

# 34th America's Cup Environmental Assessment

National Park Service  
U.S. Department of the Interior



U.S. Coast Guard



The Presidio Trust



U.S. Army Corps of Engineers



## **ENVIRONMENTAL ASSESSMENT**

### **34<sup>TH</sup> AMERICA'S CUP RACES**

**June 7, 2012**

#### **PREPARED FOR:**

U.S. Coast Guard

The National Park Service

U.S. Army Corps of Engineers

Presidio Trust

# Draft Environmental Assessment 34<sup>th</sup> America's Cup Races

San Francisco, California

Lead Agencies: National Park Service, U.S. Coast Guard  
Cooperating Agencies: U.S. Army Corps of Engineers, Presidio Trust

Pursuant to the National Environmental Policy Act (NEPA, 42 USC 4332(2)(C)), the National Park Service and the U.S. Coast Guard, in cooperation with the U.S. Army Corps of Engineers and the Presidio Trust, announce the availability of the Draft Environmental Assessment (EA) of the 34th America's Cup Races. The races would take place on lands and waters administered by federal government. On December 31, 2010, the City of San Francisco was chosen as the location to host the 34th America's Cup (AC34) sailing races. The America's Cup race events are proposed to take place in Summer-Fall 2013, with preliminary "World Series" races in Summer-Fall 2012. Races are proposed for marine areas subject to the U.S. Coast Guard authority and increased visitation is expected for lands managed by the National Park Service and the Presidio Trust. In addition, in-water facility upgrades and dredging are proposed along the San Francisco waterfront which would be subject to U.S. Army Corps of Engineers' authority. In addition, in-water construction and dredging are proposed along the San Francisco waterfront and would be subject to U.S. Army Corps of Engineers authority. The Draft EA evaluates potential environmental consequences of implementing the alternatives. Impact topics include the cultural, natural, and socioeconomic environments.

All of the action alternatives include a specified race area, spectator venues and secondary viewing areas, and race-related water-based developments. The Environmental Assessment (EA) presents and analyzes the potential consequences of implementing the following alternatives.

- Alternative A, No-Action
- Alternative B, Sponsor Proposed Project
- Alternative C, No Organized Events on NPS Lands
- Alternative D, Modified Program
- Alternative E, Preferred

**Decision Process:** The EA with the preferred alternative is released for public comment on June 8, 2012. The comment period will be 30 days (until Saturday July 7, 2012). All public comments will be taken into consideration; and any changes to the preferred alternative will be described in an errata which will be attached to each federal agency's Finding and Environmental Decision.

Comments will be accepted electronically at <http://parkplanning.nps.gov/AC34> or submitted by mail to: ESA, attn: AC34, 550 Kearny Street, Suite 900, San Francisco, CA 94108

A public meeting will be held on Thursday, June 21<sup>st</sup> from 6:30 - 8:00 p.m. at the Golden Gate Club - Cypress Room, 135 Fisher Loop on the Main Post in the Presidio, San Francisco. Additional project information may be found at <http://www.americascupnepa.org> or <http://parkplanning.nps.gov/AC34>.

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# GLOSSARY OF TERMS AND ACRONYMS

## GLOSSARY OF TERMS

**36 CFR Part 7, Final Rule** – This rulemaking provides temporary protection for western snowy plovers in the Crissy Field and Ocean Beach protection areas.

**archeological resources** – Historic and prehistoric deposits, sites, features, structure ruins, and anything of a cultural nature found within, or removed from, an archeological site.

**accelerated erosion** – An increased rate of soil erosion caused by humans or human-related factors.

**ADA accessible** – Meeting the requirements set forth in 28 CFR Part 36, revised July 1, 1994.

**adaptability** – Capacity to become modified based on changing circumstances.

**Advanced Life Support** – A level of care provided by prehospital emergency medical services. Advanced life support consists of invasive life-saving procedures including the placement of advanced airway adjuncts, intravenous infusions, manual defibrillation, electrocardiogram interpretation, and much more.

**amphibian** – Any of a class (Amphibia) of cold-blooded vertebrates intermediate between fishes and reptiles and having gilled aquatic young and air-breathing adults.

**anadromous fish** – Fish living mostly in the ocean and breeding in freshwater (e.g., steelhead trout, coho salmon). The ESA and the Organic Act require special protection for the anadromous fish found in areas of GGNRA.

**area of potential effects (APE)** – A term used in Section 106 to describe the area in which historic resources may be affected by a federal undertaking.

**aquatic environment** – Marine, estuarine, or freshwater resources that support animal and plant species.

**aquatic invertebrate** – An organism without a spine (insect, crustacean, etc.) that lives for all or most of its life in a body of water.

**armature** – A structure for offense or defense. Armatures constitute one of the internal hardened features masked by the battery earthworks.

**artifact** – An object created by humans, usually for a practical purpose, that remains from a particular period. Numerous prehistoric shell mounds and other artifacts have been identified in coastline areas from prehistoric Native American villages.

**artillery emplacement** – A prepared position for heavy, usually large-bore, military weaponry. Artillery emplacements constitute one of the internal hardened features masked by the battery earthworks.



**bare rock escarpments** – Long rocky cliffs or steep rocky slopes with limited vegetation separating comparatively level areas. These make up Rock-outcrop-Orthents complex at 30 to 75 percent slopes, and are found at many sites in GGNRA.

**barnabe soils** – Shallow, well-drained soils that are found on hills and mountainous uplands and have a slope of 9 to 75 percent.

**barracks** – Housing for soldiers/airmen. Crissy Airfield is the only Air Coast Defense Station airfield in the country that retains the majority of its original buildings, including the barracks.

**battery earthworks** – Earth placed over and around fortifications of brick, stone, and concrete (batteries) that were used as defensive structures, with features and equipment necessary to support a variety of artillery. Designed not only to absorb artillery impact but also to camouflage fortifications from the air and sea.

**bedrock parent material** – Bedrock is the solid rock that underlies all soil, and the material from which soil forms are called its parent material. When bedrock is worn or weathered away and creates soil, bedrock is the parent material that forms this residual soil. As a result of grinding movement along the many faults throughout GGNRA, bedrock parent materials within the park are jumbled, and a mixture of sandstone, basalt, and metamorphic rocks are present.

**benthic fauna** – Vertebrate and invertebrate organisms that inhabit the bottom of a body of water.

**benthic invertebrate** – An organism without a spine that lives in the bottom of a body of water. Includes crustaceans, flatworms, and other species, many of which are vital food sources for birds. See **benthic fauna**.

**biochemical oxygen demand** – The uptake rate of dissolved oxygen by the biological organisms in a body of water. It is listed as a conventional pollutant in the U.S. Clean Water Act and widely used as an indication of water quality.

**biological diversity** – Also called biodiversity. Refers to the variation of life forms found within a particular ecosystem. Often used as a measure of the health of biological systems. GGNRA is recognized as one of the most biologically diverse areas on the California coast.

**biosphere** – The complex formed by living organisms together with their environment. See **Golden Gate Biosphere Reserve**.

**brackish lagoons** – A brackish lagoon is a body of comparatively shallow water separated from the deeper sea by a shallow or exposed barrier beach, sandbank of marine origin, coral reef, or similar feature. Its water has more salinity than freshwater, but not as much as seawater.

**buried cultural resources** – Historic or prehistoric structures that have not yet been unearthed.

**California Department of Fish and Game (DFG)** – A California government department under the California Natural Resources Agency. The DFG manages and protects the state's fish, wildlife, plant resources, and native habitats, maintaining an informal list of plant and wildlife species of special concern.

**California Endangered Species Act (ESA)** – The California ESA is intended to provide additional protection to threatened and endangered species in California. The state ESA does not supersede the federal ESA, but operates in conjunction with it.

**California Fish and Game Code** – One of the 29 codes codifying the California statutes enacted by the California State Legislature and the governor. Although federal agencies are not required to comply with California’s Fish and Game Code, the NPS makes every reasonable effort to conduct its actions in a manner consistent with relevant state laws and regulations.

**California Native Plant Society (CNPS)** – A not-for-profit organization formed in 1965 that seeks to increase understanding of California’s native flora and to preserve that flora. The CNPS developed the *Inventory of Rare and Endangered Vascular Plants of California* which is published every 3 to 5 years and is used by the state and federal government for conservation planning.

**channelization** – The channelization of a waterway by straightening it (also usually by dredging/widening the natural streambed and/or building up high embankments on either side). Prevents the water from changing directions randomly, reducing net erosion. However, it can also cause wetland loss; downstream flooding; and loss of fish diversity and abundance because of reduction in habitat, elimination of riffles and pools, greater fluctuation of stream levels and water temperature, and shifting substrates. At GGNRA, the habitats of the tidewater goby and the bank swallow are both threatened by channelization.

**chaparral** – An ecological community consisting of shrubby, drought-resistant plants found primarily in California and the northern portion of the Baja California peninsula. Chaparral within the GGNRA provides habitat for federally endangered plant species.

**chert** – A resistant rock material found in the Franciscan Complex, resembling flint and consisting mostly of fibrous chalcedony. See **Mélange areas**.

**Citizens’ Advisory Commission** – Coordinated public involvement in the park. Its charter stated that the commission could make recommendations on various policy issues from the citizens’ point of view, in compliance with NPS policies.

**clay loam** – Soil containing a relatively high percentage of clay, about the same amount of sand, and the remaining portion silt.

**cliff erosion** – The wearing away of cliff faces due to natural, human, and dog-caused effects. A portion of Fort Funston is restricted to visitors in order to prevent cliff erosion and to protect bank swallow habitat and native plant communities.

**Coast Miwoks** – The second largest group of Miwok Native American people. The Coast Miwoks inhabited the general area of modern Marin County and southern Sonoma County in northern California, from the Golden Gate north to Duncans Point and eastward to Sonoma Creek.

**coastal batteries** – Artillery emplacements along the California coast. The historic structures analyzed in this plan/EIS include battery earthworks and other field fortifications associated with a number of coastal batteries within Marin and San Francisco counties.

**Coastal Zone Management Act (CZMA)** – A federal statute which encourages state, local, regional, and federal agencies to cooperate when implementing their coastal zone programs.

**Code of Federal Regulations** – The codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

**coho salmon** – A federally threatened salmonid inhabiting the streams and lagoons in GGNRA.



**colonial nesting** – Refers to large aggregations of individuals of one or more species of bird that nest in close proximity at a particular location. Most colonial nesters tend to be birds that feed in wetland habitats, such as seabirds, although colonially nesting birds also include groups such as the swifts, swallows, and martins.

**cooperating agency** – a federal agency other than the one preparing the NEPA document (lead agency) that has jurisdiction over the proposal by virtue of law or special expertise and that has been deemed a cooperating agency by lead agency.

**concession revenues** – Monies received from businesses in return for permission to operate on park lands. One source of GGNRA non-operational funding.

**contiguous habitat** – Unfragmented habitat. Particularly important for those species who have difficulty crossing from one chunk of habitat to another; e.g., the federally listed mission blue butterfly, which is found in GGNRA.

**critical habitat** – The area of land and water with physical and biological features essential to the conservation of federally listed threatened and endangered species and which may require special management considerations or protection.

**Council on Environmental Quality** – As provided by NEPA, the Council on Environmental Quality (CEQ) was established in the executive office of the President. CEQ is composed of three members appointed by the President with the advice and consent of the Senate. The council is to “analyze and interpret environmental trends and information of all kinds; to appraise programs and activities of the Federal Government in the light of the policy set forth in subchapter I of this chapter; to be conscious of and responsive to the environmental, economic, social, esthetic, and cultural needs and interests of the Nation; and to formulate and recommend national policies to promote the improvement of the quality of the environment.”

**Cronkhite soils** – Deep, moderately well-drained soils that are found on hills with slopes of 9 to 75 percent.

**cultural resources** – the broad category of socio-cultural resources and historic properties that reflect the relationship of people with their environment.

**cultural resource specialist** – Cultural resource specialists monitor projects and perform research to ensure the stabilization, preservation, and restoration of historic structures and landscapes and archeological resources.

**cumulative actions** – Actions that when viewed with other actions in the past, the present, or the reasonable foreseeable future regardless of who has undertaken or will undertake them, have an additive impact on the resource the proposal would affect.

**cumulative impact** – the impacts of cumulative actions.

**day visitor** – Visitors that do not stay overnight in the park; includes both local overnights and day excursion visitors.

