



Interim Visitor Services Plan

for

**Midway Atoll National Wildlife Refuge,
the Battle of Midway National Memorial,**

and the

**Papahānaumokuākea
Marine National Monument's
Midway Atoll Special Management Area**



Ann Bell/USFWS

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and the
Battle of Midway National Memorial
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Papahānaumokuākea Marine National Monument's
Midway Atoll Special Management Area

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Approved: _____



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Date: _____

5/22/07

Midway Atoll National Wildlife Refuge, Battle of Midway National Memorial,
and Midway Atoll Special Management Area
Interim Visitor Services Plan
Approval Submission
U.S. Fish and Wildlife Service, Pacific Region

In accordance with the National Wildlife Refuge System Administration Act of 1966, as amended, (16 U.S.C. 668dd-668ee) and Fish and Wildlife Service Manual Section 605, this interim visitor services plan has been prepared for Midway Atoll National Wildlife Refuge and the Battle of Midway National Memorial. During the course of preparation of this plan, on June 15, 2006, the President established by Proclamation (Proclamation 8031) the Papahānaumokuākea Marine National Monument (monument). Proclamation 8031 required the preparation of a comprehensive management plan for the entire monument area. Within the monument, Proclamation 8031 established the Midway Atoll Special Management Area. This visitor services plan is intended to guide a visitor services program at Midway Atoll in the interim until such time as this plan is incorporated into the comprehensive monument management plan. This interim visitor services plan is compliant with Presidential Proclamation 8031 and was prepared in consultation with the Secretary of Commerce by Honolulu-based National Oceanic and Atmospheric Administration staff and the State of Hawai'i's Department of Land and Natural Resources and Office of Hawaiian Affairs. This visitor services plan is submitted for approval by the Regional Director for the Pacific Region.

Submitted by:

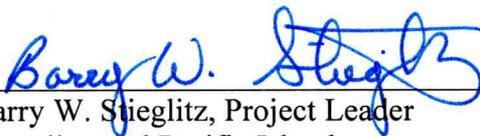


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Executive Summary

In 1996, the Fish and Wildlife Service (FWS) prepared a public use plan to guide visitor services on Midway Atoll National Wildlife Refuge (NWR). Since then, new laws and policy regarding wildlife-dependent recreation in the National Wildlife Refuge System have been promulgated, and a new visitor services plan is required to ensure recreational uses at Midway Atoll are compatible with the Refuge System mission and the purposes of the refuge and the Battle of Midway National Memorial. In addition, all recreational and special ocean use activities must be compliant with the requirements of the newly designated Papahānaumokuākea Marine National Monument (monument).

This document is an interim plan to guide visitor activities on Midway Atoll until such time as the broader monument management plan that meets the applicable requirements of a refuge comprehensive conservation plan and visitor services plan is completed in 2008. This monument plan will incorporate broader monument opportunities to assist in management and conservation activities within the Northwestern Hawaiian Islands and throughout the main Hawaiian Islands that benefit the monument. The development of this visitor services plan began prior to the establishment of the monument to fulfill FWS requirements necessary to allow a regularly scheduled visitor services program to resume at Midway Atoll. As such, the focus of activities under this plan is limited to initial visitor services within the Midway Atoll Special Management Area only. We envision that future monument-wide planning will more fully develop the President's vision to create a visitor window to the monument at Midway. In addition, future planning will address any potential for visitor activities within the monument but outside the special management area and within the main Hawaiian Islands using distance learning and remote educational opportunities. The FWS will continue to work closely with its co-trustees in the monument, the National Oceanic and Atmospheric Administration (NOAA) and State of Hawai'i, as this visitor services plan is implemented and in the development of the monument management plan that likely will replace this interim plan. Longer-term strategies are included in this plan so that readers may gain a vision of what the co-trustees have in mind at Midway Atoll.

This plan documents approved recreational activities at Midway Atoll and identifies the structure of the visitor services program. Special ocean uses that support recreational activities within the Midway Atoll Special Management Area are also addressed. The plan also outlines activities that honor and interpret the World War II history at Midway Atoll in recognition of its status as the Battle of Midway National Memorial. It discusses operational limitations, biological constraints, and partnership opportunities beyond Midway Atoll.

Since 1995, FWS has been strongly committed to welcoming visitors to Midway Atoll. This is the first and only remote island national wildlife refuge in the Pacific to provide the general public with an opportunity to learn about and experience these unique ecosystems. A regularly scheduled visitor program operated on Midway Atoll until early in 2002 but ended when our cooperator left the atoll. Since then, visitors have arrived almost exclusively by the occasional cruise ship or sailboat, or for a Battle of Midway commemorative event. Through this interim

visitor services plan, we hope to offer limited opportunities to expand the visitor program to allow more people to experience Midway's wildlife and historic treasury.

The following wildlife-dependent recreational uses have been determined to be compatible at Midway Atoll Special Management Area and National Wildlife Refuge (see Appendix F): wildlife observation and photography, environmental education and interpretation, and participatory research. Hunting and fishing, two uses when compatible normally given priority on national wildlife refuges, will not take place at Midway Atoll. All animal species are protected by law or occur in numbers too low for harvest to allow hunting opportunities. Recreational fishing is precluded under the Presidential proclamation (Proclamation 8031) designating the monument.

Additional compatibility determinations allow for beach use activities such as swimming and volleyball, nonadministrative airport operations, limited outdoor sports such as bicycling and jogging, and amateur radio use. Each compatibility determination includes stipulations necessary to ensure protection of Midway's natural and historic resources. Any additional activities that may be proposed within Midway Atoll National Wildlife Refuge would need to be evaluated through the compatibility determination process with formal public review. Activities that are determined to be compatible are authorized through the issuance of monument permits, which fall within six permit types: conservation and management, research, education, Native Hawaiian uses, special ocean uses, and recreation.

Goals, objectives, and strategies for the visitor program are discussed in Chapter 4 of this plan. FWS will encourage individual visitors as well as organized groups to come to Midway. Opportunities for teacher workshops in environmental education, college courses, and distance learning will be explored. Improvements to trails and installation of blinds will benefit wildlife observation and photography opportunities, as will snorkeling and guided kayaking tours. Onsite and offsite interpretation of Midway Atoll's historic and wildlife resources will be enhanced.

In order to ensure a high quality visitor experience using the limited infrastructure currently available, the total number of overnight visitors that would be allowed on Midway Atoll at any one time will be limited to 30 people in 2007 and 40 people in 2008 and beyond as long as this visitor services plan is effective.

This number of visitors may be exceeded for short duration (less than a day) prearranged visits by ocean vessels or aircraft. In these cases, visitor activities are closely supervised and primarily consist of guided tours or participation in commemorative events. Annual goals for the number of overnight visitors are at least 50 people in 2007 and at least 300 people in 2008 and beyond.

For the next 5 years (2007-2011), visitor programs will operate from November through July, which coincides with the albatross season on Midway. The months of August through October are reserved primarily for planned construction and major maintenance activities.

With no additional FWS funding available to support a visitor program, visitation at Midway Atoll must be financially self-sustaining. Fees reflecting actual costs for transportation, lodging,

food services, and visitor services staffing are included in this plan. Additional permitting requirements also are discussed.

For this interim period, FWS intends to operate the visitor program primarily with its own staffing and with help from monument co-trustees and volunteers. Outside entities may be needed to provide assistance with marketing the program and to establish a dive program at Midway; these options will be evaluated over the coming year.

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Chapter 1 Introduction and Background

1.1 Introduction

On June 15, 2006, President George W. Bush established the Papahānaumokuākea Marine National Monument by Proclamation 8031. The monument incorporates the Hawaiian Islands National Wildlife Refuge, the Midway Atoll National Wildlife Refuge/Battle of Midway National Memorial, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, and State of Hawai‘i Northwestern Hawaiian Islands Marine Refuge and Kure Atoll State Wildlife Sanctuary.

The monument was established to protect the historic and scientific features of the Northwestern Hawaiian Islands and to enhance visitation in a special area around Midway Atoll (through the establishment of the Midway Atoll Special Management Area), provide for carefully regulated educational and scientific activities, preserve access for Native Hawaiian cultural activities, prohibit unauthorized access to the monument, phase out commercial fishing over a 5-year period, and ban other types of resource extraction and dumping of waste.

The Midway Atoll Special Management Area is located about 1,250 miles (2,012 km) northwest of Honolulu. It includes three small islands (Sand Island, 1,117 acres (452 ha); Eastern Island, 336 acres (136 ha); and Spit Island, 15 acres (6 ha)), an encircling protective coral reef, and submerged lands and waters out to the 12-nautical mile territorial seas (581,864 acres; 235,473 ha).

Midway Atoll is an unincorporated territory of the United States and is the only atoll/island in the Hawaiian archipelago not part of the State of Hawai‘i. Midway Atoll National Wildlife Refuge is owned and administered by the U.S. Fish and Wildlife Service (FWS) on behalf of the American people and has international significance for both its historic and natural resources.

1.2 Human History

Like on many of the low islands and atolls in the Northwestern Hawaiian Islands, the first visitors to what is now called Midway Atoll may have been Polynesians/Hawaiians exploring the Pacific in voyaging canoes. Unfortunately, no physical evidence of their 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.”

Midway Atoll’s central location in the midst of the Pacific Ocean has made it a vital link in modern-day communication, transportation, and military history. The first recorded landing at Midway Atoll was made in 1859 by Captain N. C. Brooks. In 1867, the Secretary of the Navy sent Captain Reynolds to take possession of the islands for the United States. Efforts in the 1870s to open a channel in the reef were unsuccessful, and for the next 30 years visits to the atoll were limited to shipwreck survivors and bird feather collectors, who sought to satisfy the

significant demand for feathers in the millinery trade. In January 1903, President Theodore Roosevelt placed the Midway Islands and environs “under the jurisdiction and control of the Navy Department” by Executive Order 199–A to stop the “wanton destruction of birds that breed on Midway.”

Midway’s role as an important communications link was established in 1903, when the Commercial Pacific Cable Company chose Sand Island for one of its relay stations. The cable link between Honolulu and Guam was completed on July 4, 1903, in time for President Roosevelt to send the first round-the-world message wishing Americans a happy Independence Day. In 1905, the U.S. Lighthouse Service established a lighthouse on Sand Island.

In 1935, Pan American World Airways established a seaplane base in the harbor and a small (but relatively luxurious) hotel on Sand Island. Midway became a regular fuel stop on a transpacific route that also included Honolulu, Wake Island, Guam, and Manila. The short-lived era of the “Clipper” seaplanes was an important chapter in aviation history.

But Midway’s most significant historic role was as a military base. Military interest in Midway accelerated as World War II started in Europe. In 1941, the Naval Air Station was commissioned, altering the civilian character of Midway. On December 7, 1941, not only Pearl Harbor but Midway was attacked by the Japanese, who landed a direct hit on the power plant. First Lieutenant George Cannon was fatally wounded in the attack and became the first Medal of Honor recipient for the U.S. Marine Corps in World War II. On June 4, 1942, the atoll was again attacked, but the men stationed on the atoll played a significant role in the ensuing Battle of Midway, credited with turning the tide of the war in the Pacific. In July 1942, the Midway Submarine Advanced Base was formally established and operated until the end of World War II.

Though relatively quiet as a military base for several years after World War II, Midway’s importance returned in 1953 with the Cold War and the construction of the Distant Early Warning (DEW) Line. By 1958, Midway was an important part of the “Pacific Barrier,” which extended North America’s early warning system from Alaska to the mid-Pacific, and a significant construction program to support operations was underway. “Willy Victor” radar planes flew night and day as part of the DEW Line, and antenna fields covered the islands, part of an intricate chain of radar defenses. During the Vietnam War, Midway was one of the main aircraft and ship refueling stations, and it also hosted classified missile and submarine monitoring missions.

