

Golden Gate National Recreation Area
California

National Park Service
U.S. Department of Interior



ALCATRAZ FERRY EMBARKATION

DRAFT ENVIRONMENTAL IMPACT STATEMENT SUMMARY

January 2015

**SUMMARY
DRAFT
ENVIRONMENTAL IMPACT
STATEMENT

ALCATRAZ FERRY EMBARKATION**

**GOLDEN GATE NATIONAL RECREATION AREA
CALIFORNIA**

January 2015

**Alcatraz Ferry Embarkation
Draft Environmental Impact Statement
Golden Gate National Recreation Area, California**

Lead Agency: National Park Service, U.S. Department of Interior
Cooperating Agency: Port of San Francisco

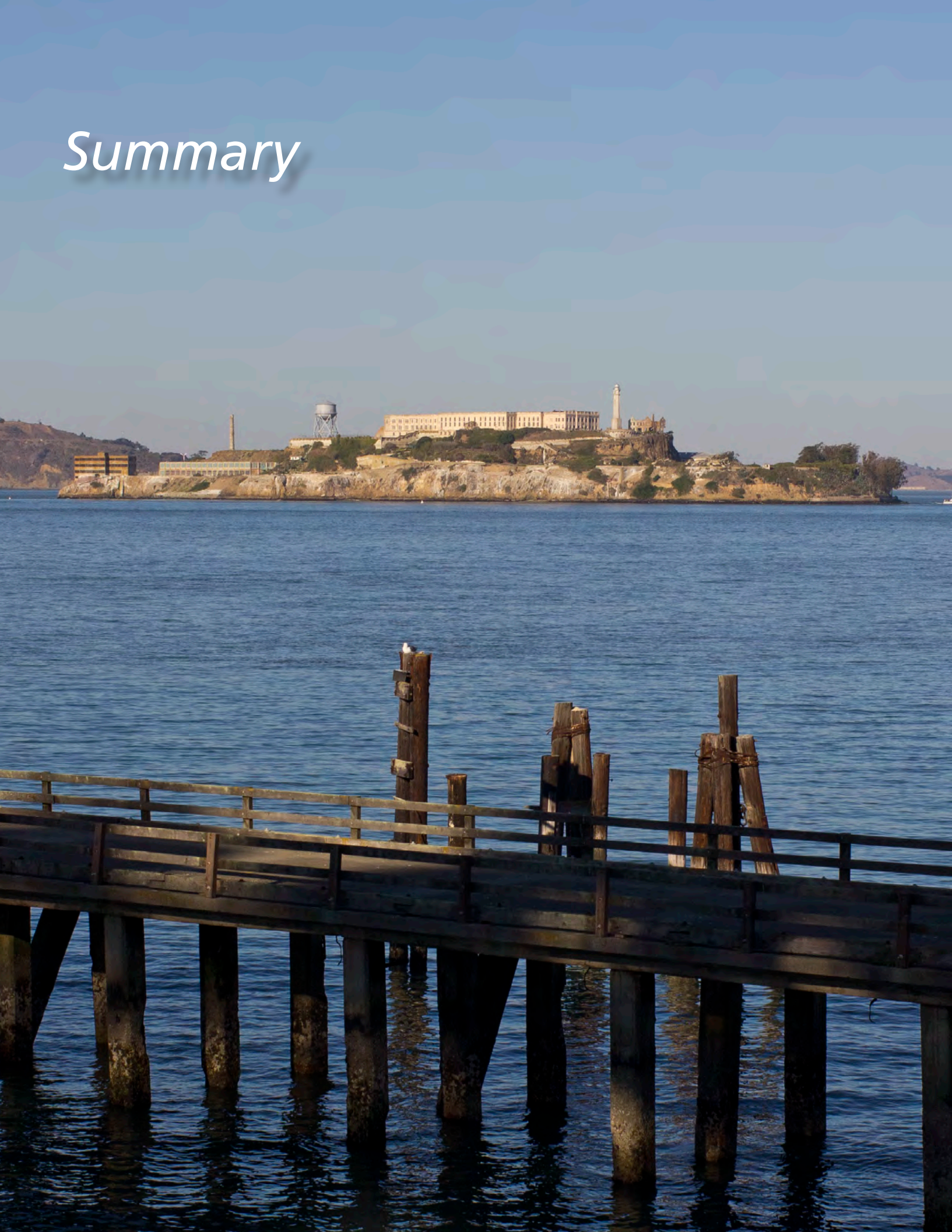
The National Park Service (NPS or Park Service) has prepared the Alcatraz Ferry Embarkation Draft Environmental Impact Statement (EIS) for establishing a long-term ferry embarkation site for passenger service between the northern San Francisco waterfront and Alcatraz Island, and special ferry service between the Alcatraz ferry embarkation site and the existing Fort Baker pier, as well as to and from Fort Mason (hereafter referred to as Project). The Project consists of a combination of indoor and outdoor spaces that serve to welcome, orient, and provide basic services for visitors. The Project also includes other administrative and operational spaces, and ramps and floats to support the berthing of up to three ferry boats at one time. The Draft EIS also programmatically evaluates the potential for ferry service linkages to other parklands in the San Francisco Bay. The purpose of this action is to create an identifiable, adequate, and quality visitor welcome and support area that connects visitors to the history of Alcatraz Island, other Golden Gate National Recreation Area sites, and orientation to the national park system in general. This action is needed because the NPS concession contract for water transportation services between San Francisco and Alcatraz Island has been subject to location changes every 10 years, which has led to visitor confusion, community concerns, and inconsistency in visitor support services, and the existing site is constrained by lease provisions. Selection of a specific ferry embarkation site is one step to addressing this need; however, that selection may also have to be coupled with agreements with the Port of San Francisco specifying the terms and conditions under which the site would be operated in the long-term.