**Department of Commerce** –The Cabinet department of the U.S. government concerned with promoting economic growth. The mission of the department is to “promote job creation and improved living standards for all Americans by creating an infrastructure that promotes economic growth, technological competitiveness, and sustainable development.” It administers NOAA and

NMFS. See **National Oceanic and Atmospheric Association (NOAA)** and **National Marine Fisheries Service (NMFS)**.

**depletable resources** – Nonrenewable resources. Natural resources that exist in a fixed amount or are consumed much faster than nature can re-create them.

**direct effect** – An impact that occurs as a result of the proposed action or alternative in the same place and at the same time as the action.

**Director's Order (DO)** – A source of detailed written guidance issued by the NPS director to help managers make day-to-day decisions. Director's Orders supplement and may amend Management Policies.

**diversity** – See **biological diversity**

**earthworks** – An embankment or other construction made of earth, especially one used as a field fortification. The earthworks at Battery Townsend in the Marin Headlands constitute one of GGNRA's important cultural resources.

**ecosystem** – An ecosystem can be defined as a geographically identifiable area that encompasses unique physical and biological characteristics. It is the sum of the plant community, animal community, and environment in a particular region or habitat.

**educational outreach** – Efforts by NPS staff to educate the public. Educational outreach can be accomplished using pamphlets, newsletters, signs, law enforcement and other techniques.

**egrets** – Wading birds, usually white, that bear long plumes during the mating season. The long feathers distinguish egrets from herons, a distinction based more on appearance than on biology. Although egrets have the same build as the larger herons, they tend to be smaller.

**emergent aquatic vegetation** – Emergent aquatic plants are rooted in the lake bottom, but their leaves and stems extend out of the water. This vegetation along the edge of watercourses and wetlands provides critical habitat for some listed species.

**emergent wetland** – Wetland characterized by frequent or continual inundation dominated by herbaceous plant species typically rooted underwater and emerging into air (e.g., cattails, rushes). The emergent wetland class is characterized by erect, rooted, herbaceous hydrophytes (e.g., cattails, rushes), excluding mosses and lichens. This vegetation is present for most of the growing season in most years. Perennial plants usually dominate these wetlands. All water regimes are included, except sub-tidal and irregularly exposed.

**encroachment** – Invasion of natural habitat by non-native, invasive vegetation.

**Endangered Species Act of 1973 (ESA)** – Provides for the conservation of threatened and endangered species of fish, wildlife and plants, and the critical habitat upon which threatened and endangered species depend.

**endangered species** – Any species that is in danger of extinction throughout all or a significant portion of its range, other than pests whose protection would present a risk to man (ESA of 1973, Public Law 93-205).

**Environmental Assessment (EA)** – A public document required under the National Environmental Policy Act that identifies and analyzes activities that might affect the human and natural environment. An EA is considered a concise public document which provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS), aids an agency’s compliance with NEPA when no EIS is necessary, and it facilitates preparation of an EIS when one is necessary.

**Environmentally preferred alternative** – Of the action alternatives analyzed, the one that would best promote the policies in NEPA section 101. This is usually selected by the IDT members, CEQ encourages agencies to identify an environmentally preferable alternative in the draft EA, but only requires that it be named in the Record of Decision.

**estuarine fauna** – Organisms that live or forage in estuaries. Estuarine fauna in GGNRA include the coho salmon, steelhead trout, and tidewater goby, all of which can be affected by increased turbidity, increased nutrients.

**estuarine** – Of, formed in, or relating to an estuary (a water passage where a tide meets a river current; especially an arm of the sea at the lower end of a river).

**ethnographic resources** – Resources that would inform the scientific description of the customs of individual peoples and cultures in the GGNRA area, or such descriptive works themselves. It is not expected that ethnographic resources will be affected by this plan and they are not included for analysis in the plan/EIS.

**exclosure fencing** – Fencing around an area (e.g., a western snowy plover nesting area) to exclude humans, dogs, and other animals in order to protect the species within the exclosure.

**exotic weeds** – Non-native, invasive plant, which can crowd out native plants that may have important habitat value to other native species.

**facilities** – Buildings, communications support structures, and the associated supporting infrastructure such as roads, trails, and utilities.

**Federal Register** – Published by the Office of the Federal Register, National Archives and Records Administration (NARA), the Federal Register is the official daily publication for rules, proposed rules, and notices of federal agencies and organizations, as well as executive orders and other presidential documents.

**federally listed endangered species** – An endangered species is one that is in danger of extinction throughout all or a significant portion of its range. Before a species can receive protection under the ESA, it must first be placed on the federal list of endangered species. All actions leading up to and including listing of a species as endangered are published in the Federal Register (USFWS Endangered Species Program).

**field fortifications** – Military earthwork features such as foxholes, trenches, etc., generally temporary in nature. The locations of the World War II era field fortifications at GGNRA are generally indicated only by suspicious landforms or gun mounts sticking up from the sand.

**Finding of No Significant Impact (FONSI)** – The public document describing the decision made on selecting the “Preferred Alternative” in an EA.

**Fish and Wildlife Coordination Act of 1934 (as amended)** – A federal regulation enacted in 1934 to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The Act provides the basic authority for the involvement of the USFWS in evaluating impacts to fish and wildlife from proposed water resource development projects.

**flushing wildlife** – Intentionally or unintentionally causing animals to flee because of noise or other disturbance.

**Franciscan Mélange** – Also Franciscan complex. A landscape of easily eroded, sheared, and crushed sandstone and shale. The bedrock to the north of the Tennessee Valley is composed of this erodible assemblage. See **Mélange areas**.

**geographic information system (GIS)** – Any system that captures, stores, analyzes, manages, and presents data that are linked to location.

**geological resources** – A naturally occurring solid, liquid, or gas that is known or thought to exist in or on the Earth's crust in concentrations that make extraction economically feasible, either at present or at some time in the future.

**Golden Gate Biosphere Reserve** – A biosphere reserve in Northern California created by UNESCO in 1988, which encompasses thirteen protected areas in the San Francisco Bay Area. It includes a diverse range of marine, coastal, and upland habitats.

**Golden Gate National Recreation Area Enabling Legislation** – GGNRA was established by Congress in 1972 (PL 92-589). Based on the record, making national park resources and programs available to a wide variety of visitors was clearly intended by Congress and the administration to be a major purpose of GGNRA (NPS 1980), along with the legislation's direction to observe sound principles of land use planning and management and preserve the scenic beauty and natural character of the area.

**Golden Gate National Recreation Area Superintendent's Compendium** – The format wherein each park, as allowed by the CFR, can publish park-specific actions to protect cultural or natural resources, enhance public health or safety, or avoid conflict among visitor use activities.

**gravelly loam** – Soil containing 7 to 27 percent clay, 28 to 50 percent silt, and 15 to 35 percent gravel by volume.

**grebe** – A member of a widely distributed order of freshwater diving birds (Podicipediformes), some of which visit the sea when migrating and in winter.

**guardhouse** – Building used as a headquarters by soldiers on guard duty. Crissy Airfield retains the majority of its original buildings, including the guardhouse.

**gulls** – Laridae; some of the birds for which the shoreline of San Francisco Bay provides feeding, breeding, roosting, and wintering habitat.

**gully** – A trench formed by soil erosion caused by running water.

**gun mount** – A weapon component used to secure an armament, which permits the operator to rest the weapon on the mount, steadying the weapon and increasing accuracy.

**habitat alteration** – Alteration of habitat occupied by unique or sensitive species can include trampled vegetation, altered or eroded soils, inadvertently introduced non-native species of plants, and increased potential for predators. Intensive human or dog use can result in any or all of these effects. Some wildlife species are highly vulnerable to even slight changes in habitat.

**habitat corridor** – A strip of land that aids in the movement of species between disconnected areas of their natural habitat. Habitat fragmentation due to human development is an ever-increasing threat to biodiversity, and habitat corridors are a possible solution. The equestrian trail in Fort Funston is within a habitat corridor.

**habitat** – The place or environment where a plant or animal naturally lives. Can be classified as nesting habitat, foraging habitat, wintering habitat, and other life-cycle divisions.

**hangar** – A covered area, usually enclosed, for housing and servicing aircraft. Crissy Airfield retains the majority of its original buildings, including the hangars.

**harassment** – Creating the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, including breeding, feeding, or sheltering (ESA, 50 CFR 17.3).

**historic and cultural resources** – Under NEPA, culturally valued pieces of real property (not historic properties) and non-tangible values such as cultural use of the biophysical and built environments, and sociocultural attributes such as social cohesion, life ways, religious practice and other social institutions (40 CFR 1508.27(b)(3)).

**historic properties** – Under NHPA and NEPA, a prehistoric or historic district, site, building, structure, object, landscape, or traditional cultural resource to which American Indians attach cultural and religious significance that is listed in, or eligible for listing in, the NRHP (36 CFR 800.16(l)(1) 40 CFR 1508.27(b)(8)).

**herons** – Wading birds in the Ardeidae family, some of which are called egrets or bitterns instead of herons. Egrets are not biologically distinct from the herons, and tend to be named differently because they are mainly white and/or have decorative plumes.

**historic structures** – Buildings or other man-made structures representative of a particular period in history. The historic structures in GGNRA, including field fortifications and other remnants of the coastal batteries of World War II, are cultural resources.

**invasive species** – Usually non-native species, which can out-compete native species for habitat and resources.

**indirect impact** – reasonably foreseeable impacts that occur removed in time or space from the proposed action. There are “downstream” impacts, future impacts, or the impacts of reasonably expected connected actions.

**lagoons** – Shallow sounds, channels, or ponds near or communicating with a larger body of water (in this case, the Pacific Ocean).

**landmark designation** – Nationally significant historic places may be designated as landmarks by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States.

**lead agency** – the agency either preparing or taking primary responsibility for preparing the NEPA document.

**loam** – Soil containing 7 to 27 percent clay, 28 to 50 percent silt, and 23 to 52 percent sand by volume.

**machine gun pit** – A field fortification offering supplemental support to the fortified batteries.

**Marine Mammal Protection Act** – This federal law, enacted in 1972, was the first article of legislation to call specifically for an ecosystem approach to natural resource management and conservation. MMPA prohibits the taking of marine mammals, and enacts a moratorium on the import, export, and sale of any marine mammal, along with any marine mammal part or product within the United States.

**marsh** – A tract of soft, wet land usually characterized by monocotyledons (e.g., grasses, cattails). Marshes in GGNRA include tidal marshes, freshwater marshes, brackish marshes, and one salt marsh (at Crissy Field).

**Mélange areas** – Topographically, Mélange areas have broad ridge crests and gentle slopes. Because they are more easily eroded, there are frequent earthflows. See **Franciscan Mélange**.

**Migratory Bird Treaty Act of 1918** – A law making unlawful the kill, capture, buy, sell, import, or export of migratory birds, eggs, feathers, or other parts.

**migratory birds** – Birds that move periodically from one region to another for feeding, breeding, or wintering.

**mitigation** – Lessening the effects of an adverse impact, either by reducing the impact itself or by arranging for acceptable mitigation elsewhere in the park or off site; for example, by restoring alternative habitat and relocating affected individuals.

**National Environmental Policy Act (NEPA)** – The federal act that sets national environmental policies and requires preparation of environmental impact statements for major federal actions that may significantly affect the quality of the human environment.

**National Historic Preservation Act** – A law enacted in 1966 that requires federal agencies to consider the effects of their undertakings on properties listed or potentially eligible for listing on the National Register of Historic Places. All actions affecting the parks' cultural resources must comply with this legislation.

**National Marine Fisheries Service (NMFS)** – A federal agency that is a division of the NOAA. The NMFS is responsible for the stewardship and management of the nation's living marine resources and their habitat within the United States' Exclusive Economic Zone, which extends seaward 200 nautical miles from the coastline.

**National Oceanic and Atmospheric Association (NOAA)** – NOAA is a scientific agency within the U.S. Department of Commerce focused on the conditions of the oceans and the atmosphere. NOAA warns of dangerous weather, charts seas and skies, guides the use and protection of ocean and coastal resources, and conducts research to improve understanding and stewardship of the environment.

**National Park Service Management Policies** – A policy is a guiding principle or procedure that sets the framework and provides direction for management decisions. NPS policies are guided by and consistent with the Constitution, public laws, Executive proclamations and orders, and regulations and directives from higher authorities. Policies translate these sources of guidance into cohesive



directions. Policy direction may be general or specific. It may prescribe the process by which decisions are made, how an action is to be accomplished, or the results are to be achieved. The primary source of NPS policy is the publication Management Policies 2001. The policies contained therein are applicable Service-wide. They reflect NPS management philosophy. Director's Orders supplement and may amend Management Policies. Unwritten or informal "policy" and people's various understandings of NPS traditional practices are never relied on as official policy.