By the early 1990s, military activities significantly declined, replaced by new technologies and centralized operations. On October 1, 1993, Naval Air Facility Midway was operationally closed under the Base Realignment and Closure Act of 1990. Prior to the Navy’s departure in 1997, a massive cleanup effort removed all buildings and structures from Eastern Island, and many of the Cold War era buildings from Sand Island. A significant effort was made to remove the environmental contaminants left by more than 90 years of military operations. In transferring Midway to the FWS, the Secretary of the Navy remarked that Americans are “trading guns for goonies,” and a new era began.

1.3 Monument and Refuge History

1.3.1 Establishment of the Refuge, Memorial, and Monument

FWS staff have been conducting research and/or assisting the Navy with wildlife management issues on Midway Atoll for almost 50 years. Cooperative projects increased in the 1970s, addressing issues such as rodent control and lead poisoning in seabirds. A cooperative management plan developed by the Navy and FWS in the early 1980s further defined responsibilities and eventually led to establishment of an “overlay” national wildlife refuge on Midway in 1988. As on other military bases with similar arrangements, the Navy retained primary jurisdiction, while FWS staff provided wildlife management assistance.

When Naval Air Facility Midway was identified for closure in 1993, the Navy began planning to transfer the atoll to the FWS. On October 31, 1996, President William Clinton signed Executive Order 13022, directing the Secretary of the Interior, through the FWS, to administer Midway Atoll National Wildlife Refuge. The purposes of the refuge, as defined in the Executive order, are to maintain natural biological diversity; conserve fish and wildlife and their habitats; fulfill international wildlife treaty obligations; provide opportunities for research, education, and compatible wildlife-dependent recreation; and recognize and maintain the atoll’s historic significance.

On September 13, 2000, in accordance with language in the Fiscal Year 2000 Interior Appropriations Act, Secretary of the Interior Bruce Babbitt signed Secretary’s Order 3217 designating the lands and waters of 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.”

On June 15, 2006, President George W. Bush established the Papahānaumokuākea Marine National Monument (monument) by signing Proclamation 8031. The monument provides immediate and permanent protection for the lands and waters associated with the Northwestern Hawaiian Islands, including Midway Atoll National Wildlife Refuge. According to the Proclamation:

The Secretary of Commerce, through the National Oceanic and Atmospheric Administration (NOAA), will have the primary responsibility regarding management of the marine areas, in consultation with the Secretary of the Interior. The Secretary of Interior, through the Fish and Wildlife Service (FWS), will have sole responsibility for management of the areas of the monument that overlay the Midway Atoll National Wildlife Refuge, the Battle of Midway National Memorial, and the Hawaiian Islands National Wildlife Refuge, in consultation with the Secretary of Commerce.

As the only atoll currently open to public visitation in the monument, Midway Atoll provides a window to the newly established monument.

1.3.2 Refuge Vision and Management Goals

Because the refuge has not yet completed a comprehensive conservation plan, this visitor services plan is based on draft versions of a refuge vision and management goals. As a

monument management plan is developed, a vision and management goals will be developed for the entire monument.

Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial Draft Vision Statement

Midway Atoll National Wildlife Refuge is a unique and peaceful treasury of wildlife and history in the midst of the Pacific,

where nature rules, but wildlife and people live in harmony;

where native terrestrial and marine habitats dominate the landscape, supporting enhanced diversity and densities of plants and animals;

where present and future generations of visitors find an opportunity to recreate their spirit and their connection with nature, an occasion to remember and honor the heroic servicemen who fought in the Battle of Midway, and a rare opportunity to experience and appreciate the importance of remote island national wildlife refuges;

where wildlife always find safe haven to rest and rear their young;

where a living laboratory provides lessons allowing the restoration of other altered island ecosystems; and

where the albatross, which has been the common thread through centuries of life on Midway, continues to persevere, singing its serenade of life and dancing its intricate steps in rhythm to the call of nature, forever.

Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial Interim Goal Statements

Goal 1. Conserve and restore the natural diversity and abundance of native plants and animals, both terrestrial and marine, at Midway Atoll, emphasizing seabirds and shorebirds, threatened and endangered species, and coastal and marine communities within the Northwestern Hawaiian Islands ecosystem.

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Goal 3. Honor, maintain, and interpret the unique historical resources of Midway Atoll, with emphasis on its status as the Battle of Midway National Memorial.

1.4 Purpose and Need for the Visitor Services Plan

In most cases, a visitor¹ services plan is a “step-down” management plan from the refuge’s comprehensive conservation plan. In this case, the requirements for a comprehensive plan for Midway Atoll National Wildlife Refuge and the Battle of Midway National Memorial are being met through the monument management plan now under development. This document will serve as an interim plan to establish a compatible visitor services program. When the monument management plan has been completed, it will either incorporate details of a new visitor program or require development of a new visitor services plan.

In 1996, FWS prepared a public use plan to guide visitor services on Midway Atoll National Wildlife Refuge. Since then, the National Wildlife Refuge System Improvement Act of 1997 (an amendment to the National Wildlife Refuge System Administration Act of 1966) set new standards for visitor programs on refuges, and in 2006, new guidance was issued in the form of FWS Manual chapters regarding wildlife-dependent recreation. In accordance with the National Wildlife Refuge System Administration Act of 1966, as amended, and FWS guidance, this visitor services plan is required to ensure recreational uses are compatible with the Refuge System mission and the purposes, goals, and objectives of the refuge and national memorial. In addition, all recreational activities must be in compliance with Proclamation 8031 and its codifying regulations at 50 CFR Part 404.

This plan documents approved recreational activities at Midway Atoll and identifies the structure of the visitor services program. Special ocean uses that support recreational activities within the Midway Atoll Special Management Area are also addressed. The plan also outlines activities that honor and interpret the World War II history at Midway Atoll in recognition of its status as the Battle of Midway National Memorial. It discusses operational limitations, biological constraints, and partnership opportunities beyond Midway Atoll

This plan is partially based on experiences with Midway visitors since 1996, but also reflects new information and new requirements. In 2005, a *Midway Atoll National Wildlife Refuge Visitor Program Market Analysis and Feasibility Study* was completed by Pandion Systems, Inc., of Gainesville, Florida, under contract to FWS. The conclusions and recommendations from this report are included in Appendix B. The complete study is available on the FWS Website at <http://www.fws.gov/midway>. This visitor services plan also reflects insights gained from their study.

Furthermore, Proclamation 8031 reinforced the importance of Midway as a vital link to the Northwestern Hawaiian Islands ecosystem, especially as an opportunity for visitors to experience, learn about, and appreciate the area. This visitor services plan not only addresses various FWS policy requirements, but goes beyond those requirements and looks at Midway

¹ For the purposes of this document, a visitor is a wildlife-dependent recreational or special ocean use visitor to Midway Atoll (including those visiting the atoll for its history) as approved under this visitor services plan. A visitor does not include refuge or monument co-trustee staff and volunteers performing official duties, researchers, refuge contractors, or other entities accessing Midway under monument conservation and management or research permits.

Atoll as a “window to the monument.” Here visitors may learn about the broader monument, and the interrelationships among the islands and the wildlife moving on, between, and among them.

Since 1995, the FWS has been strongly committed to welcoming visitors to Midway Atoll. This is the first and only remote island national wildlife refuge in the Pacific to provide the general public with an opportunity to learn about and experience these unique ecosystems. With this visitor services plan, we rededicate our efforts to share the atoll’s wildlife and historic resources with the world.

1.5 Legal and Policy Guidance

Midway Atoll Special Management Area is managed as part of the Papahānaumokuākea Marine National Monument and the National Wildlife Refuge System (Refuge System) within a framework provided by legal and policy guidelines. This interim visitor services plan is primarily guided by the provisions of Proclamation 8031 and the mission and goals of the Refuge System, as well as by the purposes of the refuge as described in its acquisition authority, FWS policy, Federal laws, Executive orders, Presidential proclamations, and international treaties. The following summaries are provided as background for development of a visitor program at Midway Atoll.

1.5.1 Papahānaumokuākea Marine National Monument

Antiquities Act

(16 U.S.C. 431-433)

The Antiquities Act of June 8, 1906, authorizes the President to designate as national monuments objects or areas of historic or scientific interest on lands owned or controlled by the United States. Through this authority, President Bush designated the Papahānaumokuākea Marine National Monument on June 15, 2006.

Presidential Proclamation 8031 – Establishment of the Papahānaumokuākea Marine National Monument

As part of this proclamation (see Appendix C), President Bush included Midway Atoll within the monument. The monument provides immediate and permanent protection for all of the Federal lands and waters within the Northwestern Hawaiian Islands, stretching from Nihoa Island to beyond Midway Atoll in a 100-mile wide swath. The three principal entities (collectively, the co-trustees) with responsibility for managing lands and waters of the monument – NOAA, FWS, and the State of Hawai‘i – are working cooperatively to administer the monument. These trustees have established a goal to provide unified management in the spirit of cooperative conservation. Joint regulations codifying Proclamation 8031 were published on August 29, 2006, and parallel its requirements. As co-trustees, all three entities were involved in the development and approval of this plan and will oversee its implementation through the joint permitting process.

As defined in Proclamation 8031, the purpose of the monument is “to preserve the marine area of the Northwestern Hawaiian Islands and certain lands as necessary for the care and management of the historic and scientific objects therein.”

Proclamation 8031 specifically prohibits the following activities:

- exploring for, developing, or producing oil, gas, or minerals within the monument;
- using or attempting to use poisons, electrical charges, or explosives in the collection or harvest of a monument resource;
- introducing or otherwise releasing an introduced species from within or into the monument; and
- anchoring on or having a vessel anchored on any living or dead coral with an anchor, anchor chain, or anchor rope.

Furthermore, Proclamation 8031 regulates numerous activities within the monument:

- commercial fishing for bottomfish and associated pelagic species is allowed as currently regulated by NOAA for no longer than 5 years from the date of the proclamation;
- a permitting program requires that any activity within the monument meet one of the following categories:
 - is research designed to further understanding of monument resources and qualities;
 - will further the educational value of the monument;
 - will assist in the conservation and management of the monument;
 - will allow Native Hawaiian practices;
 - will allow a special ocean use; or
 - will allow recreational activities.
- in addition, through a series of findings, the Secretaries of the Interior and Commerce are required to meet numerous other standards before issuing a permit for an activity (see Appendix C for listings).

Proclamation 8031 established the Midway Atoll Special Management Area with accompanying unique opportunities and requirements. Midway is the only area where recreational permits may be issued within the monument and is the most likely area where special ocean use permits may be issued as well. Recreational permits may be issued as long as the activity does not involve any extractive use or for-hire operation. Special ocean use permitted activities must further the conservation and management of the monument. All permitted activities within the refuge must be determined to be compatible with the purposes for which it was established.

1.5.2 The U.S. Fish and Wildlife Service

Midway Atoll National Wildlife Refuge is managed by FWS within the Department of the Interior. FWS is the primary Federal agency responsible for conserving and enhancing the Nation’s fish and wildlife populations and their habitats. Although FWS shares this responsibility with other Federal, State, tribal, local, and private entities, FWS has specific trust responsibilities for migratory birds, threatened and endangered species, and certain anadromous fish and marine mammals. FWS also has similar trust responsibilities for the lands and waters it

administers to support the conservation and enhancement of fish, wildlife, plants, and their habitats.

1.5.3 National Wildlife Refuge System

The 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 et seq.)

Starting with the first refuge, Florida's Pelican Island established in 1903 by President Theodore Roosevelt, the Refuge System has grown to nearly 100 million acres in size, including 547 national wildlife refuges. The Refuge System is the largest collection of lands and waters specifically managed for fish and wildlife conservation in the Nation. The needs of wildlife and their habitats come first on refuges, in contrast to other public lands that are managed for multiple uses.

