



June 2016

MIDWAY ATOLL

U.S. Fish and Wildlife Service Faces Many Competing Priorities

GAO Highlights

Highlights of [GAO-16-382](#), a report to congressional requesters

Why GAO Did This Study

Midway, a trio of islands about 1,300 miles from Honolulu, has been managed by FWS as a wildlife refuge since the closure of a naval base in 1996. Midway also serves as a national memorial to a historic World War II battle. GAO was asked to review FWS's management of Midway.

This report examines (1) funding for operations and projects on Midway for fiscal years 2009 to 2015, (2) how FWS maintained historic properties on Midway and the extent to which it consulted with key parties and sought public comment, (3) challenges FWS faces in reestablishing a public visitation program, and (4) the use of Midway's Henderson Airfield.

GAO visited Midway in April 2015 to observe the condition of historic and other properties. GAO reviewed budget data for Midway from fiscal years 2009 through 2015; reviewed laws, policies, and regulations on historic preservation; examined public visitation plans, emergency landing data, and the use of the airfield; and interviewed FWS, FAA, and Advisory Council on Historic Preservation officials and other stakeholders.

What GAO Recommends

GAO recommends that FWS ensure that the public, including previously interested key parties, are notified about FWS actions on Midway that may have an adverse effect on historic properties. The Department of the Interior agreed with GAO's recommendation.

View a [video](#) of GAO's review of FWS's management of Midway. To view high-resolution photographs from this report, please see [GAO's Flickr page](#).

View [GAO-16-382](#). For more information, contact Anne-Marie Fennell at (202) 512-3841 or fennella@gao.gov.

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What GAO Found

According to officials in the Department of the Interior's U.S. Fish and Wildlife Service (FWS), operations funding for Midway Atoll (Midway) has decreased in recent years and project-specific funding has varied. Specifically, budget officials said that FWS, after increasing the funding allocated to Midway's operations to more than \$4 million by fiscal year 2011, decreased Midway's allocation by more than \$1 million by fiscal years 2012 and 2013. These officials said that the lower allocation led to suspension of public visitation on Midway in November 2012, which, in turn, decreased operations funding available from fees collected for services such as lodging. Midway has also received funding for specific projects, such as lead-based paint abatement. In addition, under an interagency agreement, the Federal Aviation Administration (FAA) has reimbursed FWS up to \$3 million per year for the direct costs of operating Midway's Henderson Airfield and provided additional funds for capital improvement projects, such as resurfacing runways.

FWS has maintained most historic properties on Midway but has demolished others without providing for public notice and involvement, which is not consistent with the regulations implementing section 106 of the National Historic Preservation Act. A 2000 order by the Secretary of the Interior directs FWS to administer Midway in accordance with the law. Federal agencies must provide the public with notice of and opportunity to comment on agency actions that may affect historic properties. Since 2012, FWS has demolished seven historic properties on Midway as part of the agency's removal of lead-based paint and taken another action adversely affecting historic properties without providing adequate public notification, including directly notifying parties that have previously expressed interest in historic preservation issues on Midway, and an opportunity for public comment. An FWS official said that the extent of such notification may vary based on the size of the actions. However, officials with the Advisory Council on Historic Preservation said that groups known to have a high level of interest should be notified directly. Without providing public notification, including ensuring that such parties are notified about future actions that may adversely affect historic properties, FWS will not have reasonable assurance that it is adequately seeking public comment and input under the section 106 process.

Since the suspension of public visitation to Midway in 2012, FWS faces multiple challenges relating to personnel, infrastructure, supplies, and transportation access to reestablish the program. For example, the building used to house visitors is almost beyond the point of repair and renovation, according to a 2009 assessment of its condition. FWS officials estimated that \$1.2 million in annual funding would be needed to reestablish a public visitation program and that additional funding would also be needed for start-up costs.

Midway's Henderson Airfield serves as an emergency landing airport for aircraft in the mid-Pacific Ocean region and facilitates access to Midway and its surroundings. Under FAA regulations, air carriers must designate in their flight plans a certified airport for use in the event of an emergency during extended operations. Since 2003, there have been seven military and civilian emergency landings on Midway.

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Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
ETOPS	extended operations
FAA	Federal Aviation Administration
FWS	U.S. Fish and Wildlife Service
medevac	medical evacuation
Midway	Midway Atoll
MOA	memorandum of agreement
NOAA	National Oceanic and Atmospheric Administration
Recovery Act	American Recovery and Reinvestment Act of 2009

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June 2, 2016

The Honorable Tom McClintock
Chairman
Subcommittee on Federal Lands
Committee on Natural Resources
House of Representatives

The Honorable John Fleming, M.D.
Chairman
Subcommittee on Water, Power and Oceans
Committee on Natural Resources
House of Representatives

The Honorable John J. Duncan, Jr.
House of Representatives

Midway Atoll (Midway) is a chain of three small coral islands located at the northern end of the Hawaiian archipelago that is home to millions of seabirds and is a national wildlife refuge, Midway Atoll National Wildlife Refuge.¹ Midway has undergone a number of transformations since it was claimed by the United States in 1867, including to a relay station for the trans-Pacific communication cable in the early 1900s and to host for a U.S. Navy base that was the site of the Battle of Midway, a turning point in World War II. As a result of its prior uses, Midway has more than 50 historic properties, some of which are contaminated with lead paint, and an airport known as Henderson Airfield that is used as an emergency landing airport for trans-Pacific flights and military aircraft. In addition, Midway is part of the Papahānaumokuākea Marine National Monument and is the only location within the monument that has an airport and facilities for people who visit the monument.² Though remotely located in

¹An atoll is a ring-shaped coral reef, island, or series of islets. An atoll surrounds a body of water called a lagoon.

²The Northwestern Hawaiian Islands Marine National Monument was established by Presidential Proclamation 8031 on June 15, 2006. Its name was changed to the Papahānaumokuākea Marine National Monument by Presidential Proclamation 8112 on February 28, 2007. The monument is managed by three co-trustees: the state of Hawaii, the Department of the Interior's U.S. Fish and Wildlife Service, and the Department of Commerce's National Oceanic and Atmospheric Administration.

the mid-Pacific—about 1,300 miles from Honolulu—Midway previously had a public visitation program, which was discontinued in November 2012 for budgetary reasons.

The U.S. Fish and Wildlife Service (FWS), within the Department of the Interior, has managed the wildlife refuge on Midway since 1996, when the Navy closed its base, and FWS co-manages the airport with the Federal Aviation Administration (FAA) within the Department of Transportation. The executive order transferring management of Midway to FWS directs FWS, among other things, to maintain the atoll's historical significance and provide opportunities for scientific research, environmental education, and certain recreational activities consistent with the executive order on management and general public use of refuges.³ In September 2000, the Secretary of the Interior designated the Midway Atoll National Wildlife Refuge as the Battle of Midway National Memorial and directed FWS to administer, protect, and develop it in accordance with the National Historic Preservation Act, among other laws.⁴ Under section 106 of the act and its implementing regulations, federal agencies undertaking actions that might affect historic properties are to consult with state historic preservation officers and other interested parties (i.e., stakeholders) to assess the effects of the undertakings on historic properties and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.⁵ In addition, under the regulations implementing section 106, federal agencies are to provide the public with notice about such undertakings and their potential effects on historic properties and seek public comment and input on resolving adverse effects. Various stakeholders have raised concerns about the maintenance of historic structures on Midway, as well as protection of wildlife from lead paint and other hazards, and discontinuation of the public visitation program.

You asked us to review FWS's management of Midway. This report (1) describes funding for operations and projects on Midway for fiscal

³Executive Order No. 13022, 61 Fed. Reg. 56875 (Nov. 4, 1996).

⁴Secretary of the Interior Order No. 3217 (Sept.13, 2000).

⁵Pub. L. No. 89-665, § 106, 80 Stat. 915 (1966) (codified as amended at 54 U.S.C. § 3006108); 36 C.F.R. pt. 800. Section 106 applies to actions federal agencies carry out, fund, permit, license, or approve.

years 2009 to 2015; (2) examines how FWS has maintained historic properties on Midway and the extent to which it has consulted key stakeholders and sought public comment; (3) identifies challenges, if any, FWS faces in reestablishing a public visitation program; and (4) describes the use of Henderson Airfield as an emergency landing airport and access point for the Papahānaumokuākea Marine National Monument.

To describe funding, we reviewed budget data for Midway over the last 7 years, for fiscal years 2009 through 2015. FWS officials told us that because of the agency's document retention policy it does not have pre-2009 data. We assessed the reliability of these data and found them to be of undetermined reliability for purposes of our report. For example, we reviewed the annual external audit report of the Department of the Interior's financial database for fiscal year 2015, which covers FWS data; this report noted that internal control deficiencies related to financial reporting resulted in a lack of assurance that the department's financial data were correct.⁶ As a result, we relied on information from interviews with agency budget officials to generally describe funding.

To examine how FWS has maintained its historic properties, the extent to which the agency has consulted key stakeholders, and any challenges it faces in reestablishing a public visitation program, we undertook several data collection methods. We visited Midway in April 2015 to observe and document in photographs and video the condition of existing properties, which we identified from current FWS asset lists, historic preservation plans, and other documents. We reviewed FWS management and visitor services plans for Midway as a national wildlife refuge and as a part of the marine national monument. We reviewed laws, regulations, and policies regarding wildlife refuges, historic properties, and hazardous substances, including the National Historic Preservation Act and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).⁷ We interviewed FWS officials on Midway as well as the agency's Pacific Islands Refuges and Monuments Office in Honolulu and

⁶Department of the Interior, *Agency Financial Report, FY 2015* (Washington, D.C.: Nov. 13, 2015). According to the report, the agency plans to take corrective actions to remedy the internal control deficiencies.

⁷Pub. L. No. 96-510, 94 Stat. 2767 (1980) (codified as amended at 42 U.S.C. §§ 9601-9675).

its Region 1 office in Portland, Oregon,⁸ about the management and oversight of Midway. We interviewed officials from the other co-trustees of the marine national monument—specifically, the National Oceanic and Atmospheric Administration (NOAA), within the Department of Commerce, and the state of Hawaii, through its Department of Land and Natural Resources—regarding the management of Midway and the permitting process for activities in the marine national monument.⁹ We interviewed officials from the Advisory Council on Historic Preservation concerning historic preservation requirements affecting federal agencies. We also interviewed representatives of the four key stakeholder groups who have participated in public visitation programs to Midway in the past, before or after the designation of the Papahānaumokuākea Marine National Monument in 2006.¹⁰

To describe the use of Henderson Airfield, we reviewed FWS and FAA reports, policies, and regulations on the operation of Henderson Airfield and airports designated by FAA for emergency landings. We also interviewed FWS and FAA officials regarding the agencies' roles and responsibilities in providing an emergency landing site on Midway. In addition, we interviewed a nonprobability sample of airline industry representatives—of a leading aircraft manufacturer, the largest airline pilots association, and the largest organization representing commercial airlines—regarding the use of Midway as an emergency landing site. Because this was a nonprobability sample, it does not allow us to generalize these views to either a segment of or to the entire airline industry. However, these interviews provide examples of the views of some industry representatives.

⁸The region encompasses the states of Hawaii, Idaho, Oregon, and Washington and the Pacific Island Territories and is headquartered in Portland, Oregon.

⁹Access to the monument is restricted and, with limited exception, all activities within the monument must be authorized by a permit. The exceptions are emergency response, law enforcement, activities of the Armed Forces (including the Coast Guard), and passage without interruption. To obtain a permit, the proposed activity must meet specific criteria, including being conducted with adequate safeguards for the resources and ecological integrity of the monument. There are six types of permits—research, education, conservation and management, native Hawaiian practices, special ocean use, and recreation—and some have additional specific criteria.

¹⁰These groups are the International Midway Memorial Foundation, Oceanic Society, Midway Phoenix Corporation/Phoenix Air, and Friends of Midway Atoll National Wildlife Refuge.

We conducted this performance audit from March 2015 to June 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. A more detailed description of our audit scope and methodology is presented in appendix I.

Background

Laysan Albatross



Source: Kiah Walker/U.S. Fish and Wildlife Service.

The Laysan albatross is a large bird, with a wing span of up to 6 feet. Beautiful in flight, but ungainly in their movement on land, the albatross were called “gooney birds” by those stationed on Midway Atoll (Midway) during World War II. In 1997, when the Navy ceremonially transferred Midway to the U.S. Fish and Wildlife Service, the Secretary of the Navy cited the changing mission as “trading guns for goonies.” Laysan albatross are monogamous. If one mate should die, the other will likely create a new pair bond. Seventy-one percent of the world’s population nests on Midway. Laysan albatross feed primarily at night on anything that floats on the surface of the water, such as squid and fish, and also on marine debris, with an estimated 5 tons of plastic being accidentally fed to chicks each year. Their typical life span is 12 to 40 years. The world’s oldest known banded bird in the wild is a Laysan albatross named Wisdom (left in above photo with her mate, Akeakamai), who is at least 65 years old and has likely raised at least 37 chicks, according to the U.S. Fish and Wildlife Service.

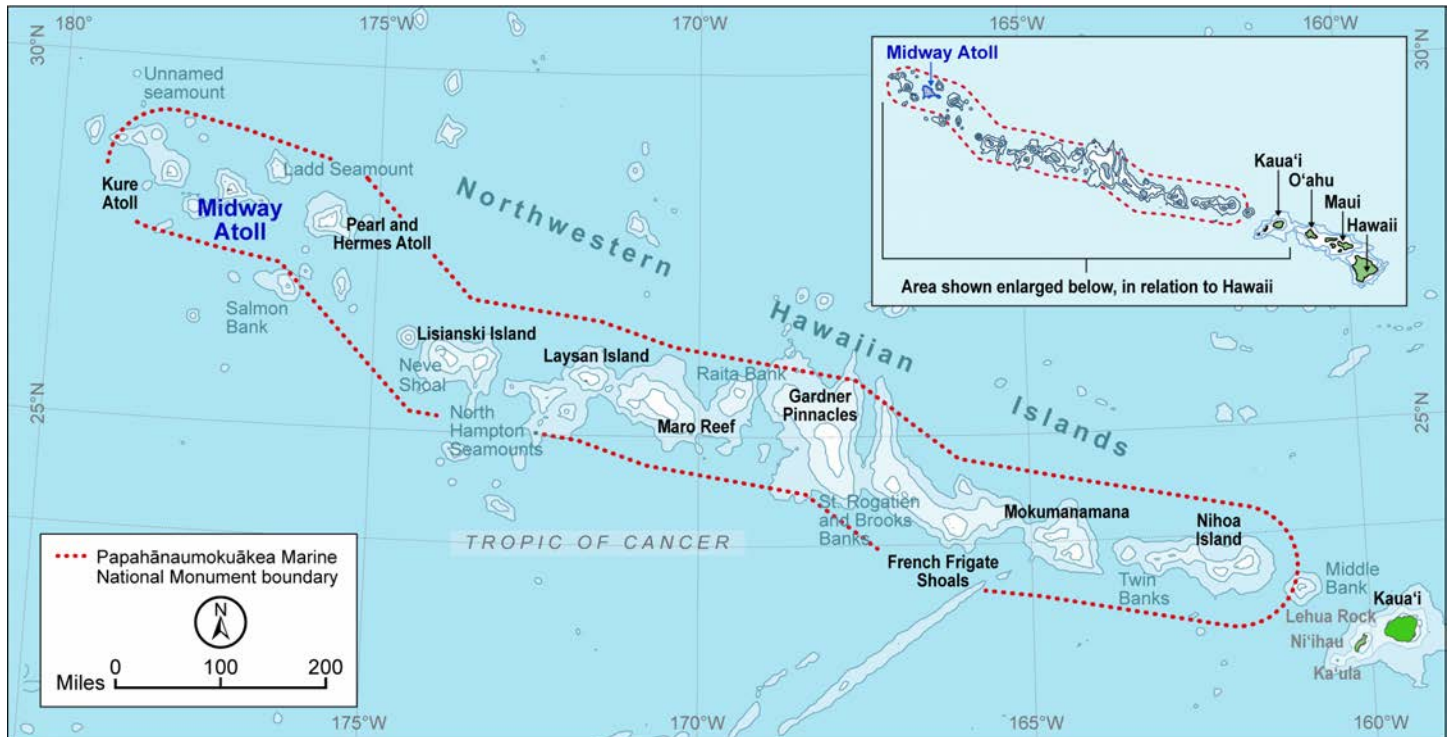
Source: U.S. Fish and Wildlife Service. | GAO-16-382

Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial is within one of the nation’s largest conservation areas—the 139,793-square-mile Papahānaumokuākea Marine National Monument—and is the location of the Battle of Midway, which was one of the most decisive battles of World War II. The atoll is roughly 5 miles in diameter and includes three islands—Sand Island (1,117 acres), Eastern Island (336 acres), and Spit Island (7 acres).¹¹ Nearly 3 million birds nest much of each year on Midway, including albatross (Laysan, black-footed, and short-tailed), Bonin petrels, and Laysan ducks.

The seasons on Midway are marked by the annual arrival of the first albatross in late October, and their courting, mating, nesting, and fledging activities until their departure in July. Green turtles, spinner dolphins, and endangered Hawaiian monk seals also frequent Midway’s lagoon. See figure 1 for a map of the Papahānaumokuākea Marine National Monument showing the location of Midway, which lies about 1,300 miles from Honolulu.

¹¹According to FWS officials, the terrain of Spit Island is dynamic, as is much of the coastal environment, and its size can vary season to season and year to year. As of February 2016, the size of Spit Island was estimated to be 7 acres.

Figure 1: Map of the Papahānaumokuākea Marine National Monument



Source: National Oceanic and Atmospheric Administration/National Ocean Service/Office of National Marine Sanctuaries/Papahānaumokuākea Marine National Monument. | GAO-16-382

Note: This picture is also included as part of a video related to this report. To view the full video, please click on the [hyperlink](#).

The first westerner to discover the atoll arrived in July 1859. Then in 1867, the Navy formally claimed the islands for the United States to establish a coaling station, supply depot, and emergency refuge for ships traveling between the West Coast of the United States and eastern Asia. In 1903, an executive order placed Midway under the jurisdiction and control of the Navy.¹² Construction of a naval air station began in 1940, and the station was commissioned on August 1, 1941. The naval air station included barracks; officers' housing; a theater; a seaplane hangar;

¹²Executive Order No. 199-A (Jan. 20, 1903).

a three-runway airfield on Eastern Island; and a defensive system, including gun emplacements, ammunition storage, and pillboxes.¹³

On December 7, 1941—the day Pearl Harbor was attacked—Midway was attacked by Japanese ships, causing casualties and extensive damage to buildings, including the seaplane hangar. During the Battle of Midway, fought June 4 through 6, 1942, the Japanese launched an attack against Midway in the hope of engaging and destroying the U.S. aircraft carriers and occupying Midway. U.S. fleet aircraft ambushed the Japanese fleet north of the islands, thereby inflicting heavy losses (four aircraft carriers), an action credited with turning the tide of the war in the Pacific.