This Draft EIS presents and analyzes the potential consequences of four alternatives: a No Action alternative, the environmentally preferred alternative at Pier 31½, and the Pier 3 and 41 alternatives. This document does not identify an NPS preferred alternative. Each of the action alternatives would fulfill the Project objectives. The Draft EIS also proposes mitigation measures to minimize the effects of adverse impacts from construction or operation of the alternatives where such impacts may occur.

How to Provide Comments: The 90-day public review period will begin upon the U.S. Environmental Protection Agency's (USEPA's) publication of a Notice of Availability (NOA) for the Draft EIS in the Federal Register; once confirmed, this date will be immediately posted on the Project website. The Draft EIS will be available for public review as follows: at <http://parkplanning.nps.gov/AlcatrazFerry>; in the Office of the Superintendent (Building 201 Fort Mason, San Francisco, California); and at local San Francisco Public Libraries (including the Marina, Main, North Beach, Eureka Valley/Harvey Milk Memorial, and Presidio branches) and the Sausalito Public Library. To conserve resources, the Park Service encourages readers to review the document online or where hardcopies are available. DVDs of the Draft EIS can be requested by email at goga_planning@nps.gov, by phone at (415) 561-4700, or by sending a written inquiry to: Superintendent, Golden Gate National Recreation Area; Attention: Alcatraz Ferry Embarkation Draft EIS; Fort Mason, Building 201; San Francisco, California 94123-0022.

Next Steps: The Park Service will record, categorize, and respond to all substantive public comments received on the Draft EIS. The Final EIS will incorporate text revisions, identify revisions corresponding to comments received, and identify the Park Service's preferred alternative. The Record of Decision will be issued a minimum of 30 days after USEPA's publication of the NOA for the Final EIS in the Federal Register.

Summary



INTRODUCTION

The National Park Service (NPS or Park Service) has prepared this draft environmental impact statement (EIS) for establishing a long-term ferry embarkation site at one of three possible locations (at Pier 3, Pier 31½, or Pier 41) along the northern San Francisco waterfront for passenger service to Alcatraz Island (hereafter referred to as Project). The Park Service also seeks to establish special ferry service (i.e., a service with no regular schedule and primarily used for special events) between the Alcatraz ferry embarkation site and the existing Fort Baker pier, implement special ferry service at Fort Mason, and programmatically evaluate the potential for future linkages to other parklands in the San Francisco Bay (Bay).

These sites are located on either NPS property (Pier 3 at Fort Mason and Fort Baker) or land owned by the Port of San Francisco (Port; Pier 31½ and Pier 41). The Park Service is the lead federal agency under the National Environmental Policy Act (NEPA) and has requested that the Port be a cooperating agency.

Each of the alternative sites are in dense, urban locations, directly adjacent to high-density residential and commercial districts. These sites are characterized by high visitation rates, high pedestrian and automobile traffic volumes, and intense recreational and commercial use. Fort Baker is slightly less developed and subject to high visitation rates associated with on-site features, including historic military structures, connections to the Golden Gate National Recreation Area's (GGNRA's) trail systems, and the Cavallo Point Lodge at the Golden Gate.

Piers 31½ and 41 are located along the Embarcadero and in Fisherman's Wharf, respectively. The Embarcadero, a roadway spanning the City's eastern waterfront, begins at the intersection of Second and King streets and continues north along the waterfront to Fisherman's Wharf.

Fisherman's Wharf encompasses the City's northeastern waterfront, from Van Ness Avenue east to Pier 35. Fisherman's Wharf is one of the busiest and most popular tourist attractions in the western U.S.

Pier 3 is located on federal (NPS) property at Fort Mason, a former U.S. Army post that is a national historic landmark district and includes numerous structures of historic significance. Fort Mason comprises two distinct areas: Upper and Lower Fort Mason. Lower Fort Mason is northeast of Marina Boulevard and includes three historic piers and several other large buildings. Upper Fort Mason is located immediately east and uphill and includes the Great Meadow and GGNRA's administrative headquarters.

Fort Baker is another former U.S. Army post. It is located in Marin County at the foot of the Golden Gate Bridge and the entrance to the Bay and currently offers recreational and educational opportunities to visitors.

Alcatraz Island is located approximately 1 mile north of downtown San Francisco in the Bay. Alcatraz Island is a former military reservation and federal prison, and is now one of the most popular tourist destinations in the San Francisco Bay Area (Bay Area).

PROJECT PURPOSE AND NEED

PURPOSE OF THE PROJECT

The Park Service seeks to secure a site that will provide a long-term orientation and ferry embarkation facility for service to Alcatraz Island from the northern San Francisco waterfront. The Park Service desires an identifiable and well-functioning facility that will provide a quality welcome and support program for visitors, orient visitors to the history of Alcatraz Island, and provide a connection to other GGNRA parklands and orientation to the national park system in general. The Park Service also seeks to establish special ferry service between the primary Alcatraz ferry embarkation site and the existing Fort Baker pier, as well as special service to and from Fort Mason, as well as to programmatically address the potential for recreational ferry service linkages to other parklands in the Bay. These elements would improve cross-bay connectivity and accommodate existing and future visitor demand for recreational travel to Fort Baker and the Marin Headlands, thereby enhancing GGNRA's operational effectiveness. Many potential visitors are unable to obtain tickets to Alcatraz Island due to the high demand. Enhanced on-shore visitor facilities would provide those visitors with interpretive information about the island and options for ferry access to other NPS destinations from San Francisco.

NEED FOR THE PROJECT

The need for the Project is driven by the following factors:

The Alcatraz ferry embarkation site and associated connections should be a consistent feature over time for visitors to the GGNRA. After operating out of Pier 41 for many years, the ferry embarkation site moved to Pier 31½ in 2006 when a new ferry service concessioner was selected, which led to inconsistencies in the delivery of visitor

services and impacts on surrounding communities, business interests, and transit providers. Federal law generally limits the maximum term of concession contracts to 10 years, and requires that a competitive process be used to select new concessioners. An important objective for identifying a long-term site is to avoid having the site move again when NPS contracts are awarded in the future, producing stability for the Park Service and the City of San Francisco.