**National Park Service Organic Act** – In 1916, the NPS Organic Act established the NPS in order to "promote and regulate use of parks..." and defined the purpose of the national parks as "to conserve the scenery and natural and historic objects and wild life therein and to provide for the enjoyment of the same in a manner and by such means as will leave them unimpaired for the enjoyment of future generations." This law provides overall guidance for the management of Yosemite National Park.

**National Vegetation Classification System** – Devised by the USGS/NPS Vegetation Mapping Program in response to the NPS Natural Resources Inventory and Monitoring Guideline (NPS-75) issued in 1992. The objective of the Vegetation Mapping Program is to develop a uniform hierarchical vegetation classification standard and methodology on a Service-wide basis and, using that classification standard and methodology, to generate vegetation maps for most of the park units under NPS management.

**native plant communities** – Interdependent complexes of naturally occurring vegetation, which nourish native wildlife and which require specific soil conditions and other habitat characteristics to survive.

**natural processes** – All processes (such as hydrologic, geologic, ecosystemic) that are not the result of human manipulation.

**No Action Alternative** – The alternative in an EIS that proposes to continue current management direction. "No action" means the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.

**non-native species** – Species of plants or wildlife that are not native to a particular area and often interfere with natural biological systems.

**Ohlones** – One of the two major indigenous communities (the other being the Coast Miwoks) occupying the lands around San Francisco Bay at the time of first contact with non-indigenous visitors. Approximately 50 small, politically independent tribes of Ohlones lived south of the Golden Gate.

**Organic Act of 1916** – Established the National Park Service. The Act requires conservation of park scenery, natural and historic objects, and wildlife, and provision for the enjoyment of park resources in such a manner as to leave them unimpaired for the enjoyment of future generations. Prohibits actions that impair park resources unless a law directly and specifically allows for these actions (16 USC 1a-1).

**park concessionaires** – Businesses that pay the park fees for permission to do business within park grounds.

**passive recreational experiences** – In contrast with active recreation, such as biking, playing frisbee, and windsurfing, passive recreation is usually quieter and includes activities such as walking, bird-watching, and picnicking.



**pelagic birds** – Oceanic birds; birds that live and hunt primarily on the open sea, returning to land only to breed. Species include petrels, sooty terns, and shearwaters.

**perennial** – Persisting for several years, usually with new herbaceous growth.

**perturbation processes** – The causes and effects of disturbance to a given group. One of the steps toward advancing the recovery of the mission blue butterfly is identification of the perturbation processes.

**pH** – A measure of the acidity or alkalinity of a solution: Solutions with a pH less than 7 are said to be acidic and solutions with a pH greater than 7 are said to be alkaline (or basic). One of the water quality indicators measured at several of the park’s waterbodies by GGNRA.

**phosphorus** – A chemical element that is essential for all living cells. The most important commercial use of phosphorus-based chemicals is the production of fertilizers; however, phosphorus levels in water may increase due to animal waste, among other factors. Phosphorus is one of the water quality indicators measured for during testing of GGNRA waterbodies.

**Presidio Trust Act** – In 1996, Congress passed the Presidio Trust Act, creating the Presidio Trust as a wholly owned federal government corporation and granting jurisdiction of the 1,168-acre inland area of the Presidio, known as Area B, to the Trust.

**promenade** – A place for strolling.

**promulgate** – Proclaim or put into action (as a rule or regulation).

**propagation** – Increasing in numbers or area, usually by reproduction (plants).

**prostrate** – Lying flat on the ground (plants).

**restored habitat** – Areas of soil, water, and vegetation that have been returned to their original functions and values by focused restoration activities.

**riparian coastal scrub** – One of the plant communities present in GGNRA. Understory is an important wildlife habitat component of riparian coastal scrub and other plant communities within GGNRA.

**riparian areas** – The land area and associated vegetation bordering a stream or river.

**roosting** – Settling down for rest or sleep; perching (birds). Resting habitat can be particularly important to migrating shorebirds, thousands of which come to GGNRA.

**San Francisco Metropolitan Statistical Area (MSA)** – Comprising the counties of San Francisco, San Mateo, and Marin counties, each of which encompasses GGNRA lands.

**sag ponds** – A body of water that forms as water collects in the depressions that form between two strands of an active strike-slip fault. The federally threatened California red-legged frog is known to breed in sag ponds.

**saline hydraquents** – Hydric soils located in tidal flats. These soils are flat (0 to 2 percent slope) and very poorly drained. The soils have a very low available water capacity and a moderate to strong salinity.

**seabirds** – Includes birds that live around the sea adjacent to land, as well as pelagic birds. See **pelagic birds**.

**Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation** – Effective September 1983, these standards and guidelines are not regulatory and do not set or interpret agency policy. They are intended to provide technical advice about archeological and historic preservation activities and methods.

**Secretary of the Interior** – Head of the Department of the Interior, which oversees such agencies as the Bureau of Land Management, the U.S. Geological Survey, and the National Park Service. The Secretary also serves on and appoints the private citizens on the National Park Foundation board and is a member of the President’s Cabinet. The ESA requires all federal agencies to consult with the Secretary of the Interior on all projects and proposals having potential impacts on federally threatened and endangered plants and animals.

**sediment** – A particle of soil or rock that was dislodged, entrained, and deposited by surface runoff or a stream. The particle can range in size from microscopic to cobble stones.

**seismically active** – Containing active faults that periodically result in earthquakes. GGNRA is located in a seismically active area, due to the presence of the San Andreas fault and multiple smaller faults.

**serpentine soils** – These rare soils have a low calcium to magnesium ratio; they have high concentrations of other metals; and they lack essential nutrients, such as nitrogen, potassium, and phosphorus. At least twenty-eight plant and animal species occur either exclusively or primarily on serpentine soils in the Bay Area. Of these species, half are federally listed as threatened or endangered and the remainder are species of concern.

**sewer outfall** – Outlet or mouth of a sewer.

**shorebird** – Any of a suborder of birds (*Charadrii*) that frequent the seashore. GGNRA waterfront lands provide habitat for thousands of shorebirds, including the federally threatened western snowy plover.

**silty clay loam** – Soil consisting of 27 to 40 percent clay, 40 to 73 percent silt, and 0 to 20 percent sand, which characterizes the Blucher-Cole complex.

**socioeconomics** – Relating to a combination of social and economic factors.

**socio-cultural resources** – Under NEPA, culturally valued pieces of real property (not historic properties) and non-tangible values such as social use of the biophysical and built environments and socio-cultural attributes such as social cohesion, life ways, religious practice and other social institutions (40 CFR 1508.27(b)(3)), including those that may have acquired an historical relevance by virtue of their continued use over time but do not meet the NRHP standards to qualify as historic properties.

**soundscapes** – The overall auditory character of an area.

**Special Ecological Area (SEA)** – The identified area in each ecological community type that is most biologically intact and diverse and has the most important biological values. In 1999, the Natural Resources section of the GGNRA RMP designated nine SEAs in the park.

**succession** – The process by which vegetation recovers following a disturbance or initially develops on an unvegetated site.

**terns** – Seabirds in the family Sternidae. The shoreline of San Francisco Bay provides feeding, breeding, roosting, and wintering habitat for terns, among other bird species.

**terrestrial habitats** – Land habitats, as distinct from freshwater and marine habitats.

**threatened and endangered species** – Species of plants that receive special protection under state and/or federal laws; also referred to as “listed species,” “endangered species,” or “special status species.”

**tidal lagoon** – Any lagoon in which a rise and fall of the water level takes place as a result of the action of the tides.

**traditional cultural resource** – Any site, structure, object, landscape, or natural resource feature assigned traditional, legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.

**trail corridor** – The area immediately surrounding and including the trail; invariably wider than the trail itself. Various factors influence the width of the trail corridor, including safety considerations, jurisdictional issues, and topography.

**turbidity** – Quality of being thick or opaque with roiled sediment.

**urbanized** – Having taken on the characteristics of a city; nonrural.

**user capacity** – As it applies to parks, user capacity is the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions based on the purpose and objectives of a park unit.

**U.S. Department of the Interior** – The U.S. federal executive department responsible for the management and conservation of most federal land and the administration of programs relating to Native Americans, Alaska Natives, and Native Hawaiians, and to insular areas of the United States. Its operating units include the Bureau of Indian Affairs, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Geological Survey.

**Vegetation Stewardship Program** – Coordinates habitat restoration activities in over 2,500 acres of the park. The habitat restoration component of the Vegetation Stewardship Program currently consists of four key program elements: the Site Stewardship Program, the Presidio Park Stewards, the Habitat Restoration Team, and the Invasive Plant Patrol.

**visitor amenities** – Such services as visitor parking, visitor centers, etc. The area at Lands End near the restored Coastal Trail is being developed with visitor amenities that would further increase visitation and use.

**visitor experience** – The perceptions, feelings, and reactions a park visitor has in relationship with the surrounding environment.

**wetlands** – Lands transitional between terrestrial and aquatic systems, where the water table is usually at or near the surface or the land is covered by shallow water.

## ACRONYMS

ABAG	Association of Bay Area Governments
AB32	California Global Warming Solutions Act (California Assembly Bill 32)
AB939	California Integrated Waste Management Act of 1989 (California Assembly Bill 939)
AC34	The 34th America’s Cup event
AC45	45-foot long sailing yachts used in America’s Cup 2012 events
AC72	72-foot long sailing yachts to be used in America’s Cup 2013 events
ACCS	America’s Cup Challenger Series
ACDS	America’s Cup Defender Series
ACEA	America’s Cup Event Authority
ACEA	America’s Cup Event Authority Television
ACHP	Advisory Council on Historic Preservation
ACOC	America’s Cup Organizing Committee
ACRM	America’s Cup Race Management
ACWS	America’s Cup World Series
ASCE	American Society of Civil Engineers
AC Transit	Alameda-Contra Costa Transit
ADA	Americans with Disabilities Act
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AGL	above ground level
AISC	American Institute of Steel Construction
ALS	Advanced Life Support
APE	Area of Potential Effects
APS	alternative planning strategy
ARB	California Air Resources Board
ARPA	Archeological Resources Protection Act
ASL	above sea level
ASTM	American Society for Testing and Materials
AWL	Audobon Watch List
BASMAA	Bay Area Stormwater Management Agencies Association
BAT	best available technology economically achievable
BCT	best conventional pollutant control technology
BAAQMD	Bay Area Air Quality Management District

BART	Bay Area Rapid Transit District
BCDC	San Francisco Bay Conservation and Development Commission
BM's	boatswains mates
BMPs	best management practices
BPI	Building Performance Institute
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standard
CAFE	Corporate Average Fuel Economy
C-APE	CEQA Area of Potential Effects
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Code
CBNMS	Cordell Bank National Marine Sanctuary
CBP	Customs and Border Protection
CCSF	City and County of San Francisco
CCA	California Coastal Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDPR	California Department of Parks and Recreation
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CGDC	Coast Guard District Commander
CH <sub>4</sub>	methane
CHP	California Highway Patrol
CLIA	Cruise Lines International Association
CLR	cultural landscape report
CMP	Congestion Management Program
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level

## GLOSSARY OF TERMS AND ACRONYMS

CNPS	California Native Plant Society
CNR	Club Nautico di Roma
CNG	compressed natural gas
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide-equivalent
Corps	United States Army Corps of Engineers
COTP	Captain of the Port
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSLC	California State Lands Commission
CSO	combined sewer overflow
CSDR	Cruise Ship Discharge Report
CWA	Federal Clean Water Act
CWO2	chief warrant officer
cy	cubic yards
CZMA	Coastal Zone Management Act
dB	decibel
dBA	decibel, A-weighted
DBI	San Francisco Department of Building Inspection
DBW	California Department of Boating and Waterways
DDA	Disposition and Development Agreement
DDT	dichlorodiphenyltrichloroethane
DEHP	di (2ethylhexyl) phthalate
DFG	Department of Fish and Game
DMMO	Dredged Material Management Office
DNL	day-night average sound level (DNL, also written as L <sub>dn</sub> )
DO	Director's Order
DOT	United States Department of Transportation
DPM	diesel particulate matter
DPW	San Francisco Department of Public Works
DTSC	California Department of Toxic Substance Control
DWR	California Department of Water Resources
EA	environmental assessment
EDMS	Emissions and Dispersion Modeling System

EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EISA	Energy and Independence Security Act
EMFAC	emission factors model
EPA	United States Environmental Protection Agency
EPCA	Energy Policy and Conservation Act
ERO	San Francisco Environmental Review Officer
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FONSI	finding of no significant impact
FS	food service specialist
FTA	Federal Transit Administration
GGBHTD	Golden Gate Bridge Highway and Transportation District
GGNRA	Golden Gate National Recreation Area
GGT	Golden Gate Transit
GGYC	Golden Gate Yacht Club
GHGs	Greenhouse gases
GOGA	Golden Gate National Recreation Area
GIS	geographic information system
GFNMS	Gulf of the Farallones National Marine Sanctuary
GM	gunners mate
GMP	general management plan
GMPA	general management plan amendment
gpm	gallons per minute
GRI	Geological Resources Inventory
gsf	gross square feet
GTA	ground transportation area
GVW	gross vehicle weight
GWH	gigawatt hours



## GLOSSARY OF TERMS AND ACRONYMS

HAPC	habitat area of particular concern
HCD	California State Department of Housing and Community Development
HCM	Highway Capacity Manual
HEPA	High Efficiency Particulate Air Filter
HFCs	hydrofluorocarbons
HMBP	hazardous materials business plan
hp	horsepower
HPC	San Francisco Historic Preservation Commission
HRER	Historical Resources Evaluation Report
Hz	hertz
HVAC	heating/ventilating/air conditioning
I-280	Interstate 280
I-80	Interstate 80
ICT	Incident Command Team
ICS	Incident Command System
IEP	Interagency Ecological Program for the San Francisco Estuary
INM	Integrated Noise Model
IPCC	International Panel on Climate Change
kWh	kilowatt-hours
LASH	lighter aboard ship
LEED	Leadership in Energy and Environmental Design
$L_{eq}$	Equivalent Energy Noise Level
$L_{dn}$	day-night average sound level
$L_{max}$	The instantaneous maximum noise level measured during the measurement period of interest.
$L_x$	The sound level that is equaled or exceeded x percent of a specified time period. The $L_{50}$ represents the median sound level (i.e., the noise level exceeded 50 percent of the time)
LOS	Level of Service
LTMS	Long-Term Management Strategy
LTS	less than significant
LTSM	less than significant with mitigation
LVW	loaded vehicle weight
MARPOL	International Convention for the Prevention of Pollution from Ships
MBNMS	Monterey Bay National Marine Sanctuary

MEI	maximum exposed individual
mgd	million gallons per day
mg/kg	milligram per kilogram
MHE	Maximum Historic Earthquake
MK	machinery technician
MLB	motor lifeboat
MLD	most likely descendant
MLLW	mean lower low water
MMDP	Materials Management Disposal Plan
MMPA	Marine Mammal Protection Act
MMRP	Mitigation Monitoring and Reporting Program
MMTCO <sub>2e</sub>	million gross metric tons equivalents
MMWD	Marin Municipal Water District
MPA	national marine protected area
MPO	metropolitan planning organization
MS4s	municipal separate storm sewer systems
MSDs	marine sanitation devices
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MRZs	Mineral Resource Zones
Muni	San Francisco Municipal Railway
MW	megawatt
M <sub>w</sub>	maximum earthquake moment magnitude
ng/m <sup>3</sup>	nanograms per cubic meter
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NERT	San Francisco Fire Department Neighborhood Emergency Response Team
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NI	no impact
NIS	noninvasive species

## GLOSSARY OF TERMS AND ACRONYMS

NMFS	National Marine Fisheries Service
NO <sub>2</sub>	nitrogen dioxide
N <sub>2</sub> O	nitrous oxide
NO <sub>x</sub>	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NPS	National Park Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OAHP	Office of Affordable Housing Production Program
OAPCA	Organotin Antifouling Paint Control Act
OHP	Office of Historic Preservation
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OWB	Open Water Basin
PAOT	people at one time
PCBs	polychlorinated byphenyls
PFCs	perfluorocarbons
PM <sub>10</sub>	particulate matter (10 microns or less)
PM <sub>2.5</sub>	particulate matter (2.5 microns or less)
PCBs	polychlorinated biphenyls
Port	Port of San Francisco
ppb	parts per billion
PPD	pounds per person per day
PG&E	Pacific Gas & Electric Company
PM10	Particulate Matter less than 10 microns in diameter
PM2.5	Particulate Matter less than 2.5 microns in diameter
ppm	parts per million
pphm	parts per hundred million
PPV	Peak Particle Velocity
PRC	California Public Resources Code
PTMP	Presidio Trust Management Plan
PWC	personal watercraft
PWTP	Presidio Water Treatment Plant

RB-S's	response boats
RecFIN	Recreational Fisheries Information Network
RHNP	Regional Housing Needs Plan
RMS	route mean square
RNA	regulated navigation area
ROG	reactive organic gases
RPD	San Francisco Recreation and Park Department
RPP	Residential Parking Permit
RTPs	regional transportation plans
RWQCB	Regional Water Quality Control Board
SAFR	San Francisco Maritime National Historic Park
SamTrans	San Mateo County Transit District
SAP	Special Area Plan
SAV	submerged aquatic vegetation
SCS	sustainable communities strategy
SDC	Seismic Design Category
Secretary's Standards	Secretary of the Interior's Standards for the Treatment of Historic Properties
SEWPCP	Southeast Water Pollution Control Plant
SDYC	San Diego Yacht Club
SEA	special ecological area
SEL	sound exposure level
sf	square feet
SF <sub>6</sub>	sulfur hexafluoride
SFAB	San Francisco Air Basin
SFCTA	San Francisco County Transportation Authority
SFDODS	San Francisco Deep Ocean Disposal Site
SFDPH	San Francisco Department of Public Health
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Partnership
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission
SFFD	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency
SFPD	San Francisco Police Department
SFWPS	San Francisco Water Power Sewer

GLOSSARY OF TERMS AND ACRONYMS

SHPO	State Historic Preservation Officer
SIP	State Implementation Plans
SK	storekeeper
SLC	California State Lands Commission
SLR	Special Local Regulation
SMARA	Surface Mining and Reclamation Act
SMCSD	Sausalito-Marín City Sanitary District
SMFPD	Southern Marin Fire Protection District
SO <sub>2</sub>	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasure
SWRCB	State Water Resources Control Board
SUD	Special Use District
SU	significant and unavoidable
SUM	significant and unavoidable with mitigation
SVP	Society of Vertebrate Paleontology
SWL	Seawall Lot
SWPPP	Stormwater Pollution Prevention Plan
SZ	safety zone
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
TACs	toxic air contaminants
TAZs	Traffic Analysis Zones
TBT	Tributyltin
TIC	tenancies in common
TMDLs	total maximum daily loads
TOG	Total Organic Gases
TSS	total suspended solids
UCMP	University of California Museum of Paleontology
U.S. 101	U.S. Highway 101
USACE	United States Army Corps of Engineers
USC	United States Code
USCG	United States Coast Guard
U.S. DOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

VAFB	Vandenberg Air Force Base
VdB	vibration decibels
VDEC	Verified Diesel Emissions Control
VIPs	Volunteers-In-Parks
VST	vessel traffic service
VOC	Volatile Organic Compound
WDRs	Wastewater Discharge Requirements
WETA	Water Emergency Transportation Authority
WHO	World Health Organization
WLUP	Waterfront Land Use Plan
WPA	Wildlife Protection Area
WPA	Works Progress Administration
YAC	Youth America's Cup
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
$\mu\text{g}/\text{kg}$	microgram per kilogram
$\mu\text{Pa}$	microPascal

## SUMMARY

A summary of the EA has been prepared and published separately and is available to the public at the locations listed below and at <http://www.americascupnepa.org> or <http://parkplanning.nps.gov/AC34>

- San Francisco Public Library – 100 Larkin St./San Francisco, CA
- Berkeley Public Library – Central Branch/2090 Kittredge/Berkeley, CA
- Oakland Public Library - 125 14th Street/Oakland CA
- City of Alameda – Main Library/1550 Oak Street/Alameda, CA
- Marin County Public Library – 3501 Civic Center Drive, Room 427 San Rafael CA 94903



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# CHAPTER 1: PURPOSE AND NEED FOR ACTION

## 1.1 INTRODUCTION AND BACKGROUND

The National Park Service (NPS) and U.S. Coast Guard (USCG), in cooperation with the U.S. Army Corps of Engineers (Corps) and the Presidio Trust—collectively referred to as the “federal team”—have prepared this Environmental Assessment (EA) to analyze the potential effects of the 34th America’s Cup (AC34) sailing races and associated events on lands and waters under the jurisdiction of these federal agencies. The America’s Cup is a series of international sailing events that the City and County of San Francisco proposes to host in summer-fall 2012 and summer-fall 2013.

### 1.1.1 Background

On December 31, 2010, San Francisco was selected as the location for the AC34 sailing races. As proposed by the project sponsor (identified as the America’s Cup Event Authority, LLC and the City and County of San Francisco), AC34 events would consist of fleet and match races on San Francisco Bay in 2012 and 2013. The 2012 events would occur between late summer and early fall, and involve the America’s Cup World Series (ACWS) and exhibition races. The 2013 events would occur between mid summer and early fall and involve the Louis Vuitton Cup and the final Match. A number of project sites, or venues, have been proposed by the project sponsor to accommodate these events. A series of approaches or alternatives are described more fully in the following chapter. The range of these alternatives encompass all aspects of AC34 facilities and services needed to support the events including team bases and operations, support space, media operations, hospitality services, sponsored commercial space, and entertainment and spectator areas.

In the most developed alternative, the project sponsor has proposed the staging of events and construction of temporary program and viewing facilities on lands and waters managed by Golden Gate National Recreation Area (GGNRA), San Francisco Maritime National Historical Park (SAFR), (both units of the NPS) and the USCG. If such events are authorized, the Presidio Trust may also undertake certain discretionary actions to address potential impacts on its lands. The project alternatives capture variations in the timing, location, and breadth of the events. The project sponsor has also proposed in-water construction and dredging to support race teams and activities along the San Francisco waterfront; much of this work would require authorization from the Corps. Authorization for these activities would come in the form of federal agency permits and the development of a USCG Special Local Regulation (SLR) for management of on-water race activities (under 33 United States Code 1233). Because such federal agency actions could result in environmental impacts, they are subject to review under the National Environmental Policy Act of 1969 (NEPA) (42 United States Code 4321 et seq.).

The City and County of San Francisco recently completed the Environmental Impact Report (EIR) for the AC34 project pursuant to the California Environmental Quality Act (CEQA). The EIR, which also addresses a separate project known as the James R. Herman Cruise Terminal and Northeast Wharf Plaza, is available for review on the Internet at <http://www.sf-planning.org/>.