The administration, management, and growth of the Refuge System are guided by the following goals (FWS Manual Part 601 (601 FW 1)):

- A. Conserve a diversity of fish, wildlife, and plants and their habitats, including species that are endangered or threatened with becoming endangered.
- B. Develop and maintain a network of habitats for migratory birds, anadromous and interjurisdictional fish, and marine mammal populations that is strategically distributed and carefully managed to meet important life history needs of these species across their ranges.
- C. Conserve those ecosystems, plant communities, wetlands of national or international significance, and landscapes and seascapes that are unique, rare, declining, or underrepresented in existing protection efforts.
- D. Provide and enhance opportunities to participate in compatible wildlife-dependent recreation (hunting, fishing, wildlife observation and photography, and environmental education and interpretation).
- E. Foster understanding and instill appreciation of the diversity and interconnectedness of fish, wildlife, and plants and their habitats.

Refuge Recreation Act of 1962

(16 U.S.C. 460k-460k-4)

The Refuge Recreation Act authorized the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use, when such uses do not interfere with the area's primary purposes. It provided for public use fees and permits, and penalties for violation of regulations. It also authorized the acceptance of donations of funds and real and personal property to assist in carryout its purposes. Enforcement provisions were amended in 1978 and 1984 to make violations misdemeanors in accordance with the uniform sentencing provisions of 18 U.S.C. 3551-3586.

National Wildlife Refuge System Improvement Act²

(Public Law 105-57, amending 16 U.S.C. 668dd-ee)

The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) amended the National Wildlife Refuge System Administration Act of 1966 (Administration Act) by defining a unifying mission for all refuges, including a new process for determining compatible uses on refuges, and requiring that each non-Alaskan refuge be managed under a comprehensive conservation plan. The Improvement Act expressly states that wildlife conservation is the priority of Refuge System lands and that the Secretary of the Interior shall ensure the biological integrity, diversity, and environmental health of refuge lands are maintained. Each refuge must be managed to fulfill the Refuge System mission and the specific purpose(s) for which the refuge was established. The first priority of each refuge is to conserve, manage, and, if needed, restore fish and wildlife populations and habitats according to its purpose(s). FWS has statutory authority under the Administration Act, as amended, to regulate activities that occur on water bodies “within” a refuge. The Improvement Act requires that a comprehensive conservation plan be completed for each refuge by the year 2012, and that the public have an opportunity for active involvement in plan development and revision. The Act also superseded some key provisions of the Refuge Recreation Act regarding compatibility and also provided significant additional guidance regarding recreational and other public uses on units of the National Wildlife Refuge System.

Compatibility (603 FW 2) and Appropriate Refuge Uses (603 FW 1) Policies

With few exceptions, lands and waters within the Refuge System are different from multiple-use public lands in that they are closed to all public access and use unless specifically and legally opened. No refuge use may be allowed unless it is determined to be compatible. A compatible use is a use that, in the sound professional judgment of the refuge manager, will not materially interfere with or detract from the fulfillment of the refuge purposes or Refuge System mission.

The Improvement Act identifies six wildlife-dependent recreational uses: hunting, fishing, wildlife observation and photography, and environmental education and interpretation. When determined to be compatible, they are the priority general public uses of the Refuge System and as such receive priority consideration over other public uses in planning and management. Other (nonwildlife-dependent) uses on a refuge are first reviewed by the refuge manager in writing to determine if they are appropriate uses. If determined appropriate, then a compatibility determination is completed.

Biological Integrity, Diversity, and Environmental Health Policy (601 FW 3)

The Improvement Act directs FWS to “ensure that the biological integrity, diversity, and environmental health of the National Wildlife Refuge System are maintained for the benefit of present and future generations of Americans” The policy is an additional directive for refuge managers to follow while achieving refuge purpose(s) and Refuge System mission. It provides for the consideration and protection of a broad spectrum of native fish, wildlife, and habitat resources found on refuges and associated ecosystems. When evaluating the appropriate

² The information in the following paragraphs of section 1.5.2 does not apply to refuges in Alaska, which are governed in part by the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 410hh-3233, 43 U.S.C. 1602-1784).

management direction for refuges (e.g., in compatibility determinations), refuge managers will use sound professional judgment to determine their refuge's contribution to biological integrity, diversity, and environmental health at multiple landscape scales. Sound professional judgment incorporates field experience, knowledge of refuge resources, an understanding of the refuge's role within an ecosystem, applicable laws, and best available science, including consultation with others both inside and outside FWS.

Wildlife-Dependent Recreation Policies (605 FW 1-7)

The Improvement Act states "compatible wildlife-dependent recreation is a legitimate and appropriate general public use of the System." A series of recreation policies provide additional guidance and requirements to be considered after a recreational use has been determined to be compatible. These policies also establish a quality standard for visitor services programs on national wildlife refuges. Through these policies, FWS is to enhance wildlife-dependent recreational opportunities and access to quality visitor experiences on refuges at the same time the refuges are managed to conserve fish, wildlife, plants, and their habitats. New and ongoing recreational uses should help visitors focus on wildlife and other natural resources, providing an opportunity to make visitors aware of resource issues, management plans, and how the refuge contributes to the Refuge System and FWS mission. The policies also require development of a visitor services plan such as this document.

1.5.4 Biological Resource Protection Acts

Midway Atoll's plant and animal species are protected under several Federal laws, including:

Endangered Species Act of 1973

(16 U.S.C. 1531-1544)

Through Federal action and by encouraging the establishment of State programs, the 1973 Endangered Species Act provided for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend. The Act:

- authorizes the determination and listing of species as endangered and threatened;
- prohibits unauthorized taking, possession, sale, and transport of endangered species;
- provides authority to acquire land for the conservation of listed species, using land and water conservation funds;
- authorizes establishment of cooperative agreements and grants-in-aid to States that establish and maintain active and adequate programs for endangered and threatened wildlife and plants;
- authorizes the assessment of civil and criminal penalties for violating the act or regulations; and
- authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the act or any regulation issued thereunder.

Both FWS and NOAA-Fisheries implement and enforce the Endangered Species Act. FWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NOAA-Fisheries are mainly marine species including mammals, turtles, fishes, invertebrates, and plants. Under this act, for the most commonly occurring endangered and threatened species at Midway Atoll, NOAA-Fisheries has primary responsibility for Hawaiian monk seals and green sea turtles while in the water, and FWS has primary responsibility for green sea turtles on

land, the Laysan duck, short-tailed albatross, and the plant *Cenchrus agrimonioides* var. *laysanensis*.

Section 7 of the Endangered Species Act requires Federal agencies to ensure that any action authorized, funded, or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat. FWS will consult with NOAA-Fisheries regarding potential impacts of visitor use on marine listed species found within the atoll and consult internally regarding terrestrial species.

Eight species presently or historically known to be found within Midway Atoll are listed under the Endangered Species Act:

- green sea turtle (*Chelonia mydas*), threatened species
- hawksbill sea turtle (*Eretmochelys imbricata*), endangered species
- leatherback sea turtle (*Dermochelys coriacea*), endangered species
- loggerhead sea turtle (*Caretta caretta*), threatened species
- Hawaiian monk seal (*Monachus schauinslandi*), endangered species with critical habitat
- humpback whale (*Megaptera novaeangliae*), endangered species
- Laysan duck (*Anas laysanensis*), endangered species
- short-tailed albatross (*Phoebastria albatrus*), endangered species
- *Cenchrus agrimonioides* var. *laysanensis*, endangered plant species (last seen on Midway sometime shortly after 1902)

FWS also maintains a list of species of concern, including the following currently or historically found on Midway:

- popolo (*Solanum nelsonii*) (candidate species for listing)
- bristle-thighed curlew (*Numenius tahitiensis*)
- Laysan albatross (*Phoebastria immutabilis*)
- black-footed albatross (*Phoebastria nigripes*)
- Pacific golden plover (*Pluvialis fulva*)
- Christmas shearwater (*Puffinus nativitatus*)
- Fullaway's seed bug (*Nysius fullaway*)
- Laysan oodemas weevil (*Oodemas laysanensis*)
- obscure pentarthrum weevil (*Pentarthrum obscurum*)
- *Achyranthes atollensis*
- pua pilo (*Capparis sandwichiana*)
- anaunau (*Lepidium bidentatum* var. *o-waihiense*)
- *Phyllostegia variabilis*

Refuge management activities are focused on protecting habitat and reducing threats so that these species do not need the protection of the Endangered Species Act.

Marine Mammal Protection Act of 1972

(16 U.S.C. 1361-140)

The 1972 Marine Mammal Protection Act established a Federal responsibility to conserve marine mammals with management vested in the Department of the Interior for sea otter, walrus, polar bear, dugong, and manatee. The Department of Commerce is responsible for cetaceans (whales, dolphins, and porpoises) and pinnipeds (seals and sea lions), other than the walrus.

With certain specified exceptions, the act establishes a moratorium on the taking and importation of marine mammals as well as products taken from them, and establishes procedures for waiving the moratorium and transferring management responsibility to the States.

On Midway, NOAA's National Marine Fisheries Service administers the Marine Mammal Protection Act provisions for Hawaiian monk seals, Hawaiian spinner dolphins, and all whale species covered under this act.

Migratory Bird Treaty Act of 1918

(16 U.S.C. 703-712)

The framers of the Migratory Bird Treaty Act were determined to put an end to the commercial trade in birds and their feathers that, by the early years of the 20th century, had wreaked havoc on the populations of many native bird species.

The Migratory Bird Treaty Act decreed that all migratory birds and their parts (including eggs, nests, and feathers) were fully protected. It is the domestic law that affirms or implements the United States' commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions between two nations protect selected species of birds that are common to both countries (i.e., they occur in both countries at some point during their annual life cycle).

All of Midway Atoll's seabirds and shorebirds are protected under this act.

1.5.5 Historic Preservation Acts

Midway Atoll's historic resources are protected under several Federal laws.

Archaeological Resources Protection Act

(16 U.S.C. 470aa - 470ll)

This act established detailed requirements for issuance of permits for any excavation for or removal of archaeological resources from Federal or Indian lands. It also established civil and criminal penalties for the unauthorized excavation, removal, or damage of any such resources; for any trafficking in such resources removed from Federal or Indian land in violation of any provision of Federal law; and for interstate and foreign commerce in such resources acquired, transported, or received in violation of any State or local law.

Public Law 100-588, approved November 3, 1988, (102 Stat. 2983) lowered the threshold value of artifacts triggering the felony provisions of the act from \$5,000 to \$500, made attempting to commit an action prohibited by the act a violation, and required the land managing agencies to

establish public awareness programs regarding the value of archaeological resources to the Nation.

Archeological and Historic Preservation Act

(16 U.S.C. 469-469c)

To carry out the policy established by the Historic Sites Act (see below), this act directed Federal agencies to notify the Secretary of the Interior whenever they find a Federal or federally assisted, licensed, or permitted project may cause loss or destruction of significant scientific, prehistoric, or archaeological data. The act authorized use of appropriated, donated, and/or transferred funds for the recovery, protection, and preservation of such data.

Historic Sites, Buildings and Antiquities Act

(16 U.S.C. 461-462, 464-467)

This act declared it a national policy to preserve historic sites and objects of national significance, including those located on refuges. It provided procedures for designation, acquisition, administration, and protection of such sites.

Among other things, National Historic and Natural Landmarks are designated under authority of this act. As of 2006, 130 national wildlife refuges contained such sites, including Midway Atoll, where nine defensive positions on Sand Island were designated a National Historic Landmark in 1986.

National Historic Preservation Act of 1966

(16 U.S.C. 470-470b, 470c-470n)

This act provided for preservation of significant historical features (buildings, objects, and sites) through a grant-in-aid program to the States. It established a National Register of Historic Places and a program of matching grants under the existing National Trust for Historic Preservation (16 U.S.C. 468-468d). The act established an Advisory Council on Historic Preservation, which was made a permanent independent agency in Public Law 94-422, approved September 28, 1976 (90 Stat. 1319). That act also created the Historic Preservation Fund. Federal agencies are directed to take into account the effects of their actions on items or sites listed or eligible for listing in the National Register.