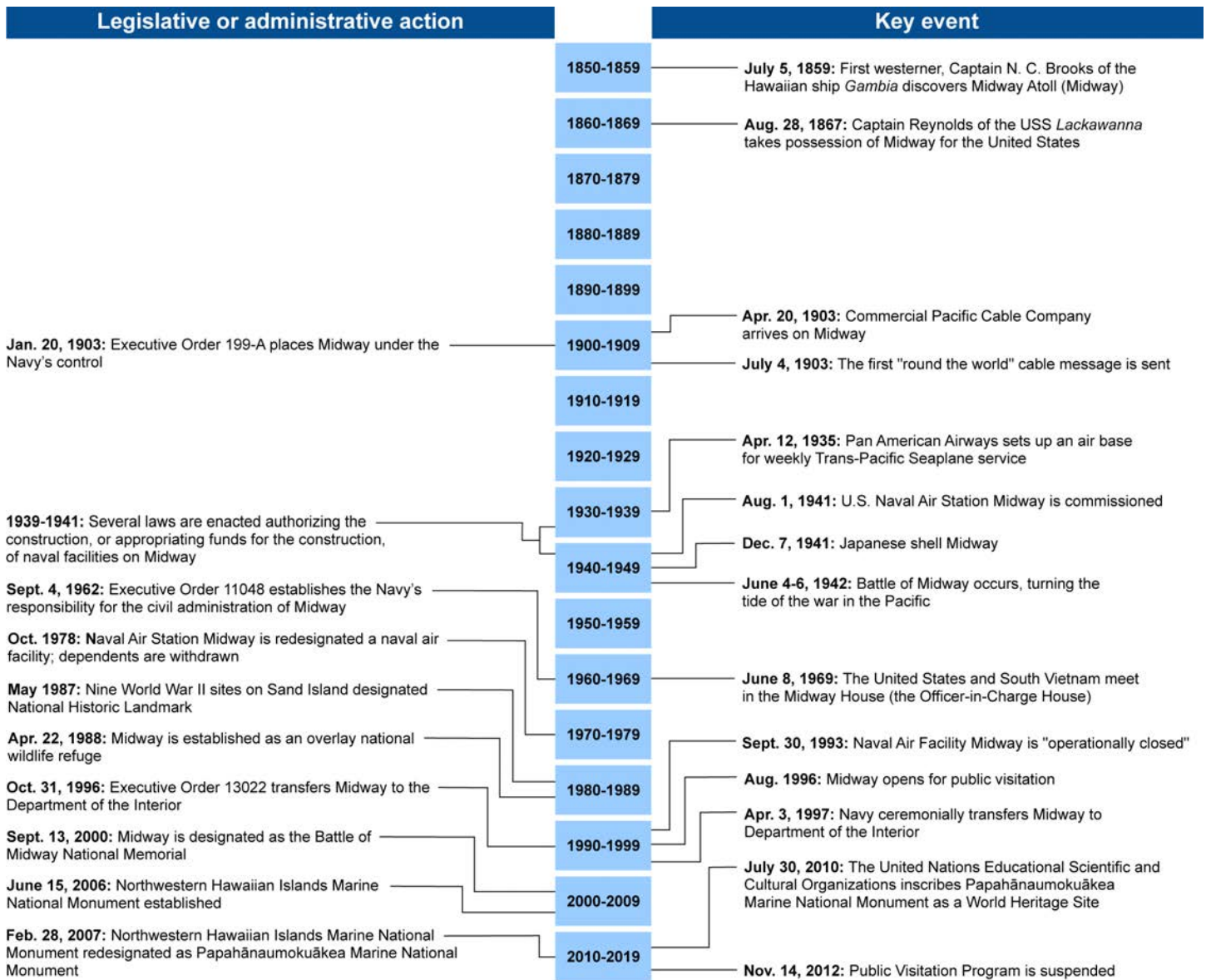
Following World War II, the Navy retained jurisdiction over Midway and maintained it as a naval air station, which was supported by a town of up to 5,000 civilians and military service families. In the 1970s and 1980s, the Navy began downsizing operations on Midway. In 1988, the Navy invited FWS to manage the atoll's extensive wildlife resources, and Midway became an overlay national wildlife refuge since the Navy retained primary jurisdiction. In 1993, the Defense Base Closure and Realignment Commission recommended that the mission of the naval air station on Midway be eliminated.¹⁴ The Navy began operations to close the air station, thereby beginning a transition in primary mission from national defense to wildlife conservation.

Figure 2 shows key events and legislation in Midway's history, including the timing of Midway's historic and other designations. (See app. II for a fuller chronology of Midway events.)

¹³A pillbox is a small, low shelter for machine guns and other weapons.

¹⁴Defense Base Closure and Realignment Commission, *Defense Closure and Base Realignment Commission 1993 Report to the President* (Arlington, Va.: July 1, 1993). The commission was established by the Defense Base Closure and Realignment Act of 1990, Pub. L. No. 101-510, tit. XXIX.

Figure 2: Selected Chronology of Midway Atoll



Source: GAO. | GAO-16-382

As part of the base closure process, the Navy conducted environmental studies that indicated widespread contamination based on introduction of a variety of man-made materials to the environment and the native wildlife, such as the presence of lead-based paint in soil, which can be toxic to birds on Midway (e.g., up to 3 percent of Laysan albatross hatchlings die from lead poisoning each year).¹⁵ In addition, the Navy conducted cultural resources surveys in 1993 and 1994 that identified buildings, structures, objects, and sites on both Sand and Eastern Islands.¹⁶ Based on these surveys, 78 properties were determined to be historic properties eligible for inclusion in the National Register of Historic Places, including 9 properties previously designated as the Midway National Historic Landmark.

Under section 106 of the National Historic Preservation Act, federal agencies are to consider the effects of their undertakings on historic properties that are listed in or eligible for listing in the National Register of Historic Places prior to the approval of the undertaking. For such undertakings, the regulations implementing section 106 require federal agencies to consult with the relevant state historic preservation officer, individuals, or organizations that request and/or are invited to be consulting parties and others.¹⁷ Since Midway is an unincorporated

¹⁵Numerous documents and reports were produced concerning environmental investigations and cleanup actions, including site inspection and investigation studies and reports on compliance issues and remedial actions. For example, see Ogden Environmental and Energy Services Co., Inc., *Comprehensive Long-Term Environmental Action Navy (CLEAN), Contract No. N62742-90-D-0019 CTO No. 136, Site Inspection (Si) Report For Naval Air Facility Midway Island, Volume I: Technical Report Part 1 of 3, Part 2 of 3, and Part 3 of 3*, Prepared for Pacific Division, Naval Facilities Engineering Command (Honolulu: January 1996), and Ogden Environmental and Energy Services Co., Inc., *NAF Midway Island BRAC Cleanup Report* (Honolulu: October 1997).

¹⁶Ann Yoklavich, *Cultural Resources Overview Survey at Naval Air Facility, Midway Island*, prepared for the Department of the Navy, Pacific Division, Naval Facilities Engineering Command (Pearl Harbor: Spencer Mason Architects, Inc., 1993) and Ann Yoklavich, D. Colt Denfeld, Joseph A. Jimenez, and Paul H. Rosendahl, *Supplemental Cultural Resources Overview Survey: Sand and Eastern Islands, Midway Atoll*, prepared for the Department of the Navy, Pacific Division, Naval Facilities Engineering Command (Pearl Harbor: Spencer Mason Architects, Inc., with Paul H. Rosendahl, Ph.D., Inc., 1994).

¹⁷Others that federal agencies are required to consult with, if relevant, are Indian tribes, native Hawaiian organizations, local governments, and applicants. In some instances, there is a tribal historic preservation officer instead of a state historic preservation officer.

territory and has no state historic preservation officer,¹⁸ the Advisory Council on Historic Preservation instructed FWS officials to consult with the state historic preservation office for Hawaii, which is the nearest state.¹⁹

The section 106 consultation is a process of seeking, discussing, and considering the views of other participants and, where feasible, seeking agreement with them on resolving adverse effects on historic properties and other matters in the section 106 process before a federal agency approves an undertaking.²⁰ If the consultation results in an agreement on how to resolve the adverse effects, the federal agency usually enters into a memorandum of agreement (MOA) with the relevant state historic preservation officer, which the regulations require the agency to provide to the Advisory Council on Historic Preservation after it is signed and before approving the undertaking.²¹

In addition to consultation, the regulations implementing section 106 require agencies to provide an opportunity for the public to express views on resolving the undertaking's adverse effects. According to the regulations, the views of the public are essential to informed federal decision making in the section 106 process. Moreover, the regulations require agencies to seek and consider the views of the public in a manner that reflects, among other things, the nature and complexity of the undertaking and its effects on historic properties and the likely interest of

¹⁸The Department of the Interior, Office of Insular Affairs, defines an unincorporated territory as "a United States insular area in which the United States Congress has determined that only selected parts of the United States Constitution apply."

¹⁹The Advisory Council on Historic Preservation, established by the National Historic Preservation Act in 1966, is an independent agency of the U.S. government that promotes the preservation, enhancement, and sustainable use of historic resources in the United States and that advises the President and Congress on national historic preservation policy.

²⁰If an undertaking may alter characteristics of a historic property that qualify it for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property, that undertaking is considered to have an adverse effect. Integrity of a property includes its location, design, setting, materials, workmanship, feeling, and association.

²¹If the Advisory Council on Historic Preservation was involved in the consultation, then it must also sign the MOA for it to go into effect.

the public in the effects on historic properties.²² The regulations also require agencies, in consultation with state historic preservation officers, to plan for involving the public in the section 106 process.²³

In lieu of conducting multiple section 106 processes, federal agencies may negotiate programmatic agreements to govern the resolution of adverse effects from multiple undertakings.²⁴ The regulations implementing section 106 require agencies, when developing programmatic agreements, to consult with, as appropriate, the relevant state historic preservation officer and others and provide for appropriate public participation. In 1996, the Navy and FWS along with the Advisory Council on Historic Preservation signed a programmatic agreement directing how Midway's 78 historic properties were to be treated during the closure of the Naval Air Facility and transfer of these properties. The agreement defined the following six levels of treatment for the properties:²⁵

- **Reuse:** The agreement identified 23 properties to be used and maintained in support of refuge operations, including the officers' housing, theater, barracks, shops, and industrial facilities.
- **Secure:** The agreement identified 13 properties to be secured by the Navy to minimize hazards to wildlife and people, including the power plant/command center that was shelled on December 7, 1941, and the cable station complex.
- **Leave as is:** The agreement identified 20 properties that would be left in "as is" condition and would not be used under refuge management,

²²36 C.F.R. § 800.2(d)(1).

²³36 C.F.R. § 800.3(e).

²⁴36 C.F.R. § 800.14(b). In addition, federal agencies may negotiate programmatic agreements to govern resolution of adverse effects of the implementation of a particular program or certain complex project situations.

²⁵The treatment designation for each property was based on many factors, including historic importance; interpretive value; the overall setting; association with key themes, such as the Battle of Midway; structural integrity; and recommendations from interest groups, specialists, and the Advisory Council on Historic Preservation.

other than for interpretive purposes, including the runways on Eastern Island and various bunkers, pillboxes, and gun batteries.²⁶

- **Fill:** The agreement indicated that four properties would be filled with sand, including pillboxes on Sand and Eastern Islands and two ammunition storage huts.
- **Demolish:** The agreement called for demolishing 15 historic properties that were of secondary historical importance, were in very poor condition, or were redundant to other resources being maintained; the properties included a motor pool building, a laundry, the naval operating base armory, and airport storage buildings.
- **Relocate:** The agreement listed three properties to be moved to enhance their protection and interpretation: a torpedo and inert bomb, submarine net,²⁷ and metal pillbox.

The Navy transferred to FWS the 63 historic properties that remained after the 15 demolitions as well as a number of buildings and other infrastructure (i.e., equipment and related buildings that provide electricity, water, and other support services) that had been used to support the base. On June 30, 1997, the last Navy personnel departed. (See app. IV for pictures of all the historic properties in existence in 2015 and selected other properties on Midway.)

When Midway was transferred from the Navy in 1996, Executive Order 13022 directed FWS to provide opportunities for scientific research, environmental education, and certain recreational activities in a manner consistent with the executive order on management and general public use of refuges.²⁸ In 1996, FWS entered into a cooperative agreement with the Midway Phoenix Corporation for support of a public use program, which required the corporation to operate Henderson Airfield; maintain

²⁶In the programmatic agreement with the Navy, the three runways on Eastern Island were treated as a single historic property. However, FWS counts the three runways on Eastern Island as separate properties. In this report, we are using FWS's approach of counting the three runways separately, for a total of 20 historic properties in the "leave as is" treatment designation.

²⁷A submarine net is a device placed across the mouth of a harbor or narrow waterway for protection against submarines and torpedoes.

²⁸Executive Order No. 13022, 61 Fed. Reg. 56875 (Nov. 4, 1996).

the harbor; operate, maintain, and/or provide utilities (i.e., electrical system, sewage, television, and telephone); implement a grounds maintenance plan; and provide basic and emergency medical care.²⁹ In addition, the agreement authorized the Midway Phoenix Corporation to provide food service, lodging, and maritime rescue services. After the Midway Phoenix Corporation discontinued operations on Midway in 2002, FWS did not operate an ongoing public visitation program but allowed occasional visitation, primarily through tour providers and cruise ships. Subsequently, in accordance with its regulations and guidance implementing the National Wildlife Refuge System Improvement Act of 1997, FWS determined that a number of recreational uses were both appropriate and compatible with the refuge's wildlife conservation purposes, such as wildlife observation and photography, environmental education, interpretation, snorkeling, and diving.³⁰ FWS reestablished a public visitation program in 2007 and then suspended public use in November 2012. (See app. III for additional information on public visitation to Midway.)

In February 2010, FWS and the other co-trustees of the Papahānaumokuākea Marine National Monument received a notice of intent to sue from a nongovernmental organization for violations of several laws on Midway because, among other things, the lead-based paint used to paint some buildings in the 1950s and 1960s was causing lead poisoning in some birds. FWS agreed in a 2012 settlement with the nongovernmental organization to complete, over the course of 7 years,

²⁹From 1996 through 2002, Henderson Airfield and visitor services and basic operations on Midway were managed under a cooperative agreement between FWS and the Midway Phoenix Corporation. FWS and the Midway Phoenix Corporation entered into a settlement agreement in March 2002 that terminated the cooperative agreement.

³⁰The National Wildlife Refuge System Improvement Act of 1997 authorizes the Secretary of the Interior to issue regulations to permit refuge uses that are compatible with the major purposes for which the refuge is established. Under the act's implementing regulations and guidance, FWS must find that a proposed use of a refuge, such as recreational boating or wildlife observation, is appropriate and compatible before permitting that use. An appropriate use of a refuge is one that (1) is a wildlife-dependent recreational use; (2) contributes to fulfilling the refuge purpose, refuge system mission, or goals or objectives described in a refuge management plan; (3) involves the taking of fish and wildlife under state regulations; or (4) has been found appropriate through the specified procedure. A compatible use is a use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the refuge system mission or the purposes of the refuge.

a “non-time critical removal action” under CERCLA, which governs the cleanup of releases or threatened releases of hazardous substances, to address the lead-based paint on buildings.³¹ The regulations implementing CERCLA require removal actions to comply with applicable requirements under federal and state laws, among other things.³² FWS determined that the National Historic Preservation Act was an applicable requirement for removal actions involving historic properties on Midway and decided that it would work with the Hawaii State Historic Preservation Officer to address the removal action’s adverse effects on historic properties. When completing removal actions that are not time critical, the regulations require federal agencies to publish a document containing the analysis of removal alternatives, provide for at least a 30-day public comment period on the document, and issue a decision document selecting a removal alternative that responds to the public comments.

³¹The Environmental Protection Agency, which has issued regulations establishing cleanup procedures under CERCLA, categorizes removal actions as emergency, time-critical, or non-time-critical, based on the type of situation, the urgency and threat of the release or potential release, and the subsequent time frame in which the action must be initiated. Non-time-critical removal actions are used when a response can start later than 6 months after the determination that a response to address a release or threatened release of a hazardous substance is necessary.

³²The Environmental Protection Agency’s CERCLA guidance states that the National Historic Preservation Act section 106 consultation is an administrative requirement that does not apply to removal actions’ on-site activities though the guidance nevertheless recommends adhering to these requirements. However, the Advisory Council on Historic Preservation interprets consultation as a substantive requirement applying to removal actions because the consultations inform an agency’s final decision on which action, if any, to implement.

FWS Officials Reported That Midway's Operations Funding Has Decreased in Recent Years and Project-Specific Funding Has Varied

The Midway Atoll National Wildlife Refuge's funding consists of both operational and project-specific funding. According to FWS budget officials we interviewed,³³ after increasing each year for fiscal years 2009 through 2011, the agency's operations funding for Midway decreased substantially in fiscal years 2012 and 2013, while project-specific funding varied, with no clear trend, for fiscal years 2009 through 2015. The officials attributed the decrease in the operations budget to a decrease in funding from FWS Region 1 and a decrease in fees collected on Midway after the public visitation program ended. FWS officials also told us that Midway's funding for deferred maintenance has varied based on regional priorities,³⁴ and funding for other projects has varied based on need or availability of funds dedicated to particular uses, such as CERCLA response actions.

Midway's Operations Budget Has Decreased Substantially in Recent Years, According to FWS Officials

Midway's operations budget contains three different funding streams: funds allocated by FWS Region 1 to Midway; fees that are collected on Midway and that Midway is authorized to use for specified purposes; and funding from FAA for airport operations. According to FWS officials, the overall funding for operations for Midway has substantially decreased since fiscal year 2011 because of a decrease of about \$1 million in allocations from Region 1 and about \$0.8 million in fees collected since the end of public visitation in 2012.

After Increasing for Fiscal Years 2009 to 2011, FWS Allocations for Midway Operations Reportedly Decreased Substantially

According to an FWS budget official we interviewed, after increasing from fiscal year 2009 to 2011 to a peak of more than \$4 million, Region 1's funding of operations for Midway decreased in fiscal years 2012 and 2013. According to several officials, regional funding over those 2 years decreased more than \$1 million from the fiscal year 2011 funding level, a substantial decrease. The FWS budget official told us that the agency's allocation for Midway of over \$3 million in fiscal year 2015 remained at more than \$900,000 below the 2011 allocation.

³³We interviewed FWS officials on Midway as well as the agency's Pacific Islands Refuges and Monuments Office in Honolulu and its Region 1 office in Portland, Oregon, about the management and oversight of Midway, including budgetary issues.

³⁴Deferred maintenance projects are those that have an estimated cost exceeding \$5,000 and that are at least 1 year past the date when they were scheduled to be done, according to FWS officials; projects with lower costs can be funded with annual operating funds.

Fees Collected on Midway Are Reported to Have Decreased since Fiscal Year 2012

FWS officials said that decreases in Midway's allocation were due to flat and declining budgets overall for FWS Region 1 and to sequestration in 2013.³⁵ These officials said that given decreases in Midway's operations budget, FWS eliminated functions supporting visitor services, including personnel responsible for implementing and overseeing the public visitation program and for enforcing the regulations of the wildlife refuge, to maintain core functions consistent with Midway's status as a wildlife refuge—that is, protecting wildlife.³⁶

According to FWS officials, fees collected for Midway's operations have decreased since fiscal year 2012. FWS is authorized to charge and retain reasonable fees for services provided at the refuge, such as fuel sales, to use for specified purposes.³⁷ Overall operations funding from such fees declined substantially following the end of public visitation in 2012, from \$1.3 million in fiscal year 2012 to about a half million in fiscal year 2015, according to an FWS budget official.

FWS also collects fees from aircraft, both commercial and military, for landing on Midway. Landing fees cover costs, beyond normal operations, incurred by FWS from the aircraft landings. For example, a commercial aircraft flying from Honolulu to Guam made an emergency landing on Midway on July 10, 2014, and reimbursed FWS \$86,000 to cover costs

³⁵Under the Budget Control Act, which amended the Balanced Budget and Emergency Deficit Control Act of 1985, when legislative action to reduce the deficit by \$1.2 trillion did not occur, the sequestration process in section 251A of the Balanced Budget and Emergency Deficit Control Act of 1985 as amended was triggered. Pub. L. No. 99-177, tit. II, 99 Stat. 1037 (1985). Section 251A required the Office of Management and Budget to calculate, and the President to order, a sequestration of discretionary appropriations and direct spending, also known as mandatory spending, to achieve a certain amount of deficit reduction for fiscal year 2013.

³⁶The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. 16 U.S.C. § 668dd(a)(2).

³⁷Pub. L. No. 107-206, § 703, 116 Stat. 820, 864 (2002). The fees collected are available until expended for operation and maintenance of infrastructure and staffing required for non-refuge-specific needs, including meeting the terms necessary for an airport operating certificate and purchasing fuel supplies.

FAA and FWS Share Costs for Operations at Henderson Airfield

such as paying for airport staff overtime, providing food for passengers, and providing fuel, according to FWS officials.³⁸

An agreement between FWS and FAA specifies that FAA is responsible for reimbursing FWS for the costs for operating and maintaining the airport.³⁹ FAA reimburses FWS about \$3 million per year—the amount is negotiated annually—for these costs. For certain overhead costs for the airport—costs that cannot be clearly distinguished between Henderson Airfield and refuge operations—FWS and FAA have a cost-sharing arrangement that generally determines the costs according to a formula based on the proportion of full-time equivalent staff on Midway who provide support for the refuge versus the airport.⁴⁰ Overhead costs shared according to this formula include electricity, fuel, water, and waste management. FAA officials said that how best to share overhead costs remains under discussion between FWS and FAA.