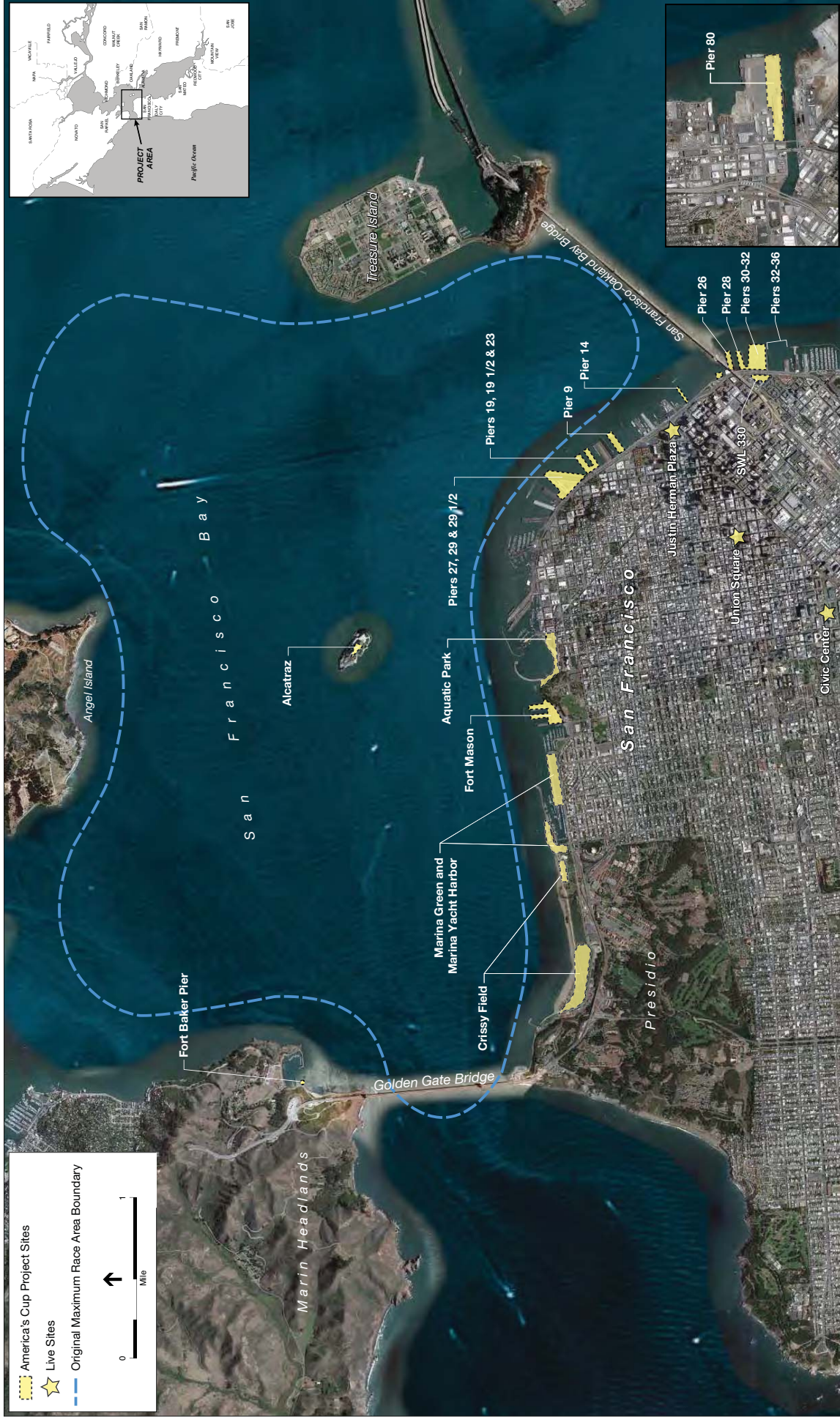
### 1.1.2 Project Study Area

As shown in **Figure PAN-1**, on-water activities including the AC34 sailing races, if authorized, would occur within Central San Francisco Bay, generally within an area bounded by the San Francisco waterfront to the south; the San Francisco-Oakland Bay Bridge, Treasure Island, and Yerba Buena Island to the east; portions of southern Marin County (including Angel Island) to the north; and areas just beyond the Golden Gate Bridge to the west. As described in Chapter 2—Alternatives, the actual race courses for the sailing races would be closer to the San Francisco waterfront, confined to a smaller portion of the Bay, and located within an area subject to restrictions established under the USCG’s SLR and Marine Events Permit and the NPS Special Use Permit. As such, were the races to occur in San Francisco Bay, people interested in viewing the races would be expected to visit lands and waters under the jurisdiction of federal agencies, including portions of San Francisco Bay near the race areas (under the jurisdiction of the NPS and USCG); Aquatic Park within SAFR (under the jurisdiction of the NPS); Fort Mason, Alcatraz Island, Fort Baker, and trails within the Marin Headlands, all within the GGNRA (under the jurisdiction of the NPS); and the Presidio, also within the GGNRA (under the jurisdiction of the National Park Service and the Presidio Trust). The Presidio is divided into Areas A and B. Area A comprises the 300 coastal acres and is overseen by the National Park Service. Area B comprises the 1,100 interior acres and is overseen by the Presidio Trust. Crissy Field, a district in the Presidio, contains an Area A/B division: Mason Street and south is part of Area B and under Trust jurisdiction; land north of Mason Street is Area A and under the jurisdiction of the NPS. In addition, temporary City waterfront improvements necessary to support AC34 event-related activities (i.e., dredging, floating docks and gangways, mooring anchors, and piles), would be subject to review and approval by the Corps. Accordingly, this Environmental Assessment examines the environmental implications of such activities within the collective jurisdictions of the federal team.

It is important to note that not all race-related activities are subject to federal jurisdiction. For example, the project sponsor has proposed various activities on property under the jurisdiction of the City and County of San Francisco, such as Marina Green and on top of various waterfront piers. However, NEPA requires analysis of cumulative impacts as well, that is, those impacts that result from the action “when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7). As such, while this document focuses primarily on activities under federal jurisdiction, the implications of these activities for the environment are also considered in a cumulative context, along with activities under the purview of state and local government agencies.

## 1.2 PURPOSE AND NEED FOR THE ACTION

The federal team conducted internal scoping between June and October 2011 to identify the overarching goal or “purpose” they intend to fulfill by taking action; consider the impetus or “need” for taking action and to develop specific critical objectives for that action. In addition, the federal team identified key legal, policy or other “constraints” that would prohibit certain actions and thereby restrict what is considered a reasonable alternative. These planning elements (purpose, need, objectives, and constraints) respond to federal agency mandates and guidelines, are identified in the following paragraphs, and are different from those used in the Environmental Impact Report (EIR), as



SOURCE: Google Maps

AC34 / Environmental Assessment (210317)  
**Figure PAN-1**  
 AC34 Potential Venue and Facility Sites



NEPA has slightly different requirements than CEQA. The results of the internal scoping process are discussed more fully in Section 1.5, Scoping Process and Public Participation, below.

### 1.2.1 Purpose for Taking Action

The purpose of the federal actions is to establish the regulatory framework and conditions under which AC34 can be conducted and concluded. If authorized, the federal agencies would provide for a safe and enjoyable experience during AC34 events. In addition, the purpose of the federal action is for the protection of resources, values, and uses of the federal lands and waters and of the marine and maritime environment.

### 1.2.2 Need for Action

The America's Cup Event Authority, LLC and the City and County of San Francisco are proposing to hold these events in San Francisco Bay and surrounding environs. The events would involve use of land, water, and air space under federal jurisdiction. (Although use of land under local or state jurisdiction is also requested, this EA is a federal document and deals only with permits or authorities issued under federal jurisdiction). The federal government needs to engage in transparent, integrated, and informed decision-making to respond to this request and to ensure that any final decision conforms to all applicable laws and regulations (e.g., the Clean Air Act's general conformity provisions, described below). The federal agency actions of granting permits (i.e., NPS and Presidio Trust Special Use Permit, USCG Marine Events Permit, and Corps Section 10 and 103 Permits) and issuing an SLR are identified as separate from the actual AC34 races and associated events proposed by the project sponsor.

### 1.2.3 Objectives of the Federal Agencies

Objectives are specific goal statements that help to illuminate the overarching goal or "purpose" of taking action. Critical or primary objectives are those that must be met to a large degree for federal action such as granting a permit to be justified or an alternative considered feasible. These objectives come from a variety of sources, including NPS, USCG, Corps, and Presidio Trust management policies, laws, and regulations. The ability of an alternative, including the one proposed by the sponsor, to meet primary objectives is part of what the federal team considered in deciding whether an alternative was reasonable and should be carried forward for environmental impact analysis or dismissed from further consideration. As noted below, some of the objectives are shared by the agencies and others are specific to a single agency.

#### Shared Agency Primary Objectives:

- Ensure safety for all affected parties before, during and after the event activities.
- Avoid, minimize, or mitigate impact on the environment and all affected parties, including through the use of sustainable, best practices.

- Maintain acceptable level of operational readiness including adequate communications between agencies, the public, project sponsor and all affected parties as needed.
- Provide for diverse, affordable, and enjoyable spectator and visitor experiences.

**National Park Service Primary Objectives:**

(Note: All objectives apply to GGNRA and SAFR.)

- Ensure that permitted activities have a meaningful association between the park and the event and contribute to understanding of a park's significance.
- Minimize and mitigate effects of AC34 operations on existing unique park recreational uses (e.g., where few or no other local opportunities exist).
- Minimize impacts on park assets and sustain or restore all park assets (e.g., facilities, features, grounds, ships, etc.) to pre-event or better condition.
- Facilitate convenient and affordable multi-modal access to parks during the event.
- Maintain access for residents, park staff, park partners, and visitors.
- Provide for cost recovery (for added or detailed staff, management, and restoration costs).

**U.S. Coast Guard Primary Objective:**

- Ensure that participating boats comply with appropriate safety, security, and environmental regulations.

**U.S. Army Corps of Engineers Objective:**

- Avoid or minimize to the maximum extent possible the impacts of structures and work in and over navigable waters.

**Presidio Trust Primary Objectives:**

- Minimize disruption to or use of existing Presidio resources.
- Respect the needs of Presidio residents, tenants, and visitors.
- Maintain access to Presidio facilities and uses.

## **1.2.4 Constraints of the Federal Agencies**

Constraints represent relevant legal, regulatory, logistic, economic, environmental, or other limitations that agencies must factor in to their respective decision-making processes. The constraints identified in this document represent a subset of those guiding the agencies' development and consideration of alternatives. However, these constraints do not preclude other federal, state, and local regulations and policies from being considered during and ultimately influencing that process. The constraints identified by each agency are presented below.



National Park Service Constraints:

- No advertising within parklands (Section 8.6 of NPS Management Policies 2006).
- No personal watercraft (PWCs) within park legislative boundary waters (0.25 mile) (36 CFR 3.24).
- Overflight restrictions (Section 8.4 of NPS Management Policies 2006) to protect park resources (Alcatraz Island nesting birds) and values (visitor experience).
- No boats or marine activities within 500-foot exclusion zone around Alcatraz Island and off Crissy Field Wildlife Protection Area (WPA) (GOGA Superintendent’s Compendium).
- No impairment to park resources or values (Section 1.4.7 of NPS Management Policies 2006, Organic Act).
- No “adverse effects” allowed on historic properties under the National Historic Preservation Act (NHPA).
- No admission fee charged in parks for special events and activities (CFR 250, 6.2.1 Management Policies).
- No significant conflict with other park uses (CFR 250, Section 8.6.2.1 of NPS Management Policies 2006)
- Americans with Disabilities Act (ADA) accessibility (Section 8.2.4 of Management Policies 2006).
- No visitation levels that would cause unacceptable impacts on visitor experience or resources could occur (8.2.5; 8.2.1 NPS Management Policies).
- No conflict with applicable provisions of the Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), and Migratory Bird Treaty Act (MBTA). This would include prohibiting the following actions in accordance with 36 CFR 2.2, Wildlife protection:
  - (1) The taking of wildlife, except by authorized hunting and trapping activities conducted in accordance with paragraph (b) of 36 CFR 2.2 Wildlife protection.
  - (2) The feeding, touching, teasing, frightening or intentional disturbing of wildlife nesting, breeding or other activities.
- No unacceptable impacts (Section 1.4.7.1 of NPS *Management Policies 2006*) individually or cumulatively. “Unacceptable” impacts would:
  - Be inconsistent with a park’s purposes or values; or
  - Impede the attainment of a park’s desired future conditions for natural and cultural resources as identified through the park’s planning process; or
  - Create an unsafe or unhealthful environment for visitors or employees; or
  - Diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values; or
  - Unreasonably interfere with park programs or activities, an appropriate use, the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.

**U.S. Coast Guard Constraints:**

- Event Authority must comply with requirements and conditions of the Marine Event Permit.
- On-water event activities will only be allowed in the permitted event zone as defined by Special Local Regulation and a Marine Event Permit.
- All maritime users will comply with existing anchoring regulations.
- Participating foreign flagged vessels and foreign constructed vessels will meet safety, environmental, and passenger carriage requirements as directed by Officer in Charge of Marine Inspections (OCMI), per applicable laws.
- The Captain of the Port (COTP) may direct vessels as necessary to ensure safety, when justified by weather, visibility, sea conditions, temporary port congestion, other temporary hazardous circumstances, or a vessel's condition. Such COTP action may override Special Local Regulations in effect, or may result in delay, disruption, or cancellation of the permitted marine event.

**U.S. Army Corps of Engineers Constraints:**

- Project/permit denied if:
  - It is not authorized by Regional Water Quality Control Board (RWQCB) or Bay Conservation and Development Commission (BCDC);
  - It does not comply with Clean Water Act Section 404(b)(1) (if not the least environmentally damaging project alternative);
  - If the National Marine Fisheries Service (NMFS) Endangered Species Act Section 7 consultation results in an a “jeopardy” opinion;
  - If the project poses a navigational hazard (as determined in consultation with the USCG); and
  - If the project is contrary to the public interest (i.e., detrimental outweigh beneficial impacts).