As of September 2004, 157 historic sites on national wildlife refuges have been placed on the National Register. An additional 229 sites have been identified as eligible for listing, including 63 on Midway Atoll.

Executive Order 11593 Protection and Enhancement of the Cultural Environment

Signed May 6, 1971, this Executive order requires that the Federal government provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation. Agencies of the executive branch of the government must (1) administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations; (2) initiate measures necessary to direct their policies, plans, and programs in such a way that federally owned sites, structures, and objects of historical, architectural, or archaeological significance are preserved, restored, and maintained for the inspiration and benefit of the people; and (3) in consultation with the Advisory Council on Historic Preservation, institute procedures

to assure that Federal plans and programs contribute to the preservation and enhancement of nonfederally owned sites, structures, and objects of historical, architectural, or archaeological significance.

Maritime Laws

Department of the Navy ship and aircraft wrecks are government property in the custody of the U.S. Navy. These seemingly abandoned properties remain government-owned until the Navy takes specific formal action to dispose of them. Navy custody of its wrecks is based on the property clause of the U.S. Constitution and international maritime law and it is consistent with Articles 95 and 96 of the Law of the Sea Convention. These laws establish that right, title, or ownership of federal property is not lost to the government due to the passage of time. Only by congressional action can ship and aircraft wrecks be declared abandoned.

Through the sovereign immunity provisions of Admiralty law, the Department of the Navy retains custody of all of its naval vessels and aircraft, whether lost within U.S., foreign, or international boundaries. Under the National Historic Preservation Act, the Navy is obligated to protect its historic properties, including ship and aircraft wrecks, for which it has custodial responsibilities.

1.5.6 Specific Legal Mandates for Midway Atoll

Executive Order 13022 Administration of the Midway Islands

On October 31, 1996, the President signed this Executive order, transferring jurisdiction and control of Midway Atoll from the U.S. Navy to the Secretary of the Interior, to be managed as Midway Atoll National Wildlife Refuge. It furthered specified the following purposes for the refuge:

- maintaining and restoring natural biological diversity within the refuge;
- providing for the conservation and management of fish and wildlife and their habitats within the refuge;
- fulfilling the international treaty obligations of the United States with respect to fish and wildlife;
- providing opportunities for scientific research, environmental education, and compatible wildlife-dependent recreational activities; and
- in a manner compatible with refuge purposes, recognizing and maintaining the historic significance of the Midway Islands consistent with the policy stated in Executive Order 11593, Protection and Enhancement of the Cultural Environment.

Secretary's Order 3217 Designation of the Battle of Midway National Memorial

On September 13, 2000, in accordance with congressional direction, the Secretary of the Interior designated 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.” As such, Midway is the only national memorial in the Refuge System.

1.6 Internal/External Issues

On February 6, 2006, prior to the establishment of the Papahānaumokuākea Marine National Monument, FWS posted a notice on its Midway Atoll website announcing the initiation of a new visitor services planning process and inviting anyone interested in being on our mailing list to contact us. In addition, readers were invited to identify any issues that should be considered, visitor activities they would want to recommend, or thoughts about how the program should be structured.

FWS received 180 requests to be included on the mailing list and additional comments from 62 individuals. Only 1 person expressed concern about allowing increased visitation at Midway Atoll, and 46 commenters expressed an interest in actually visiting (or revisiting) the atoll.

Individual issues identified by those contacting us included:

- fees (e.g., should charge enough to mitigate environmental impacts, costs are not a factor, local residents should be charged less, don't make it too expensive)
- natural resource protection (e.g., FWS staff need to be conservationists rather than preservationists, need to fiercely protect natural resources while allowing visitation)
- historical recognition (e.g., should be open to all veterans, need to honor World War II history, need to market to veterans' organizations)
- authorized uses (e.g., diving, recreational fishing, photography, amateur radio use, university courses)
- cruise ship impacts
- numbers of visitors to be allowed
- length of visits to be offered
- type of facilities offered (e.g., should not be a resort)

These issues will all be addressed in the appropriate sections below.

With the inclusion of the refuge within the monument, FWS also contacted our monument co-trustees regarding a visitor services program at Midway Atoll. The State of Hawai'i expressed support for a renewed ecotourism operation at Midway to "ensure some opportunity to have people experience the 'place' and the phenomenal wildlife," as well as a concern that adequate funding and infrastructure be available to support visitors, management activities, research, and enforcement. In addition, the State requested that support be available for management activities at the Kure Atoll State Wildlife Sanctuary.

NOAA also expressed interest in the visitor program at Midway, especially as it relates to environmental education and ocean literacy and within the broader context of the monument. As Proclamation 8031 largely directs visitation to the Northwestern Hawaiian Islands to Midway Atoll, the Special Management Area is being viewed as the "window to the monument" and as such needs to provide visitors an experience that encompasses the natural, historical, and Native Hawaiian cultural attributes of the monument. In addition, NOAA would like infrastructure planning for the visitor services program to be closely integrated with infrastructure planning for other uses at Midway Atoll including field operations, field-based research, emergency response, and enforcement.

NOAA, which is charged with protecting federally endangered Hawaiian monk seals and threatened and endangered sea turtles at Midway Atoll, shares FWS' concern that all wildlife species are adequately protected. FWS has completed informal consultation under the Endangered Species Act with NOAA-Fisheries to ensure both agencies meet their goals.

Internally, FWS staff raised concerns about the island's infrastructure (capacity and condition), availability of transportation to Midway, and visitor program costs. Others stated the visitor program needs to be financially self-sustaining in a time of declining budgets. In addition, staff want to ensure visitors have a safe, educational, and enjoyable experience while on Midway Atoll.

1.7 Local Setting

1.7.1 Community Description

Midway Atoll is so remote (about 1,250 miles from Honolulu, its nearest major city) that it must operate independently as its own small town. It provides its own power system, water treatment and distribution, facilities maintenance, sewage treatment, waste management systems, communications systems, and all the other operational necessities found in a small municipality.

The refuge is currently staffed by four full-time FWS employees, one of whom is stationed in Honolulu. A few volunteers (normally one to four) assist the refuge staff in biological and habitat management activities. One part-time NOAA-Fisheries and part-time U.S. Geological Survey employee is based on Midway Atoll. The atoll also hosts transient³ researchers, other FWS employees, or U.S. Coast Guard personnel on an occasional basis. During "construction season," from August through October, as many as 30 additional workers may be on the island. NOAA and the State of Hawai'i have expressed interest in basing a small number of staff on Midway, but exact numbers have not been determined. The refuge has contracted with a private entity to operate the infrastructure of the atoll. The contractor currently has approximately 50 employees on Midway.

Island residents live in renovated Navy housing, including single family homes, duplexes, and Bachelor Officers Quarters (BOQ). One BOQ (known as Charlie Barracks), which contains 36 rooms, has been set aside for transient and visitor use. Almost all of the residents and transients eat at the "Clipper House," where three meals a day are served buffet style. Most supplies, particularly foodstuffs, are flown to the island on chartered aircraft. Approximately once a year, a barge brings in equipment, food, and supplies too large or heavy for the aircraft. Fuel to operate the generators and small vehicles and to refill chartered aircraft is brought by fuel barge about once every 2 years. All fuel deliveries operate in compliance with FWS regulations and the Midway Atoll Spill Prevention Control and Counter Measure Plan.

Current funding to operate Midway Atoll comes from FWS, supplemented by Federal Aviation Administration funding that fully covers airport operations costs and a share of infrastructure

³ Transients include those coming to Midway Atoll for official duties, e.g., refuge employees, co-trustee staff, Coast Guard or other law enforcement entities, contractors, researchers, other federal or state employees, or other permitted personnel.

operations costs. A small amount of funding is generated by other users of the atoll, such as other federal agencies conducting activities on Midway.

1.7.2 Travel Links

The only means of accessing Midway Atoll are by air or vessel. Midway has a fully certified airport known as Henderson Airfield, maintained to standards specified in Federal Aviation Administration Title 14 Code of Federal Regulations, Part 139. Midway is used as a required emergency landing site for extended twin-engine operations (ETOPS) flights across the Pacific Ocean. Under current regulations, twin-engine aircraft must be within a maximum of 180 minutes from a Part 139 certified airfield in case of an emergency. Midway's 7,900-foot runway is capable of handling almost any type of aircraft.

As a Navy base, numerous facilities were built to support a variety of vessel types. Small boats can enter the inner harbor and moor dockside or in the harbor. Larger vessels resupplying the island and research vessels generally come into the cargo pier, inside Midway's lagoon but outside the inner harbor. Cruise ships are required to remain outside the reef and shuttle their passengers in via tenders due to port security requirements.

1.7.3 Visitor Services Opportunities (Beyond Midway)

When Midway Atoll was opened to the public in 1995, it became the first and only remote refuge in the Pacific open to public visitation. The other islands in the Northwestern Hawaiian Islands are protected within the Hawaiian Islands National Wildlife Refuge (from Nihoa to Pearl and Hermes Atoll) or in the State of Hawai'i's Kure Atoll Wildlife Sanctuary. Because of their fragility and sensitive wildlife, these other islands and atolls are all closed to public use.

The Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve was established adjacent to and seaward of the seaward boundaries of the State of Hawai'i and Midway Atoll National Wildlife Refuge in 2001, and is administered by NOAA. The area was under consideration for designation as a national marine sanctuary until the area was set aside as a marine national monument. A monument management plan and regulations will clarify if any public use will be allowed outside the Special Management Area and under what conditions. As required in the Presidential proclamation establishing the national monument, special ocean uses such as ecotourism may be permitted outside the Midway Atoll Special Management Area if:

- the activity will directly benefit the conservation and management of the monument;
- the activity is for research or education related to the resources or qualities of the monument;
- the public is provided an opportunity to review the application for a special ocean use permit at least 30 days before the permit is issued; and
- the activity does not involve the use of a commercial passenger vessel.

The State of Hawai'i also administers submerged lands and waters out to 3 nautical miles from the islands and atolls except at Midway. In 2005, the State created a marine refuge in those waters with regulations prohibiting commercial and recreational fishing. Other uses (such as research, education, and Native Hawaiian cultural practices and subsistence fishing) are regulated by permit.

Although numerous visitor opportunities exist in the main Hawaiian Islands or at other islands in the Pacific, none offer the unique combination of natural and historic resources found at Midway Atoll.

Chapter 2 Significant Features

2.1 Terrestrial Resources

Humans have greatly changed Midway Atoll from its original form. Only Spit Island has the general terrestrial habitat characteristics of an undisturbed atoll island, though it probably formed as an unintended result of channel dredging. Although the combined effects of dredging and filling, seawall construction, and importation of soil and many nonnative plant species has greatly expanded and altered the original acreage of Midway, it is still a wildlife habitat of worldwide importance.

The earliest botanical descriptions of Midway were made in 1902. Since then, 355 different plant species have been identified. Twelve species are native and 2 are questionably indigenous to Hawai'i. One plant species, *Cenchrus agriminoides* var. *laysanensis*, is listed as endangered, but it has not been observed on Midway since the early 1900s. Numerous exotic species are found on Midway, including some that are invasive and affect wildlife habitat. Ecological restoration efforts are underway to eradicate the worst invasive plants, control others, and revegetate with native species.

Since the first insect (a moth) was described from Midway in 1894, more than 300 species of arthropods and land snails have been found on Midway, most introduced aliens.

Almost 2 million breeding seabirds of 18 species make Midway one of the most important breeding areas of seabird conservation in the Pacific. Midway hosts the world's largest populations of both Laysan albatross (398,529 nesting pairs in 2006) and black-footed albatross (24,887 nesting pairs). Midway's breeding populations of white terns, black noddies, and red-tailed tropic birds constitute the largest colonies in the Hawaiian archipelago. After eradication of rats in the mid-1990s, the Bonin petrel colony at Midway is rebounding to more than 32,000 pairs. One or two endangered short-tailed albatrosses generally visit Midway each year, although none have nested since the 1960s.

