA adequately considered the placement of the channel and the impact that would result from access. Other comments recommended that the marsh be larger, and that NPS should put a culvert in the inlet channel. NPS acknowledged that such a culvert could be installed as mitigation, but only if it was needed to maintain an open channel.

NPS characterized opposition to the tidal marsh as limited to a few individuals and the Council on America’s Military Past. Only eight individuals recorded their opposition to the Proposed Action in general. Opposition to the Proposed Action was largely due to concern for the adequacy of the NEPA process and with parking and traffic impacts. In addition, one individual submitted 2,700 signatures on petitions opposing the creation of an “artificial Crissy Field wetland that would cause conflicts with traditional recreational uses, including off-leash dog walking.” A further 800 signatures were collected on petitions supporting continued opportunities for dog walking, but these petitions were silent on the issue of a wetland. These were characterized as comments regarding “dog walking.” NPS addressed these issues by stating that these concerns were already addressed in the EA, which provided expanded opportunities for off-leash dog walking and which took off-leash dog walking into account in the design of the marsh.

After this public consultation, NPS determined that improvement of Crissy Field, including the restoration of the tidal marsh, should be

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87 Id. at 11.
88 Id.
89 Id.
90 Id. at 11–12.
91 Id. at 12.
92 Id.
93 Id. at 13.
94 Id. at 2.
95 See id. at 3–10.
96 Id. at 13.
97 Id.
98 Id. at 13.
99 Id. at 13.
approved, and a Finding of No Significant Impact (FONSI) should be prepared.  

The Staff Report was presented to the GGNRA Advisory Commission on September 18, 1996, and was approved unanimously, allowing the Crissy Field Plan, including marsh design and construction, to proceed without further revision or public comment. The FONSI included a matrix of mitigation measures derived from the public comments. For example, there was a potential for siltation and closure of the tidal marsh inlet channel, so the FONSI committed to monitoring the inlet, periodically excavating sand, and, if necessary, considering construction of a culvert. The FONSI was signed on October 2, 1996, by Brian O’Neill, the Superintendent of GGNRA.

IV. THE ARCHAEOLOGICAL CHALLENGES

During the public comment period, the public expressed its concerns regarding the potential impact to unknown archeological and cultural resource sites. NPS committed to conduct research and test excavations, and to implement an archaeological monitoring program in accordance with a 1994 Programmatic Agreement, which stated that all human remains and other archaeological findings would be handled with the utmost care and respect. Further, NPS promised to consult with the appropriate Native American groups and conduct its operations in accordance with the law in the event that it discovered any prehistoric sites or burials.

The public and NPS had reason to anticipate that there might be archaeological findings, since there had long been evidence of native human occupation at the Presidio. NPS believed that prehistoric peoples had occupied an area called Estuary Bluff. Around 1912, a shell mound was discovered in the area that was to be filled in by the Panama Pacific International Exposition Company. Ironically, given the care

100 Id. at 28. Under NEPA, a FONSI is the document that presents the reasons that the proposed agency action will not have a significant impact on the human environment.  
102 Id. at 4.  
103 Id. at 5.  
104 Id.  
105 Id.  
106 Id.  
107 NAT’L PARK SERV., supra note 16, at 185.  
108 E. W. Gifford, Indian Mound Found in Presidio’s Limits, S.F. EXAMINER, Aug. 15, 1914. Shell mounds comprise the shells of edible mollusks and may also contain cultural artifacts. Shell mounds are believed to be evidence of prehistoric settlement in coastal environments.
with which archaeological sites are now treated, a newspaper reassured
the public that the site was “expected to be buried within six months.”

In 1972, the bones of a “California Indian” female were discovered. In
keeping with the growing respect NPS showed for human remains, these
were de-accessioned on October 15, 1986, and transferred to the Native
American Heritage Commission for reburial. Reflecting the increasing
sensitivity to Native American history and resources, and partially in
preparation for the marsh construction, NPS conducted a number of
archaeological surveys in Presidio in the 1990s.

Before the marsh reconstruction began, buried remains of a seasonal
village occupied by the Yelamu (one of fifty independent tribal groups)
were discovered. In order to preserve the site, NPS consulted with
members of contemporary Ohlone tribes and redesigned the marsh.

According to an observer, on the first day of the marsh restoration, the
contractors started digging at 8:00 AM; by 10:00 AM, they had
uncovered a shell midden. Construction shut down briefly until the
Native American community was involved to consult and monitor the
project.