Selection of a more specific ferry embarkation site is one step to addressing this need. However, for any site at the Port, that selection would also need to be coupled with the execution of agreements with the Port specifying the long-term availability of and conditions under which the ferry embarkation sites would be made available to any ferry services concessioner, selected by the Park Service through the solicitation and award process mandated by federal law. Given the statutory limitations on extensions of the terms of NPS concession contracts, the risk of delay creates a significant risk of interrupting visitor services through the San Francisco waterfront to Alcatraz Island. The current ferry service concession contract is a 10-year contract scheduled to expire in 2016 and could only be extended by up to three years. The Project does not identify the future ferry concessioner.

The Alcatraz ferry embarkation site should allow for efficiency in making facility improvements when necessary and consistency in projecting facility costs. Under the current scenario, the lease between the Port and the concessioner hinders the ability for improvements to be made to the existing site. The Port has the authority to approve nearly all modifications made to leased pier facilities. Associated Port review and approval timelines can be unpredictable. At present, neither the Park Service nor its concessioner are motivated to make long-term investments in the site,

which could be abandoned in 2016. This arrangement hinders the ability to create an identifiable and quality visitor welcome area and a unique visitor experience that starts with the arrival at the ferry embarkation site. In addition, considerable revenues from Alcatraz Island ferry service operations are used to offset rent for the concessioner's pier leased from the Port, which reduces the amount available for improvements on Alcatraz Island or at other GGNRA parklands.

The Alcatraz ferry embarkation site and associated facilities should serve as a gateway to GGNRA, reflecting the Park Service's identity and providing a quality experience for visitors. Under the current scenario, the condition of the existing embarkation site reduces the quality of the visitor experience. The existing embarkation site is on property that the concessioner has leased from the Port and is outside of GGNRA boundaries. Nevertheless, that embarkation site is the beginning and end point of the transportation services provided to the visiting public, and therefore, is an integral part of the visitor services provided under the concession contract. Consequently, the Park Service has an interest in reviewing elements of the embarkation site facilities for purposes of considering their impact on the interpretation of GGNRA to the visiting public (including visitor appreciation and understanding of the resource). These elements include, for example, signs, logos, colors, or other means of demarcating the existing site as the Park Service's official Alcatraz Island departure location. Lack of formal authority, in combination with changing adjacent commercial uses and developments, hinders the Park Service's ability to create a clear sense of identity and quality visitor support services at the Alcatraz ferry embarkation site.

The Alcatraz ferry embarkation site should provide the space, circulation, and interpretive materials to appropriately and effectively orient visitors to Alcatraz Island and GGNRA. NPS policy is to

provide public access and opportunities for all to enjoy and to learn about park resources. In its current configuration, space is unavailable at Pier 31½ to provide appropriate interpretive exhibits or an orientation to Alcatraz Island and GGNRA for visitors prior to departing for the island. These interpretive and orientation opportunities are also key for visitors wishing to visit Alcatraz Island but unable to secure reservations. The visitor facility does not currently provide a genuine park portal to GGNRA and as such, many visitors or aspiring visitors to Alcatraz Island are unaware of the other recreational and educational opportunities provided by GGNRA.

The Alcatraz ferry embarkation site may provide a valuable opportunity for cross-bay ferry service to other GGNRA parklands. Convenient transit connections to other GGNRA parklands, such as Fort Baker, are currently unavailable from the existing ferry embarkation site. NPS policy promotes alternative transportation access that is energy conserving and convenient, and that provides multiple travel options for visitors. Increasing numbers of park visitors choose to use transit, do not have an automobile, and perceive travel by ferry as an enjoyable experience. The potential to add another (third) berth and promote additional special-event services to the ferry embarkation site would further enhance this opportunity. Special ferry service at Fort Mason could reduce traffic and congestion during peak use and enable program participants to experience the Bay in a manner that is consistent with the site's historic use.

PUBLIC REVIEW PROCESS

The Notice of Intent (NOI) for the Project was published in the Federal Register (FR) on June 1, 2012. The NOI announced the preparation of an EIS by the Park Service, as the federal lead agency. The NOI also included background information, potential alternatives, and methods for public comment. The comment period closed on July 31, 2012. The Park Service distributed a Project newsletter, announcing the scoping period and public meeting dates and location, through postal and electronic mail to existing GGNRA mailing lists. Scoping meetings were held on June 26 and 28, 2012, at Fort Mason Building 201 in San Francisco and the City Hall in Sausalito, respectively.

During the comment period, approximately 90 correspondences were collected from interested stakeholders, such as current ferry operators, tenants and users of Fort Mason Center, Marina District residents, Supervisor Farrell, merchants at Fisherman's Wharf, government agencies, and the Golden Gate Bridge Highway Transportation District. The Public Scoping Comment Summary is available for public review on the Project website. The primary environmental concerns focused on changes in traffic and parking, noise levels, impacts on community character, wind and wave impacts, and impacts to air and water quality. A number of commenters requested that the Park Service continue to operate ferry service from Port sites, specifically at piers 31½ and 41. Many commenters expressed concerns about locating the embarkation site at Fort Mason.

ALTERNATIVES

The alternatives analyzed in this Draft EIS include the No Action, Pier 31½, Pier 41, and Pier 3 alternatives.

NO ACTION ALTERNATIVE

The No Action Alternative is included as an alternative in this EIS for detailed analysis pursuant to 40 Code of Federal Regulations (CFR) 1502.14(d) of the Council on Environmental Quality regulations. The No Action Alternative, which represents no change from the Park Service's current management direction, provides a reference for comparing the other alternatives against, evaluating the magnitude of proposed changes, and measuring the effects of those changes. It assumes a continuation of existing conditions, where the location of the embarkation site would be determined through competition for future concession contracts subject to change every 10 years, and a permanent Alcatraz ferry embarkation site would not be established. There would be no construction costs, and no additional funding would be required to implement this alternative.