In 2004, 20 endangered Laysan ducks were transported to Midway from their home at Laysan Island in the Hawaiian Islands National Wildlife Refuge. Biologists hope to establish a second "insurance" population of this endemic duck. The birds adapted 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 were transported to Midway in 2005, most of which were introduced to Eastern Island. By the end of 2006, more than 100 Laysan ducks were living on Midway Atoll.

Midway also serves as an overwintering area for several arctic migrant shorebirds, including the rare bristle-thighed curlew. The availability of predator-free islands on which this large shorebird can spend its nonbreeding season is essential, because they become flightless during their molt. Many other migratory birds also visit Midway, some regularly and some rarely.

2.2 Marine Resources

Midway Atoll is one of the northernmost coral atolls in the world, presenting a unique opportunity to study the effect of colder waters on the growth, development, and ecology of coral reefs. Its neighbor, Kure Atoll, is the northernmost atoll in the world. Midway Atoll drops off steeply outside the barrier reefs, making it possible to observe in a relatively small area the different organisms and communities associated with pelagic, reef crest, ocean reef slope, deep reef, and lagoon habitats.

The lagoon is filled with dense networks of linear reticulated and circular reefs that block circulation in much of the lagoon and trap sand washed over the northeastern reefs. These sediments limit coral development in much of the lagoon, except in the central lagoon where a modest amount of fingercoral gardens exist. Seagrass meadows are common in the lagoon, as are rock-boring urchins, calcareous green algae, and brown turban algae.

Massive spurs and grooves high in coralline algal cover face the open ocean along the northwest to southwest perimeter reefs and offer evidence of the importance of coralline algae as a major reef builder in the far end of the Northwestern Hawaiian Islands. Corals are more abundant elsewhere on some ocean facing reefs and especially on shallow back-reefs and lagoon pinnacles.

A total of 29 species of coral have been recorded at Midway, mostly *Pocillopora*, *Porites*, and *Montipora* species. Blue encrusting coral tentatively identified as *Montipora* cf. *turgecens* occurs in spectacular formations in the lagoon and back reef habitats and may be endemic to the Northwestern Hawaiian Islands.

The first systematic marine invertebrate survey was conducted at Midway in 1997. It documented 316 invertebrate species, 250 of which had not been previously recorded at Midway. Crustaceans were the dominant macroinvertebrates, composing 46 percent of the total species.

More than 100 species of algae are known from Midway, including 35 previously unrecorded species at Midway and 1 seaweed species new to science, *Dudresnaya babbittiana*. One alien algae, one alien fish (blueline snapper), and four alien marine invertebrate species are established at Midway as found in 2000-2003 surveys. Incidental observations of two other introduced species, blacktail snapper and bluespotted grouper, have occurred at Midway in the last decade.

A total of 266 species of fish, including 7 pelagic species, have been recorded at Midway. Some of these species are either not found in the main Hawaiian Islands or are very rare. Despite its low species diversity, Midway's reef fish biomass is higher than in the main Hawaiian Islands, largely due to lower fishing pressures. Midway and its neighboring atolls have the highest rates of endemic reef fishes within the archipelago, in some cases reaching 52 percent.

Many Midway species grow to larger than average size. All trophic levels are well represented, including jacks and four species of sharks. Several species of fish found elsewhere only in deep waters are found at shallow diving depths at Midway, including the endemic Hawaiian black grouper (hapu'upu'u).

Threatened green sea turtles are frequently seen inside the lagoon and basking on beaches. No turtle nesting had been documented until successfully hatched eggs were discovered on Spit Islet in July 2006. High surf uncovered the eggs, which probably hatched in 2005. Endangered hawksbill sea turtles are infrequently seen in the lagoon. About 65 endangered Hawaiian monk seals are usually present at Midway at any one time, and pupping levels have increased significantly since 1996, with a record number of 17 in 2004. However, as is common throughout the Hawaiian Islands, survivorship of juveniles is low and contributes to the critically endangered status of the species. In an effort to increase survivorship, NOAA-Fisheries established a captive care program on Sand Island in 2006. Six females were released in March 2007 and are currently foraging throughout the area.

Approximately 200-300 Hawaiian spinner dolphins rest within Midway's lagoon and forage outside its reef. Bottlenosed, striped, spotted, and rough-toothed dolphins may occasionally be seen in the open ocean, as well as beaked, pilot, and endangered humpback whales.

2.3 Historic Resources

2.3.1 Early Cultural Resources Investigations

Study of Midway's heritage resources was initiated in 1986 by the National Park Service when it conducted a survey of World War II-era properties eligible for designation as a National Historic Landmark. Nine structures, all defensive positions on the west side of Sand Island, were identified on Midway that convey a close association with the pivotal Battle of Midway, including ammunition magazines (ARMCO huts), a pillbox, and gun emplacements. Later that year, the nine defensive positions on Sand Island identified as eligible by the National Park Service and surrounding buffer areas were designated as a landmark.

Between 1992 and 1994, the Navy sponsored studies of the Naval Air Facility on Midway, including archival research, interviews, and field surveys. The initial field effort consisted of an architectural history survey of the structures, buildings, and objects located on Sand and Eastern Islands.

The study of Cold War Resources was conducted in 1993-94 by contractors hired by the Department of the Navy in order to identify the most important Cold War-era resources, even though they were less than 50 years old, as part of the Base Closure process. The historian hired to conduct the inventory, research, and make recommendations regarding the significance of the buildings on Midway was a specialist in the Cold War period. The Cold War-era buildings were constructed on Midway between 1957 and 1969. The recommendation accepted by the Navy was that the Cold War-era buildings and structures on Midway lacked architectural merit, were not directly associated with Nixon's visit, and do not convey a direct link to the events that occurred during the Cold War. The Navy subsequently demolished many of the Cold War-era buildings and structures prior to the transfer to the FWS.

In addition to the landmark structures, 69 buildings, structures, and objects associated with the 1903-1945 historic period on Sand and Eastern Islands were determined to be eligible according to criteria established for the National Register. The properties evaluated as significant are

associated with three major themes: colonization, initial years of base construction and the Battle of Midway, and 1942-1945 base construction.

Archaeological surveys of Sand and Eastern Islands were conducted in 1992 and 1994. Surface inspections, 68 subsurface core samples, and 5 shovel-test units revealed no evidence of Polynesian/Hawaiian or pre-1900 historic period cultural remains. A literature review of Hawaiian legends found numerous references to distant low-lying islands with abundant birds and turtles but no clear tie to Midway. However, like many low islands and atolls in the Northwestern Hawaiian Islands, Midway may have been visited by Polynesians/Hawaiians in their extended travels. Prior to extensive military-era construction, these islands were periodically scoured by storms and high winds that may have removed or buried evidence of use.

2.3.2 Programmatic Agreement and Treatment of Midway's Historic Properties

In 1996, the Navy's Pacific Division, Naval Facilities Engineering Command; the Advisory Council on Historic Preservation; and FWS signed a programmatic agreement directing how Midway Atoll's historic properties were to be treated during the closure of Naval Air Facility Midway. These properties were assigned to one of six categories of preservation treatment: reuse and maintain, secure and abandon in place, abandon in place and leave as is, fill or cover, relocate, or demolish (see Appendix D). FWS was required to prepare a long-term Historic Preservation Plan, which it completed in 1999.

2.3.3 Historic Preservation Plan

The June 1999 *Midway Atoll National Wildlife Refuge Historic Preservation Plan* defines a program to integrate historic preservation planning with the wildlife conservation mission of FWS at Midway Atoll. The plan focuses on the long-term management conditions and goals for preserving and stabilizing historic properties. It also recommends procedures for treating new discoveries, caring for museum collections, and implementing a visitor program that includes historic preservation work. The plan will be revised and updated over the coming year. In the future, the co-trustees will incorporate submerged cultural resource protection into such plans.

Chapter 3 Limitations on the Visitor Program

3.1 Visitor Access

The wildlife treasury that makes Midway Atoll so special for visitors also requires certain restrictions be placed on visitors for the protection of plants and animals. As on all national wildlife refuges, wildlife takes priority. Albatross nesting within the main housing areas of Sand Island continues successfully, even in the presence of human residents, but management measures are necessary to control human access to the nesting habitat of more sensitive bird species and the beach areas frequented by monk seals and sea turtles.

To maximize visitor safety and minimize wildlife disturbance and habitat degradation temporally, land-based visitor activities (other than walking, bicycling, and refuge manager-approved interpretive programs) will be restricted to daylight hours (legal sunrise to legal sunset), and water-based to ½-hour after legal sunrise to ½-hour before legal sunset. Vessels involved in the visitor program must return to dock at least 1 hour before sunset to allow sufficient time for search and rescue operations if necessary.

To prevent disturbance of petrel and shearwater burrows, visitors and residents will be required during their initial orientation and through appropriate handout material to remain on paved or gravel roads and designated trails. The trails that are open for visitor use will be clearly marked on maps (see Figure 3.1.1). North Beach from Rusty Bucket to the fuel farm is considered a ‘trail.’

Most of the beaches on the western half of Sand Island are closed to public access to protect Hawaiian monk seals from disturbance, although there will be opportunities for beach viewing access from a primitive walking trail to designated viewing sites. “Turtle Beach,” located on the eastern side of Sand Island from the old seaplane ramp to Cross Point and several wetlands inhabited by endangered Laysan ducks are also closed to visitors. For visitor safety, the fuel farm and active airport runways are closed to the public, except for designated crossing points on the runways.

Spit Island is closed to all public access, and Eastern Island is open only to visitors with FWS or FWS-trained escorts on scheduled trips. Since 1988, all beach areas (including all beach crest vegetation to its deepest extent inland), lagoon waters, and ocean waters to a depth of 20 fathoms – except on Sand Island and its harbor – have been designated critical habitat for Hawaiian monk seals. Power boats engaged in recreational activities are not allowed within buffer areas of at least 500 feet around Eastern, Spit, and most of Sand Island (see Figure 3.1.2), although they may transit to the pier on Eastern Island for interpretive tours and volunteer work. No visitors will be allowed on the coral reefs surrounding the lagoon. Water activities will avoid preferred monk seal and sea turtle resting habitat areas on these reefs.

To protect threatened and endangered species, visitors are required to remain at least 150 feet away from Hawaiian monk seals, short-tailed albatrosses, and sea turtles on land or in the water.

This distance is recommended under Watchable Wildlife guidelines. Disturbance or harassment of these species is a violation of the Endangered Species Act. Collection of live or dead wildlife, including feathers, bones, eggs, shells, and coral, also is prohibited under 50 CFR 27.61. Objects of antiquity are similarly protected from removal under 50 CFR 27.62, and military shipwrecks and aircraft wrecks are also protected under the Sunken Military Craft Act of 2005 and other statutes.

All visitor activities allowed under this interim visitor services plan, as authorized by the compatibility determinations found in Appendix F, will occur within the Midway Atoll Special Management Area. No excursions beyond that boundary will occur.

Refuge staff and volunteers are working diligently to remove invasive species from Midway Atoll. Although the battle is far from won, we want to ensure no additional invasive species – particularly plants and insects – are inadvertently introduced to the atoll, or conversely, taken from Midway and introduced into Hawai‘i or elsewhere. To help prevent this, an inspection program will be implemented both before departure from Honolulu and before departure from Midway. All flights will originate from Hawai‘i to reduce the risk of invasive species reaching Midway. In addition, visitors going to Eastern Island will be asked to check their gear for mice before departure to prevent accidental introductions. Prior to returning to Sand Island, they will be asked to clean their shoes, clothing, and gear to prevent spread of the invasive black mustard onto Sand Island.

Passengers arriving by vessel are required to clean their footwear before coming ashore. Sailboats are inspected by FWS staff upon arrival and before docking to ensure they are rat free.