V. THE ENGINEERING CHALLENGES

Designing a marsh was a unique challenge, because, in order for the
marsh to function, water has to flow through an open channel to the bay.
The design had to allow for an adequate “tidal prism”; that is, the
difference between the high water and low water volume of the marsh,
which would require either a large footprint or a deep channel. It
became clear during the planning process that there was not sufficient
space available to create a marsh with the recommended thirty-acre
footprint. Early planners thought that a thirty-acre footprint was required
in order to maintain a continuously open channel to the bay. Because of

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109 Id.
110 Letter from Rodger Hegler, Associate Professor, to Lt. Gonzales (Apr. 23, 1973) (on file
with author); Memorandum for Record, Michael W. Whitten, Nat’l Park Serv. (Oct. 15, 1986) (on
file with author).
111 LAND & CMTY. ASSOCS., NAT’L PARK SERV., PRESIDIO OF SAN FRANCISCO
CULTURAL LANDSCAPE ATLAS (Apr. 1991); NAT’L PARK SERV., CRISSEY FIELD
112 NAT’L PARKS CONSERVATION ASS’N, CRISSEY FIELD: A UNIQUE URBAN NATIONAL
PARK SITE ON THE PRESIDIO SHORELINE (2001).
113 Telephone Interview with Carol Prince, supra note 69.
114 Id.
115 Telephone Interview with Kristen Ward, supra note 17; E-mail correspondence from
Kristen Ward, Nat’l Park Serv. (Jan. 20, 2012); Tidal Prism, ANSWERS.COM,
www.answers.com/topic/tidal-prism#ixzz1mUFJ9oaS (last visited Apr. 23, 2012).
limitations on available space, the marsh’s footprint was designed to be twenty acres. The proposed creation of the twenty-acre tidal marsh was described in broad strokes in the EA.\textsuperscript{116} The marsh would be created by excavating soil and was initially envisioned as open water, intertidal sand and mud flats, with a perimeter of marsh vegetation.\textsuperscript{117} The marsh was designed to be “immature” and to mature over time through the natural processes of scouring and sedimentation.\textsuperscript{118} The tidal marsh would be connected to the bay by a fifteen-foot-wide channel that was expected to be shallow enough to wade in, but that would grow wider at high tide.\textsuperscript{119} In compensation for the reduced footprint, the marsh was dug deeper than originally planned in order to gain additional tidal prism.\textsuperscript{120}

After the marsh was created, it temporarily removed sand from the beach east of the marsh, resulting in exposed rock.\textsuperscript{121} NPS brought sand in to the east beach on August 2000 and January 2001. By October of 2001, the beach, which was a favorite of boardsailors, had naturally recovered most of its preconstruction volume.\textsuperscript{122} The park had considered boardsailors a key stakeholder since the Draft General Management Plan, which specifically provided boardsailors with access to the beach and with parking.\textsuperscript{123}

Although planners anticipated that the tidal flux would be enough to keep the mouth of the inlet open for twenty to thirty years, or even from thirty to fifty years, the EA had anticipated that mechanical excavation might be necessary.\textsuperscript{124} In fact, the channel closed within eighteen months of its initial opening, leading to the first mechanical excavation of the inlet in May 2001, coinciding with the Grand Opening celebration at Crissy Field.\textsuperscript{125} About six months later, the inlet closed again, but this time NPS closely monitored the channel and tested water quality of the marsh twice each day, considering whether the possibility of a natural reopening would result in the best long-term management approach.\textsuperscript{126} Frustrated by his belief that NPS was not responding quickly enough, an

\textsuperscript{116} JONES & STOKES ASSOCS., \textit{supra} note 60, at 2-23.
\textsuperscript{117} Id.
\textsuperscript{118} Id.
\textsuperscript{119} Id. at 2-28.
\textsuperscript{120} Telephone Interview with Kristen Ward, \textit{supra} note 17; E-mail correspondence from Kristen Ward, \textit{supra} note 115.
\textsuperscript{121} Telephone Interview with Kristen Ward, \textit{supra} note 17.
\textsuperscript{122} Id.
\textsuperscript{123} THE PARK QUARTERLY, \textit{supra} note 56, at 2.
\textsuperscript{124} JONES & STOKES ASSOCS., \textit{supra} note 60, at 2-28; NAT’L PARK SERV., \textit{supra} note 80, at 12.
\textsuperscript{125} Telephone Interview with Kristen Ward, \textit{supra} note 17; E-mail correspondence from Kristen Ward, \textit{supra} note 115.
\textsuperscript{126} Telephone Interview with Kristen Ward, \textit{supra} note 17.
individual named Wayne Lambright proudly dug a channel with a shovel (and memorialized it on his website). Mr. Lambert’s small channel provided just enough of a starter channel through the sand barrier to allow high tides to finish the work. The narrow channel quickly widened and deepened, and ultimately more than two feet of accumulated sand was scoured from the inlet channel and the marsh. NPS decided to discipline Mr. Lambright. For this first offense, NPS merely provided Mr. Lambright with an educational call. However, the channel closed again later that year, Mr. Lambright came back, and this time Park Police gave him a ticket and confiscated his shovel.