Project-Specific Funding Has Varied, According to FWS Budget Officials

Some projects on Midway are not funded through its operating budget but through funds dedicated to specific purposes, such as deferred maintenance, CERCLA response actions, and capital improvements to the airport.

³⁸Other than paying landing fees, the airline industry does not provide regular funding for Henderson Airfield. Airline industry representatives we interviewed said they already contribute toward regular operating costs through their general taxes and fees and did not believe they should provide additional funding.

³⁹This interagency agreement is in effect from May 31, 2011, to September 30, 2019, unless terminated, and is the funding agreement that authorizes the transfer of funds between the two agencies. In addition to this interagency agreement, FWS and FAA have an MOA for operating and maintaining Henderson Airfield for fiscal years 2012 through 2019. According to FWS officials, the MOA established the working relationship between FWS and FAA. Under these agreements, FWS is responsible for operating and maintaining the airfield, which it does with contractors who are certified by FAA for this work.

⁴⁰Full-time equivalent employment is defined as the total number of regular straight-time hours (not including overtime or holiday hours) worked by employees divided by the number of compensable hours applicable to each fiscal year.

For fiscal years 2009 through 2015, Midway's annual allocation from FWS Region 1 for deferred maintenance projects has varied, with a high of about \$1.3 million in fiscal year 2014 and a low of approximately \$81,000 in fiscal year 2015, according to an FWS official, with no clear trends. Officials told us that deferred maintenance funds go to projects such as restoration of historic buildings and improvements to infrastructure, such as sewer systems.⁴¹

FWS officials also said that the total cost to address Midway's outstanding deferred maintenance needs is not known because estimating the costs of such projects is itself expensive. For example, according to FWS facilities maintenance officials, it cost \$193,000 to estimate the cost of deferred maintenance for just one historic structure—the Seaplane Hangar—which included the costs to transport and house potential bidders on Midway as well as to transport and house three to four staff members from the winning bidder to conduct work necessary for developing the estimate. In 2010, FWS estimated the cost to stabilize (not restore) that structure was about \$18 million—several times the agency's annual budget for such projects in the Pacific region, according to FWS officials.⁴²

Other projects on Midway that are not included in the operations budget are funded through other sources within the Department of the Interior. For example, the Department of the Interior's Central Hazardous Materials Fund—an appropriation available to pay for the department's

⁴¹According to FWS officials, to determine allocation of deferred maintenance funds to Midway, Region 1 submits a list of prioritized projects for all of the region's refuges to FWS headquarters for review. To rank or prioritize its refuges' deferred maintenance projects, each FWS region uses such factors as whether a project will help support the refuge's mission of protecting wildlife, whether a project has historic significance, or FWS's ability to complete the project. Projects on the lists are evaluated through condition assessments performed by FWS facilities managers and have cost estimates prepared based on those assessments before the lists are submitted to headquarters. Once the regions submit the prioritized lists, FWS headquarters determines whether each region's priorities are supported by documentation and are in line with overall FWS and Department of the Interior priorities.

⁴²According to an FWS official in headquarters, the funding FWS receives for both annual and deferred maintenance is less than 1 percent of the total replacement value of its real property inventory, in contrast to the general facility industry best practice of from 2 percent to 4 percent of the replacement value of real property inventory for the annual maintenance budget alone.

removal actions under CERCLA—provided over \$20 million from fiscal year 2010 to 2015 to perform lead-based paint abatement projects on Midway, according to FWS officials. Similarly, about \$2 million in American Recovery and Reinvestment Act of 2009 (Recovery Act) funds were used to refurbish the historic officers' housing and for energy efficiency projects on Midway in 2010; these funds were paid by the FWS regional office directly to contractors and were not included in Midway's budget.⁴³ For Henderson Airfield, FAA, under an interagency agreement for capital improvements with FWS, also provides up to \$2.5 million annually to pay for capital improvement projects, such as resurfacing runways and taxiways.

FWS Has Maintained Most Historic Properties but Not Others and Has Not Adequately Provided Public Notification and Sought Public Comment under the Section 106 Process

FWS has maintained most historic properties on Midway but has demolished others without providing adequate public notification and seeking public comment and input, which is not consistent with the regulations implementing section 106 of the National Historic Preservation Act.⁴⁴ More specifically, FWS has maintained most of the historic properties on Midway in accordance with a 1996 programmatic agreement with key stakeholders and historic preservation plans it developed. However, FWS has demolished seven historic properties and completed another undertaking with adverse effects on historic properties that was not contemplated by the agreement without directly notifying parties who had previously expressed interest in historic preservation issues on Midway (hereafter referred to as key parties) and seeking their comments and input, and, in some cases, without providing public notification or opportunity for the public to express its views on resolving the adverse effects. In addition, FWS did not conduct consultations before approving three of the four undertakings even though, according to Advisory Council on Historic Preservation officials, the intent of consultation is to inform agency decision making.

⁴³Pub. L. No. 111-5, 123 Stat. 116 (2009). The purposes of the Recovery Act included preservation and creation of jobs and promotion of economic recovery.

⁴⁴For the purpose of this document, we use the term maintain to mean to adhere to the five categories in the 1996 programmatic agreement that were the responsibility of FWS to carry out for the historic properties that remained on Midway after the Navy left—reuse, secure, leave as is, fill with sand, and relocate.

FWS Has Maintained Most Historic Properties as Agreed but Has Demolished Others

FWS has maintained most of Midway's historic properties as specified in the 1996 programmatic agreement and the historic preservation plans it developed. The 1996 programmatic agreement signed by the Navy, FWS, and Advisory Council on Historic Preservation covered actions the Navy would take before departing Midway, such as securing certain properties from intrusion by wildlife or demolishing properties that were badly deteriorated, and specified that FWS would reuse and maintain 23 of the 63 historic properties that would remain on Midway after the Navy's departure.⁴⁵ As required by the programmatic agreement, FWS developed its first historic preservation plan in 1999, followed by an updated plan in 2010.⁴⁶ The 1999 plan included the following five management categories for the properties, all of which were consistent with the earlier agreement with the Navy: reuse (23 properties), secure (13 properties), leave as is (20 properties),⁴⁷ fill with sand (4 properties), and relocate (3 properties). A sixth category, the demolition of 15 properties, was carried out by the Navy prior to transferring the management of Midway to FWS. The 2010 updated historic preservation plan revised the management categories to account for issues that arose since 1999 and to conform with the Secretary of the Interior's Standards for the Treatment of Historic Properties.⁴⁸

Since 1996, FWS has reused 19 of the 23 properties planned for reuse, in some cases rehabilitating them. For example, as of June 2015, FWS rehabilitated and was using as housing for residents structures that once provided housing for Navy officers (see table 1). In addition, FWS put into use 3 properties, including a paint shop, which had been categorized as "leave as is" by the 1996 programmatic agreement, because the agency had a need for them.

⁴⁵The actions agreed upon were based on factors such as historic importance; interpretive value; structural integrity; and recommendations from interest groups, specialists, and the Advisory Council on Historic Preservation.

⁴⁶The 1996 programmatic agreement and 2010 historic preservation plan were still in effect as of our review.

⁴⁷Properties in this category were to be abandoned after minor actions to mitigate chipping or peeling lead paint.

⁴⁸The standards (for preservation, rehabilitation, restoration, and reconstruction) promote historic preservation best practices that will help to protect our nation's irreplaceable cultural resources.

Table 1: Historic Properties on Midway Atoll That the U.S. Fish and Wildlife Service Agreed to Reuse under a 1996 Programmatic Agreement with Stakeholders and Status, as of June 2015

Property name (property number) ^a	Number of properties	Construction year(s)	Historic significance	Status as of June 2015
Seaplane hangar (151)	1	1941-43	Designed by Albert Kahn; ^b associated with Dec. 7, 1941, and Battle of Midway attacks	Used on a limited basis for storing boats and equipment; restricted access
Mall/theater complex (259)	1	1941-44	Designed by Albert Kahn; associated with Navy base development in World War II	Parts of building used
Seaplane ramp (S2115)	1	1940	Associated with Dec. 7, 1941, and Battle of Midway attacks, and with Navy base development before and during World War II	Used as a boat ramp
Commissary and cold storage (349)	1	1941	Designed by Albert Kahn; associated with Navy base development in World War II	Used for storage
Carpentry shop (353)	1	1941	Designed by Albert Kahn; associated with Navy base development before and during World War II	Used for storage
General squadron storehouse (356)	1	1941	Designed by Albert Kahn; associated with Navy base development in World War II	Used as a maintenance shop
Torpedo shop (357)	1	1941-42	Designed by Albert Kahn; associated with attack on Dec. 7, 1941, and with Navy base development before and during World War II	Not used
Electrical switch station (361)	1	1944	Associated with Navy base development in World War II	Used as a storage building
SK1 warehouse/public works storehouse (393) ^c	1	1943	Associated with Navy base development in World War II; designed by Public Works Department	Demolished in Sept. 2012
Senior officer's quarters (414, 415, 416, 417, 418, 419, 421, 422, 423, 424)	10	1941	Designed by Albert Kahn; associated with Navy base development before World War II	Rehabilitated and used as housing for residents
Marine barracks (578, 579)	2	1941	Designed by Albert Kahn, but altered; associated with Navy base development before World War II	Demolished in Sept. 2013
Water reservoirs (S3126, S3127)	2	1941	Associated with Navy base development before and during World War II	Used for freshwater storage
Total number of properties	23		—	19 used

Source: GAO review of U.S. Fish and Wildlife Service data. | GAO-16-382

Note: During the closure of the U.S. Naval Air Facility Midway, the Navy, the U.S. Fish and Wildlife Service (FWS), and the Advisory Council on Historic Preservation entered into a programmatic agreement that addresses the transfer of historic properties identified on Midway Atoll (Midway) in 1996 and how FWS was to treat the properties afterward.

^aEach property on Midway is identified by a property number based on the Navy facility number or a number assigned during a study of cultural resources on Midway.

^bMany of the buildings for Midway were designed by the firm of Albert Kahn in Detroit. Kahn was well known for his industrial architecture for the U.S. war effort in World War I and World War II.

^cThis warehouse, originally named Storage Keeper 1 warehouse, has become commonly known by its acronym, SK1, or “SKI” warehouse.

Since 2012, FWS has also demolished seven historic properties—actions that were not contemplated by the 1996 programmatic agreement or the 2010 historic preservation plan (see table 2 and figs. 3, 4, and 5).

Table 2: Seven Historic Properties on Midway Atoll Demolished by the U.S. Fish and Wildlife Service since 2012

Management category in the 1996 Programmatic Agreement	Management categories in the 2010 Historic Preservation Plan	Number of historic properties	Properties demolished (property number) ^a	Demolition dates
Reuse	Salvage and dismantle (578, 579), dismantle and replace with new structure (393)	3	Marine barracks (578, 579) SK1 warehouse ^b (393)	Sept. 2013 Sept. 2012
Secure	Dismantle to ruin	3	Cable station buildings (619, 623, 628)	June 2012 – Sept. 2012
Leave as is	Ruin	1	Cable station building (626)	June 2012 – Sept. 2012
Total		7		

Source: GAO review of U.S. Fish and Wildlife Service documents. | GAO-16-382

Note: During the closure of the U.S. Naval Air Facility Midway, the Navy, the U.S. Fish and Wildlife Service (FWS), and the Advisory Council on Historic Preservation entered into a programmatic agreement that addressed the transfer of historic properties identified on Midway Atoll (Midway) in 1996 and how FWS would treat the properties afterward.

^aEach property on Midway is identified by a property number, based on the Navy facility number or a number assigned during a study of cultural resources on Midway.

^bThis warehouse, originally named Storage Keeper 1 warehouse, has become commonly known by its acronym, SK1, or “SKI” warehouse.

Figure 3: Historic SK1 Warehouse on Midway Atoll, Demolished in 2012



Source: U.S. Fish and Wildlife Service. | GAO-16-382
SK1 Warehouse (property number 393), 1997.



SK1 Warehouse (property number 393), 2007.

Figure 4: Two Historic Marine Barracks on Midway Atoll, Demolished in 2013



Source: National Archives and Records Administration.
Marine Barracks (property numbers 578 and 579), 1947.



Source: U.S. Fish and Wildlife Service.
Marine Barracks (property number 578), 2007.



Source: U.S. Fish and Wildlife Service. | GAO-16-382
Marine Barracks (property number 579), 2007.

Figure 5: Historic Cable Station Buildings on Midway Atoll, All Five in 1913 and the Four Demolished in 2012

Cable Station, 1913.



Cable Station (property number 626), 1997.



Cable Station (property number 619), 2007.



Cable Station (property number 623), 2007.



Cable Station (property number 628), 2007.



Sources: Hawaii State Archives (top photo); U.S. Fish and Wildlife Service (all other photos). | GAO-16-382

FWS Has Not Adequately Notified the Public, Including Key Parties, under the Section 106 Process

For undertakings with adverse effects on historic properties not contemplated by the 1996 programmatic agreement and 2010 historic preservation plan, FWS is to complete the section 106 process before deciding to undertake such actions but FWS did not do so for four undertakings affecting eight historic properties. The four undertakings included demolishing seven buildings and rehabilitating a cable station building with materials from three other cable station buildings that were dismantled (see table 3).

Table 3: Four U.S. Fish and Wildlife Service Undertakings That Adversely Affected Historic Properties

Property name (property number) ^a	Number of undertakings ^b	Number of properties affected	Undertaking by the U.S. Fish and Wildlife Service	Date of undertaking	How adverse effect on historic properties was addressed
Cable station buildings (619, 623, 628, 643)	1	4	Dismantling and salvage of property numbers 619, 623, 628 and preservation and rehabilitation of building 643	2009	2009 memorandum of agreement ^c
Cable station buildings (619, 623, 626, 628)	1	4	Demolition under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) removal action to address lead paint	June 2012 – Sept. 2012	2012 amendment to the 2009 memorandum of agreement for the cable station buildings ^d
SK1 warehouse (393)	1	1	Demolition under CERCLA removal action to address lead paint ^e	Sept. 2012	2012 memorandum of agreement
Marine barracks (578, 579)	1	2	Demolition under CERCLA removal action to address lead paint	Sept. 2013	Draft 2012 memorandum of agreement (not signed)
Total number of undertakings	4				

Source: GAO review of U.S. Fish and Wildlife Service documents. | GAO-16-382

Note: CERCLA governs the cleanup of releases or threatened releases of hazardous substances, such as lead-based paint.

^aEach property on Midway Atoll (Midway) is identified by a property number, based on the Navy facility number or a number assigned during a study of cultural resources on Midway.

^bAn undertaking is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency.

^cU.S. Fish and Wildlife Service (FWS) concluded that property numbers 619, 623, and 628 had deteriorated to the point where they were a safety hazard and restoration was impossible. Under the memorandum of agreement, FWS dismantled the buildings' rafters, roofing, and verandas and salvaged their windows and doors for use in the cable station mess hall, building 643.

^dFWS determined that it would be too costly to dismantle property numbers 619, 623, and 628 because, if the buildings were left open, the lead paint would have to be abated on both the interior and exterior walls. FWS, therefore, determined that they needed to be demolished.

⁶The July 2011 CERCLA decision document (action memorandum) selected lead paint abatement, not demolition, as the removal action for the SK1 warehouse. FWS decided in August 2012 to demolish this property, and it was demolished in September 2012.

For all four of these undertakings, we found that FWS did not adequately notify the public and seek comments and input on the adverse effects the undertakings would have on the historic properties. More specifically:

- For the undertaking in 2009, FWS did not make information about the planned actions available to the public or provide an opportunity for the public to express views on resolving the adverse effects of the undertaking consistent with the regulations implementing section 106 of the National Historic Preservation Act.
- For the two undertakings that demolished the cable station buildings and Marine barracks, FWS published a notice about the availability of its analysis of removal alternatives on its website and in newspapers in January 2011, as required under CERCLA. However, FWS did not directly notify key parties that were involved in prior historic preservation matters on Midway, such as the 2010 Historic Preservation Plan. For example, FWS did not directly inform the International Midway Memorial Foundation and other parties that had served on the defunct Battle of Midway National Memorial Advisory Committee about the CERCLA removal action.⁴⁹ According to Advisory Council on Historic Preservation officials, because FWS knew these parties had an interest in historic preservation issues at Midway, the method of notifying these parties about these undertakings with adverse effects on historic properties was not sufficient under section 106 unless these parties received the notice directly.
- For the undertaking that demolished the SK1 warehouse, the document containing the analysis of removal alternatives made available to the public in January 2011 did not include demolition as

⁴⁹In 2002, the Secretary of the Interior established the Battle of Midway National Memorial Advisory Committee to develop a strategy for a public dedication of the memorial, identify and plan for appropriate exhibits to commemorate the event, and offer recommendations on improving visitor services. Interior terminated the committee at the end of fiscal year 2004. Other parties who had been committee members but did not receive direct notice of the CERCLA removal action include the National Park Service, the Naval Historic Center, the National Wildlife Refuge Association, Friends of Midway Atoll National Wildlife Refuge, and the National Trust for Historic Preservation.

an alternative, so the public and key parties did not have any notice about FWS's decision to demolish it, either under the CERCLA or the section 106 process.

As a result, FWS's decisions regarding all four undertakings that had adverse effects on historic properties were not informed by public comment and input, straining its relationship with at least one key stakeholder.⁵⁰ According to the regulations implementing section 106 of the National Historic Preservation Act, the views of the public are essential to informed federal decision making in the section 106 process.

For all four of these undertakings, FWS consulted with the Hawaii State Historic Preservation Office and the Historic Hawaii Foundation but did not receive requests from other interested parties to participate in the consultations. However, since the public and potentially interested parties did not have adequate notice about these four planned undertakings and section 106 consultations, it is not clear that they would have known to request participation in the consultations. FWS notified three parties for the four undertakings, which is fewer than for other agreements, plans, or activities. For example, FWS and the Navy notified seven parties about the 1996 programmatic agreement, and FWS distributed the 2010 Historic Preservation Plan for Midway directly to 10 parties. According to Advisory Council on Historic Preservation officials, it was unlikely that these key parties could have requested to participate in these consultations since, as described above, they did not have adequate notice of the planned undertakings.

⁵⁰The relationship between FWS and the International Midway Memorial Foundation has been strained. Since at least 2005, the foundation has been advocating that another federal agency be assigned responsibility for managing Midway. At a November 2014 hearing on Midway, in response to a question from Representative Bordallo, the FWS Region 1 Manager acknowledged that FWS had not been adequately consulting with the foundation. See "Is the Midway Atoll National Wildlife Refuge Being Properly Managed?" Oversight Hearing before the Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs, House Committee on Natural Resources (Nov. 20, 2014).

In addition, according to Advisory Council on Historic Preservation officials, the intent of the section 106 consultation requirements is for such consultations to inform the agency's decision making.⁵¹ However, FWS did not conduct consultations before approving three of the four undertakings. While FWS consulted with the Hawaii State Historic Preservation Officer and the Hawaii Historic Foundation and entered into an MOA with the former to resolve the adverse effects of the 2009 undertaking on the cable station buildings, FWS did not conduct section 106 consultations before issuing its final CERCLA action memorandum selecting demolition for the four cable station buildings and the two Marine barracks in July 2011. The memorandum acknowledged that consultation had not occurred but stated that FWS was to work with the Hawaii State Historic Preservation Officer to reach agreement on how to treat these buildings.

Subsequently, FWS consulted with the Hawaii State Historic Preservation Office and Hawaii Historic Foundation about the CERCLA removal actions demolishing the four cable station buildings, Marine barracks, and SK1 warehouse. The consultations resulted in FWS and the Hawaii State Historic Preservation Officer signing MOAs for the demolition of the cable station buildings and SK1 warehouse but not for demolition of the Marine barracks. However, according to an FWS official, consultations over the Marine barracks lasted 5 months and in 2012 resulted in a draft MOA between FWS and the Hawaii State Historic Preservation Office. Although neither party formally signed the agreement at that time, they began to implement its provisions.