While any pier on the San Francisco waterfront that is within a reasonable crossing time from Alcatraz Island could feasibly become the ferry embarkation site under the No Action Alternative, the existing site at Pier 31½ is used as a surrogate (or representative set of conditions) for the No Action Alternative, for the purposes of analyzing impacts of this alternative in the EIS. The existing Alcatraz embarkation site program is located entirely outdoors, with the exception of a portable restroom facility and limited operations space located in the Pier 33 shed. There is currently one float at the existing embarkation site to accommodate two berths. The existing site's program does not meet the Project's basic program requirements and has deficiencies in providing the desired high-quality visitor experience. The presence of an Alcatraz-

themed souvenir shop in the bulkhead building, separate from the NPS concession and not operated by the Park Service, further diminishes the ability of the Park Service to provide a clear sense of identity and quality experience.

PIER 31½ ALTERNATIVE

The Pier 31½ Alternative would retain the current Alcatraz ferry embarkation site at Pier 31½ and would propose improvements to the existing facility. It would use the historic Pier 31 north and south bulkhead building on the Embarcadero, portions of the Pier 31 and Pier 33 sheds, and all of the outdoor space between piers 31 and 33 for embarkation services. The existing single dock and gangway would be replaced with two parallel floating docks (to accommodate three berths) and gangways accessed from the existing bulkhead. Improvements would include retrofit of the existing substructure, consisting of installation of a new gangway, float, and guide piles; repair or replacement of concrete and reinforcing bars; sealing asphalt cracks. Abandoned utilities would be removed and new utilities installed. The existing interior space plan of the bulkhead buildings would be extensively reconfigured on all floors.

This alternative would construct a third berth at Pier 31½, which would increase Pier 31½'s operational capacity and provide visitors the opportunity to visit other park sites within the Bay, as well as special ferry service to Fort Baker.

PIER 41 ALTERNATIVE

The Pier 41 Alternative returns the embarkation site to Pier 41, which served as the Alcatraz ferry embarkation site between the early 1980s and 2006. This alternative would replace the existing floating docks and gangways (currently accessed from the

existing Pier 41 bulkhead) with two parallel floating docks (to accommodate three berths) and gangways. The third berth would increase the site's operational capacity and provide visitors the opportunity to visit other park sites within the Bay, as well as special service to Fort Baker.

This alternative would involve an expansion of the existing building footprint, spanning both piers. Due to its age and condition, the old pier (and adjacent concrete bulkhead) would likely be demolished and replaced prior to major construction in the Pier 41 building. The timber bulkhead wall of the newer pier would be replaced, and piles under the existing building would be reinforced. A new gangway and float would be installed, including supporting guide piles. Abandoned utilities would be removed and replaced. The existing building, which was constructed in the 1980s, would be expanded, remodeled, and updated to be compliant with seismic, life safety, and accessibility codes and guidelines.

PIER 3 ALTERNATIVE

The Pier 3 Alternative would locate the ferry embarkation site in Fort Mason's historic Pier 3 shed, which was constructed between 1910 and 1915. Nearly all services and functions would be located in less than half of the rehabilitated Pier 3 shed building, leaving an opportunity for a compatible use to inhabit the remaining space. The Alcatraz embarkation program would be located in the front (southern) portion of the pier shed, and the compatible use space would be located in the back (northern) portion. A walkway along the eastern side of the building would provide direct and autonomous access to the compatible use space and would not overlap with the Alcatraz embarkation area. Retrofit of the existing Pier 3 substructure would be needed, including repair and installation of support piles; installation of two new gangways and floats (between piers 2 and 3 and piers 1 and 2, for a total of three berths

like the other action alternatives); repair or replacement of damaged concrete and reinforcing bars; and replacement of fender piles, asphalt paving, and guardrails.

Abandoned utilities would be removed and replaced. The existing Pier 3 shed building would require architectural improvements for seismic retrofit, life safety, Architectural Barriers Act Accessibility Standards compliance, historic preservation, and interior design and remodeling upgrades.

ACTIVITIES COMMON TO ALL ACTION ALTERNATIVES

Developing a ferry berth at Fort Baker for special service that could operate for special events, such as conferences, occasional excursions, or special occasional service between other parklands and the primary ferry embarkation site in San Francisco, is common to all action alternatives evaluated in this EIS. The construction necessary to establish ferry service at Fort Baker would primarily involve upgrades to the existing concrete pier, which was constructed in the late 1930s. Retrofit of the existing pier substructure would be needed. This would entail installation of a new gangway, float, and support piles; repair of existing piles; repair or replacement of damaged concrete and reinforcing bars; replacement of fender piles, asphalt paving, and the existing guardrails; and extension or relocation of utilities.

As part of enhancing the opportunities for visitors to Alcatraz and the GGNRA, the Park Service is also proposing an occasional special ferry service from Fort Mason separate from service provided to and from the primary embarkation site as an activity that is common to all action alternatives evaluated in this EIS.

The purpose of this additional, special service is to enhance Fort Mason Center programs through additional recreational opportunities, as well as to provide water-based demand management opportunities to

help reduce traffic and parking congestion during peak use.

This special service would utilize the same float and gangway design described and analyzed as the third berth located between piers 1 and 2 as part of the Fort Mason Pier 3 Alternative. If special ferry service at Fort Mason is added concurrent with locating the primary Alcatraz ferry embarkation site at piers 31½ or 41 (inclusive of all three berths), the float and gangway between piers 1 and 2 (otherwise referred to as the third berth in the Pier 3 Alternative) would be constructed at Fort Mason. If the Pier 3 Alternative is selected as the location of the primary Alcatraz ferry embarkation site, the special ferry service would be accommodated by transportation improvements associated with the full buildout of the Pier 3 Alternative.