**1.3 SCOPE OF THE ENVIRONMENTAL ASSESSMENT**

This EA focuses primarily on those elements of AC34 project that are under the collective jurisdictions of the federal team agencies (i.e., on or affecting lands, waters, or other resources managed by each agency). However, NEPA also requires analysis of “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR ~ 1508.7).” As such, the EA also considers these elements in the broader context of other activities – both federal and non-federal – that could result in a combined, or cumulative, effect on the environment. The EA is being prepared in accordance with NEPA and federal team’s respective NEPA regulations. Although agency NEPA regulations do not conflict, they sometimes require greater attention to certain facets of NEPA consistent with the agency’s mandate. This EA follows the most comprehensive agency regulations when this situation occurs.

## **1.4 SUMMARY OF LAWS, REGULATIONS, PLANS AND POLICIES**

Authorization of AC34 would occur under, and in conformance with plans, policies, and regulations for each of the federal agencies, including, but not limited to the following. Other federal laws, regulations, and policies (e.g., Marine Mammal Protection Act, Endangered Species Act, and International Migratory Bird Treaty Act) with relevancy to this project are included as Appendix A.

### **1.4.1 National Environmental Policy Act of 1969**

The National Environmental Policy Act (NEPA) Section 102(2)(C) requires that an Environmental Impact Statement (EIS) be prepared for proposed major federal actions that are likely or expected to significantly affect the quality of the human environment. If significant impacts are not likely but unresolved conflicts concerning alternative uses of federal resources exist, an Environmental Assessment (EA) with a full range of alternatives is required (Section 102(2)(B)). If public involvement or analysis reveals potential for a significant impact from an alternative analyzed in an EA, the impact must be mitigated to “below significance” or an EIS prepared.

### **1.4.2 Clean Air Act**

The U.S. Environmental Protection Agency (U.S. EPA) promulgated the General Conformity Rule (58 FR 63214) to implement the conformity provision of Title I, Section 176(c)(1) of the Clean Air Act (CAA). Section 176(c)(1) requires that the federal government not engage in, support, or provide financial assistance for licensing, permitting, or approving any activity not conforming to an approved CAA State Implementation Plan in nonattainment or maintenance areas of the country.

The San Francisco Bay Area Air Basin is designated as a nonattainment area for the federal 8-hour ozone standard and the federal fine particulate (PM<sub>2.5</sub>) standard. The basin is designated as a maintenance area with respect to the federal carbon monoxide (CO) standards. Through this NEPA process, the federal team is working with the U.S. EPA to ensure that its final decision with regard to the AC34 project would conform to State Implementation Plans, not cause or contribute to new violations of NAAQS, and ensure that attainment of NAAQS within the air basin is not delayed.

### **1.4.3 National Historic Preservation Act, as Amended (1966)**

Activities associated with the AC34 events could come under the jurisdiction of the National Historic Preservation Act. Cultural resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470 et seq.), and its implementing regulation, Protection of Historic Properties (36 CFR Part 800). Under the NHPA, a cultural resource is considered significant if it meets the Criteria for Evaluation (36 CFR 60) for the National Register of Historic Places (NRHP, or National Register).

## **1.4.4 Federal Agencies**

### ***1.4.4.1 National Park Service***

The project sponsor has proposed the staging of events and construction of temporary program and viewing facilities on lands and waters managed by GGNRA and SAFR, which are units of the NPS. The NPS actions would be governed by the following plans and policies.

#### **National Park Service Organic Act and Management Policies**

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of the Interior and the NPS to manage park units “to conserve the scenery and the natural and historic objects and wild life therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (16 USC 1). The Organic Act prohibits actions that impair park resources unless a law directly and specifically allows for these actions (16 USC 1a). The NPS *Management Policies 2006* provides more specific guidance regarding park management, including the use of park lands for special events and activities (Section 8.6.2), but similarly requires the park to consider whether the approval of a project would result in impairment of a park’s resources and values. The fundamental purpose of the national park system, as established by the Organic Act and reaffirmed by the General Authorities Act, begins with a mandate to conserve park resources and values. Consequently, park managers must always seek ways to avoid, or minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the NPS the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park. That discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

#### **General Management Plan – Golden Gate National Recreation Area**

**1980 General Management Plan.** The original GGNRA General Management Plan (GMP) (NPS 1980) was combined with the plan for Point Reyes National Seashore, which adjoins the GGNRA. The GMP is a document that ensures that a park has a clearly defined direction that sets achievable and sustainable goals for resource preservation and visitor use. The joint GMP notes that the resources in these two park units would be of outstanding significance even if they did not exist at the fringes of a large city. Together, these two parks represent one of the nation’s largest coastal preserves—more than 100,000 acres of “superlative North Pacific Coast landscape” (NPS 1980). This area has since grown to more than 150,000 acres. The GMP goes on to state that “in spite of the outstanding quality of the scenic, natural, and historic resources” in the GGNRA, it may be the sharp contrast between the intensively developed urban environment of San Francisco and the park’s adjacent and undeveloped areas that make it particularly unique. It points to the chance to view wilderness-quality scenery, headlands that are much like they were when gold-seekers first viewed them a century ago, and the chance to be removed “from the sights and sounds of man” a short hike away (NPS 1980) as examples. This wide variety of resources and outdoor settings provides opportunities for a correspondingly diverse array of recreational and educational activities of “a quality and character found nowhere else” (NPS 1980).

Management objectives in the 1980 GMP that are relevant to the AC34 project include the following (NPS 1980):

- Maintain and restore character of natural environment lands by maintaining the diversity of native park plant and animal life; identifying and protecting threatened and endangered plant and animal species, marine mammals, and other sensitive natural resources; controlling exotic plants; and checking erosion whenever feasible.
- Retain the current character of cultural resources pending completion of detailed resource management plans.
- Offer recreational opportunities to a diversity of park users and impart knowledge necessary for full enjoyment of park resources through a particular emphasis on interpretation, education, and information programs.
- Develop facilities and programs that respond to the special needs of senior citizens, the handicapped, and cultural and ethnic minorities.
- Plan facilities to offer a wide variety of uses.
- Retain opportunities for recreational activities pursued in the park today.
- Balance the responsibility of meeting the needs of park visitors with the need to protect the interests of residents in adjacent communities.

**1994 General Management Plan Amendment.** GGNRA legislation ensured that if the military deemed the Presidio of San Francisco in excess of its needs, jurisdiction would be transferred to the NPS. In 1989, the Presidio was designated for closure, and in 1994 the U.S. Army transferred the Presidio to the NPS. The GMP Amendment (NPS 1994) was developed by the NPS to provide direction and policy guidance in the transition of this former military post to a unit of the NPS. The GMP guidance for Area A of the Presidio, managed by the NPS, provides for natural resource restoration, education, and outdoor recreation along the coastal areas of San Francisco Bay and the Pacific Ocean. The GMP Amendment refers to Crissy Field as the “front yard” for the Presidio, ideal for a broad range of visitor experiences, and calls for restrictions on uses in particular areas if necessary to preserve natural resources. It envisions only small to moderate-sized special events to be periodically held on the historic airfield, and precludes large events, such as the Fourth of July celebration that occurred annually at the site before it was restored to more natural conditions.

**General Management Plan Updates.** The GGNRA and Point Reyes National Seashore are each currently updating their now separate GMPs. The GGNRA GMP was released to the public and the comment period ended December 9, 2011. Despite the updating, the park’s purpose will remain as follows:

The purpose of Golden Gate National Recreation Area is to offer national park experiences to a large and diverse urban population while preserving and interpreting the park’s outstanding natural, historic, scenic, and recreational values.

The updated GMP for the GGNRA will be the blueprint for the parks to move into the future. Since 1980, the GGNRA has doubled in size and park staff members have gained a better understanding of the natural and cultural resources and recreational uses within the park.

The updated GMP is also being built around the NPS policies that are most relevant to the GGNRA. Area A of the Presidio is not being revisited by the updated GMP. The NPS policies guide the development of the GMP and will continue to guide the park in the future.

### **Crissy Field Plan**

The Crissy Field Plan (NPS 1996) incorporates the design, elements and objectives envisioned for Crissy Field in the 1994 GMP Amendment, including the restoration of a 20-acre portion of a historical tidal marsh and the cultural resources of the historic airfield, the establishment of a wildlife protection area, and improvements to parking, transportation, and circulation. The 1994 GMP Amendment identified objectives, uses and implementation strategies that would guide management and use of this portion of the GGNRA. The Crissy Field Plan assumes that, to reduce parking demand, special events at Crissy Field would be moderate in size compared with some past and now prohibited large events (e.g., the Fourth of July celebration, which drew upwards of 75,000 spectators annually). The plan presumes that parking requirements for day-to-day use and special events could “easily be met” through surplus spaces south of Mason Street. However, since implementation of the plan, special events have resulted in overflow parking that has been restrictive for day-to-day activities, requiring a comprehensive array of parking management strategies, including establishment of paid parking areas, which is scheduled for 2012.

### **General Management Plan—San Francisco Maritime National Historical Park**

The General Management Plan for San Francisco Maritime National Historical Park (NPS 1997) guides the management of resources, visitor use, and general development at SAFR. The document reiterates the park’s purpose, significance, mission, and vision for the future. While the plan chronicles the history of the park, the majority focuses on ways in which the park can preserve and restore its resources, including its vast collection of maritime historical artifacts, while also making them accessible to the public. Toward that end, the SAFR GMP identifies specific park objectives for cultural resource management, visitor experience, park facilities and design, and the park’s relationship to the surrounding environment and community. Carrying these objectives forward, the GMP addresses future design and development options for park facilities, interpretive and educational programming, and conceptual planning for various segments of the park.

### **1.4.5 Presidio Trust**

The project sponsor has proposed the staging of events and construction of temporary program and viewing facilities on lands and waters managed by Golden Gate National Recreation Area (GGNRA) which includes the Presidio. The Presidio Trust is a wholly owned, federal government corporation and granting jurisdiction of the 1,168-acre interior area of the Presidio, known as Area B, to the Presidio Trust. This transferred jurisdiction of Area B from the Secretary of the Interior to the Presidio



Trust and required that the Presidio Trust conform only to the purposes of the GGNRA establishing legislation and the general objectives of the GMP Amendment.

#### ***1.4.5.1 The Presidio Trust Management Plan***

In 2002, the Presidio Trust approved the Presidio Trust Management Plan (Presidio Trust 2002) to update and supersede the GMP Amendment in Area B. The 2002 Presidio Trust Management Plan describes the Presidio's cultural, natural, scenic, and recreational resources and provides planning principles that will ensure that the Presidio is preserved, protected, and enhanced for the public's benefit. The planning principles are interrelated and, taken together, guide actions and decision-making by the Presidio Trust. The following principles pertaining to recreational use and special events are relevant to the proposed action (Presidio Trust 2002):

- ***Recreational Use.*** The Trust is committed to providing diverse opportunities for both passive and active recreation, and to maintaining an atmosphere that is open, inviting, and accessible to visitors. In providing these opportunities, the Trust will consider what activities are best suited to the Presidio, and will balance recreational opportunities with resource protection. To achieve this balance, the Trust will consider the type and level of visitor use that can be accommodated while sustaining the desired resources and visitor experience conditions. . .
- ***Special Events and Festivals.*** The Presidio's open space and recreational amenities will be managed to provide settings for public programs, activities, and events. The Trust is committed to making the park increasingly accessible to the public and will facilitate public use of the park for festivals and special events, such as marathons or bike rides. The Trust will identify ways to monitor these events and to anticipate and address potential impacts on park resources, neighbors, and the visitor experience.

#### **1.4.6 United States Coast Guard**

The project sponsor has proposed the staging of events and construction of temporary program and viewing facilities on waters managed by the USCG. The USCG action would be governed by the following laws and policies.

##### ***1.4.6.1 Establishment of Coast Guard - 14 U.S.C Section 1***

The primary duties of the USCG are to enforce or assist in the enforcement of all applicable Federal laws on, under, and over the high seas and waters subject to the jurisdiction of the United States. The agency shall engage in maritime air surveillance or assist in the enforcement of the laws of the United States. The agency shall administer laws and enforce regulations for the promotion of safety of life and property on and under the high seas and waters subject to the jurisdiction of the United States covering all matters not specifically delegated by law to some other executive department. In addition, the agency shall develop, establish, maintain, and operate, with regard to the requirements of rescue facilities for the promotion of safety on, under, and over the high seas and waters subject to the jurisdiction of the United States.