VI. FUNDING AND GROWING CRISPY FIELD

The Golden Gate National Parks Association (now the Golden Gate National Parks Conservancy (Parks Conservancy)) solicited donations from throughout the community, ranging from coins from school children to multi-million-dollar donations, in order to restore Crissy Field. One of the Parks Conservancy’s greatest contributions was to bring in school children from all over San Francisco, including Chinatown, Hunter’s Point and the Mission District; in exchange for planting native vegetation, the kids got tee shirts and a warm invitation to return to show their parents the plants they had planted. This program was so popular that the Parks Conservancy ended up having to ration plants because there were more kids than plants.

San Francisco resident and former president of Levi-Strauss & Company, Walter Haas Jr., regularly walked on Crissy Field and loved it. The Evelyn and Walter Haas, Jr. Fund began the long process of restoring Crissy Field with a gift of $110,000 to conduct planning studies. The Haas, Jr. Fund felt that the project required a broad funding base, not a single donor, because it felt Crissy Field had to involve diverse communities in the planning.

128 Telephone Interview with Kristen Ward, supra note 17; E-mail correspondence from Kristen Ward, supra note 115.
129 Telephone Interview with Kristen Ward, supra note 17.
130 Telephone Interview with Kristen Ward, supra note 17.
131 Telephone Interview with Carol Prince, supra note 69.
132 Id.
133 Id.
134 Id.
135 THE PARK QUARTERLY, supra note 56, at 8.
136 Telephone Interview with Carol Prince, supra note 69.
community shaped the design of the Field. For example, picnic areas were redesigned because input from community members showed that people wanted to have groupings of tables so large families could sit together.  

The Parks Conservancy hired a contractor, signed a contract for more than $10 million and began the challenging process of supervising the work. By November 1999, the marsh had been excavated and the channel to the bay was opened. By the spring of 2000, 60,000 native plants had been planted, largely by schoolchildren. At the same time, the Parks Conservancy also raised $30 million including a joint gift of $12 million from the Evelyn and Water Haas, Jr. Fund and $4 million from the Colleen and Robert Haas Fund, totaling the largest individual non-land gift ever received in support of America’s National Parks to this day. In total, the Campaign for Crissy Field brought in $35 million from 2,500 contributors who donated anywhere from $5 to $16 million; and Help Grow Crissy Field engaged 3,200 volunteers to plant 100,000 native plants. 

By winter of 2000-2001, wildlife in Crissy Field Marsh included migrating and resident bird species such as snowy egrets, great blue heron, brown pelicans, grebes, loons, cormorants and scaup; fish including staghorn sculpin, gobies and topsmelt; and invertebrates included mysid shrimp, burrowing clams, amphipods and polychaetes. By the winter of 2000, 14,000 native plants, representing fourteen native species, had been planted in Crissy Field Marsh with the help of community volunteers. More than 75,000 people celebrated Crissy Fields’ opening day on May 6, 2001, and Bob Haas himself was there to say to the crowd, “This is only the beginning at Crissy Field.”

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137 Id.
138 Id.
139 Renewing Crissy Field: News About the Crissy Field Restoration and Public Campaign (Golden Gate Nat’l Parks Ass’n), Spring 2000, Issue No. 3.
140 Id.
142 Id.
144 Golden Gate Nat’l Parks Ass’n, supra note 141; Erin Heimbinder, Revegetation of a San Francisco Coastal Salt Marsh, 2 Native Plants J. 54, 54–59 (2001), available at npj.uwpress.org/content/2/1/54.full.pdf+html.
VII. CONCLUSION

The creation, and ongoing management, of Crissy Field Marsh illustrates why public involvement is not only advantageous to the National Park Service, but necessary. Like the Golden Gate National Recreation Area itself, Crissy Field Marsh simply would not exist without the initiative and contributions of the public.

Certainly, there are geographical and physical issues to consider. NPS may have to reconsider the original objective of creating an ecologically viable, self-sustaining tidal marsh that would require little human intervention. The planners originally expected that the channel would remain open for decades, but as conditions have evolved, NPS has responded to best manage the resources and marsh. Currently, NPS mechanically excavates the marsh inlet once or twice a year. The marsh closes more frequently, but it often reopens naturally. Despite the early interest in how the inlet closures were managed, the public now appears to be comfortable with the current approach, and with NPS’s decisions about dredging. NPS must now consider another geographic uncertainty, that which comes from climate change and how this could affect habitats at Crissy Field. There is no certainty as to how high sea level will rise. NPS will have to rely on developing science, and continuing public engagement, to best manage the marsh, which could not have existed without so many years of public commitment.

146 JONES & STOKES ASSOC., supra note 60, at 2-23.
147 Telephone Interview with Kristen Ward, supra note 17.