The construction and operation of special ferry service at either Fort Baker or Fort Mason would not be tied to the primary Alcatraz Island ferry embarkation facility or site operator.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with Director's Order No. 12 and NEPA, the Park Service is required to identify the environmentally preferred alternative, or, "the alternative that will promote the national environmental policy as expressed in the NEPA's Section 101." The environmentally preferred alternative is not the same as the NPS preferred alternative for implementation, nor is the Park Service required to implement the environmentally preferred alternative. Continued discussion between the Park Service and Port is likely to determine the preferred alternative; however, public feedback on this Draft EIS will also be considered. As such, the preferred alternative for implementation is not identified in the Draft EIS, but will be identified in the Final EIS.

For each of the action alternatives, impacts by resource topic are generally consistent with the No Action Alternative, with major adverse impacts limited primarily to transportation, air quality, and noise. Major seismic impacts could occur associated with each action alternative (consistent across all alternatives), although these would be reduced compared to the No Action Alternative. The Pier 41 Alternative could result in major socioeconomic impacts. The magnitude of noise impacts would be consistent across the action alternatives, with major impacts limited to short-term construction effects. Transportation impacts would be least significant under the Pier 31½ Alternative, limited to long-term effects on transit. For the remaining resource topics, the magnitude of impacts would be similar among each of the action alternatives and less than major. Each of the action alternatives would fulfill the Project objectives, while the No Action Alternative would not meet all of the Project objectives.

For the remaining resource topics where impacts of all alternatives would be less than major, the Pier 31½ Alternative would result in the fewest impacts. The Pier 31½, Pier 41,

and Pier 3 alternatives would result in equivalent negligible to minor adverse impacts in the categories of water quality and hydrology, aquatic biological resources, and visual resources. Compared to the Pier 3 Alternative, the Pier 31½ Alternative would have reduced impacts related to terrestrial biological resources, cultural resources, recreation (long-term), and socioeconomics. Compared to the Pier 41 Alternative, the Pier 31½ Alternative would have reduced impacts related to recreation (short-term) and socioeconomics. While the Pier 3 and Pier 41 alternatives would result in short-term, minor, beneficial socioeconomic impacts during construction and beneficial intersection traffic, increased impacts to other resource topics (including socioeconomics and transportation and circulation) outweigh these benefits.

Therefore, the Pier 31½ Alternative has been identified as the environmentally preferred alternative, as selection of this alternative would fulfill the Project objectives while incurring reduced major transportation impacts and similar or reduced impacts to remaining resource topics compared to the other action alternatives.

ENVIRONMENTAL CONSEQUENCES

The following topics were raised during the scoping process or were deemed relevant for evaluation by the Park Service and selected for detailed analysis in this Draft EIS: land use; transportation and circulation; air quality; noise and vibration; geology, soils, and seismicity; water quality and hydrology; aquatic biological resources; terrestrial biological resources; visual resources; cultural resources; recreation; socioeconomics; public services and utilities; and hazardous materials. The rationale for selection of each impact topic was based on potential for substantive impact; environmental statutes, regulations, and executive orders; and/or NPS management policies and guidance. Table ES-1 summarizes the potential impacts of each of the alternatives evaluated in this Draft EIS, including the activities common to all action alternatives, as well as proposed mitigation measures.

TABLE ES-1. POTENTIAL IMPACTS OF ALTERNATIVES

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Land Use			
No impacts	<ul style="list-style-type: none"> • No impacts • Fort Mason special ferry service: minor impacts • Fort Baker special ferry service: no impacts 	<ul style="list-style-type: none"> • No impacts • Fort Mason special ferry service: minor impacts • Fort Baker special ferry service: no impacts 	<ul style="list-style-type: none"> • Minor impacts • Fort Mason special ferry service: minor impacts • Fort Baker special ferry service: no impacts
Transportation and Circulation			
<ul style="list-style-type: none"> • Construction: no impacts • Operation: short- and long-term, minor, adverse impacts on traffic, transit, bicycle facilities, pedestrian facilities, and parking facilities • Cumulative¹: long-term, minor, adverse impacts on traffic, transit, bicycle facilities, pedestrian facilities, and parking facilities 	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse impacts • Operation: short-term, minor, adverse impacts on traffic, transit, bicycle facilities, pedestrian facilities, and parking facilities • Cumulative¹: <ul style="list-style-type: none"> – Traffic, bicycle facilities, pedestrian facilities, and parking facilities: long-term, minor, adverse impacts – Transit: long-term, major, adverse impacts • Mitigation measure: Transportation-MM-1 • Fort Mason special ferry service: consistent with impacts above with additional long-term, adverse transit impact • Fort Baker special ferry service: no impacts 	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse impacts • Operation: <ul style="list-style-type: none"> – Traffic, transit, bicycle facilities, and parking facilities: short-term, minor, adverse impacts – Pedestrian facilities: short-term, moderate, adverse impacts • Cumulative¹: <ul style="list-style-type: none"> – Traffic and pedestrian facilities: long-term, moderate, adverse impacts – Transit: long-term, major, adverse impacts – Bicycle facilities and parking facilities: long-term, minor, adverse impacts – Transit: long-term, major, adverse impacts • Mitigation measures: Transportation-MM-1, 2, and 3 • Fort Mason special ferry service: consistent with impacts above with additional long-term, adverse transit impacts • Fort Baker special ferry service: no impacts 	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse impacts • Operation: <ul style="list-style-type: none"> – Traffic, transit, pedestrian facilities, and parking facilities: short-term, minor, adverse impacts – Bicycle facilities and parking facilities: short-term, moderate, adverse impacts • Cumulative¹: <ul style="list-style-type: none"> – Traffic and pedestrian facilities: long-term, minor, adverse impacts – Transit: long-term, major, adverse impacts – Bicycle facilities and parking facilities: long-term, moderate, adverse impacts • Mitigation measures: Transportation-MM-4 and 5 • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: no impacts