These four undertakings were the first with adverse effects on historic properties under FWS management of Midway, according to FWS. But as properties continue to age and deteriorate in the future, FWS may need to take additional actions that have adverse effects on historic properties. Before approving such actions, FWS will need to complete the section 106 process detailed in regulations, which includes planning, in

⁵¹The goal of consultation is to identify historic properties potentially affected by the undertaking; assess its effects; and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. 36 C.F.R. § 800.1(a). Moreover, in order to meet the requirements of section 106 and its implementing regulations, the federal agency must submit a copy of the executed memorandum of understanding to the Advisory Council on Historic Preservation prior to approving the undertaking. 36 C.F.R. § 800.6(b)(1)(iv).

consultation with the state historic preservation officer, for involving the public in the process. An FWS official who works on historic preservation issues on Midway noted that the extent of public notification and involvement can vary based on the size of the undertaking. However, officials with the Advisory Council on Historic Preservation pointed out that another factor in the regulations that should be considered in determining the extent of seeking and considering the views of the public is the likely level of public interest in the action.⁵² They stated that the Midway interest groups that are known to have a high level of interest in Midway should have been notified of these undertakings and FWS should have sought and considered their views.

FWS officials told us that they are taking steps to better coordinate with stakeholders on future actions. For example, as agreed with the Hawaii State Historic Preservation Office, FWS is consulting with stakeholders on developing a programmatic agreement for the treatment of a group of 18 historic buildings designed by architect Albert Kahn.⁵³ According to an FWS official, the intent of developing a programmatic agreement for all the Kahn buildings is to consider actions taken on any of the buildings in the context of all the historical buildings and to improve public participation and standardize maintenance procedures and set priorities for maintenance of the Kahn buildings. This programmatic agreement, however, does not eliminate the need for FWS to complete the section 106 process, including notifying the public and providing an opportunity for the public to express their views for future undertakings with adverse effects on other historic properties that are outside of its scope. Without ensuring that key parties that have previously expressed interest in historic preservation issues on Midway are notified about future actions that may have an adverse effect on historic properties, FWS will not have reasonable assurance that it is adequately providing public notification and an opportunity for public comment under the section 106 process.

⁵²36 C.F.R. § 800.2(d)(1).

⁵³Many of the buildings for Midway were designed by the firm of Albert Kahn in Detroit. Kahn was well known for his industrial architecture for the U.S. war effort in World War I and World War II.

FWS Faces Multiple Challenges in Reestablishing a Public Visitation Program on Midway

FWS faces multiple challenges in reestablishing a public visitation program on Midway, such as deteriorating infrastructure and infrequent delivery of supplies. In addition, the planning documents needed to implement a visitor services program have not been updated to reflect operational changes on Midway, creating uncertainty about the resources that may be needed to reestablish a public visitation program.

Challenges FWS Faces Relate to Personnel, Infrastructure, Supplies, and Transportation Access

FWS has not had a public visitation program on Midway since November 2012 and faces multiple challenges to reestablishing such a program in the future. FWS officials we interviewed said they would like to reestablish a public visitation program to Midway but would need additional resources to do so. On the basis of our visit to Midway; interviews with FWS, NOAA, and Hawaii state officials and representatives from stakeholder groups; and review of FWS documents, we identified four key resource-related challenges to the reestablishment of a public visitation program: personnel, infrastructure, supplies, and transportation.

Positions Have Been Eliminated

According to FWS's 2008 visitor services plan, the most recent FWS guidance for managing approved recreational activities and the visitor services program at Midway,⁵⁴ personnel are essential for providing a quality public visitation program on Midway. FWS officials we interviewed said that to reestablish a public visitation program, the agency would need to fill six positions—four located on Midway and two in the FWS Pacific Islands Office—that were eliminated when the program was suspended in 2012. Personnel in these positions were responsible for, among other things, implementing and overseeing the public visitation program by coordinating with tour providers, developing recreational and educational programs on Midway, and enforcing the regulations of the wildlife refuge. In addition, FWS officials we interviewed said that the agency would also like to have an additional staff person help develop a mechanism, such as a concessionaire, that would allow an organization or company to operate a public visitation program on Midway.

⁵⁴In 2008, FWS prepared a new visitor services plan to ensure that recreational uses of Midway are compatible with the National Wildlife Refuge System mission and the purposes of the refuge and the Battle of Midway National Memorial. In addition, all activities must comply with the regulations governing the Papahānaumokuākea Marine National Monument, which was designated in 2006.

Infrastructure Is Deteriorating

According to the agency's 2008 visitor services plan, FWS can provide accommodations to no more than 50 overnight visitors on Midway at one time. However, the FWS refuge manager said that visitation may be limited to as few as 15 to 30 overnight visitors at one time because of the deteriorating infrastructure on Midway. The building that is available to house visitors, known as Bachelor Officer Quarters Charlie Barracks, is almost beyond the point of repairs and renovation, according to a condition assessment conducted by contractors in 2009. During our 2015 site visit, we observed that the first floor of Charlie Barracks had extensive water damage (see fig. 6). In addition, one of the guest rooms on the second floor occupied by a GAO analyst had a leaking ceiling. In 2009, a contractor estimated that updating and renovating Charlie Barracks, which was constructed in 1957, could cost up to \$14 million and that replacing it could cost up to \$20 million. According to FWS officials we interviewed, the estimate for renovating Charlie Barracks is likely understated, as the deterioration has continued since the completion of the most recent assessment in 2009.

Figure 6: Exterior and Interior Photographs of Charlie Barracks on Midway Atoll (April 17, 2015)



Charlie Barracks (property number 4204) is a three-story reinforced concrete and masonry structure that was built in 1957.



Charlie Barracks has 36 rooms, some of which are being used to house transient personnel. In the past, Charlie Barracks was also used to house visitors.



Efflorescence, caused by rainwater and high moisture content in the soil, has led to damage to the first floor of Charlie Barracks.

Source: GAO. | GAO-16-382

In addition to providing accommodations, reestablishing a public visitation program on Midway would likely entail increasing the capacity of existing infrastructure systems to support visitors. Specifically, FWS and its contractors operate and maintain the power system, water treatment and distribution, facilities maintenance, waste management systems, communications systems, and other operational necessities. Many of these infrastructure systems were designed to accommodate the naval air station and a population of up to 5,000 people and have deteriorated over time. FWS has been replacing these systems to accommodate a population of approximately 200 people. For example, in October 2007, FWS installed a new fuel system with the capacity of up to

450,000 gallons to be used primarily for electricity generation. This new system replaced an old fuel system with a capacity of about 4 million gallons, which was deteriorating and was demolished in October 2015, according to FWS officials. See figure 7 for our photographs of the old fuel system prior to its demolition and the new fuel system.

Figure 7: Photographs of Old Fuel System (Left) and New Fuel System (Right) on Midway Atoll, April 2015



Source: GAO. | GAO-16-382

Also, according to the 2008 Midway Atoll National Wildlife Refuge Conceptual Site Plan, a new drinking water treatment system and distribution main were placed into service in October 2005. The new treatment system was sized for a short-term maximum population of 200 persons at a per capita daily use rate of 100 gallons per day, totaling 20,000 gallons per day. However, according to the 2008 conceptual site plan, the actual efficient operating capacity is much lower, and a regular on-island population above 120 people would require added capacity.

Supplies Are Infrequently Delivered

To routinely accommodate visitors to Midway, FWS officials said they would likely need to increase the amount of supplies delivered. According to these officials, the primary method for delivering supplies to Midway is by ship, with some supplies arriving on charter flights. In 2014, FWS decreased the number of shipments to Midway from three or four to two per year to reduce costs. The two shipments are limited by their capacity to transporting 84,000 gallons of fuel, but Midway's power plant consumed approximately 127,000 gallons in fiscal year 2015, according to the Midway contractor's annual management report. To make up the difference, agency officials we interviewed said that FWS borrowed fuel from the Coast Guard. The officials added that this arrangement is not

Transportation through
Charter Flights Is Expensive

likely to be a reliable source of fuel in the future because the fuel may be needed for Coast Guard operations.

The primary method of transportation to Midway is by charter flights, which are expensive to operate, given Midway's remote location. Before 2006, FWS was able to coordinate with cruise ships to visit Midway as an alternative form of transportation, but access to Midway through the marine national monument requires a permit.⁵⁵ FWS officials we interviewed said that Midway has not been visited by a cruise ship since 2007 because the company found the regulations of the monument too onerous. As of July 2015, the round-trip charter flight from Honolulu to Midway was approximately \$50,000. FWS covers the entire cost of the round-trip flight. If the flight is not full of passengers, the remaining space is used for cargo, such as mail, food, supplies, and parts. These charter flights are scheduled to travel from Honolulu to Midway approximately once every 2 weeks, or 26 flights per year, representing a reduction in the number of flights to Midway since the suspension of the public visitation program. For example, in fiscal year 2011, the FWS contractor for Midway reported 50 routine scheduled FWS charter flights or visitor flights to Midway.⁵⁶ In total, including round-trip transportation from Honolulu and other costs on Midway, such as lodging, food, and other fees, a 2-week stay on Midway costs about \$6,700 per person in 2015.

Planning Documents to
Implement Visitation
Program Were Last
Updated in 2008

The planning documents FWS needs to reestablish a public visitation program have not been updated since 2008 to reflect changes to the operating environment on Midway, creating uncertainty about the resources that may be needed to reestablish the program. In 2015, FWS officials estimated that \$1.2 million in additional annual funding would be needed to operate and oversee a reestablished public visitation program

⁵⁵Cruise ships need a special ocean use permit for activities within the Midway Atoll Special Management Area, which provides for sailing through the monument to enter the management area. Without a permit, vessels, including cruise ships, are generally only permitted to sail through the marine monument without interruption. 50 C.F.R. § 404.4(a).

⁵⁶According to FWS officials, at the beginning of the visitor season in January, FWS would pay to charter a return flight from Midway to Honolulu and arrange for a visitor group to pay for the incoming flight to Midway. Upon the visitor group's departure, FWS would arrange for that visitor group to pay for the return charter flight to Honolulu, and a new visitor group to pay for the incoming flight to Midway. This flight arrangement occurred until the end of the visitor season, which ended in May or June.

Bonin Petrel



Source: Ian Jones/U.S. Fish and Wildlife Service.

The Bonin petrel is a small, burrow-nesting seabird that breeds primarily in the Northwestern Hawaiian Islands. Midway Atoll (Midway) hosts the world's largest Bonin petrel population. Midway's Bonin petrel population was estimated at over 500,000 in the late 1930s, but the accidental introduction of rats in 1943 caused numbers to plummet to fewer than 5,000 in the 1980s. The rats were eradicated in the 1990s, and the Bonin petrel population has rebounded with a current population estimated at close to 1 million. The petrels spend their days either in their burrows or at sea. Starting at sundown, they emerge from their burrows and congregate in the air above their nesting grounds by the hundreds of thousands. They feed on small fish and squid by dipping or surface-feeding on the ocean surface. Their life span is 15 years.

Source: U.S. Fish and Wildlife Service. | GAO-16-382

and that additional funding would also be needed for start-up costs. However, this estimate relies on the availability of Charlie Barracks to house visitors, but as previously mentioned, the barracks is deteriorating. In addition, FWS officials told us that the populations of certain wildlife on Midway have grown and were not addressed in the most recent visitor services plan from December 2008. For example, because of the eradication of rats on Midway, there has been a significant increase in the population of the Bonin petrel—a seabird species that creates burrows in order to nest. On our site visit, we observed the extensive burrowing by Bonin petrels on unpaved areas and areas surrounding the buildings, which can create safety issues for visitors when the burrows collapse and disturb the seabirds. Officials were uncertain how much funding would be needed to update the plan but said that given current resource and personnel constraints, they have no plans to do so.

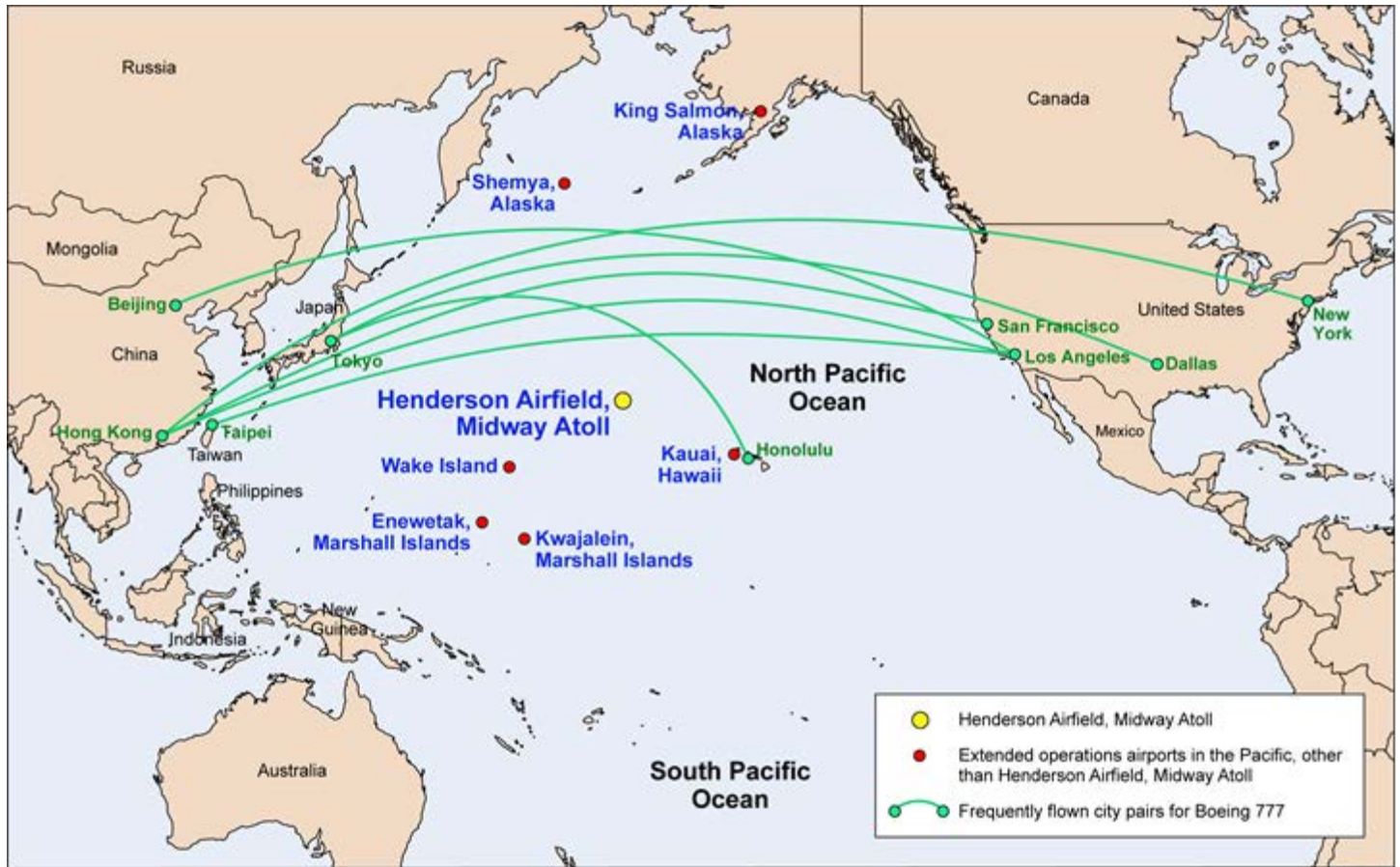
Midway's Airport Plays a Key Role as an Emergency Landing Site and Access Point to the Marine National Monument

Midway's Henderson Airfield serves as an emergency landing airport for aircraft for the mid-Pacific Ocean region and facilitates access to the marine national monument that includes Midway. Under FAA regulations, FAA-certified air carriers cannot operate airplanes on routes outside the continental United States if they are more than a specified flying time from an adequate airport unless FAA approves their extended operations (ETOPS). To gain FAA approval, air carriers must, among other things, designate adequate airports, which are certified by FAA, for use in the event of a diversion during ETOPS.⁵⁷ Henderson Airfield also serves as an emergency airport for military aircraft.

Airline industry representatives and FAA officials we interviewed said that the availability of Henderson Airfield on Midway allows aircraft to fly more direct routes across the Pacific Ocean than would otherwise be possible without Midway. An FAA official said that other ETOPS airports are available in the Pacific region, including in Alaska, but commercial airlines may prefer to designate Midway as their ETOPS airport in their flight plans because it is a shorter flight than flying over Alaska. In addition, according to an airline pilots' association representative, Midway's availability as an ETOPS airport gives airlines more flexibility in developing complex flight plans based on their routes, weather and wind conditions, time, and fuel efficiency as well as ETOPS locations. If the airport were not available, an official of an association representing airlines said that airlines would need to alter their routes further north or south, resulting in longer routes and incurring additional flight time and fuel-related costs. Figure 8 shows the locations of Midway's Henderson Airfield and other ETOPS airports in the North Pacific Region.

⁵⁷To obtain a certificate, an airport must comply with certain operational and safety standards, such as runway size and maintenance, markings and lighting, and creation of a wildlife hazard management plan, if FAA determines that one is needed. Airports must also provide such things as firefighting and rescue equipment. 14 C.F.R. Part 139.

Figure 8: Location of Alternative Extended Operations Airports in the Pacific and Frequently Flown City Pairs for Boeing 777



Sources: GAO analysis of Federal Aviation Administration data; MapResources (map). | GAO-16-382

Since 2003, seven emergency landings have occurred at the airport—four military and three civilian—generally caused by mechanical failures (see table 4).

Table 4: Emergency Landings at Henderson Airfield from 2003 through 2015

Date	Aircraft	Military or civilian	Reason for emergency landing
July 3, 2003	C-130 #2	Military	Engine out
Jan. 6, 2004	B777	Civilian	Left engine issues
July 8, 2009	F-18 #1	Military	Engine out
June 16, 2011	B747-400	Civilian	Cracked windshield
Aug. 2, 2012	F-18 IFE	Military	In-flight emergency
July 10, 2014	B777-200	Civilian	Smoke in cockpit
July 14, 2015	F-18	Military	Cabin pressure malfunction

Source: Federal Aviation Administration. | GAO-16-382

Figure 9 shows two U.S. Marine Corps F/A-18 Hornets that made an emergency landing in July 2015.

Figure 9: Two U.S. Marine Corps F/A-18 Hornets, One with Serious Mechanical Issues, Making an Emergency Landing at Henderson Airfield on July 14, 2015



Source: D. Dow/U.S. Fish and Wildlife Service. | GAO-16-382

Henderson Airfield also facilitates regular access for FWS and other federal agency staff, and those with approved permits to Midway and the rest of the Papahānaumokuākea Marine National Monument to conduct research and monitor geological events and endangered species. FWS, the primary user of the airport, regularly flies staff, volunteers, and supplies to support refuge mission activities. Other agencies use the airport as follows:

Hawaiian Monk Seal



Source: National Oceanic and Atmospheric Administration.

The endangered Hawaiian monk seal is one of the rarest marine mammals in the world and endemic to the Hawaiian archipelago. In 1976, they were listed as endangered under the Endangered Species Act. Approximately 1,200 seals are scattered throughout the entire archipelago. About 65 monk seals are usually present at Midway at any one time, and pupping levels have increased significantly since 1996. Primary factors affecting their recovery include predation by sharks, aggression by adult male monk seals, and reduction of habitat. Entanglement in marine debris, such as fishing nets and lines, and plastic rings are other sources of mortality. Their diet consists of reef fish, squid, octopus, and crustaceans, and their life span is 25 to 30 years.

Sources: U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration. | GAO-16-382

- The U.S. Coast Guard uses the airport to aid in its search-and-rescue and medical evacuation (medevac) operations for an area about 600 miles north of Midway that is used by numerous large vessels, according to Coast Guard officials. When the Coast Guard has to conduct a rescue in this area, it flies people with medical needs to Midway and then to Hawaii. From 2005 through 2015, there were 51 Coast Guard medevac flights that used Henderson Airfield. To support medevac flights and provide for other emergency needs, such as a hurricane evacuation, the Coast Guard stores its own fuel on Midway.
- NOAA has tidal monitoring stations on Midway and uses the atoll as a staging area to coordinate research activities throughout the marine national monument, including research to monitor endangered Hawaiian monk seals. For example, NOAA has flown Hawaiian monk seals from other areas in the Northwestern Hawaiian Islands to Midway, where they are acclimated and released. NOAA also uses Midway as an evacuation site. For example, according to NOAA officials, in 2015, it evacuated monk seal researchers from field camps on other islands in the marine monument to Midway because of dangerous weather conditions. According to a NOAA official, the agency “depends heavily” on the airport and has used FWS’s charter flights or chartered its own flights to transport people and supplies. Another NOAA official said it is good to have a runway within the marine national monument since ships are infrequent and it is difficult for ships to travel around the monument in winter.
- The U.S. Geological Survey conducts research, such as translocating endangered Laysan ducks from Laysan Island, in the Northwestern Hawaiian Islands, to Midway to establish a second wild population, largely because of its “rat-free” status and the logistic feasibility of restoring habitat and monitoring the ducks after release.