#### ***1.4.6.2 Federal Water Pollution Control Act (Clean Water Act)***

The Clean Water Act authorizes federal, state, and local entities, to prepare comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries and improving the sanitary condition of surface and underground waters.

#### ***1.4.6.3 Oil Pollution Act of 1990***

The Oil Pollution Act of 1990 amended the Clean Water Act and addressed the wide range of problems associated with preventing, responding to, and paying for oil pollution incidents in navigable waters of the United States.

#### ***1.4.6.4 Ports and Waterways Safety Act of 1972***

This law provides increased supervision of vessel and port operations in order to (1) reduce the possibility of vessel or cargo loss, or damage to life, property, or the marine environment; (2) prevent damage to structures in, on, or immediately adjacent to the navigable waters of the United States or the resources within such waters; (3) insure that vessels operating in the navigable waters of the United States shall comply with all applicable standards and requirements for vessel construction, equipment, manning, and operational procedures; and (4) insure that vessels operating in the navigable waters of the United States comply with all applicable standards and requirements for vessel construction, equipment, manning, and operational procedures.

#### ***1.4.6.5 Navigation and Navigable Waters – 14 CFR Parts 1 -199***

These regulations delegate to the USCG authority to implement provisions of the Federal Water Pollution Control Act (FWPCA) and provisions of the Oil Pollution Act of 1990 (OPA). District Commanders and Captains of the Ports have been delegated the authority to establish safety and security zones. Vessel Traffic Services are delegated authority to discharge the duties of the Captain of the Port that include directing the operation, movement, and anchorage of vessels within a Vessel Traffic Service area including management of vessel traffic within anchorages, regulated navigation areas and safety zones, and to enforce Vessel Traffic Service and ports and waterways safety regulations.

#### ***1.4.6.6 Coast Guard Marine Safety Performance Plan***

The Coast Guard Marine Safety Performance Plan (USCG 2008) guides USCG efforts to ensure safe and environmentally sound operation of U.S. flagged vessels wherever they are in the world, and to carry out Port State authorities for foreign vessels operating in U.S. waters. This five-year plan establishes goals and objectives for improving boater safety and facilitating maritime commerce. The plan includes major initiatives designed to focus the USCG's efforts to achieve its stated goals and objectives. These initiatives range from workforce development to boating safety. Specific safety and commerce facilitation actions identified in the plan include (1) increasing safety communications, (2) increasing compliance with navigation rules, (3) increasing the rulemaking process to expedite

regulatory implementation, (4) strengthening safety partnerships and increasing outreach efforts, and (5) increasing maritime law enforcement, among others.

### **Marine Safety Manual**

**Volume VI, Ports and Waterways Activities; Commandant Instruction M16000.11.** General considerations of these guidelines include: (1) to minimize deaths, personal injuries, and property loss or damage associated with vessels and onshore and offshore facilities engaged in commercial, scientific, or exploratory activity in the marine environment; (2) to safeguard the nation's ports, waterways, port facilities, vessels, persons, and property in the vicinity of the port, from accidental destruction, damage, loss, or injury; (3) to protect the navigable waters and adjacent shore areas of the U.S. and adjacent resources from environmental harm; and (4) to prevent pollution of the marine environment from accidental or intentional discharges of oil, hazardous substances, dredged spoils, sewage, and wastes from vessels.

**Volume IX, Marine Environmental Protection Commandant Instruction M16000.14.** The purpose of this instruction presents the authorities and responsibilities, and consolidates policies and procedures for the Marine Environmental Protection Program, with the following in specific regard to NEPA. As a Federal entity, the USCG must comply with the requirements of NEPA by instructing agency personnel to be aware of programs or projects that could "significantly affect the environment" including programs or projects that interfere with reasonable peaceful enjoyment or property or use of property; interfere with visual or auditory amenities; limit multiple use management programs for an area; pose a danger to human health, safety, or welfare; or cause irreparable harm to animal or plant life in an area.

#### ***1.4.6.7 Preparation of Field Regulations Manual***

This Manual establishes policies and procedures on preparing field regulations for publication in the Federal Register in print and internet release.

#### **1.4.7 United States Army Corps of Engineers**

The Corps is charged with regulating certain activities that affect waters of the United States. Typical examples of activities regulated by the Corps include: (1) discharge of dredged or fill material into waters of the U.S.; (2) dredging, piers, pilings, bulkheads, fills, etc., and (3) transport of dredged materials for open ocean disposal. The first class of activities is regulated under Section 404 of the Clean Water Act of 1972. The second is regulated by Section 10 of the Rivers and Harbors Act of 1899. The last category of work is regulated under Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. The Corps' Section 10 jurisdiction extends to the mean high tide line of tidal waters. The agency's Section 404 jurisdiction extends to the high tide line of tidal waters and includes adjacent marshes and wetlands. The Corps' Section 103 jurisdiction is limited to the transport of dredged material proposed for ocean disposal. Most of the water-based work that would occur in association with the AC34 events would be subject to the Corps' jurisdiction under Section 10 and 103, and is therefore analyzed in this Environmental Assessment. However, in 1968, Congress designated a

certain portion of the San Francisco waterfront, namely that area extending from Van Ness Avenue to Bryan Street, as “nonnavigable waters within the meaning of the laws of the United States” (33 USC 59h). Therefore, any work occurring within the existing pier footprints along this portion of the San Francisco waterfront would not be subject to Corps Section 10 authorization. The Corps does not consider any of the AC34-related water-based work under review to be the discharge of dredged material or fill into waters of the U.S. Therefore, there would be no application by the Corps of Section 404 regulations.

#### ***1.4.7.1 Long-Term Management Strategy***

The Corps is a signatory to the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region. The Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) (the Corps 2001) was developed to address the need for improved management and alternative disposal options for dredged materials in the San Francisco Bay region. The LTMS planning area encompasses all of the San Francisco Bay estuary up to Sherman Island and the estuary’s major tributaries up to a point where navigation is no longer feasible.

The goals of the LTMS are to manage dredging and disposal in an economically and environmentally sound manner, to maximize beneficial use of dredged material, and to develop a coordinated permit application review process for dredging and disposal projects. The LTMS provides specific mechanisms to ensure that existing laws and regulations concerning disposal of dredged materials in the Bay are consistently applied and coordinated.

## **1.5 SCOPING PROCESS AND PUBLIC PARTICIPATION**

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in a planning document prepared in accordance with NEPA and NPS NEPA Regulations (e.g. Director’s Order No. 12). Scoping includes obtaining early input about the AC34 project from the public, staff, interested agencies, or any agency with jurisdiction by law or expertise. Scoping activities for this NEPA process are summarized below. Additional information on the public involvement process and ongoing agency coordination is presented in Chapter 5—Consultation and Coordination. Issues were selected for analysis through internal scoping with the federal team and public scoping as described below.

### **1.5.1 Internal Agency Involvement**

In July 2011, an internal scoping session involving the federal team and the NEPA consultants was held to discuss overarching topics that would be covered in the environmental analyses and documentation. During this session, the federal team discussed the nature of the federal actions in response to the project sponsor’s requests, constructed draft purpose and need statements, defined preliminary objectives (both agency-specific and shared objectives), identified agency constraints, and identified conceptual preliminary alternatives as well as potential environmental impact topics (described in Section 1.6, Issues and Impact Topics, below). The same team met again on October 25

and 26, 2011 to incorporate public comments made during the scoping period and further develop a range of reasonable project alternatives.

## 1.5.2 Public Involvement

The scoping period for the 34th America's Cup NEPA process opened to the public on August 5, 2011, and ended on September 23, 2011. Originally anticipated to remain open for 30 days, the scoping period was extended to accommodate the public's requests for additional time to review and comment on the project and agency actions under consideration. During the scoping period, the federal team solicited comments through three public scoping meetings and one agency scoping meeting. The scoping period, public meetings, and instructions for submitting comments were announced through a variety of media, including regular (United States Postal Service) mail, newspaper advertisements, two websites, posted flyers, e-mail, and a press release, as described below.

A two-page brochure announcing the scoping period and public meetings and summarizing the scope of the proposed project was sent to 3,966 members of the public on August 1, 2011. Addressees included persons on the mailing lists maintained by the GGNRA, SAFR, the Corps, the USCG, and the Presidio Trust. Mailers were also sent to known addresses of persons who participated in the CEQA component of the environmental review. On August 2, 2011, a newspaper display ad announcing the scoping period and public meetings was published in the following newspapers: the San Francisco Chronicle, the San Francisco Examiner, the Marin Independent Journal, and the Oakland Tribune. The ad was also sent to the Oakland Tribune distribution list, which includes the Alameda Times-Star, Hayward Daily Review, Fremont Argus, Tri-Valley Herald, Contra Costa Times, East County Times, West County Times, and San Ramon/ Valley Times. On August 7, 2011, the ad was published in the Chinese newspaper Sing Tao.

In addition, on August 5, 2011, the America's Cup NEPA project website (<http://www.americascupnepa.org>) was launched and the NPS Planning, Environment, and Public Comment (PEPC) website was updated to include the America's Cup project. Initial information posted to these sites included the project summary, statement of purpose and need, project objectives, impact topics, alternative concepts, and other relevant background materials. Also posted to the websites were the dates, times, and locations of the three public scoping meetings, along with instructions for submitting written public comments. The websites will be periodically updated as the project moves forward.

On August 10, 2011, flyers announcing the scoping meetings were also posted in and around both the GGNRA and SAFR. The public notices were mounted on "a-frame" and "windmaster" notice boards and placed in conspicuous locations near the proposed study area, including Vista Point Overlook, Fort Baker, Crissy Field, St. Francis Yacht Club, Fort Mason, and San Francisco Maritime National Historical Park.

Public scoping meetings were held on August 17, 18, and 23, 2011, in Sausalito, San Francisco, and Oakland, respectively. All meetings were conducted in an open house format, occurred between the hours of 4:30 p.m. and 8:30 p.m. and offered the same opportunities to participate and comment. On August 4, 2011, an e-mail announcing the GGNRA Open House, held on August 17 and including

AC34 as an agenda topic, was sent to 1,005 e-mail addresses; the e-mail also included information on when and how to submit comments as well as information about the other public meetings. On August 17, 2011, a press release announcing the name and description of the project, the purpose of the EA, and the duration of the scoping period, was mailed to a media list including the San Francisco Chronicle, San Francisco Examiner, Marin Independent Journal, Oakland Tribune, Alameda Times-Star, Hayward Daily Review, Fremont Argus, Tri-Valley Herald, Contra Costa Times, East County Times, West County Times, and San Ramon/ Valley Times.

Prior to the NEPA process, the project sponsor's proposal was evaluated in an environmental impact report (EIR) pursuant to the San Francisco Administration Code, Chapter 31 under the California Environmental Quality Act (CEQA). Similar to this EA, the EIR is a public information document for use by governmental agencies and the public to identify and evaluate potential environmental impacts of the project, to recommend mitigation measures to lessen or eliminate significant adverse impacts, and to examine feasible alternatives to the project. Public comments on the Draft EIR were accepted from July 11, 2011 to August 25, 2011 and were published in the Final EIR on December 15, 2011.

### **1.5.3 Agency Scoping Meeting**

In addition to the public scoping meetings described above, an agency scoping meeting was held on August 30, 2011 in San Francisco. The meeting was attended by a total of 33 people, including representatives of 17 agencies and organizations involved with planning and/or regulating the project under consideration. The meeting consisted of a brief presentation, followed by a roundtable discussion of topics of interest to the agencies represented. As with the public scoping meetings, oral comments were recorded on flip-chart paper. Topics of interest to meeting attendees generally centered on (1) transportation to and throughout the proposed and other potential spectator viewing areas, including the Golden Gate Bridge, the Presidio, and Angel Island; (2) the marine environment and water quality; and (3) identification and coordination of compliance with various regulatory requirements.

### **1.5.4 Scoping Period Results**

As noted above, the scoping period remained open for a period of 49 days. During that time, the federal team received 48 pieces of correspondence, containing 383 comments representing the views of the general public, civic groups, public agencies, businesses, recreational groups, and conservation and preservation groups, among others. Submittals from public (federal) agencies and conservation/preservation groups accounted for about one quarter of all submittals (six each). These comments came in the form of regular mail, electronic mail, completion of web-based comment forms, comment forms at public meetings, and oral comments. Topics most frequently raised in these comments included transportation, wildlife and wildlife habitat, recreation, and sustainability. All comments were reviewed by the federal team and incorporated into the project alternatives development process.