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Air Quality			
No impacts	<ul style="list-style-type: none"> • Construction: short-term, major, adverse impacts • Operation: long-term, minor, adverse impacts • Mitigation measures: Air-MM-1, 2, and 3 • Fort Mason special ferry service: accounted for in impacts above • Fort Baker special ferry service: accounted for in impacts above 	<ul style="list-style-type: none"> • Construction: short-term, major, adverse impacts • Operation: long-term, minor, adverse impacts • Mitigation measures: Air-MM-1, 2, and 3 • Fort Mason special ferry service: accounted for in impacts above • Fort Baker special ferry service: accounted for in impacts above 	<ul style="list-style-type: none"> • Construction: short-term, major, adverse impacts • Operation: long-term, minor, adverse impacts • Mitigation measures: Air-MM-1, 2, and 3 • Fort Mason special ferry service: accounted for in impacts above • Fort Baker special ferry service: accounted for in impacts above
Noise and Vibration			
No impacts	<ul style="list-style-type: none"> • Construction: <ul style="list-style-type: none"> – Off-site receptors: short-term, negligible impacts – Pier 33 building: short-term, major, adverse impacts – Mitigation measures: Noise-MM-1 and Vibration-MM-1 • Operation: no impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Short-term, major, adverse construction impacts – Mitigation measures: Noise-MM-1 and Vibration-MM-1 – No operational impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – No impacts 	<ul style="list-style-type: none"> Construction: <ul style="list-style-type: none"> • Off-site receptors: short-term, negligible impacts • Pier 41 building: short-term, major, adverse impacts • Mitigation measures: Noise-MM-1 and Vibration-MM-1 • Operation: no impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Short-term, major, adverse construction impacts – Mitigation measures: Noise-MM-1 and Vibration-MM-1 – No operational impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – No impacts 	<ul style="list-style-type: none"> Construction: <ul style="list-style-type: none"> • Off-site receptors: short-term, negligible impacts • Mitigation measures: Noise-MM-1 and Vibration-MM-1 • Operation: no impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Short-term, major, adverse construction impacts – Mitigation measures: Noise-MM-1 and Vibration-MM-1 – No operational impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – No impacts

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Geology, Soils, and Seismicity			
<ul style="list-style-type: none"> • Seismically induced ground shaking or liquefaction: long-term, major, adverse impacts • Seismically induced settlement: long-term, minor, adverse impacts • Expansive soils, landslides, and mineral resources: no impacts 	<ul style="list-style-type: none"> • Seismically induced ground shaking or liquefaction: long-term, major, adverse impacts • Seismically induced settlement: long-term, minor, adverse impacts • Expansive soils, landslides, and mineral resources: no impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Seismically induced ground shaking or liquefaction: long-term, major, adverse impacts – Seismically induced settlement: long-term, minor, adverse impacts – Landslides: long-term, negligible impacts – Expansive soils and mineral resources: no impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – Seismically induced ground shaking: long-term, major, adverse impacts – Seismically induced settlement: long-term, minor, adverse impacts – Liquefaction, expansive soils, landslides, and mineral resources: no impacts 	<ul style="list-style-type: none"> • Seismically induced ground shaking or liquefaction: long-term, major, adverse impacts • Seismically induced settlement: long-term, minor, adverse impacts • Expansive soils, landslides, and mineral resources: no impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Seismically induced ground shaking or liquefaction: long-term, major, adverse impacts – Seismically induced settlement: long-term, minor, adverse impacts – Landslides: long-term, negligible impacts – Expansive soils and mineral resources: no impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – Seismically induced ground shaking: long-term, major, adverse impacts – Seismically induced settlement: long-term, minor, adverse impacts – Liquefaction, expansive soils, landslides, and mineral resources: no impacts 	<ul style="list-style-type: none"> • Seismically induced ground shaking or liquefaction: long-term, major, adverse impacts • Seismically induced settlement: long-term, minor, adverse impacts • Landslides: long-term, negligible impacts • Expansive soils and mineral resources: no impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: <ul style="list-style-type: none"> – Seismically induced ground shaking: long-term, major, adverse impacts – Seismically induced settlement: long-term, minor, adverse impacts – Liquefaction, expansive soils, landslides, and mineral resources: no impacts

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Water Quality and Hydrology			
<ul style="list-style-type: none"> • Water quality (construction): no impacts • Water quality (operations): long-term, negligible impacts • Flood risk, tsunamis, and seiches: long-term, negligible impacts 	<ul style="list-style-type: none"> • Water quality (construction): short-term, negligible impacts • Water quality (operations), flood risk, sea level rise, tsunamis and seiches: long-term, negligible impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: consistent with impacts above 	<ul style="list-style-type: none"> • Water quality (construction): short-term, negligible impacts • Water quality (operations), flood risk, sea level rise, tsunamis and seiches: long-term, negligible impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: consistent with impacts above 	<ul style="list-style-type: none"> • Water quality (construction): short-term, negligible impacts • Water quality (operations), flood risk, sea level rise, tsunamis and seiches: long-term, negligible impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: consistent with impacts above
Aquatic Biological Resources			
No impacts	<ul style="list-style-type: none"> • Marine mammals: short-term, minor, adverse impacts • Plants and macroalgae, common fish species, essential fish habitat (EFH), and protected species: short- and long-term, negligible to minor, adverse impacts • Plankton, protected eelgrass, submerged aquatic vegetation beds, or encrusting invertebrates: no impacts • Mitigation measures: Aquatic-MM-1 and 2 • Fort Mason special ferry service: <ul style="list-style-type: none"> – Marine mammals: short-term, minor, adverse impacts – Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts – Plankton, protected eelgrass, submerged aquatic 	<ul style="list-style-type: none"> • Marine mammals: short-term, minor, adverse impacts • Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts • Plankton, protected eelgrass, submerged aquatic vegetation beds, or encrusting invertebrates: no impacts • Mitigation measures: Aquatic-MM-1 and 2 • Fort Mason special ferry service: <ul style="list-style-type: none"> – Marine mammals: short-term, minor, adverse impacts – Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts – Plankton, protected eelgrass, submerged aquatic vegetation beds, or encrusting invertebrates: no impacts – Mitigation measures: Aquatic-MM-1 	<ul style="list-style-type: none"> • Marine mammals: short-term, minor, adverse impacts • Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts • Plankton, protected eelgrass, submerged aquatic vegetation beds, or encrusting invertebrates: no impacts • Mitigation measures: Aquatic-MM-1 and 2 • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: <ul style="list-style-type: none"> – Marine mammals: short-term, minor, adverse impacts – Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts – Plankton, protected eelgrass,