Conclusions

With its unique history and natural resources, Midway has several designations, including as a national wildlife refuge and as the site of many historic properties. These designations result in competing priorities for FWS, including managing the ecosystem to protect wildlife as well as maintaining historic properties. FWS faces these competing priorities with an overall budget that has declined in recent years and with a property maintenance budget that is variable and small in relation to the maintenance work needed, some of which has been deferred. In this environment, FWS has maintained most of Midway's historic properties as specified in a programmatic agreement that it entered in 1996 with the Navy and the Advisory Council on Historic Preservation during the Navy base closure and in its 2010 historic preservation plan.

However, FWS has not consistently completed the section 106 process before deciding to demolish or take other actions with adverse effects on historic properties. Specifically, FWS did not provide public notification for two actions adversely affecting five historic properties and did not adequately notify the parties that had previously expressed interest in historic preservation issues on Midway about these or two other actions. Without providing public notification, including ensuring that key parties that have previously expressed interest in historic preservation issues on Midway are notified about future actions that may have an adverse effect on historic properties, FWS will not have reasonable assurance that it is adequately seeking public comment and input under the section 106 process.

Recommendation for Executive Action

To fulfill the secretarial order's directive that FWS manage Midway in accordance with the National Historic Preservation Act, the Secretary of the Interior should direct the Director of the U.S. Fish and Wildlife Service to ensure that the public, including key parties that have previously expressed interest in historic preservation issues on Midway, are notified about future FWS undertakings that may have an adverse effect on historic properties so that they have an opportunity to provide comment and input.

Agency Comments and Third-Party Views

We provided a draft of this report, for their review, to the Secretaries of Commerce, Homeland Security, the Interior, and Transportation; the Executive Director for the Advisory Council on Historic Preservation; and the Governor of Hawaii. In the letters conveying their comments and views, the Department of the Interior, the Advisory Council on Historic Preservation, and the State of Hawaii all generally agreed with the

report's findings and recommendation; these letters are included in appendixes V, VI, and VII, respectively. The Departments of Commerce, Homeland Security, and Transportation indicated that they had no formal comments on our report through e-mail communications provided through audit liaisons.

The Department of the Interior agreed with our recommendation as drafted, which focused on notifying key parties that have previously expressed interest in historic preservation issues on Midway about future undertakings that may have an adverse effect on historic properties. The department said that, effective immediately, FWS would directly notify key interested parties about such future undertakings.

The Advisory Council on Historic Preservation also agreed with our recommendation and suggested that, to better reflect the regulations implementing section 106 of the National Historic Preservation Act, we clarify in our recommendation that FWS ensure the public—and not just key parties previously expressing interest in historic preservation issues on Midway—are notified about future undertakings that have adverse effects on historic properties. We clarified our recommendation to indicate that FWS should ensure that the public, including key parties, are notified because, as we noted in our report, FWS did not provide public notification for two of the undertakings and did not notify key parties about those or two other undertakings. In addition, the council emphasized the importance of initiating the section 106 review process as early as possible in the planning process to allow adequate time for participation by the public and consulting parties and to ensure the review process is complete before expenditure of federal funds on an undertaking. In light of public interest in Midway's historic properties and the possibility of restoring public visitation in the future, the council expressed hope that FWS would make historic preservation a higher priority among its competing funding priorities.

The State of Hawaii agreed with our recommendation as drafted and noted the importance of Midway to the state as ecological habitat supporting the state's resources and as a staging area supporting the state's field camps at Kure Atoll. The State of Hawaii also expressed hope that Midway's visitation program can be reinstated since it provides unique access to the Papahānaumokuākea Marine National Monument. In addition, the Department of the Interior, the Department of Commerce, and the Advisory Council on Historic Preservation provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees; the Secretaries of Commerce, Defense, Homeland Security, the Interior, and Transportation; the Executive Director for the Advisory Council on Historic Preservation; the Governor of Hawaii; and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff members have any questions about this report, please contact me at (202) 512-3841 or fennella@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix VIII.

A handwritten signature in black ink that reads "Anne-Marie Fennell". The signature is written in a cursive style with a horizontal line underneath the name.

Anne-Marie Fennell
Director, Natural Resources and Environment

Appendix I: Objectives, Scope, and Methodology

Our objectives were to (1) describe funding for operations and projects on Midway Atoll (Midway) for fiscal years 2009 through 2015; (2) examine how the U.S. Fish and Wildlife Service (FWS) has maintained historic properties on Midway and the extent to which it has consulted key stakeholders and sought public comment; (3) identify challenges, if any, FWS faces in reestablishing a public visitation program; and (4) describe the use of Henderson Airfield as an emergency landing airport and access point for the Papahānaumokuākea Marine National Monument.

To describe funding for Midway's operations and projects, we collected financial data for fiscal years 2009 through 2015 from FWS Region 1 for its financial allocations to Midway and from the Pacific Islands Refuges and Monuments Office in Honolulu for fees collected on Midway by the FWS contractor. An FWS official told us that because of the agency's document retention policy, it does not have pre-2009 data. We assessed the reliability of these data and found them to be of undetermined reliability for purposes of our report. Specifically, we reviewed the annual external audit of the Department of the Interior's financial database for fiscal year 2015, which noted internal control deficiencies related to financial reporting that could result in a misstatement within the financial statements. As a result, we relied on interviews with FWS budget and other officials to generally describe funding for Midway. In particular, we interviewed FWS budget and other officials on Midway and officials from the Pacific Islands Refuges and Monuments Office in Honolulu; the Region 1 office in Portland, Oregon; and FWS headquarters. We also interviewed officials with the Department of Transportation's Federal Aviation Administration (FAA) regarding the agencies' roles and responsibilities in providing an emergency landing site on Midway.

To examine how FWS has maintained its historic properties,¹ the extent to which it has consulted key stakeholders, and any challenges FWS faces in reestablishing a public visitation program, we collected documents and data to determine the universe of historic properties on Midway and actions that have been taken on these properties. We reviewed the National Historic Preservation Act, FWS's Historic

¹For the purpose of this document, we use the term maintain to mean to adhere to the five categories in the 1996 programmatic agreement that were the responsibility of FWS to carry out for the historic properties that remained on Midway after the Navy left—reuse, secure, leave as is, fill with sand, and relocate.

Preservation Plans for Midway, section 106 consultation documents, including regulations implementing section 106, and other relevant documents. We also interviewed the historian for Regions 1 and 8 and FWS officials located on Midway, in the Honolulu office, in the Region 1 office, and in headquarters. We interviewed officials in the Advisory Council on Historic Preservation, the Hawaii State Historic Preservation Office, the Historic Hawaii Foundation, and the Office of Hawaiian Affairs and native Hawaiian cultural practitioners for their perspectives on historic preservation on Midway.

We also conducted a site visit to Midway in April 2015, during which we documented the presence and appearance of the 56 historic and other nonhistoric properties on Midway, including Sand and Eastern Islands. Properties included buildings, structures, monuments, ruins, and other items found on Midway. Using a data collection instrument to guide our work, we took photographs and videos of properties, in addition to noting the general condition of those properties. We identified properties by building number listed on FWS's real property asset list, maps, or FWS photos or directly by observing numbers found on properties. We also consulted with the FWS officials on Midway frequently to confirm the presence and identity of properties. We did not physically measure or test any features or components of any property on Midway to determine its condition. Any statements we made as a result of our site visit on the condition of a property were based solely on the general appearance of the structure and do not constitute an actual physical assessment of the property. Moreover, our observations were limited at times because of several factors. For example, FWS directed us to avoid all direct contact with or disturbing of wildlife, including staying 150 feet away from endangered species whenever possible. Midway is a seabird nesting colony, and our site visit coincided with albatross breeding season. Other seabirds were present in great numbers on Midway, such as the Bonin petrel, a burrowing seabird. In addition, FWS directed us not to remove any object from or disturb any properties on Midway. FWS officials also directed us to avoid those properties having hazardous materials, such as lead paint, asbestos, and black mold. Further, FWS officials directed us to avoid those having unstable features, such as a collapsed portion of a structure, risk of falling debris, and partial or complete structural instability.

To identify challenges, if any, FWS faces in reestablishing a public visitation program, we collected documents, plans, and data to determine any FWS obligations to have a public visitation program, what prior visitation program Midway had, and challenges that FWS faces in

reestablishing a visitation program. During our site visit to Midway, we observed and photographed properties that have been used for or are potentially relevant to a visitation program. We also interviewed FWS officials on Midway, in the Honolulu office, and in the Region 1 office about public visitation.

To describe the use of Henderson Airfield, we reviewed FWS and FAA reports, policies, and regulations on the operation of Henderson Airfield and extended operations airports and interviewed FWS and FAA officials regarding the agencies' roles and responsibilities in providing an emergency landing site on Midway. We also interviewed a nonprobability sample of airline industry representatives—of a leading aircraft manufacturer, the largest airline pilots association, and the largest organization representing commercial airlines—regarding the use of Midway as an emergency landing site. The interviews allowed us to gain a perspective of airline industry views on Midway, but because this was a nonprobability sample, it does not allow us to generalize these views to either a segment of or the entire airline industry. We also reviewed information related to flight and passenger data from FWS's contractor on Midway and FAA data on the emergency military and civilian landings on Midway. FAA only had data on emergency military and civilian landings available for the years 2003 through 2015, so we can only report on the number of emergency landings for this time period.

We conducted this performance audit from March 2015 to June 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Chronology of Historical and Other Events for Midway Atoll

This appendix lists a chronology of historical and other events on Midway Atoll (Midway) based on our review of documents from the U.S. Fish and Wildlife Service (FWS), the Department of the Navy, the U.S. Marine Corps, and the Papahānaumokuākea Marine National Monument; legal documents, including laws and executive orders; and other historical resources.

Pre-1850s. The first visitors to the islands that constitute Midway Atoll (Midway) may have been Polynesians/Hawaiians exploring the Pacific in voyaging canoes. No physical evidence of such visits remains, but oral histories and chants refer to distant low-lying islands with abundant birds and turtles. Native Hawaiians named the atoll “Pihemanu,” which means “the loud din of birds.”

July 5, 1859. The first westerner, Captain N. C. Brooks of the Hawaiian ship *Gambia*, discovers Midway. He claims Midway for the United States. Captain Brooks names the atoll Middlebrooks, combining his name and Midway’s position between the west coast of the United States and Japan.

July 1867. The Pacific Mail Steamship Company, a transpacific commercial trading company, attempts to establish a coal storage depot and constructs two wooden houses on Sand Island, the larger of the two main islands in the atoll.

August 28, 1867. Captain William Reynolds of the steamer *USS Lackawanna* formally takes possession of Midway for the United States by order of the Secretary of the Navy. Midway’s location is considered important to provide a safe refuge for ships traveling between the United States and Asia in case of disaster and to establish a supply depot for provisions and water as well as coal to fuel the ocean steamships, according to an 1869 report submitted to the Senate Committee on Naval Affairs.¹

January 28, 1869. The Navy adopts the name Midway Islands, according to a report submitted to the Senate Committee on Naval Affairs.

¹Resolution of Senate on practicability, expediency, and probable cost of deepening entrance to harbor of Midway islands in Pacific Ocean, Senate Committee on Naval Affairs, 40th Cong., 3rd sess., Sen. Rep. 194, Jan. 28, 1869.

January 20, 1903. Executive Order 199-A places Midway Islands “under the jurisdiction and control of the Navy Department.”

April 20, 1903. About 30 people from the Commercial Pacific Cable Company arrive on Midway to begin constructing the cable station. They first erect temporary houses and then construct five permanent station buildings using steel beam supports and reinforced concrete, which is considered an innovative use of the modern material. The buildings provide an office for the cable operator; a mess and recreation hall; and quarters for the staff, servants, and a superintendent. The basements are used for support functions, such as storing provisions and housing the laundry and machine shop.

Short-Tailed Albatross



Source: GAO.

The first short-tailed albatross was observed on Midway between 1936 and 1941. The short-tail population dropped dramatically because of feather hunters in the late 19th century who sold feathers for women’s hats. Over 5 million adult birds were hunted and killed. Protections for the short-tailed albatross date back to 1970, and populations in the United States were listed as endangered under the Endangered Species Act in 2000. The world population of short-tailed albatross is currently estimated at 2,200 birds. They feed on flying fish eggs, shrimp, squid, and crustaceans, primarily during daybreak and twilight hours, and have been known to forage as far as 1,988 miles from their breeding grounds.

Source: U.S. Fish and Wildlife Service. | GAO-16-382

June 1903. The Navy ejects Japanese squatters and poachers who kill seabirds for feathers that are popular for women’s hats and appoints the Commercial Pacific Cable Company as Midway’s custodians.

June 18, 1903. The ships *C.S. Anglia* and *C.S. Colonia* complete installing the cable between Guam and Midway.

July 4, 1903. The cable, which stretches from San Francisco to Honolulu to Midway to Guam to the Philippines, carries the first round-the-world message and wishes “a happy Independence Day to the United States, its territories and properties.” The message takes 9 minutes to be received.

May 1904. About 20 U.S. Marines arrive to secure Midway as a U.S. possession and protect the cable staff and albatross from poachers.

September 22, 1905. The U.S. Lighthouse Service illuminates the first lighthouse on the atoll.

1906. A cemetery—commonly referred to as the Doctors' Cemetery because four of the six individuals buried there are medical doctors—is established on Midway when James Miller, an assistant surgeon in the Navy, dies of appendicitis.²

1917. The U.S. Weather Bureau establishes a station on Midway.³

April 12, 1935. Pan American Airways sets up an air base for weekly Trans-Pacific Flying Clipper Seaplane service and constructs a hotel on Sand Island. Midway becomes a regular fuel stop on a trans-Pacific route, including Honolulu, Wake Island, Guam, and Manila.⁴

November 22-29, 1935. Pan American Airways' China Clipper makes the first trans-Pacific airmail flight from San Francisco to Honolulu, Midway, Wake, Guam, and Manila.

1938. The U.S. Army Corps of Engineers dredges an entrance channel through the southern reef between Eastern and Sand Islands. It also constructs a harbor and seaplane runways in the lagoon as a civil works project.

April 25, 1939. Public Law No. 76-43 authorizes the Navy to establish, develop, or increase naval aviation facilities on Midway.

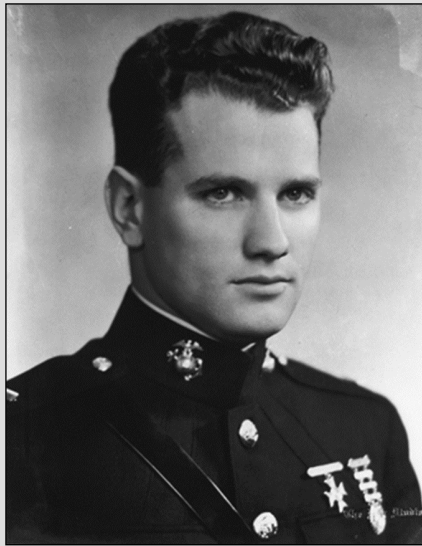
March 1940. Construction of a naval air station begins. Private contractors start constructing land runways on Eastern Island and other infrastructure on Sand Island in preparation for possible hostilities.

²One individual buried in the cemetery was a cable operator who broke his neck in a diving accident, and another was a seaman with a cable ship. Military personnel who died during the war or during the military's occupation of Midway were buried at sea or transported to Honolulu or the mainland for burial.

³The U.S. Weather Bureau became the National Weather Service in 1970 and is now a component of the National Oceanic and Atmospheric Administration within the Department of Commerce.

⁴Pan American Airways changed its name to Pan American World Airways on January 3, 1950.

First Lieutenant George H. Cannon, First U.S. Marine Medal of Honor Recipient in World War II



Source: U.S. Marine Corps.

On December 7, 1941, Midway Atoll (Midway) was bombarded by Japanese ships, in concert with the Japanese strike on Pearl Harbor. Midway's property number 354, the command/communications and power plant building was penetrated by a 5-inch artillery shell. First Lieutenant George H. Cannon was commanding one of Midway's gun batteries at the time. Mortally wounded by enemy fire, he refused to leave his post and refused medical attention, even though he had a crushed pelvis, until he was assured communications were restored to his command post. By the time he received medical attention, it was too late, and he died. According to the Medal of Honor citation, Cannon earned the nation's highest military award for "distinguished conduct in the line of his profession, extraordinary courage, and disregard of his own condition."

Source: GAO analysis. | GAO-16-382

1940. The Navy contracts with Albert Kahn of Detroit to prepare standardized plans for barracks, mess halls, and hangars for various bases. He also provides plans for the officers' housing, shops, storage buildings, and theater on Midway. Kahn is considered to be one of the country's foremost industrial designers and known for his use of steel, reinforced concrete, and natural light to create comfortable and functional interior spaces.

1941. The Commercial Pacific Cable Company's last superintendent on Midway begins his tenure. He remains on Midway during World War II, operating the cable for the Navy.

August 1, 1941. A Naval Air Station, Midway Islands is established on Eastern Island.

December 7, 1941. Japanese destroyers, known as the Midway Neutralization Unit, shell Midway. Four people are killed and 10 are wounded during the shelling.

June 4-6, 1942. Early on June 4, aircraft from four Japanese aircraft carriers, which had attacked Pearl Harbor 6 months earlier, attack and severely damage the base on Midway. After their initial attacks, the Japanese aircraft head back to their carriers to rearm and refuel, and while the aircraft are returning, the Japanese navy is surprised by U.S. naval forces in the area. Aircraft from the *USS Enterprise*, *USS Hornet*, and *USS Yorktown* attack the Japanese fleet. Three Japanese carriers are hit, set ablaze, and abandoned. A fourth Japanese carrier, the *Hiryu*, responds with two waves of attacks—both times bombing the *USS Yorktown*, leaving her severely damaged but still afloat. That afternoon, a *USS Yorktown* scout plane locates the *Hiryu*, and the *USS Enterprise* sends dive bombers to attack. The attack leaves the *Hiryu* burning and without the ability to launch aircraft. Over the next 2 days, the U.S. Navy forces the Japanese to abandon the battle and retreat to Japan. The Japanese lose approximately 4,800 men, four carriers, one cruiser, and hundreds of aircraft, while the United States loses about 307 men, one carrier, one destroyer, and over 100 aircraft. The Battle of Midway is considered the decisive battle of the war in the Pacific. After Midway, the Americans and their allies took the offensive in the Pacific arena.

July 15, 1942. The submarine base at Midway is commissioned and operates until the end of World War II.

August 1944. After the Battle of Midway, Sand Island is developed as an airfield, and it accommodates all operations of large planes from Eastern Island. The airfield becomes an important stopover for aircraft transiting to the war zone as it pushes further east.

1945. Air activity on Eastern Island withers as the Navy shifts it to Sand Island, and the Navy abandons Eastern Island by the end of the year.

1947. Pan American Airways discontinues its operations on Midway. In September, the Civil Aeronautics Authority takes over the maintenance and operation of airport facilities at Midway, Wake Island, and Guam, and the facilities become part of the federal airways and links in the air routes over the Pacific.

May 1, 1950. The Civil Aeronautics Authority ceases airport operations on Midway because of the Navy's decision to withdraw from the island.

June 6, 1950. The Navy decommissions the naval air station on Midway.

September 1950. The Navy recommissions the naval air station on Midway to support the Korean conflict. Ships and planes transporting thousands of military personnel stop at Midway for refueling and emergency repairs.

1951. The Federal Communications Commission issues an order authorizing permanent discontinuance of all operations of the Commercial Pacific Cable Company's route between San Francisco and Manila.⁵

December 31, 1952. The Commercial Pacific Cable Company turns over all its buildings and equipment to the Navy and ceases operations on Midway.

April 1953. The Navy deactivates the naval air station on Midway as hostilities in Korea decrease.

⁵The Federal Communications Commission—an independent U.S. government agency—regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia, and U.S. territories.