In addition, all permitted vessels must have their hulls inspected and cleaned when required, including the visual inspection of anchors and tender vessels. Proclamation 8031 prohibits the release of ballast water within the Special Management Area. Protocols have also been developed (see Appendix I) and will be enforced for the treating of snorkel and dive gear to prevent the inadvertent introduction or transmission of alien species.

To minimize conflicts between aircraft and birds in flight, all visitor flights from November through July will be scheduled to arrive and depart Midway at night, unless specifically authorized by the refuge manager.

3.2 Visitor Capacity and Scheduling

Many of Midway’s infrastructure systems (i.e., water, sewer, power generation) were originally designed to service a population of up to 5,000 individuals. However, Sand Island’s current population of FWS employees and volunteers, contractors, etc., is less than 100 people. FWS is concluding several millions of dollars of construction downsizing the primary infrastructure systems in order to create long-term efficiencies. These new, more economical systems are designed to support a population of no more than 200 individuals, including interagency personnel, volunteers, researchers, and visitors engaged in any activity.

In order to ensure a quality visitor experience using the limited infrastructure currently available, the total number of overnight visitors allowed on Midway Atoll at any one time will be limited to

30 people in 2007 and 40 people in 2008 and beyond as long as this visitor services plan is in effect. At the present time, a maximum of 24 rooms are available for visitors, which may be more restrictive than the 30 person limit depending on multiple occupancies of the same rooms. All visitors must stay in existing facilities; the policy to disallow camping continues due to potential impacts on wildlife habitat and the species themselves. Although visitors arriving by sailboat will not require rooms, they will still be counted toward the total number of visitors since they may require other infrastructure support such as fresh water and food. In addition to lodging, other factors such as the number of visitors who can be accommodated on the aircraft and in our dining facility limit the total number of visitors.

Due to other infrastructure or visitor safety limitations, all visitors may not be able to engage in the same activity at one time (e.g., snorkel boat capacity, a limited number of approved guides, etc.). Children are welcome at Midway, though parents are cautioned that limited medical facilities are available in this remote location. Parents will be responsible for monitoring their children's activities.

This number of visitors may be exceeded for short duration (less than a day) prearranged visits by ocean vessels or aircraft. In these cases, visitor activities are closely supervised and primarily consist of guided tours or participation in commemorative events.

For the next 5 years (2007-2011), visitor programs will operate from November through July, which coincides with the albatross season on Midway. To ensure the safety of visitors and enhance their experience on Midway, visitor programs will be concentrated in this 9-month timeframe. The months of August through October are reserved for planned construction and major maintenance activities. Very few rooms will be available during these months due to the number of contractors on island, and aircraft capacity will be needed both for contractors and supplies.

3.3 Monitoring Visitor Impacts

Midway Atoll monument staff will monitor the impacts of visitors and other users on wildlife and historic resources to ensure continuing compatibility, as required by monument and FWS policies. Monitoring methodology to assess impacts on seabirds, Hawaiian monk seals, sea turtles, corals, and fishes will be developed by the refuge biologist based on previous work on other refuges and protected areas, in consultation with the co-trustees. The visitor program supervisor, in consultation with the FWS and NOAA cultural resources program staffs, will monitor impacts on historic resources.

Impact monitoring of marine resources will be conducted in partnership with NOAA using the multi-agency monitoring protocols developed collaboratively since 2000. In addition, the co-trustees will develop impact monitoring protocols for all activities in the Special Management Area including any impacts from the visitor services program.

Based on FWS experience from 1996-2002, when up to 100 overnight visitors were allowed on Midway at any one time, we anticipate few impacts as long as visitors comply with refuge and monument rules and regulations. A refuge officer will be added to the staff to enforce these rules

and regulations, as well as to assist with coordinated law enforcement throughout the monument. Additional refuge officers may be detailed to Midway for special events or activities. Under the National Wildlife Refuge System Administration Act, the refuge manager has the authority to close areas, halt activities, or restructure visitor programs if necessary to protect wildlife or historic resources or to ensure a quality visitor program.

3.4 Midway Atoll Law Enforcement Activities

Lands within the National Wildlife Refuge System are generally considered strict liability lands, where the visitor is responsible for knowing the rules. Because of the “closed until open” concept of the National Wildlife Refuge System Administration Act of 1966, as amended, everything is initially prohibited. Because entry into the monument is prohibited, this same concept applies. A refuge may be opened to particular uses or a suite of uses through a finding of appropriateness, when required, and approved compatibility determinations. The public may then be notified of this opening through one of several mechanisms found in Title 50 of the Code of Federal Regulations 25.31: conspicuously posted signs, special regulations published in 50 CFR 26.33, maps, or other appropriate methods that give the public actual or constructive notice of the permitted activity.

At Midway, the public review and comment period associated with development of this plan, as well as issuance of the final plan, serve as constructive notice to the visitor under the strict liability standard. Additionally, the mandatory visitor orientation presentation within 24 hours of arrival; visitor access maps provided at that orientation, posted throughout the island, and contained in information notebooks in each room; signs; and other information found within the information notebooks located in each hotel room provide the visitor with additional actual or constructive notice.

A visitor found in violation of these rules may be issued a Notice of Violation, or arrested in the most serious cases. A Notice of Violation usually includes an option for paying a fine under an established Forfeiture of Collateral Schedule or appearing in court before a Magistrate Judge. In addition, depending on the violation, other applicable laws and penalties will apply.

Monument permits will incorporate all applicable requirements, and the signed monument permit also serves as actual notice of these requirements.

Chapter 4 Visitor Services Standards

4.1 Overview

The goals and objectives for this interim visitor services program at Midway Atoll are summarized in the table below. More detailed information, including strategies, is discussed under the visitor services standards that follow. A more comprehensive and detailed set of objectives, strategies, and possibly goals to address the atoll's biological needs will be developed as part of the monument management plan and potentially an associated habitat management plan. The objectives and strategies associated with the biological goal and included in this plan are those with a tie to the visitor services program. Unless otherwise stated, the objectives and strategies would be implemented by FWS monument staff following plan approval.

Management Goals	Objectives
<p><i>Goal 1.</i> Conserve and restore the natural diversity and abundance of native plants and animals, both terrestrial and marine, at Midway Atoll, emphasizing seabirds and shorebirds, threatened and endangered species, and coastal and marine communities within the Northwestern Hawaiian Islands ecosystem.</p>	<p><i>Objective 1.1</i> Incorporate at least 75 percent of visitors staying 3 days or longer into the volunteer program for habitat restoration.</p>
	<p><i>Objective 1.2</i> Provide 25 percent of visitors staying 3 days or longer opportunities to assist with wildlife population monitoring as volunteers.</p>
	<p><i>Objective 1.3</i> Continue efforts to support the habitat restoration program sponsored by the Friends of Midway Atoll National Wildlife Refuge.</p>
<p><i>Goal 2.</i> Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.</p>	<p><i>Objective 2.1</i> During 2007, provide visitor opportunities for at least 50 overnight visitors, with no more than 30 overnight visitors at any one time.</p>
	<p><i>Objective 2.2</i> During 2008, reestablish a regularly scheduled visitor services program for at least 300 overnight visitors, with no more than 40 overnight visitors at any one time.</p>
	<p><i>Objective 2.3</i> Provide visitor opportunities for private sailboats and up to three individual cruise ship visits per year.</p>
	<p><i>Objective 2.4</i> Ensure all visitors feel welcome, enjoy a safe experience, and understand refuge and monument rules and regulations during their stay on Midway Atoll.</p>
	<p><i>Objective 2.5</i> Within 3 years, improve wildlife viewing and photography opportunities for all visitors to Midway Atoll.</p>
	<p><i>Objective 2.6</i> Work with and encourage qualified groups or individuals to develop specialized wildlife-dependent programs such as wildlife monitoring, photography, and art in 2008 and beyond.</p>

	<p><i>Objective 2.7</i> Develop and provide biennial wildlife-dependent teacher workshops targeting a mix of science teachers and teachers who do not have a strong science background or interest.</p>
	<p><i>Objective 2.8:</i> Beginning in 2008, facilitate at least two opportunities per year for accredited colleges, universities, or private/nonprofit environmental or historical organizations to conduct wildlife-dependent college level courses or administer informal educational camps.</p>
	<p><i>Objective 2.9:</i> In 2008, initiate a distance learning program from Midway Atoll to bring the Papahānaumokuākea Marine National Monument to classrooms across the Nation.</p>
	<p><i>Objective 2.10</i> By 2008, improve onsite interpretation and interpretive facilities to better educate visitors about Midway Atoll and the Northwestern Hawaiian Islands.</p>
	<p><i>Objective 2.11</i> By 2008, develop at least two offsite exhibits and programs to educate the general public about the Northwestern Hawaiian Islands and Midway Atoll in particular.</p>
	<p><i>Objective 2.12</i> Allow residents and visitors to engage in other recreational uses on Midway that have been determined to be compatible.</p>
	<p><i>Objective 2.13</i> On a continuing basis, maintain outreach efforts to Midway’s diverse audiences to update them on the visitor program and wildlife-oriented news stories.</p>
	<p><i>Objective 2.14</i> By March 2008, evaluate the effectiveness of the visitor program marketing effort.</p>
	<p><i>Objective 2.15.</i> Seek long-term well qualified volunteers to assist monument staff with the operation of the visitor services program.</p>
<p><i>Goal 3.</i> Honor, maintain, and interpret the unique historical resources of Midway Atoll, with emphasis on its status as the Battle of Midway National Memorial.</p>	<p><i>Objective 3.1</i> By 2008, improve onsite interpretation and interpretive facilities to better educate visitors about the Battle of Midway National Memorial and Midway’s human history.</p>
	<p><i>Objective 3.2</i> By 2009, develop at least two offsite exhibits to educate the general public about the Battle of Midway National Memorial.</p>
	<p><i>Objective 3.3</i> Work with and encourage qualified groups or individuals to develop specialized historical programs that honor the Battle of Midway.</p>
	<p><i>Objective 3.4</i> Working with partners, offer special events on Midway and at other offsite locations that honor its history.</p>

	<i>Objective 3.5</i> Seek grant funds to bring at least two groups of volunteers to Midway each year to work on historic restoration projects under the guidance of FWS cultural resources staff and/or historic preservation specialists.
	<i>Objective 3.6</i> Provide at least 15 percent of visitors staying 3 days or longer opportunities to assist with historic preservation tasks and activities.

4.2 Welcome and Orient Visitors

“We will assure that refuges are welcoming, safe, and accessible. We will provide visitors with clear information so they can easily determine where they can go, what they can do, and how to safely and ethically engage in recreational and educational activities. Facilities will meet the quality criteria defined in [policy]. We will treat visitors with courtesy and in a professional manner.” *Fish and Wildlife Service Manual, 605 FW 1*

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent recreational and educational activities.

Objective 2.1 During 2007, provide visitor opportunities for at least 50 overnight visitors, with no more than 30 overnight visitors at any one time.

Strategy 2.1.1 By October 2007, hire one FWS ranger (interpretation) or make arrangements for well-qualified volunteers to be based on Midway to develop and provide the orientation, guided tours, and customer service on the atoll.

Strategy 2.1.2 Support efforts of monument co-trustees in hiring appropriate staff to support the visitor program on Midway Atoll.

Strategy 2.1.3 Use existing FWS staff in Honolulu, Hawai‘i, to coordinate visitor scheduling, work with interested private organizations, and respond to visitor inquiries.

Strategy 2.1.4 Limit the total number of overnight visitors to no more than 30 at any one time to match the existing infrastructure, ensure a quality program, and limit impacts to wildlife.

Strategy 2.1.5 Work with private groups to arrange facilitated visits to Midway.

Strategy 2.1.6 If funding is available, hire a supervisory outdoor recreation planner to further develop and coordinate the visitor program on Midway Atoll by December 2007.