ENVIRONMENTAL CONSEQUENCES

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
	<p>vegetation beds, or encrusting invertebrates: no impacts</p> <ul style="list-style-type: none"> – Mitigation measures: Aquatic-MM-1 and 2 • Fort Baker special ferry service: <ul style="list-style-type: none"> – Marine mammals: short-term, minor, adverse impacts – Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts – Plankton, protected eelgrass, submerged aquatic vegetation beds, or encrusting invertebrates: no impacts – Mitigation measures: Aquatic-MM-1 and 2 	<p>and 2</p> <ul style="list-style-type: none"> • Fort Baker special ferry service: <ul style="list-style-type: none"> – Marine mammals: short-term, minor, adverse impacts – Plants and macroalgae, common fish species, EFH, and protected species: short- and long-term, negligible to minor, adverse impacts – Plankton, protected eelgrass, submerged aquatic vegetation beds, or encrusting invertebrates: no impacts – Mitigation measures: Aquatic-MM-1 and 2 	<p>submerged aquatic vegetation beds, or encrusting invertebrates: no impacts</p> <ul style="list-style-type: none"> – Mitigation measures: Aquatic-MM-1 and 2

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Terrestrial Biological Resources			
No impacts	<ul style="list-style-type: none"> • No impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Special status bird species: short-term, minor, adverse and long-term, negligible impacts – Common terrestrial wildlife species: long-term, negligible impacts – Terrestrial vegetation, special status bat species, mission blue butterfly, or San Bruno elfin butterfly: no impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – Common terrestrial wildlife, special status bird species, western red bat, and California least tern: short- and long-term, minor to negligible impacts – Terrestrial vegetation, American badger, or mission blue butterfly: no impacts • Mitigation measure: Noise-MM-1 	<ul style="list-style-type: none"> • No impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Special status bird species: short-term, minor, adverse and long-term, negligible impacts – Common terrestrial wildlife species: long-term, negligible impacts – Terrestrial vegetation, special status bat species, mission blue butterfly, or San Bruno elfin butterfly: no impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – Common terrestrial wildlife, special status bird species, western red bat, and California least tern: short- and long-term, minor to negligible impacts – Terrestrial vegetation, American badger, or mission blue butterfly: no impacts • Mitigation measure: Noise-MM-1 	<ul style="list-style-type: none"> • Special status bird species: short-term, minor, adverse and long-term, negligible impacts • Common terrestrial wildlife species: long-term, negligible impacts • Terrestrial vegetation, special status bat species, mission blue butterfly, or San Bruno elfin butterfly: no impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: <ul style="list-style-type: none"> – Common terrestrial wildlife, special status bird species, western red bat, and California least tern: short- and long-term, minor to negligible impacts – Terrestrial vegetation, American badger, or mission blue butterfly: no impacts • Mitigation measure: Noise-MM-1

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Visual Resources			
No impacts	<ul style="list-style-type: none"> • Rehabilitated infrastructure: long-term, minor, beneficial impacts • Addition of a third berth: long-term, negligible impacts • Increased lighting: long-term, minor, adverse impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Rehabilitated infrastructure: long-term, minor, beneficial impacts – Addition of two gangways and floats: long-term, minor, adverse impacts – Increased lighting: long-term, moderate, adverse impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – Rehabilitated infrastructure: long-term, minor, beneficial and adverse impacts – Water views: long-term, minor, adverse impacts – Increased lighting: long-term, minor, adverse impacts • Mitigation measures: Visual-MM-1, 2, and 3 	<ul style="list-style-type: none"> • Rehabilitated infrastructure: long-term, minor, beneficial impacts • Vegetation views: long-term, minor, adverse impacts • Shielded lighting: long-term, minor, beneficial impacts • Fort Mason special ferry service: <ul style="list-style-type: none"> – Rehabilitated infrastructure: long-term, minor, beneficial impacts – Addition of two gangways and floats: long-term, minor, adverse impacts – Increased lighting: long-term, moderate, adverse impacts • Fort Baker special ferry service: <ul style="list-style-type: none"> – Rehabilitated infrastructure: long-term, minor, beneficial and adverse impacts – Water views: long-term, minor, adverse impacts – Increased lighting: long-term, minor, adverse impacts • Mitigation measure: Visual-MM-4 	<ul style="list-style-type: none"> • Rehabilitated infrastructure: long-term, minor, beneficial impacts • Addition of two gangways and floats: long-term, minor, adverse impacts • Increased lighting: long-term, moderate, adverse impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: <ul style="list-style-type: none"> – Rehabilitated infrastructure: long-term, minor, beneficial and adverse impacts – Water views: long-term, minor, adverse impacts – Increased lighting: long-term, minor, adverse impacts • Mitigation measures: Visual-MM-1, 2, and 3
Cultural Resources			
No impacts	<ul style="list-style-type: none"> • Minor impacts to historic structures • Fort Mason special ferry service: no impacts • Fort Baker special ferry service: minor impacts to historic structures and cultural landscapes 	<ul style="list-style-type: none"> • No impacts • Fort Mason special ferry service: no impacts • Fort Baker special ferry service: minor impacts to historic structures and cultural landscapes • Fort Mason special ferry service special ferry service: no impacts 	<ul style="list-style-type: none"> • Minor impacts to historic structures and cultural landscapes; potential beneficial impacts to historic structures and cultural landscapes • Fort Mason special ferry service: no impacts • Fort Baker special ferry service: minor impacts to historic structures