July 1953. The Navy reactivates the naval air station on Midway in reaction to Soviet bombers flying across the Pacific, sparking the era of “Cold War” hostilities. To protect the United States and keep track of the Soviet planes, construction begins on the Distant Early Warning Line—a network of radar picket ships to give a distant early warning of aircraft or missile attack on North America.

1957. A \$40 million construction program begins as Midway becomes a home for the Pacific Airborne Early Warning portion of the Distant Early Warning Line, known as the Pacific Barrier. Navy construction units (Seabees) complete an 8,000-foot runway for the heavy aircraft landing on Midway and build an aircraft hangar large enough to hold six aircraft. During this construction, the Hawaiian Dredging Company completes new housing, reconditions the station theater, and builds a new chapel in a modern “A” frame design.

July 1958. The Pacific Barrier becomes fully operational, and Midway gains renewed importance as a staging point for airborne radar early warning patrols by Navy WV-2 (EC-121) *Warning Star* aircraft—called Willy Victors—flown by the Airborne Early Warning Barrier Squadron, Pacific. These patrols between Midway and the Aleutian Islands are designed to provide warning of attack on North America by Soviet bombers.

March 18, 1959. The Hawaiian Statehood Act is passed and, on August 21, 1959, Hawaii becomes the 50th state. The law excludes Midway from the state of Hawaii’s territory.

September 4, 1962. Executive Order 11048 makes the Secretary of the Navy responsible for the civil administration of Midway and vests all executive and legislative authority necessary for that administration, and certain judicial authority, in the Secretary.

1968. Midway is one of the main aircraft and ship refueling stations during the Vietnam War. It also accommodates classified missions and the storage and assembly of advanced underwater weapons and the Sound Surveillance System (Project Caesar), which includes miles of undersea cables with hydrophones to pick up the sounds of submarines.

June 8, 1969. The United States and South Vietnam conduct secret meetings in the Midway House (the Officer-in-Charge House, property number 414). During this meeting, the United States announces the “Vietnamization” of the war and a U.S. troop withdrawal of 25,000 men.

October 1978. The Navy downgrades the naval air station to a naval air facility, and dependents are withdrawn.

1981. A base operating services contract is awarded to civilian contractors to operate the naval air facility, further reducing the number of military personnel there.

November 23, 1985. Pan American B747 “China Clipper II” visits Midway to commemorate the 50th anniversary of the first China Clipper flight.

1986. The National Park Service initiates a study of Midway’s heritage resources to determine if any of the World War II-era properties are eligible for designation as a National Historic Landmark. The study identifies nine eligible defensive structures on Sand Island and none on Eastern Island.

May 1987. Six ammunition magazines, a pillbox (a defensive structure built on or near the beach), and two gun emplacements on the west side of Sand Island are, as a group, designated a National Historic Landmark and placed on the National Register of Historic Places.

April 22, 1988. A cooperative agreement between the Navy and FWS establishes an overlay national wildlife refuge on Midway. Under the agreement, the Navy makes the atoll’s land and water areas available to the Department of the Interior to administer for the conservation and management of migratory birds, endangered species, and other fish and wildlife. The wildlife on the island includes the endangered Hawaiian monk seal, the threatened green turtle, and diverse marine species and migratory seabirds and shorebirds, including the world’s largest population of nesting Laysan albatross.

July 1, 1993. The naval air facility on Midway is recommended for closure under the Defense Base Closure and Realignment Act of 1990 (Pub. L. No. 101-510, Tit. XXIX).

1993 and 1994. The Navy conducts cultural resources surveys to identify buildings, structures, objects, and sites on both Sand and Eastern Islands that might be eligible for inclusion in the National Register of Historic Places. The Navy determines that 78 properties are eligible, including 9 properties that were designated as a National Historic Landmark.

September 30, 1993. The naval air facility on Midway is operationally closed.

Green Turtle



Source: Sandra Hall/U.S. Fish and Wildlife Service.

Green turtles are the largest of all the hard-shelled sea turtles. They were listed as threatened under the Endangered Species Act in 1978, except for the Florida and Mexican Pacific coast populations, which were listed as endangered. The 1978 green turtle listing was replaced in April 2016 with listings of distinct population segments as endangered or threatened; the green turtles on Midway Atoll (Midway) are part of the Central North Pacific distinct population segment, which was listed as threatened. A major factor contributing to the green turtle’s decline worldwide is the commercial overharvest of turtles and eggs for human consumption. The number living and foraging within Midway’s lagoon is currently undetermined, but many of Midway’s turtles have been tagged to monitor the population. Adults migrate from foraging grounds throughout the Hawaiian Islands to breeding grounds. Their life span is unknown, but sexual maturity occurs anywhere from 20 to 50 years.

Source: U.S. Fish and Wildlife Service. | GAO-16-382

February 5, 1996. FWS, the Navy, and the Advisory Council on Historic Preservation enter into a programmatic agreement, as authorized by the regulations implementing section 106 of the National Historic Preservation Act, regarding historic preservation issues on Midway. The agreement addresses the transfer of historic properties identified on Midway in 1996 and how FWS was to treat the properties afterward.

August 2, 1996. FWS enters into a cooperative agreement with the Midway Phoenix Corporation for support of a public visitation program.

August 1996. Midway opens to public visitation.

October 31, 1996. Executive Order 13022 transfers jurisdiction and control of Midway from the Navy to the Department of the Interior and directs the Secretary of the Interior, through FWS, to administer Midway as the Midway Atoll National Wildlife Refuge.

April 3, 1997. In a ceremony transferring Midway to FWS, the Secretary of the Navy presents the “key to Midway” (in the shape of a Laysan albatross) to the Department of the Interior and remarks that Americans are “trading guns for goonies.”

June 30, 1997. The last Navy personnel stationed on Midway depart.

1997. The first systematic marine invertebrate survey is conducted and documents 316 invertebrate species, 250 of which had not been previously recorded at Midway.

1998. FWS and the Oceanic Society sponsor the first two Elderhostel historic preservation projects. Working under the supervision of a historic preservation specialist, volunteers clean and preserve the 3-inch anti-aircraft gun on Eastern Island, clean and stabilize Battery C, and remove paint from the 5-inch guns in the memorial park. FWS funds roof and soffit repairs on eight officers’ quarters and the Officer-in-Charge house. FWS receives a National Park Service grant for \$6,000 to develop a plan for restoring the Armco huts, power plant, and cable station.

June 1999. FWS issues the Midway Atoll National Wildlife Refuge Historic Preservation Plan 1999, which defines a program to integrate historic preservation planning with the refuge’s wildlife conservation mission.

1999. FWS and the Oceanic Society sponsor three Elderhostel historic preservation projects. Work includes restoring the theater windows and completing a condition assessment, cleaning and stabilizing Battery A, preserving the 5-inch guns, completing a condition assessment of the cable station, inventorying changes to the buildings, drafting new architectural floor plans, and organizing a library of historic resources.

2000-2001. FWS receives a Save America's Treasures grant for \$308,681 from the National Park Service. The grant provides funds for termite prevention of the officers' housing, Officer-in-Charge house, theater, and several shop buildings; re-roofing of a cable station building (property number 643; mess hall); and restoration of an ARMCO hut.⁶

September 13, 2000. In response to a mandate in the fiscal year 2000 appropriations act, the Secretary of the Interior signs Secretarial Order 3217 designating the Midway Atoll National Wildlife Refuge as the Battle of Midway National Memorial "so that the heroic courage and sacrifice of those who fought against overwhelming odds to win an incredible victory will never be forgotten."

December 4, 2000. Executive Order 13178 establishes the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. The reserve encircles the Northwestern Hawaiian Islands, except for Midway; however, it directs the Secretary of the Interior to follow the order's management principles in managing the Midway Atoll National Wildlife Refuge to the extent consistent with applicable laws.

January 7, 2002. The fiscal year 2000 appropriations act requires the Secretary of the Interior to consult on a regular basis with organizations with an interest in Midway, including the International Midway Memorial Foundation, on the management of the national memorial. The Secretary of the Interior establishes the Battle of Midway National Memorial Advisory Committee to develop a strategy for a public dedication of the memorial, identify and plan for appropriate exhibits to commemorate this important event, and offer recommendations on improving visitor services.

⁶The National Park Service administers the Save America's Treasures grants program, which began in 1999, to help preserve nationally significant historic properties and collections.

March 6, 2002. The Midway Phoenix Corporation and FWS enter into a settlement agreement to terminate their cooperative agreement.

May 1, 2002. The last Midway Phoenix Corporation employees depart Midway.

February 2003. As much as 100,000 gallons of JP-5 jet fuel spills from an underground corroded pipeline at the Midway fuel farm. Officials from the Coast Guard, FWS, GeoEngineers, Inc., and Pacific Environmental Corporation collaborate to oversee the cleanup project.

February 26, 2003. H.R. 924 is introduced in the House of Representatives, which, if enacted, would require the Secretary of the Interior to designate an agency within the department to replace FWS as administrator of Midway. Congress does not pass H.R. 924.

Laysan Duck



Source: Ian Jones/U.S. Fish and Wildlife Service.

The world's most endangered duck, the Laysan duck is considered the rarest native waterfowl in the United States. They once were widespread across the Hawaiian Islands, but by 1860, they ceased to exist anywhere except Laysan Island. In 1967, they were listed as endangered. In 2004, 20 endangered Laysan ducks were transported 750 miles to Midway Atoll (Midway) from Laysan Island. Biologists have established a second "insurance" population of this endemic duck on Midway. Today, the population numbers over 400 ducks. Laysan ducks are primarily insect feeders but may also feed on leaves and seeds, and their life span is about 12 years.

Source: U.S. Fish and Wildlife Service. | GAO-16-382

May 7, 2003. FWS awards a contract to Chugach McKinley, Inc., to provide operations and maintenance services at Midway Atoll National Wildlife Refuge.

July 3, 2003. A military C-130 makes an emergency landing because an engine is out.

Jan. 6, 2004. A civilian Boeing 777 makes an emergency landing because of left engine issues.

2004. FWS transports 20 endangered Laysan ducks to Midway from their home at Laysan Island in the Hawaiian Islands National Wildlife Refuge. The birds adapt well to the seeps created on Sand Island and surprised biologists by breeding during their first year, with 12 ducklings successfully fledging. An additional 22 ducks are transported to Midway in 2005, most of which are introduced to Eastern Island. By the end of 2006, more than 100 Laysan ducks are living on Midway.

May 26, 2005. An oversight hearing on public access within the national wildlife refuge system is held before the Subcommittee on Fisheries and Oceans, House Committee on Resources. Witnesses include the Chairman of the International Midway Memorial Foundation, who requests that the committee consider designating an agency other than FWS to manage Midway.

June 15, 2006. Proclamation 8031 designates the Northwestern Hawaiian Islands Marine National Monument. The monument is one of the largest fully protected marine managed areas in the world.

The Meaning of Papahānaumokuākea

The name Papahānaumokuākea (pronounced Pa-pa-hah-now-mo-koo-ah-keh-ah) comes from an ancient Hawaiian tradition concerning the formation of the Hawaiian Islands.

Papahānaumoku is a mother figure personified by the earth, and Wākea is a father figure personified in the expansive sky. According to tradition, their union resulted in the creation of the entire Hawaiian archipelago.

The components of the name of the monument—"Papa" (earth mother), "hānau" (birth), "moku" (small island or large land division), and "ākea" (wide)—bespeak a fertile woman giving birth to a wide stretch of islands beneath a benevolent sky.

Source: Papahānaumokuākea Marine National Monument. | GAO-16-382

February 28, 2007. Proclamation 8031 is amended by Proclamation 8112 to give the Northwestern Hawaiian Islands Marine National Monument the Hawaiian name Papahānaumokuākea Marine National Monument.

March 1, 2007. The First Lady visits Midway in recognition of the newly designated Papahānaumokuākea Marine National Monument and to increase public awareness of its exceptional marine ecosystem. On March 2, 2007, in a ceremony in Honolulu, accompanied by the Governor of Hawaii and native Hawaiian elders, she announces the new native Hawaiian name of the marine monument.

2008. FWS contracts for a condition assessment of the cable station. Because of their deteriorated condition, a decision was made to salvage and dismantle three of the four two-story buildings and save one. FWS contracts to salvage the windows, doors, and other fixtures of the cable station.

July 8, 2009. A military F-18 conducts an emergency landing because an engine is out.

2009. FWS's Cultural Resources Team travels to Midway with the National Oceanic and Atmospheric Administration to record the terrestrial elements associated with the Battle of Midway for the American Battlefield Grant. Consultation is completed for the cable station and a memorandum of agreement is signed with stipulations that mitigate for the loss of three buildings. Engineering and historic preservation firms assess the condition of the seaplane hangar and present the results in two different studies. They begin the process of developing appropriate plans and costs for rehabilitating the seaplane hangar.

December 2010. FWS revises its Midway Atoll National Wildlife Refuge Historic Preservation Plan 1999 and reissues it in December 2010. American Recovery and Reinvestment Act funding is used to rehabilitate officers' housing and for solar water heaters.

July 30, 2010. Delegates to the United Nations' Educational Scientific and Cultural Organizations 34th World Heritage Convention agree to

inscribe Papahānaumokuākea Marine National Monument as one of 28 mixed (natural and cultural) World Heritage Sites.

March 10, 2011. A tsunami hits Midway, which is caused by a 9.0 earthquake in Japan. The tsunami covers about 60 percent of Eastern Island and 20 percent of Sand Island. There are no human casualties, but the boat piers and old seawalls are damaged. More than 110,000 Laysan and black-footed albatross chicks—about 22 percent of the year’s albatross production—and at least 2,000 adults/subadults are lost. Thousands of dead reef fish wash up on Eastern Island, and hundreds or potentially several thousand adult/subadult Bonin petrels are buried alive and die.

2011. Plans and costs to rehabilitate/repair the seaplane hangar are finalized and contract bids are reviewed. The project is halted because of the high cost.

June 16, 2011. A Boeing 747-400 makes an emergency landing because of a cracked windshield.

Aug. 2, 2012. A military F-18 makes an emergency landing because of an in-flight emergency.

November 14, 2012. Midway’s Public Visitation Program is suspended.

July 10, 2014. A Boeing 777 en route to Guam with 348 passengers makes an unscheduled landing because of smoke in the cockpit.

November 20, 2014. An oversight hearing titled “Is the Midway Atoll National Wildlife Refuge Being Properly Managed?” is held before the Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs, House Committee on Natural Resources.⁷

July 14, 2015. Two U.S. Marine Corps F/A-18 Hornets, one with a cabin pressure malfunction, make an emergency landing on Midway.

⁷“Is the Midway Atoll National Wildlife Refuge Being Properly Managed?” Oversight Hearing before the Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs, House Committee on Natural Resources (Nov. 20, 2014).

Appendix III: Public Visitation to Midway Atoll Has Varied Substantially Over Time

Since 1996, the U.S. Fish and Wildlife Service (FWS) provided a variety of opportunities for the public to visit Midway Atoll (Midway). Given Midway's remote location in the Pacific Ocean, providing public access to the wildlife refuge has been challenging. According to FWS officials we interviewed, almost 20,000 people visited Midway from 1996 through 2012. This appendix provides additional information about three phases of public visitation to Midway from 1996 to 2002, from 2003 to 2006, and from 2007 to 2012.

FWS Implemented a Public Visitation Program through a Cooperative Agreement from 1996 to 2002

FWS entered into a cooperative agreement with the Midway Phoenix Corporation in August 1996, amended in November 1997, to support a public use program at Midway. Under the amended cooperative agreement, FWS was responsible for establishing and enforcing national wildlife refuge policies, rules, and regulations and providing staff and expertise to assist in implementing and overseeing the public use program. The Midway Phoenix Corporation, under the amended cooperative agreement, was responsible for implementing and supporting the public use program. The cooperative agreement also established that the Midway Phoenix Corporation would provide the funding, staffing, supplies, equipment, logistics, and services to accomplish its responsibilities under the agreement. Under the agreement, the Midway Phoenix Corporation retained revenue derived from the goods and services it offered on Midway, including lodging and recreational activities, such as boat and fishing trips. The agreement also required the Midway Phoenix Corporation to provide the principal funding to develop, implement, and maintain a compatible public use program on the refuge and to contribute \$200,000 per year to support FWS's responsibilities under the agreement because FWS would not be able to meet its responsibilities without those funds.

Under the cooperative agreement, the Midway Phoenix Corporation completed several capital improvement projects and coordinated air transportation to and from Midway. Capital improvement projects included the refurbishment of two barracks for overnight lodging, construction of a new restaurant and bar (see fig. 10), and the installation of a cell phone tower. According to the former executives of the Midway Phoenix Corporation, their initial capital investments on Midway totaled \$15 million. Under the terms of the cooperative agreement, all newly constructed property was property of the United States and the Midway Phoenix Corporation did not have any claims to improvements made to the government property. The Midway Phoenix Corporation, using the Henderson Airfield runway, also coordinated air transportation from

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Honolulu using Phoenix Air and Aloha Airlines.¹ According to the former Midway Phoenix Corporation executives we interviewed, air travel to Midway was subsidized by the company.

Figure 10: Photographs of Midway Phoenix Corporation Refurbishment and Construction on Midway Atoll

Charlie Barracks (exterior)



Charlie Barracks (interior)



Clipper House



Captain Brooks Tavern



Source: Phoenix Air Group, Inc. | GAO-16-382

Note: Photographs were taken by the Midway Phoenix Corporation while implementing a public use program from 1996 to 2002.

¹The Midway Phoenix Corporation was created as a subsidiary of Phoenix Air Group, Inc. in support of negotiating and implementing a cooperative agreement for a public use program with FWS.

The Midway Phoenix Corporation hired contractors to facilitate recreational activities and coordinated tours to Midway with several tour providers. Specifically, recreational activities were supported by contractors that operated catch and release sport fishing and scuba diving excursions (see fig. 11). Tour providers organized packages for visitors to Midway around those and other recreational activities, such as historic interpretation. In 1999, cruise ships also began to transport visitors to Midway, although their visits were typically for less than a day.

Figure 11: Photographs of Scuba Diving Boat and Midway Sport Fishing Sign



Source: Phoenix Air Group, Inc. | GAO-16-382

Note: Photographs were taken by the Midway Phoenix Corporation while implementing a public use program from 1996 to 2002.

FWS and the Midway Phoenix Corporation entered into a settlement agreement in March 2002 that terminated their cooperative agreement and a 2001 fuel delivery contract. As a result, FWS limited access to Midway in January 2002.

FWS Did Not Implement a Public Visitation Program on Midway from 2002 to 2006, and Visitation to Midway Occurred Ad Hoc

From 2002 to 2006, FWS did not operate a regularly scheduled public visitation program on Midway. Although FWS allowed the public to visit Midway during that time, the agency did not coordinate commercial or charter flights for the public as was the case under the prior public use program operated by the cooperator. As a result, visitors to Midway during this time arrived primarily by cruise ship, with a few additional visitors who arrived via private sailboats and aircraft. Visitors were required to obtain permission to travel to Midway from the refuge

manager to ensure staff availability. In order to accommodate visitors, FWS charged cruise ship visitors a refuge access fee, and other costs were paid by the cruise lines to bring interpretative staff to Midway. FWS also supported commemorative events, such as the 62nd anniversary of the Battle of Midway in 2004 where most visitors arrived by cruise ship.

FWS Reestablished a Public Visitation Program to Midway in 2007 after the Designation of the Marine National Monument

After the designation of the marine national monument in 2006, FWS reestablished a public visitation program to Midway beginning in 2007. Midway was established as a special management area and is the only location within the marine national monument that can be used for public visitation and recreation. However, this public visitation program operated differently from the previous iteration in that any activity that took place within the marine national monument was subject to the approval of the Monument Management Board.² The Monument Management Board comprises representatives from the three agencies designated as co-trustees to manage the marine national monument—the state of Hawaii, the Department of the Interior, and the Department of Commerce.³ Under this public visitation program, tour providers were responsible for obtaining monument permits through the application process. Those permit applications were evaluated and approved by the co-trustees.

Transportation to Midway under this public visitation program was primarily by charter flights from Honolulu. Tour providers coordinated with FWS to arrange for transportation to Midway on regularly scheduled charter flights. FWS supported recreational activities and interpretative tours and established a Midway visitor's center and museum (see fig. 12).

²The Monument Management Board issues six types of permits: (1) conservation and management, (2) research, (3) education, (4) native Hawaiian practices, (5) special ocean uses, and (6) recreation.