Discussion: Implementation of the visitor services plan will begin in late 2007. Since Midway's regularly scheduled visitor program ended early in 2002, most visitors have arrived by cruise ships or private sailboats and have remained on the island for only brief periods. Existing refuge staff have provided orientation sessions and tours, with assistance from offsite interpreters during cruise ship visits. We will use 2007 and early 2008 as a startup year, phasing in the staffing and programs that will lead to a more complete visitor program in 2008 and beyond.

At the present time, only three FWS personnel are stationed on Midway. All visitor services staff were removed from the atoll in 2002, and we will now begin hiring a new staff to work with Midway visitors. With the small size of the initial program, one interpreter will be hired in 2007 to help with orientation sessions and tours, possibly followed by a supervisory outdoor recreation planner in October. This planner will have the primary responsibility for Midway's visitor program, including program development, program implementation, program evaluation, coordination with NOAA, and supervision of the interpretive staff. This employee would provide direction for the visitor services sections of the comprehensive management plan and ultimately be responsible for developing a long-term visitor services plan for Midway in collaboration with monument co-trustee staff. Until this employee has been hired, FWS staff in Honolulu will continue to provide support for the Midway visitor program and solicit support from NOAA to augment this capacity. FWS will work with its contractor to identify additional contractor staffing needs for lodging, food service, and administrative work in support of the visitor program.

The limit of no more than 30 overnight visitors on Midway at any one time reflects the limited capacity of our means of transportation and island infrastructure. Our Fiscal Year 2007 aircraft charter company operates a Gulfstream G-1 aircraft with 19 seats and a weight capacity of 3,200 pounds. Therefore, it is likely that no more than 15 seats will be available on any flight. In general, visitor groups will be transported on separate charter flights from those that bring food; mail; supplies; repair parts; and FWS, contractor, and co-trustee staff to and from the atoll. Most visits will be for one week at a time, although occasionally a shorter-term visit may be offered.

Of the 36 rooms in our guest lodging facility (Charlie Barracks), 24 rooms generally will be available for overnight guests at any one time (except from August through October). The remaining rooms may occasionally be available, but often will be occupied by off-island staff, co-trustee staff, and contractors. The seating capacity at Midway's dining facility is likewise limited. Although meal times can be staggered to accommodate larger numbers of people on island, aircraft seating and lodging still limit the size of the program.

Since 2002, various private groups have inquired about the possibility of bringing structured groups of people to Midway for 2 to 7-day visits. FWS will encourage such visits, working with the organizers to arrange trips in the most cost-efficient manner possible. These groups will be led by a FWS-approved guide who has been thoroughly briefed in refuge and monument rules and regulations, and all proposed activities on Midway Atoll will be approved in advance by the refuge manager in compliance with monument regulations and necessary permit conditions.

Objective 2.2 During 2008, reestablish a regularly scheduled visitor services program for at least 300 overnight visitors, with no more than 40 overnight visitors at any one time.

Strategy 2.2.1 By February 2008, solicit additional staff or qualified volunteers to support the visitor program on Midway Atoll.

Strategy 2.2.2 By January 2008, evaluate existing island infrastructure to identify and seek solutions for shortcomings, considering longer-term regional field station needs and build-out.

Strategy 2.2.3 By December 2008, seek larger capacity aircraft to service Midway Atoll on a regular basis.

Strategy 2.2.4 Limit the total number of overnight visitors to no more than 40 at any one time to match the existing infrastructure, ensure a quality program, and limit impacts to wildlife.

Strategy 2.2.5 Offer a minimum of two 3- to 7-day visits for independent travelers to come to Midway on less structured visits.

Discussion: An additional FWS ranger (interpretation) or qualified volunteer will be stationed on Midway to assist in providing orientation and interpretive programs and staff the interpretive facilities. A refuge officer (law enforcement) will also be hired to enforce rules and regulations on Midway and to assist with law enforcement throughout the monument. Until that officer is hired, the refuge zone officer will be responsible for enforcement activities at Midway.

FWS monument staff, in coordination with NOAA, will evaluate other types of aircraft that could safely and more cost-effectively transport visitors to Midway Atoll. We will work with the Department of the Interior's Office of Aircraft Services and NOAA's Marine and Aviation Operations office to identify suitable potential bidders for an aircraft charter service. Our goal would be to be able to transport 25-30 visitors to and from Midway per flight. We will also evaluate the island infrastructure to identify additional needs for visitor housing, food services facilities, etc., for future planning and budget development purposes.

Although we anticipate having no more than 30 overnight visitors on island at any one time due to the same limitations described above, it may be possible during specific periods to increase this number to 40 people at one time if larger capacity aircraft were available. Although most visits would be part of structured programs, we will offer at least two 3- to 7-day periods when individuals may come to Midway to enjoy the atoll's historic and wildlife resources in a less structured manner. Such visitors would participate in available guided activities but would not be with an organized group. All of the rules and restrictions that apply to other visitors would apply to independent travelers. These independent travelers would require more oversight by monument employees than organized groups, but still deserve the opportunity to visit their public lands.

Objective 2.3 Provide visitor opportunities for private sailboats and up to three individual cruise ship visits per year.

Strategy 2.3.1 Continue to allow private sailboat crews with prior approval to stop at Midway Atoll and moor in the inner harbor. All sailboats must obtain a monument permit and meet monument requirements during their voyage.

Strategy 2.3.2 Continue to allow up to three cruise ship visits to Midway Atoll during any calendar year for 8-12 hour visits. These vessels will meet all refuge and monument cruise ship requirements.

Discussion: Although the number of sailboats visiting Midway Atoll varies from year to year, the average number seeking prior permission to land is about five per year. Midway Atoll is not en route to normal sailboat destinations in the Pacific, and due to prevailing winds and currents, it is difficult to sail from Midway back to Honolulu. Those that do come to Midway generally stay only a few days, remaining overnight on their vessels. Occasionally they eat some of their meals at the Clipper House dining facility.

For the past several years, Midway has hosted from one to four commercial cruise ships of varying passenger capacities for walking tours of Sand Island. Weather permitting, the cruise ships remain outside of the southern reef at the channel entrance and offload their passengers in groups of up to 100 in the ships' tenders. These small boats come into the inner harbor, where the passengers disembark and are divided into groups for a 2-hour walking tour along existing roads to specific sites where Fish and Wildlife Service, National Park Service, and/or volunteer interpreters provide informative talks. Each group is accompanied by tour guides from the ship to ensure the passengers remain on the clearly marked guided tour route. Visitors return to the cruise ship at the end of their walking tour. Some of these cruise ships have been on theme-based itineraries to World War II Pacific battlefields, while others have been more general in nature. Many visitors – including those on world tours – have remarked that their stop at Midway Atoll was one of their most enjoyable and educational experiences.

Each cruise ship must follow the monument's requirements, including obtaining a monument special ocean use permit, as well as numerous refuge requirements (see Appendix E). A separate permit is required for each visit to Midway Atoll, and no more than three special ocean use permits for cruise ship visits will be granted per year. Monument permit conditions such as hull inspections, specific vessel monitoring systems, and discharge limitations apply to cruise ships as well as other vessels permitted within the Monument. Permits are not issued if the vessels do not meet the requirements of Proclamation 8031 and 50 CFR 404.11. The refuge manager and ship's captain have the authority to cancel any visit should weather and ocean conditions be too dangerous for human safety.

Cruise ship companies cover the cost of bringing additional interpreters to the island. In order to ensure that these short-term visits do not conflict with the overnight visitors, we will limit the number of cruise ship visits to no more than three per year. Since they are generally scheduled months in advance of the visit, we may be able to avoid scheduling overnight visitor trips at times when cruise ships will arrive. Prior to the arrival of the first cruise ship since

establishment of the monument, the FWS will work with its monument partners to identify an appropriate anchoring/mooring site for ships outside the reef to minimize any possibility of damaging coral reef resources.

Objective 2.4 Ensure all visitors feel welcome, enjoy a safe experience, and understand refuge and monument rules and regulations during their stay on Midway Atoll.

Strategy 2.4.1 Ensure visitors with disabilities feel welcome at Midway and enjoy a quality experience. Opportunities to improve existing facilities for the disabled will be evaluated in 2007 and funding for improvements will be sought in 2008.

Strategy 2.4.2 All visitors arriving at Midway Atoll will receive advance materials regarding the sensitivity of Midway's resources and will participate in a mandatory orientation briefing within 12 hours after their arrival.

Strategy 2.4.3 On an ongoing basis, maintain notebooks in each visitor room with maps and information on safety, wildlife viewing etiquette, regulations, and emergency contacts.

Strategy 2.4.4 Staff the visitor center at least 4 regularly scheduled hours a day during workweeks so that visitors can ask questions and seek additional information.

Strategy 2.4.5 By February 2008, develop and begin implementing a stepdown sign plan for Midway Atoll that will guide directional, regulatory, and interpretive signage for Sand Island.

Strategy 2.4.6 By November 2007, ensure the FWS contractor has a visitor satisfaction survey in place so that the visitor program can be monitored and appropriate adjustments can be made to enhance the visitor experience on Midway.

Discussion: Opportunities to enhance accessibility for all visitors will be sought throughout implementation of the visitor program. Wheelchair-accessible lodging is currently available for visitors in Bravo Barracks on Sand Island. The boardwalk leading to the dining facility also is accessible. Due to Sand Island's mostly flat terrain, most of the roads are passable for all visitors. A review of Midway's facilities with particular attention to their accessibility was completed in 1997 and will be reviewed in 2008.

Advance materials will be provided to registered visitors with helpful hints about what to bring to Midway, how to avoid introducing new invasive species, how to avoid disturbing wildlife, and what to expect on the atoll. Since 1995, all visitors arriving at Midway Atoll have been required to attend a mandatory orientation session led by FWS personnel, even those who may have participated in a pre-trip briefing. During this time, visitors learn about some of the natural and historical resources of Midway Atoll, cultural resources of Papahānaumokuākea Marine National Monument, rules and regulations that protect wildlife, and personal safety information. They are provided maps and other information to make their visit more enjoyable and educational. The schedule of the briefing varies by the time the aircraft/vessel arrives on Midway, but it always occurs within 12 hours. As a helpful reference, each guest room will have a notebook containing this information. These notebooks will be in place by November 2007 and will be updated on a

regular basis. Information on natural, military, and other hazards will be included in both the orientation and the reference notebooks. Staffing the visitor center at least 4 hours per day will allow visitors the opportunity to seek answers to any questions. During 2007, when only one interpretive ranger will be present on Midway, this may not be possible, but as staffing increases, visitors will know where and when staff will be present at the visitor center to provide customer service.

For cruise ships, briefings are either given on board the ship prior to arrival or, if no FWS-approved guides are on board, via written materials developed by the cruise ship company in coordination with FWS and monument co-trustees. Since all cruise ship visitors are guided in small groups from one site to another along existing roads, these methods of orientation suffice.

We try to minimize the number of signs on Midway both to reduce impacts on wildlife and to allow visitors to have a more natural experience. Street signs have been lowered to minimize collisions by birds in flight. A new entry sign will be in place early in 2007. During 2008, refuge staff will analyze the need for additional signage and complete a sign plan in consultation with NOAA.

Because of the age of Midway's infrastructure, the atoll's harsh climate, and the difficulty of getting materials and supplies to the atoll, maintenance of visitor facilities is a major and expensive endeavor. Efforts will be made to improve these facilities during 2006-2011. However, to ensure a minimal level of funding is available, visitor program fees will be structured to cover maintenance costs for lodging and dining facilities, on-island means of transportation (e.g., golf carts and bicycles), and at least some of the interpretive facilities. FWS will also work with its other partners on Midway to seek funding for island infrastructure maintenance and repair.

FWS' contractor will design and implement a visitor satisfaction survey. A previous questionnaire distributed by a private partner at Midway provided valuable insight into how we could improve our visitor program. FWS, contractor, and co-trustee staff will work together to make appropriate changes to enhance the visitor experience based on this feedback.