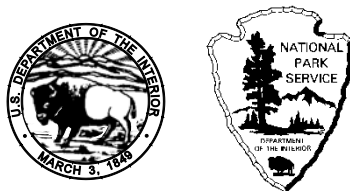
No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
			and cultural landscapes
Recreation			
Long-term, moderate, adverse impacts	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse impacts • Operation: long-term, major, beneficial impacts from enhanced recreational opportunities; and no impacts on recreational boating • Fort Mason special ferry service: no construction impacts; long-term, major, beneficial impacts on recreation from operations • Fort Baker special ferry service: short-term, minor, adverse impacts during construction; long-term, minor, adverse impacts on recreational fishing; long-term, major, beneficial impacts from enhanced recreational opportunities 	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse impacts • Operation: long-term, major, beneficial impacts from enhanced recreational opportunities and short-term, moderate, adverse impacts on Water Emergency Transportation Authority (WETA) ferry services; and no impacts on recreational boating • Fort Mason special ferry service: no construction impacts; long-term, major, beneficial impacts on recreation from operations • Fort Baker special ferry service: short-term, minor, adverse impacts during construction; long-term, minor, adverse impacts on recreational fishing; long-term, major, beneficial impacts from enhanced recreational opportunities 	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse impacts • Operation: long-term, minor, adverse impacts from loss of Pier 3 for large events; long-term, minor, adverse impacts from increased travel time from parking areas; long-term, major, beneficial impacts from enhanced recreational opportunities; and no impacts on recreational boating or swimming • Fort Mason special ferry service: no construction impacts; long-term, major, beneficial impacts on recreation from operations • Fort Baker special ferry service: short-term, minor, adverse impacts during construction; long-term, minor, adverse impacts on recreational fishing; long-term, major, beneficial impacts from enhanced recreational opportunities • Mitigation measure: Transportation-MM-5

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
Socioeconomics			
Long-term, negligible, beneficial impacts	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse and beneficial impacts • Operation: long-term, minor, beneficial impacts on merchants near Pier 31½ • Fort Mason special ferry service: short-term, minor, beneficial impacts and long-term, minor to negligible, adverse impacts • Fort Baker special ferry service: short- and long-term, negligible to minor, beneficial impacts 	<ul style="list-style-type: none"> • Construction: short-term, minor, beneficial impacts • Operation: long-term, minor, beneficial impacts on Fisherman's Wharf merchants; long-term, negligible impacts on merchants near Pier 31½; and long-term, major, adverse impacts associated with displacing WETA ferry service • Fort Mason special ferry service: short-term, minor, beneficial impacts and long-term, minor to negligible, adverse impacts • Fort Baker special ferry service: short- and long-term, negligible to minor, beneficial impacts 	<ul style="list-style-type: none"> • Construction: short-term, minor, adverse and beneficial impacts • Operation: long-term, moderate, adverse impacts on parking for Fort Mason Center tenants; and long-term, moderate, adverse impacts from the loss of Pier 3 event space to the Fort Mason Center and users • Fort Mason special ferry service: short-term, minor, beneficial impacts and long-term, minor to negligible, adverse impacts • Fort Baker special ferry service: short- and long-term, negligible to minor, beneficial impacts • Mitigation measures: Transportation-MM-5
Public Services and Utilities			
No impacts	<ul style="list-style-type: none"> • Construction: short-term, negligible to minor, adverse impacts • Operation: long-term, negligible impacts • Fort Mason special ferry service special ferry service: short-term, negligible to minor, adverse impacts during construction and long-term, negligible impacts during operation • Fort Baker special ferry service special ferry service: short-term, negligible to minor, adverse impacts during construction and long-term, negligible impacts 	<ul style="list-style-type: none"> • Construction: short-term, negligible to minor, adverse impacts • Operation: long-term, negligible impacts • Fort Mason special ferry service special ferry service: short-term, negligible to minor, adverse impacts during construction and long-term, negligible impacts during operation • Fort Baker special ferry service special ferry service: short-term, negligible to minor, adverse impacts during construction and long-term, negligible impacts during operation • Mitigation measure: Utilities-MM-1 	<ul style="list-style-type: none"> • Construction: short-term, negligible to minor, adverse impacts • Operation: long-term, negligible impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service special ferry service: short-term, negligible to minor, adverse impacts during construction and long-term, negligible impacts during operation • Mitigation measure: Utilities-MM-1

No Action Alternative	Pier 31½ Alternative	Pier 41 Alternative	Pier 3 Alternative
	during operation • Mitigation measure: Utilities-MM-1		
Hazardous Materials			
No impacts	<ul style="list-style-type: none"> • Construction: short-term, negligible impacts • Operations: long-term, minor, beneficial impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: consistent with impacts above 	<ul style="list-style-type: none"> • Construction: short-term, negligible impacts • Operations: long-term, minor, beneficial impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: consistent with impacts above 	<ul style="list-style-type: none"> • Construction: short-term, negligible impacts • Operations: long-term, minor, beneficial impacts • Fort Mason special ferry service: consistent with impacts above • Fort Baker special ferry service: consistent with impacts above

Note:

1 Due to the nature of the transportation analysis methodology, the cumulative and long-term operational transportation impacts of the alternatives under evaluation are equivalent. As such, cumulative impacts for transportation (but not other resource topics) are included in this summary table.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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Golden Gate National Recreation Area
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