³The Monument Management Board consists of representatives from the National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries, NOAA National Marine Fisheries Service, FWS National Wildlife Refuge System, FWS Ecological Services, Hawaii Department of Land and Natural Resources Division of Aquatic Resources, Hawaii Department of Land and Natural Resources Division of Forestry and Wildlife, and Office of Hawaiian Affairs.

Figure 12: Photographs of the Midway Atoll Visitor's Center and Select Museum Exhibits (April 13, 2015, and April 14, 2015)



Source: GAO. | GAO-16-382

However, unlike the previous public visitation program operated from 1996 to 2002, sport fishing was prohibited and FWS did not facilitate scuba diving.⁴ FWS supported another commemorative event for the 65th anniversary of the Battle of Midway in 2007. This public visitation program was implemented by FWS until November 2012, when public visitation to Midway was suspended because of resource constraints.

See table 5 for a summary of public visitation on Midway since 1996.

⁴Sport fishing is prohibited within the marine national monument, but scuba diving is allowed outside the Midway Atoll Special Management area with a permit. 50 C.F.R. § 404.7(a), (i). However, an FWS official told us that Midway did not have the correct diving equipment for scuba diving.

**Appendix III: Public Visitation to Midway Atoll
Has Varied Substantially Over Time**

Table 5: Overview of Public Visitation to the Midway Atoll National Wildlife Refuge, 1996-2012

Characteristics of the public visitation program	1996-2002	2002-2006	2007-2012
Operator	Midway Phoenix Corporation through a cooperative agreement with the U.S. Fish and Wildlife Service (FWS)	FWS	FWS
Mechanism	Cooperative agreement	FWS permit process	Monument permit process
Primary method of transportation	Commercial airline Cruise ship (after 1999)	FWS charter flight Private vessel Cruise ship	FWS charter flight
Maximum number of overnight visitors	100	Not specified	50
Average number of annual visitors	2,317 ^a	905 ^a	312 ^a

Source: GAO review of U.S. Fish and Wildlife Service information. | GAO-16-382

^aAccording to FWS officials any nonresident was counted as a "visitor" until 2008.

Appendix IV: Photographs of Historic and Selected Properties on Midway Atoll

We visited Midway Atoll (Midway) from April 7, 2015, to April 21, 2015, to document the physical appearance of historic and other properties on Midway, including on Sand and Eastern Islands. This appendix presents selected photographs of properties that are National Historic Landmarks, are eligible for inclusion on the National Register of Historic Places, or have the potential to be used for public visitation.¹ It also presents photographs of other properties that were identified as important during our interviews with U.S. Fish and Wildlife Service (FWS) officials and stakeholders, including the former executives of the Midway Phoenix Corporation and the International Midway Memorial Foundation. In total, 65 properties met our selection criteria and are included in this appendix.

In 2009, FWS conducted an on-site review of Midway properties to determine their condition. Each property's condition was rated on the following scale: excellent, good, fair, poor, or failed.² We did not independently assess the condition or the FWS rating during our review. Of the 65 properties included in this appendix, 35 properties were determined by FWS to be in fair condition; 12 properties, in poor condition; 8 properties, in fair to poor condition; 5 properties, in failed condition; and 1 property, in fair to good condition. For 2 properties, the condition was unknown.³ In addition, 2 of the properties were

¹Prior to the closure of the naval base in 1996, the Navy conducted a series of studies of the cultural resources on Midway. These cultural resource surveys indicated the extent of the resources that could be affected by the closure of the base and made evaluations on historic significance of Midway's properties, including recommendations of eligibility for inclusion in the National Register of Historic Places. According to the U.S. Fish and Wildlife Service historian for Region 1 and Region 8, Midway properties that are considered eligible for inclusion on the National Register of Historic Places are treated as if they were listed.

²According to FWS officials, the agency rates a property as "excellent" if it is brand new and routine maintenance is undertaken at appropriate intervals; "good" if the cost to rehabilitate the property is 10 to 15 percent of the total current replacement value or less; "fair" if the cost to fix the damage exceeds 10 to 15 percent of the current replacement value and the damage is nonstructural; "poor" if the cost to rehabilitate the property to good condition exceeds 50 percent of the current replacement value; and "failed" if the property presents a safety hazard to FWS employees, the public, or the mission of the agency.

³According to an FWS official responsible for facilities management, for the one of the two properties where the condition was unknown, one property is not included in the agency's real property inventory, and the other property could not be assessed because the entrance has not been located.

condemned, meaning that the properties are no longer safe to enter. None of the properties included in this appendix were assessed to be in excellent or good condition.

The appendix is generally organized by the approximate date of construction, with the oldest properties first and newer constructed properties last. Each property is identified by a number, based on the Navy facility number or a number assigned during a study of cultural resources on Midway. For each property, FWS provided information regarding its use status as of 2015. (See figs. 13 through 70.)

To view these photographs online, please click on this [hyperlink](#).

Figure 13: Cable Station Building, Mess Hall (Property No. 643), Midway Atoll, Sand Island (April 10, 2015, and April 17, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 14: Doctors' Cemetery (Property No. S-4), Midway Atoll, Sand Island (April 14, 2015)



A cemetery is located on Midway that includes six gravestones, four belonging to medical doctors, with dates that range from 1906 to 1950. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the cemetery is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 15: Japanese Fishermen Memorials (Property No. S-5), Midway Atoll, Sand Island (April 13, 2015)



The Japanese Fishermen Memorials include markers from 1911 to 1916 for fishermen who died at sea. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the memorial is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 16: Seaplane Hangar (Property No. 151), Midway Atoll, Sand Island (April 13, 2015)



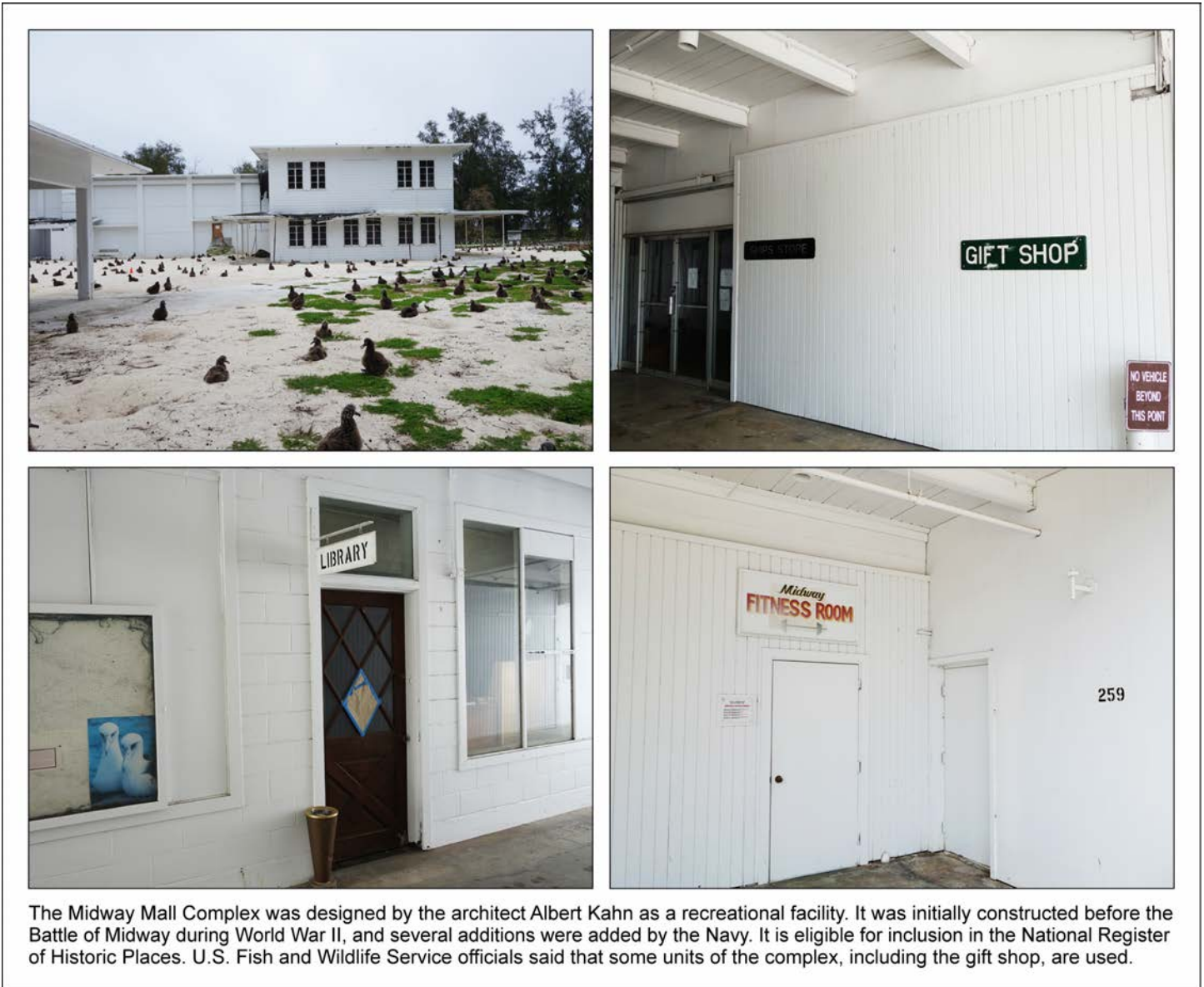
The seaplane hangar was designed by the architect Albert Kahn and constructed in 1941. This building was bombed during both the December 7, 1941, and June 4, 1942, attacks on Midway and housed the seaplanes that spotted the Japanese attack during the Battle of Midway. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is used for equipment storage.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Appendix IV: Photographs of Historic and Selected Properties on Midway Atoll

Figure 17: Midway Mall Complex (Property No. 259), Midway Atoll, Sand Island (April 10, 2015, and April 17, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 18: Theater of the Midway Mall Complex (Property No. 259), Midway Atoll, Sand Island (April 10, 2015, and April 17, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 19: General Squadron Storehouse (Property No. 356), Midway Atoll, Sand Island (April 13, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 20: Torpedo Shop with Parachute Tower (Property No. 363), Midway Atoll, Sand Island (April 13, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 21: Commissary and Cold Storage (Property No. 349), Midway Atoll, Sand Island (April 13, 2015)



The commissary and cold storage building was designed by the architect Albert Kahn and constructed in 1941 before the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is used for storage.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 22: Paint and Oil Storehouse (Property No. 342), Midway Atoll, Sand Island (April 13, 2015)



The paint and oil storehouse was designed by the architect Albert Kahn and constructed in 1941 before the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is used as a maintenance shop.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 23: Torpedo Machine Shop (Property No. 357), Midway Atoll, Sand Island (April 13, 2015)



The torpedo machine shop was designed by the architect Albert Kahn and constructed in 1941 before the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 24: Carpentry Shop (Property No. 353), Midway Atoll, Sand Island (April 13, 2015)



The carpentry shop was designed by the architect Albert Kahn and constructed in 1942 before the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is used for storage.

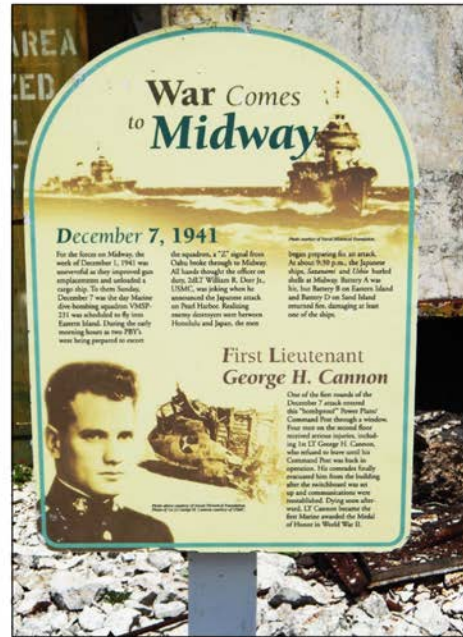
Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 25: Power Station Building (Property No. 354), Midway Atoll, Sand Island (April 13, 2015)



The power station building, also known as the Cannon Building, was constructed in 1941. During the attack of Midway Atoll by the Japanese on December 7, 1941, the building was bombed and Lieutenant George H. Cannon was mortally wounded. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is not in use.



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

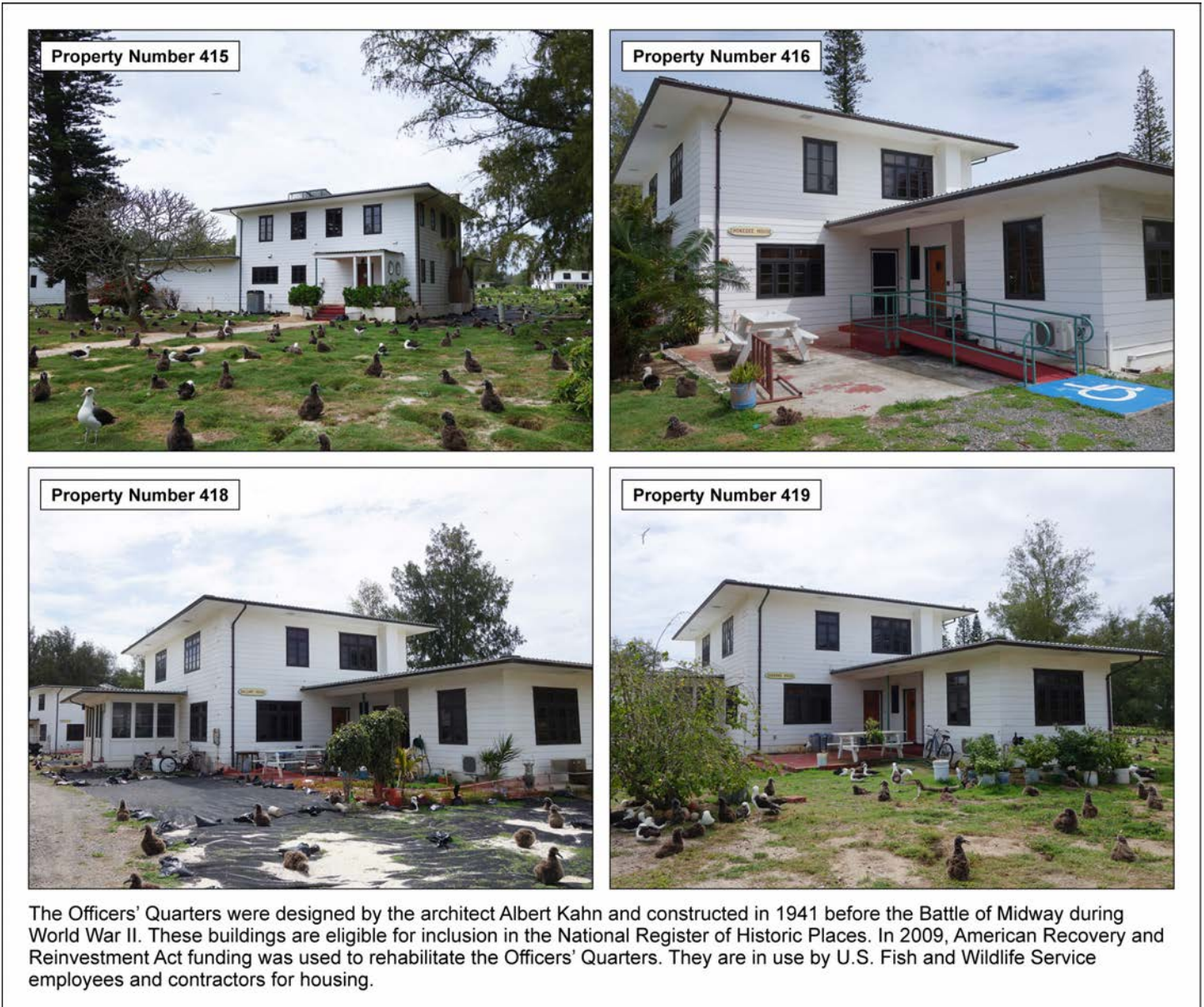
Figure 26: Officer-in-Charge House (Property No. 414), Midway Atoll, Sand Island (April 16, 2015, and April 17, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 27: Senior Officers' Quarters, Midway Atoll, Sand Island (April 10, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 28: Senior Officers' Quarters, Midway Atoll, Sand Island (April 10, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 29: Senior Officers' Quarters (Property No. 417), Midway Atoll, Sand Island (April 10, 2015, and April 15, 2015)



The Officers' Quarters were designed by the architect Albert Kahn and constructed in 1941 before the Battle of Midway during World War II. These buildings are eligible for inclusion in the National Register of Historic Places. In 2009, American Recovery and Reinvestment Act funding was used to rehabilitate the Officers' Quarters. They are in use by U.S. Fish and Wildlife Service employees and contractors for housing.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 30: Metal Pillbox (Property No. E-3), Midway Atoll, Eastern Island (April 16, 2015)



This metal pillbox was used as a defensive structure in the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the pillbox is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 31: Metal Pillboxes (Property No. E-4), Midway Atoll, Sand Island (April 13, 2015)



These metal pillboxes were used as defensive structures in the Battle of Midway during World War II. They are eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the pillboxes have been moved into storage on Midway.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 32: Metal Pillbox (Property No. S-7), Midway Atoll, Sand Island (April 14, 2015)



This metal pillbox was used as a defensive structure in the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the pillbox is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 33: Concrete Pillbox (Property No. S-6), Midway Atoll, Sand Island (April 15, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 34: Concrete Pillbox (Property No. S-3), Midway Atoll, Sand Island (April 15, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 35: Armco Hut (Property No. S7125), Midway Atoll, Sand Island (April 15, 2015)



This Armco hut was used as an underground bunker for storing ammunition in the Battle of Midway during World War II. It was designated as a National Historic Landmark in 1987. U.S. Fish and Wildlife Service officials said that the hut is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 36: Armco Hut (Property No. S7124), Midway Atoll, Sand Island (April 15, 2015)



This Armco Hut was used as an underground bunker for storing ammunition in the Battle of Midway during World War II. It was designated as a National Historic Landmark in 1987. U.S. Fish and Wildlife Service officials said that the hut is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 37: Armco Hut (Property No. S6194), Midway Atoll, Sand Island (April 14, 2015)



This Armco hut was used as an underground bunker for storing ammunition in the Battle of Midway during World War II. It was designated as a National Historic Landmark in 1987. In 2001, the front panels (not shown) were fabricated and installed using Save America's Treasures grant funding. U.S. Fish and Wildlife Service officials said that the hut is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 38: Revetments (Property No. E-6), Midway Atoll, Eastern Island (April 16, 2015)



The revetments were used as sand dune bunkers to protect planes during World War II. They are eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the revetments are not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 39: Battery A, 5-Inch Gun Position (Property No. S-9), Midway Atoll, Sand Island (April 15, 2015)



This gun position was used in the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the gun position is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 40: Battery C, 5-Inch Gun Position (Property No. S-1), Midway Atoll, Sand Island (April 14, 2015)



This gun position was used in the Battle of Midway during World War II. It was designated as a National Historic Landmark in 1987. U.S. Fish and Wildlife Service officials said that the gun position is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 41: Battery D, 3-Inch Gun Position (Property No. S-2), Midway Atoll, Sand Island (April 15, 2015)

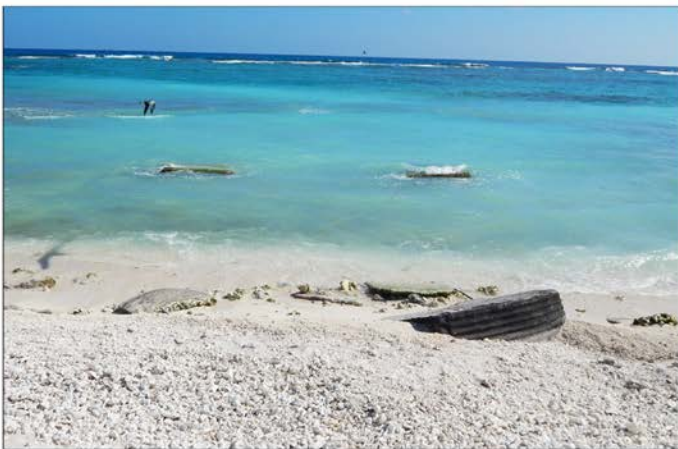


This gun position was used in the Battle of Midway during World War II. It was designated as a National Historic Landmark in 1987. U.S. Fish and Wildlife Service officials said that the gun position is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 42: Possible Gun Position (Property No. E-7, E-8), Midway Atoll, Eastern Island (April 16, 2015)