## 1.6 ISSUES AND IMPACT TOPICS

### 1.6.1 Issues

During the federal team's internal scoping meetings in July and October, 2011 and public scoping period from July to August, 2011, issues of potential concern regarding the AC34 event generally fell into the following categories, some of which are described in more detail in the paragraphs below:

- Geologic resources
- Water quality
- Tidal currents and circulation
- Air quality
- Biological resources: wildlife, unique vegetation, wetlands and lagoons, invasive species, threatened and endangered wildlife and vegetation, and marine resources
- Changes in marine substrate
- Cultural resources
- Recreational boating and fishing
- Visitor experience and visitor use
- Human health and safety
- Sustainability
- Noise and soundscape
- Lightscape
- Viewsheds/visual resources
- Traffic and circulation
- Navigational safety
- Maritime commerce
- Visitor facilities and amenities
- Park operations
- Park infrastructure
- Socioeconomics and environmental justice

### 1.6.2 Impact Topics Retained

Among the issues raised during the internal agency scoping session and throughout the scoping process, the following impact topics were selected for detailed analysis. Rationale for selection of each impact topic was based on potential for impact; environmental statutes, regulations, and executive orders; and NPS and USCG management policies and guidance. In some cases, identified issues were



combined into categories or topics as appropriate. For example, impacts related to tidal circulation and currents are addressed in the hydrology and water quality sections of this EA.

### ***1.6.2.1 Geology, Soils and Seismicity***

**Issue:** AC34 project impacts on geological features and soil resources could occur as a result of the physical disturbance, soil compaction, or social trails associated with increased visitation to the project area. In some areas, high pedestrian traffic could loosen soil leading to soil loss and erosion. Unique geological features that offer excellent viewing could be subject to spectators climbing. In addition, there are potential impacts of natural hazards, such as earthquakes, during the AC34 event.

### ***1.6.2.2 Hydrology and Water Quality***

**Issue:** Demolition activities above and near the Bay and dredging activities to accommodate AC34 and spectator boats could result in negative effects on water quality. Dredging and boating activities may increase suspension of bottom sediment with increases in turbidity, and mobilize chemicals of concern in the bottom sediments. During AC34 activities, discharges from either moored or moving boats could adversely affect NPS- and USCG-managed waters by disturbing benthic communities and marine resources including seabirds, fish, eelgrass, marine mammals, and essential fish habitat. AC34 in-water activities could increase the potential for illegal dumping of garbage and other materials into the Bay.

### ***1.6.2.3 Air Quality and Greenhouse Gas Emissions***

**Issue:** The AC34 project could result in an increase in emissions primarily due to temporary increases in marine operations of race-sponsored passenger vessels, race-support vessels, and spectator vessels, including super yachts and cruise ships. Other emissions associated with the AC34 project would include motor vehicle trips to and from events. AC34 construction activities (covered by Corps federal permits for dredging) would cause short-term increases of regional pollutants of reactive organic gases and nitrogen oxides including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and carbon dioxide equivalent (CO<sub>2</sub>e).

### ***1.6.2.4 Biological Resources***

**Issue:** Direct impacts of the AC34 events could include crushing or removal of sensitive vegetation, some of which is rare or endangered and some of which provides habitat for listed species (e.g., Mission blue butterfly or other wildlife). Indirect impacts on upland wildlife and waterbirds could include effects of noise generated by spectators (on land or by boat), helicopters, and special event activities, such as fireworks displays; and effects of night lighting colonial nesting seabirds on Alcatraz, a unique resource in the San Francisco Bay, may increase energy expenditures or leave nests and chicks unprotected if they flush from nests as a result of large sailboats or support boats coming near the island. Shorebirds at Crissy Field could also be experience adverse impacts due to race and event activities on the water.



### ***1.6.2.5 Cultural Resources***

**Issue:** The AC34 project area includes several designated National Historic Landmark Districts, National Register Historic Districts, and individually listed or eligible National Register properties. These archeological sites, historic architectural properties, and cultural landscape resources could be subject to adverse effects due to increased pedestrian traffic, as well as physical damage from installation of AC34 facilities at programmed event venues. Increased visitation and crowding at secondary viewing areas could result in adverse effects on cultural resources (such as on the earth-covered military features) due to climbing, erosion, vandalism, degradation of vegetation, and other damage.

**Issue:** The installation of event facilities such as bleachers, stages with amplified sound, video screens, and tents could adversely affect the integrity of National Register and National Historic Landmark Districts in the AC34 project area. The historic significance of these districts is based in part on their integrity with regard to historic feeling, setting, and association, all of which could be diminished by the introduction of visually incompatible elements.

### ***1.6.2.6 Visitor Use and Experience***

**Issue:** NPS areas, including the Marin Headlands, portions of the Presidio, Fort Point, and other waterfront areas under the jurisdiction of the NPS could be prime viewing spots during the AC34 races. Spectator use of these NPS areas has the potential to displace visitors who are in these park sites for reasons other than viewing the AC34 races. This could result in a temporary loss of or displacement of recreational opportunities such as hiking, boating, fishing, and swimming or other recreational activities available within affected park lands and/or waters. The experience for visitors may also be degraded through crowding and noise, especially for those who have not come specifically for race activities. In addition, large crowds could increase the potential for accidents, compromise safety and reduce accessibility for emergency vehicles.

### ***1.6.2.7 Soundscape and Noise***

**Issue:** During AC34 activities, noise generated from increased overflights (i.e., media and personal craft), increased marine activity and boat traffic, and special events (i.e., fireworks, concerts, cannon firing, etc.) may disturb park visitors, local residents and business owners, and may disturb and even displace some wildlife.

### ***1.6.2.8 Visual Resources***

**Issue:** The temporary installation of AC34 facilities, resource protection fencing, signage, restrooms, and water supply vehicles at spectator venues may alter some of the visual and scenic elements of NPS sites and/or the character of the Bay and federal lands. The anchoring of display boats (i.e., in Aquatic Park Cove) and installation of tents, bleachers, and other AC34 visitor services and facilities could block views of park features for recreationists who have come to the area to experience the NPS park lands or waters.

**Issue:** Night lighting may be temporarily used for live entertainment, general utility, and/or safety purposes at evening event locations. New sources of lighting may affect nearby neighborhoods.

### ***1.6.2.9 Transportation***

**Issue:** Transportation to and throughout the AC34 project area, including the Marin Headlands and the Presidio, could be temporarily affected during the AC34 race events as demand could exceed available parking near the shoreline areas and level of service (LOS) at intersections. The AC34 race events could also increase demand for improved transit services, including bus and ferry services, improved dedicated bike and pedestrian areas, and a well-integrated intelligent transportation system.

**Issue:** The AC34 race events could generate a substantial increase in spectator vessels in the Bay, which could cause congestion. AC34 race events could also affect existing shipping lane traffic and operation of ferry services in the Bay.

### ***1.6.2.10 Maritime Navigation and Safety***

**Issue:** AC34 project-related restrictions and closures may affect the movements of existing commercial shipping and recreational boating activities on the Bay. If movements are affected, then navigational conflicts and safety concerns could arise. Specifically, closing a portion of San Francisco Bay for preferential use by AC34 race and support vessels from noon to 5:00 p.m. on race days, combined with an increase of recreational boating traffic, could have an adverse affect on the flow of maritime commerce as well as the general safety of all boaters on the Bay.

### ***1.6.2.11 Assets and Operations***

**Issue:** Increased use of NPS visitor facilities and amenities including restrooms, utilities, and water supply would likely occur as a result of AC34 activities. The level of use could have an effect on wear and tear, and subsequent deterioration, of some visitor facilities, including promenades, picnic areas, and other lawn areas. NPS facilities and amenities that may be affected include those located within Crissy Field, SAFR, Fort Baker, Fort Mason, the Marin Headlands, and Alcatraz Island. These facilities and amenities may subsequently require repairs or expansion.

### ***1.6.2.12 Socioeconomics***

**Issue:** As discussed in Section 1.6.2.10 above, issues arising from movements in maritime activity could also affect land-based businesses by reducing normal customers, which could result in decreased revenues and economic impacts.

**Issue:** Environmental justice is the principle that low-income and minority populations should not disproportionately bear the burden of environmental impacts. The AC34 project may generate disproportionate impacts on minority and low-income populations by restricting or reducing private or public transportation access to worksites in or near job sites in or near NPS and Presidio Trust affected lands; and reducing, displacing, or eliminating economic activities undertaken by minority or

low-income populations on NPS and Presidio Trust affected lands. An example of this would be subsistence fishing.

**Issue:** An increase in visitors to the area may displace potential consumers of local businesses who may be deterred by the crowding and anticipated road closures.

### **1.6.3 Impact Topics Eliminated from Further Consideration**

The following issues and concerns would not be affected or could be affected negligibly by the alternatives; therefore, these topics have been dismissed from detailed analysis.

#### ***1.6.3.1 Energy Requirements and Conservation Potential***

The Council on Environmental Quality requires that NEPA analyses include an assessment of the effects of the proposed activity on energy consumption and energy conservation. The AC34 project events in both 2012 and 2013 would be of a short duration (12 and 45 days, respectively). State and local requirements mandate that the project sponsor prepare a Sustainability Plan, which it has done. The City and County of San Francisco has also prepared a transportation access management plan, also known as the “People Plan.” These two plans will ensure that the project would not result in substantial new uses of energy, and that the project would comply with all applicable energy conservation measures to the fullest extent possible. Since the project is not expected to cause an increase in energy consumption, this topic has been dismissed from further analysis.

#### ***1.6.3.2 Prime and Unique Agricultural Land***

The Farmland Protection Policy Act was established to minimize the conversion of prime and unique farmland, and farmland of statewide or local importance, to nonagricultural uses, and to ensure that federal programs are compatible with state, local, and private programs and policies to protect farmland. The act does not apply to projects already in urban development. Since the project area does not include any prime or unique farmland, this topic was dismissed from further analysis.

#### ***1.6.3.3 Wild and Scenic Rivers***

The Wild and Scenic Rivers Act of 1968 established the national wild and scenic river system to protect the nation’s highest quality natural rivers. There are no designated wild and scenic rivers within the study area, so this topic has been dismissed from further analysis.

#### ***1.6.3.4 Indian Trust Resources***

Department of Interior Compliance Memorandum 95-2 requires the NPS to address environmental impacts of its proposed actions on Indian trust resources. Indian trust resources are those assets owned by Native Americans but held in trust by the United States. Since the lands in the study area are not trust resources, this topic was dismissed from further analysis.

### 1.6.3.5 Paleontological Resources

The Franciscan Complex, which is the only geologic unit with high paleontological potential in the AC34 study area, would remain undisturbed by project activities. AC34 event facilities would be located on artificial fills, dune and beach sands, or bay mud deposits, which have low paleontological potential. Because these soil materials are too young to contain unique or significant fossils, activities associated with the project would have no effect on paleontological resources and therefore the topic was dismissed from further analysis.

## 1.7 REFERENCES

### National Park Service (NPS)

- 1980 *Golden Gate National Recreation Area General Management Plan and Environmental Analysis.*
- 1994 *General Management Plan Amendment Environmental Impact Statement, Presidio of San Francisco.* GGNRA. July 1994.
- 1996 *Environmental Assessment for Crissy Field Plan.* Golden Gate National Recreation Area. JSA 95-127. Prepared by Jones & Stokes Associates, Inc., Sacramento, California. June 1996.
- 1997 San Francisco Maritime National Historical Park, General Management Plan. October 1997.
- 2001 *Director's Order #12 and Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making.* January 8, 2001.
- 2006 *Management Policies 2006.* Prepared by the National Park Service.
- 2011 *Golden Gate National Recreation Area Draft Dog Management Plan / Environmental Impact Statement.* January 2011.

### Presidio Trust

- 2002 *Presidio Trust Management Plan.* Available on the Internet at <<http://www.presidio.gov/trust/documents/environmentalplans/ptmp.htm>>. Viewed May 2011.

### San Francisco Bay Conservation and Development Commission (BCDC)

- 1965 *San Francisco Bay Plan.* (As amended through November 2007.)

### United States Army Corps of Engineers (the Corps)

- 2001 Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region

### United States Coast Guard

- 2008 *Marine Safety Performance Plan 2009 – 2014*