This possible gun position is a concrete structure built on the shore of Midway Atoll used in the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. GAO observed during a site visit in April 2015 that the structure was deteriorated. U.S. Fish and Wildlife Service officials said the deterioration was likely caused by overwash on Midway Atoll from the tsunami that also hit Japan in 2011.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 43: 500-Pound Bomb and Submarine Torpedo (Property No. S-8), Midway Atoll, Sand Island (April 14, 2015, and April 18, 2015)



The bomb (left) and submarine torpedo (right) are associated with the Battle of Midway during World War II. They are eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the bomb and torpedo are on display in front of the Main Hangar Building.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 44: Underground Bunker (Property No. E-2), Midway Atoll, Eastern Island (April 16, 2015)



The underground bunker is a concrete structure associated with the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the bunker is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 45: Submarine Netting (Property No. E-5), Midway Atoll, Sand Island (April 13, 2015)



The submarine netting was used to defend against submarines entering the harbor during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the netting has been moved into storage on Midway Atoll and is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 46: Eastern Island Runways, Midway Atoll, Eastern Island (April 16, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 47: Seaplane Ramp (Property No. S2115), Midway Atoll, Sand Island (April 14, 2015)



This seaplane ramp is a historic property associated with the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the seaplane ramp is used as a boat ramp.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 48: Seaplane Ramp (Property No. 2117), Midway Atoll, Sand Island (April 20, 2015)



This seaplane ramp is a historic property associated with the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. GAO observed during a site visit in April 2015 that most of the seaplane ramp is buried under soil.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 49: Seaplane Ramp (Property No. S9132), Midway Atoll, Sand Island (April 14, 2015)



This seaplane ramp is a historic property associated with the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the ramp is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 50: Underground Shelter (Property No. S956), Midway Atoll, Sand Island (April 15, 2015)



The underground shelter is a historic structure associated with the Battle of Midway during World War II. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the shelter is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 51: Midway Memorial Plaque (Property No. S2123), Midway Atoll, Sand Island (April 10, 2015)



The Midway Memorial Plaque was placed shortly after the Battle of Midway during World War II in commemoration. It is eligible for inclusion in the National Register of Historic Places.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 52: 3-Inch Anti-Aircraft Gun (Property No. E-1), Midway Atoll, Eastern Island (April 16, 2015)



The anti-aircraft gun is a historic property associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the gun is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 53: Two 5-Inch Naval Guns (Property No. S2409), Midway Atoll, Sand Island (April 10, 2015)



The two 5-inch naval guns, located within the Midway Memorial, are associated with the naval air station on Midway Atoll from 1942 to 1945. They are eligible for inclusion in the National Register of Historic Places.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 54: Water Reservoir (Property No. S3126), Midway Atoll, Sand Island (April 14, 2015)



This water reservoir is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the water reservoir is used for freshwater storage.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 55: Water Reservoir (Property No. S3127), Midway Atoll, Sand Island (April 14, 2015)



This water reservoir is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the water reservoir is used for freshwater storage.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 56: Brackish Water Reservoir (Property No. S5247), Midway Atoll, Sand Island (April 16, 2015)



The brackish water reservoir is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the reservoir not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 57: Electrical Switch Station (Property No. 361), Midway Atoll, Sand Island (April 13, 2015)



The electrical switch station is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the station is used for storage.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 58: Small Radar Building (Property No. 631), Midway Atoll, Sand Island (April 14, 2015)



The small radar building is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 59: Radar Tower Bunker (Property No. 5187), Midway Atoll, Sand Island (April 20, 2015)



The radar tower bunker is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the bunker is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 60: Diesel Power Plant and Salt Water Pumping Station (Property No. 144), Midway Atoll, Sand Island (April 13, 2015)



The diesel power plant and saltwater pumping station is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the plant and pumping station are not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 61: Command Post (Property No. 521), Midway Atoll, Sand Island (April 14, 2015)



The command post is associated with the naval air station on Midway Atoll from 1942 to 1945. It is eligible for inclusion in the National Register of Historic Places. U.S. Fish and Wildlife Service officials said that the building is not in use.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 62: Bachelor Officer Quarters Bravo Barracks (Property No. 4203), Midway Atoll, Sand Island (April 10, 2015)



The Bachelor Officer Quarters Bravo Barracks was constructed in 1957 as part of the buildup of Midway Atoll's naval air station during the Cold War. The building was refurbished by the Midway Phoenix Corporation for visitor and employee housing. U.S. Fish and Wildlife Service officials said that the building is not in use and the agency plans to demolish the building.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Appendix IV: Photographs of Historic and Selected Properties on Midway Atoll

Figure 63: Galley (Property No. 3502), Midway Atoll, Sand Island (April 13, 2015, and April 17, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

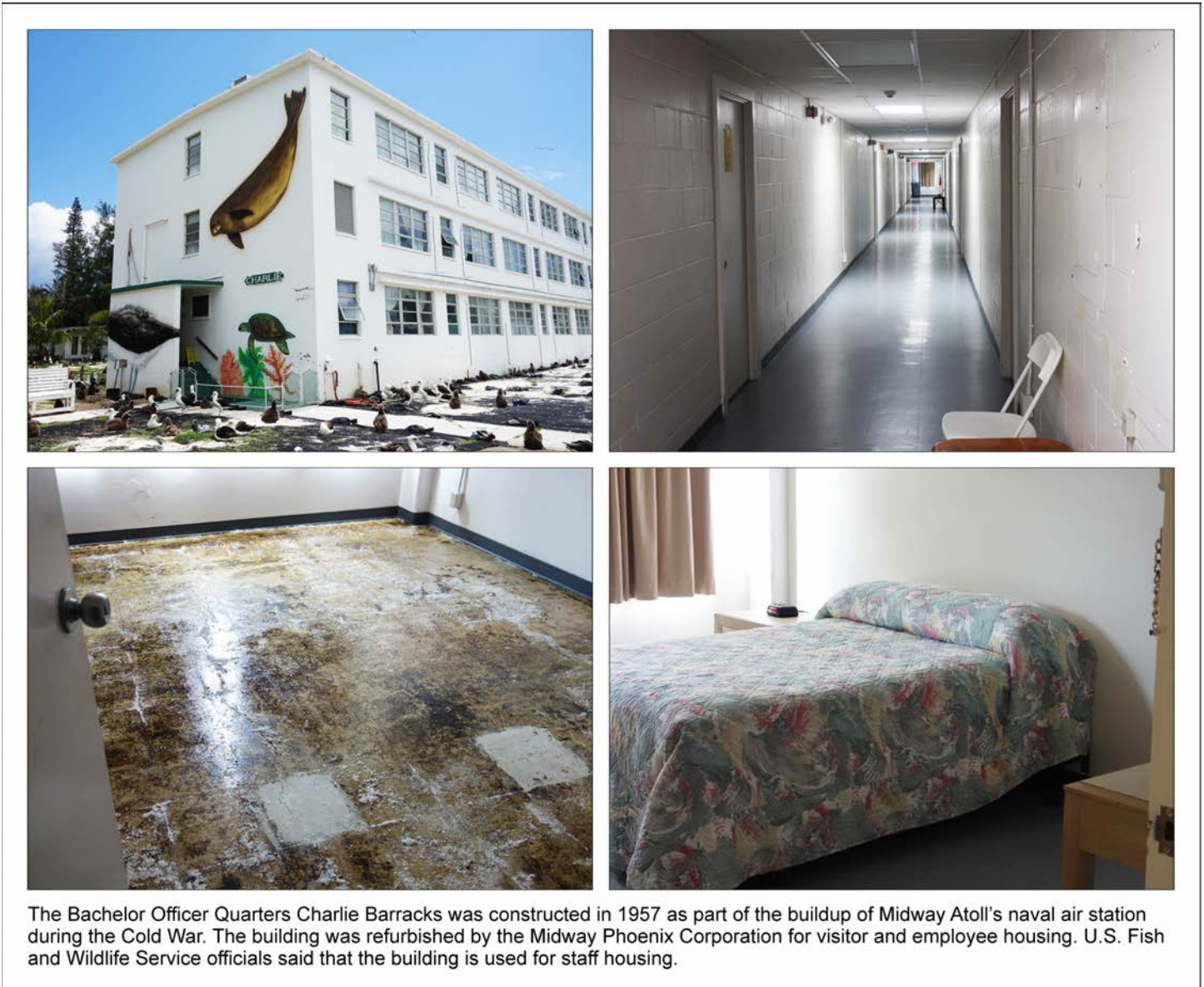
Figure 64: Bachelor Enlisted Quarters Delta Barracks (Property No. 3504), Midway Atoll, Sand Island (April 13, 2015, and April 17, 2015)



Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 65: Bachelor Officer Quarters Charlie Barracks (Property No. 4204), Midway Atoll, Sand Island (April 17, 2015)



The Bachelor Officer Quarters Charlie Barracks was constructed in 1957 as part of the buildup of Midway Atoll's naval air station during the Cold War. The building was refurbished by the Midway Phoenix Corporation for visitor and employee housing. U.S. Fish and Wildlife Service officials said that the building is used for staff housing.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 66: U.S. Fish and Wildlife Service Offices and Visitor Center (Property No. 3521), Midway Atoll, Sand Island (April 13, 2015, and April 14, 2015)



The U.S. Fish and Wildlife Service Offices and Visitor Center building was constructed from 1976 through 1977 as a hobby shop for Midway Atoll (Midway) residents. The building is used by the wildlife refuge employees who manage Midway. The Visitor Center includes interpretative exhibits relating to Midway's history and wildlife.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 67: International Midway Memorial Foundation Memorial (Property No. 96018), Midway Atoll, Sand Island (April 10, 2015)



This memorial was constructed in August 1995 by the International Midway Memorial Foundation to preserve the memory of the Battle of Midway on June 4, 1942.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 68: International Midway Memorial Foundation Henderson Field Memorial, Eastern Island (Property No. 96023), Midway Atoll, Eastern Island (April 16, 2015)



This memorial was constructed in August 1995 by the International Midway Memorial Foundation to honor Major Lofton R. Henderson, whose heroic actions contributed to the United States' victory in the Battle of Midway on June 4, 1942. In July 1999, the memorial expanded to include plaques honoring the soldiers who fought during the battle.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 69: Clipper House (Property No. 9101), Midway Atoll, Sand Island (April 10, 2015, and April 18, 2015)

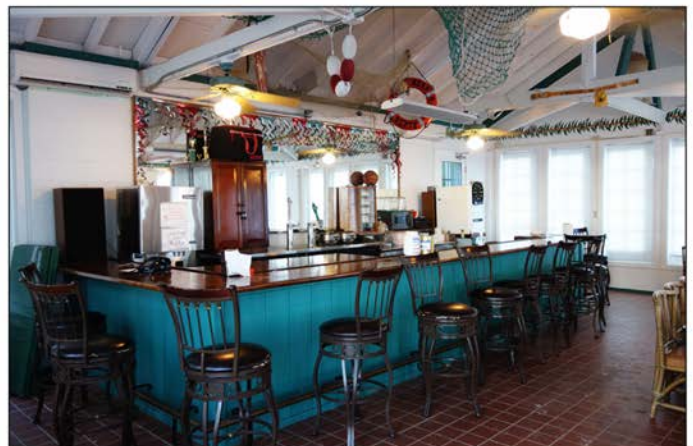


The Clipper House was constructed as a restaurant in 1997 by the Midway Phoenix Corporation as part of a public visitation program for Midway Atoll. The building is still in use by the U.S. Fish and Wildlife Service for food service and is sometimes used as a staging area for aircraft passengers.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Figure 70: Captain Brooks Tavern (Property No. 9102), Midway Atoll, Sand Island (April 18, 2015)



The Captain Brooks Tavern was constructed in 1997 by the Midway Phoenix Corporation as a part of a public visitation program for Midway Atoll. The tavern is still in use by the U.S. Fish and Wildlife Service as a bar and recreation area and is sometimes used as a staging area for aircraft passengers.

Source: GAO. | GAO-16-382

Note: High-resolution photographs from this report are available on [GAO's Flickr page](#).

Appendix V: Comments from the Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

MAY 11 2016

Ms. Anne-Marie Fennell
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Fennell:

Thank you for providing the Department of the Interior (Department) the opportunity to review and comment on the draft Government Accountability Office (GAO) report entitled *Midway Atoll: U.S. Fish and Wildlife Service Faces Many Competing Priorities* (GAO-16-382). We appreciate GAO's efforts to review the U.S. Fish and Wildlife Services' (FWS) management of Midway including the assessment of the condition of historic and other properties on Midway.

To fulfill the Secretarial Order's directive that FWS manage Midway in accordance with the National Historic Preservation Act, the GAO issued a recommendation requiring the Secretary of the Interior to direct the Director of the FWS to ensure that key parties that previously expressed interest in historic preservation issues on Midway to be notified about future FWS actions that may have an adverse effect on historic properties so they have an opportunity to provide comment and input.

The FWS concurs with the recommendation. The FWS will manage the historic properties at Midway Atoll National Wildlife Refuge/Battle of Midway National Memorial, by directly notifying key parties that previously expressed interest in future FWS management actions that may have an adverse effect on historic properties. This corrective action led by the Regional Director of the FWS Pacific Region will commence immediately and will be in effect the first time management actions may have an adverse effect on historic properties.

The enclosure includes some general and technical comments for your consideration when finalizing the report.

If you have any questions, or need additional information, please contact Kevin Foerster, the Regional Refuge Chief, at kevin.foerster@fws.gov or Kathy Garrity, the FWS Audit Liaison Officer at Katherine_garrity@fws.gov or at (703) 358-2551.

Sincerely,

Michael J. Bean
Principal Deputy Assistant Secretary
for Fish and Wildlife and Parks

Enclosure

Appendix VI: Comments from the Advisory Council on Historic Preservation



Preserving America's Heritage

May 12, 2016

Ms. Anne-Marie Fennell
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Fennell:

The Advisory Council on Historic Preservation (ACHP) has reviewed the U.S. Government Accountability Office's (GAO's) draft report to Congressional Requesters on the U.S. Fish and Wildlife Service's (FWS's) management of Midway Atoll, received via email on April 20, 2016. We would like to provide the following comments on the draft report.

First, we agree with the GAO's recommendation that persons who have previously expressed interest in historic properties on Midway should be directly notified as part of future Section 106 reviews about FWS undertakings that may have adverse effects on those historic properties. With that being said, to reflect the breadth of the public involvement requirement under the regulations implementing Section 106 of the National Historic Preservation Act, "Protection of Historic Properties" (36 CFR Part 800), we would add a recommendation that FWS ensure that the general public is notified of future undertakings with the potential to affect historic properties on Midway as well. The Section 106 regulations require that agencies "seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, the likely interest of the public in the effects on historic properties, confidentiality concerns of private individuals and businesses, and the relationship of the Federal involvement to the undertaking" (Section 800.2(d)(1)). In addition, we recommend defining the term "key parties" after its first use to mean, "persons who have previously expressed interest in historic properties at Midway." Thus, if the recommendation is that FWS directly notify such interested persons and the general public of undertakings that may have an adverse effect on historic properties, this recommendation would better reflect the public involvement requirements in the Section 106 regulations and we would fully support it.

We would also like to comment on the timing of FWS's Section 106 review for undertakings at Midway. Based on our records, it is clear that there has been some inconsistency with regard to FWS meeting the required timeframes for providing consulting parties and the public with its findings and determinations in its Section 106 reviews. Further, there has been at least one occurrence where FWS has implemented an undertaking prior to concluding the Section 106 review for the undertaking. It is important FWS ensure that Section 106 reviews are completed prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, in accordance with the Section 106 regulations which state "[t]he agency official shall ensure that the Section 106 process is initiated early in the undertaking's planning, so that a broad range of alternatives may be considered during the planning process for the undertaking" (Section 800.1(c)).

ADVISORY COUNCIL ON HISTORIC PRESERVATION
401 F Street NW, Suite 308 • Washington, DC 20001-2637
Phone: 202-517-0200 • Fax: 202-517-6381 • achp@achp.gov • www.achp.gov

**Appendix VI: Comments from the Advisory
Council on Historic Preservation**

2

We believe that initiating the Section 106 review process as early as is feasible in the planning process, as well as involving consulting parties and the public at appropriate intervals, will help ensure that FWS meets the recommendations of the GAO report and improve the agency's Section 106 compliance for undertakings at Midway.

Lastly, regarding the feasibility of re-establishing a visitation program at Midway, we understand that the many logistical and budgetary challenges presented by Midway's location create a situation in which there are competing funding priorities that FWS must balance. However, the ongoing management of such significant historic resources requires dedicated funding and condition monitoring on a consistent basis. As FWS balances the competing priorities with regard to the conservation and preservation of the natural and cultural resources at Midway, we hope this report will assist FWS in making historic preservation a higher priority. The protection of Midway's historic properties is of great public interest and is critical to recognizing, and preserving, the enduring legacy of Midway for generations to come; particularly should a visitation program be re-established in the future.

Thank you in advance for considering our comments on GAO's draft report. Our technical comments on the document are appended to this letter. If you have any questions regarding our comments, please contact Tom McCulloch, Assistant Director, at (202) 517-0222 or via email at tmcculloch@achp.gov.

Sincerely,



Reid J. Nelson
Director
Office of Federal Agency Programs

Enclosure

Appendix VII: Comments from the State of Hawaii

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 18, 2016

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Mr. Jeff Malcolm
Assistant Director
U.S. Government Accountability Office
4416 G Street, NW
Washington, D.C. 20548

Dear Jeff Malcom,

The State of Hawai'i has reviewed the U.S. Government Accountability Office's Draft Report entitled, *Midway Atoll U.S. Fish and Wildlife Service Faces many Competing Priorities*, (GAO-16-382). The State of Hawai'i (State) works closely with the U.S. FWS on many fronts to effectively co-manage the natural, historic, and cultural resources of our island chain, inclusive of Midway Atoll. Both the State, through the Department of Land and Natural Resources, and the U.S. FWS alongside NOAA and the Office of Hawaiian Affairs co-manage the Papahānaumokuākea Marine National Monument (Monument) as noted in the Report.

The State concurs with the recommendation that the U.S. FWS administer Midway in accordance with the National Historic Preservation Act, and in particular with more consistency regarding the notification and consultation requirements of the Act. The State Historic Preservation Office remains one of these key consultations.

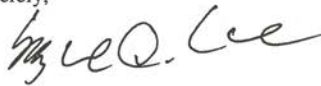
The competing priorities listed in the report capture the scope of the responsibility that our U.S. FWS partners have with respect to their administration of the Atoll. The Atoll's history, resources, and its location within our archipelago, as well as the Pacific, hold great importance. For instance, Midway Atoll serves as important ecological habitat supporting the bio cultural resources of our State. Midway Atoll also serves as an important staging area for logistics that support the State's remote field camps at Kure Atoll. The Midway visitor services program served as an important part of Monument management. We hope that this program can be realized once again for the unique access into the Monument it provided.

The State of Hawai'i, through the Department of Land and Natural Resources, inclusive of the State Historic Preservation Office, will continue to engage both through the Monument's governance structure and directly with the US FWS to collaboratively and constructively support the resource management at Midway Atoll. We appreciate the Administration's attention to this special place.

Appendix VII: Comments from the State of
Hawaii

If you have any further questions or require additional follow up, please contact Ms. Maria Carnevale, Monument Co-Manager, at 808-587-0099, or maria.a.carnevale@hawaii.gov.

Sincerely,



Suzanne D. Case
Chairperson

c: Dr. Alan Downer, Administrator, State Historic Preservation Division
Matthew Brown, Superintendent for Policy, Partners and Support,
U.S. Fish and Wildlife Office

Appendix VIII: GAO Contact and Staff Acknowledgments

GAO Contact

Anne-Marie Fennell, (202) 512-3841 or fennella@gao.gov

Staff Acknowledgments

In addition to the contact named above, Jeff Malcolm (Assistant Director), Carolyn Blocker, Patricia Donahue, Amanda Goolden, Cynthia Norris, Carl Potenzieri, Dan Royer, Jerry Sandau, Ilga Semeiks, and Jeanette Soares made key contributions to this report. Melanie Papasian Fallow, Doug Manor, Ernest Powell Jr., and Timothy Walker made key contributions to the multimedia for this report.

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