4.3 Provide Quality Hunting Opportunities

“Hunting is a wildlife-dependent recreational use and, when compatible, an appropriate use of resources in the Refuge System. Hunting programs will meet the quality criteria defined in [policy] and, to the extent practicable, be carried out consistent with State laws, regulations, and management plans.”
Fish and Wildlife Service Manual, 605 FW 1

Midway Atoll has no available hunting opportunities since all of its animal species are protected by law as either nongame species or threatened or endangered species, or they occur in numbers too low for harvest (e.g., migratory waterfowl).

4.4 Provide Quality Fishing Opportunities

“Fishing is a wildlife-dependent recreational use and, when compatible, an appropriate use of resources in the Refuge System. Fishing programs will meet the quality criteria defined in [policy] and, to the extent practicable, be carried out consistent with State laws, regulations, and management plans.”

Fish and Wildlife Service Manual, 605 FW 1

Consistent with relevant law, FWS grants wildlife-dependent public uses, including fishing, special consideration on national wildlife refuges. When determined compatible, wildlife-dependent public uses receive priority consideration over all other uses of a refuge. In this instance however, Midway Atoll is managed not just as a national wildlife refuge but as part of the Monument. In accordance with Proclamation 8031 “[r]emoving, moving, taking, harvesting, possessing, injuring, disturbing, or damaging; or attempting to remove, move, take, harvest, possess, injure, disturb, or damage any living or nonliving monument resource” is prohibited without a permit, and recreational permits cannot be issued for activities that result in the extraction of monument resources. Therefore, sportfishing at Midway Atoll will not be permitted.

4.5 Provide Quality Wildlife Observation and Photographic Opportunities

“Visitors of all ages and abilities will have an opportunity to observe and photograph key wildlife and habitat on the refuge when it is compatible with refuge purpose(s). Viewing and photographing wildlife in natural or managed environments should foster a connection between visitors and natural resources

Fish and Wildlife Service Manual, 605 FW 1

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Objective 2.5 Within 3 years, improve wildlife viewing and photography opportunities for all visitors to Midway Atoll.

Strategy 2.5.1 Develop informational materials to enhance wildlife viewing opportunities by November 2007, including bird, fish, and other wildlife checklists and a wildlife viewing calendar and map.

Strategy 2.5.2 Maintain and improve the West Beach trail by November 2007.

Strategy 2.5.3 Construct a migratory bird/Laysan duck observation blind at the water catchment basin by March 2008.

Strategy 2.5.4 Plant additional native vegetation to create a natural blind overlooking Turtle Beach by October 2007.

Strategy 2.5.5 Provide water-based activities to observe marine ecosystems by November 2007.

Strategy 2.5.6 Renovate the refuge's pontoon boat to transport visitors to Eastern Island, snorkeling sites, etc., by November 2007.

Strategy 2.5.7 By 2011, establish remote viewing cameras to transmit live video of terrestrial and marine species and their habitats to the visitor center and other locations beyond Midway Atoll.

Discussion: At few other places in the world can visitors be so totally surrounded by wildlife. Midway's seabirds have little fear of humans, and visitors are offered opportunities to observe and photograph them from the time they arrive until they leave. To enhance their experience and ensure their expectations are met, a wildlife calendar will be developed showing what species are present at Midway during each month of the year. Existing bird and fish checklists will be reviewed and updated, then printed for distribution. A wildlife map of Midway Atoll will show visitors where they might have the best opportunity to see specific wildlife species. These documents will also be available on the Midway Atoll website.

In 1997, West Beach – wrapping all the way from Rusty Bucket around Frigate Point – was closed to protect Hawaiian monk seals that use the beach for resting and pupping. To continue to allow visitors to reach historic resources in that area and to expand their opportunities to see the wildlife resources of Midway, FWS constructed a trail through the ironwood forest adjacent to West Beach, in consultation with NOAA-Fisheries. At several locations along the trail, spur trails leading to overlooks were marked and native vegetation planted to create natural wildlife viewing blinds. Though generally left as a self-guided tour for visitors to explore, FWS also offered a guided West Beach trail tour approximately once every week.

Much of the trail needs maintenance work to ensure visitor safety, and wildlife viewing blinds will be re-evaluated to ensure their effectiveness in screening visitors from resting monk seals. FWS will work with NOAA-Fisheries staff on this project. In addition, signs will be posted along a section of trail so hikers avoid disturbing Laysan ducks, Midway's newest endangered species.

Unlike the albatrosses and some other seabird species, Laysan ducks are frequently secretive and wary of humans. To increase opportunities for visitors to see this highly endangered species, an accessible observation/photography blind will be constructed at the water catchment basin by March 2008. Construction will take place offsite to the extent possible, and be placed at the

basin between December and March to minimize disturbance to Laysan ducks and the migratory birds that also use this pond. If needed, a spotting scope may be added to the blind to enhance viewing opportunities.

Turtle Beach is closed to visitors, but with additional screening visitors could observe the resting sea turtles without disturbing them. Native plants such as naupaka (*Scaevola sericea*) will be planted in 2007 to create a natural blind for visitors adjacent to the road.

A limited water-based wildlife observation program will begin in 2007, using existing refuge boats or those of the co-trustees. In 2008 and beyond, FWS and its partners will seek additional resources to expand the program. Because of the inherent safety concerns of any water-based activities, particularly in such a remote location, strict standards and rules will be established and enforced before any visitors are allowed to engage in these activities.

We will offer snorkeling and guided kayaking opportunities during daylight hours only (one-half hour after sunrise and one hour before sunset) to learn about and enjoy Midway's marine resources. Beginning in 2007, small groups of up to eight snorkelers per guide may be taken by FWS-approved guides to specified locations within the lagoon to enjoy snorkeling within the lagoon and adjacent to the reef (except within the 500-foot buffer zone identified in Figure 3.1.2). Snorkeling sites may be rotated to reduce marine impacts and will avoid preferred monk seal and sea turtle haulout sites. Visitors also will be permitted to snorkel near the cargo pier as long as no monk seals are in the vicinity. Use of the "buddy system" is required.

Guided kayaking tours of the lagoon will also be offered in 2008 in groups of no more than six kayaks. All participants will be carefully instructed in kayak safety and wildlife/marine resource viewing etiquette before launching the boats. Kayaks launched from Sand Island may tour only from the cargo pier across the northern beach, around Rusty Bucket to Frigate Point. All kayak tours must remain at least 150 feet from shore to avoid disturbing resting monk seals on the beach. Kayak tours will remain at least 500 feet from shore at West Beach if a monk seal mother and pup are present. FWS or FWS-approved kayak guides will be trained in kayak operation and in radio contact with employees on Sand Island. Individuals may not take kayaks out on their own. Kayaking tours will not be allowed to head toward Eastern Island or Spit Island, or to approach the reef. No snorkeling will be conducted from kayaks.

Visitors may also want to explore the coral reefs in waters outside the lagoon through SCUBA diving. Monument staff will evaluate the feasibility of offering a diving program in 2008 or beyond. If a diving program is determined to be feasible, monument staff will develop guidelines and monitoring protocols and ensure proper diving equipment is available and regularly serviced and maintained.

As a preliminary step toward a dive program, the refuge manager has determined guided dive tours focused on wildlife observation and photography would be a compatible wildlife-dependent use (see Appendix F.1). If offered, divers would be accompanied by a certified master diver, with a maximum of six divers per one dive master. The dives would be specialized for divers interested in marine life and underwater photography, and all NOAA-Fisheries guidelines for viewing marine mammals and sea turtles would be met. No night diving would be

allowed due to increased shark activity. Typically, this would be a seasonal activity, generally from May through September when the seas are calmer. Specific monument protocols to ensure invasive species and disease are not transmitted through snorkel and dive gear will be implemented (see Appendix I).

Although live-aboard dive cruises are offered on the Island of Hawai‘i and many other areas of the Pacific, Midway’s remote location would mean vessels would need to be in transit for many days before reaching the atoll to dive, and that they would need to transit the waters of the monument. It seems highly unlikely such a vessel could meet the environmental standards required of vessels within the monument. Any request for such use at Midway Atoll would require the approval of the co-trustees through the permitting process. Cruise ships are only onsite for sufficient time to allow terrestrial tours and occasionally the opportunity to swim off the North Beach. No other alternatives (e.g., snorkeling or diving) for cruise ship passengers will be allowed. All requirements outlined in the compatibility determinations for wildlife observation and nonwildlife-dependent recreational activities would apply.

As technology improves and funding becomes available, we will work with our co-trustees to provide opportunities to broadcast live images of sensitive species such as the short-tailed albatross, Hawaiian monk seal, and Laysan duck and coral reef habitats to the visitor center on Sand Island and perhaps to the main Hawaiian Islands (such as at the Mokupapapa Discovery Center in Hilo) and beyond through the National Marine Sanctuary Program’s web portal (<http://www.oceanslive.org/portal/>).

Objective 2.6 Work with and encourage qualified groups or individuals to develop specialized wildlife-dependent programs such as wildlife monitoring, photography, and art in 2008 and beyond.

Strategy 2.6.1 Conduct research to identify appropriate vendors and initiate contact to introduce Midway Atoll and its opportunities for visitors.

Discussion: In the *Midway Atoll National Wildlife Refuge Visitor Program Market Analysis and Feasibility Study*, Pandion Systems, Inc., recommended several target audiences within the broad category of sustainable ecotourism, including specialized programs such as service learning activities, photography tours, writing and artist workshops, and educational tours. The FWS and monument co-trustees agree and will explore opportunities to reach such vendors in 2007 and beyond. Since these programs generally bring a leader/guide/instructor with them, we need only ensure their understanding and compliance with rules and regulations and provide local expertise as needed. All such proposed activities would require monument special ocean use permits since the activities would generate revenue or profits.

4.6 Develop and Implement Quality Environmental Education Programs

“Through curriculum-based environmental education packages based on national and State education standards, we will advance public awareness, understanding, appreciation, and knowledge of key fish, wildlife, plant, and resource issues. Each refuge will assess its potential to work with schools to provide an appropriate level of environmental education. We may support environmental education through the use of facilities, equipment, educational materials, teacher workshops, and study sites that are safe, accessible, and conducive to learning.”

Fish and Wildlife Service Manual, 605 FW 1

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Objective 2.7 Develop and provide biennial wildlife-dependent teacher workshops targeting a mix of science teachers and teachers who do not have a strong science background or interest.

Strategy 2.7.1 Working with the Navigating Change Educational Partnership, including the State of Hawai‘i Department of Education and co-trustees, bring together a small focus group of Navigating Change teachers by March 2008 to design a standards-based workshop to be conducted for other teachers on Midway.

Strategy 2.7.2 Implement a week long teacher workshop on Midway conducted and developed by the teacher focus group in 2008.

Discussion: The goal of these biennial teacher workshops is to inspire a new group of teachers to use environmental education as a method of connecting students to wildlife. Over the past 5 years, the partners have joined together to create Navigating Change, a project conceived by the Polynesian Voyaging Society and focused on raising awareness and ultimately motivating people to change their attitudes and behaviors to better care for our islands and ocean resources. A standards-based educational curriculum for fourth and fifth graders was released by the partnership in 2005, and more than 15 workshops have been conducted on the main Hawaiian Islands to introduce the curriculum to local teachers. The major themes included within the curriculum could provide the stepping stones for future development of educational activities such as telepresence and distance learning projects.

The target date for the first actual teacher workshop on Midway would be summer 2009. Agency planning will begin early 2008, and the members of the teacher focus group will be selected by April 2008. By December 2008, the focus group will have met on Midway for a week to design the future workshop as well as upper grade level curriculum components as an extension of Navigating Change. Funds to support any teacher workshop on Midway will need

to be generated by grants, non-FWS Federal or State funds, or by the teachers themselves. The 2009 teacher workshop and beyond will be conducted mainly by the focus group teachers with the Navigating Change Educational Partnership and co-trustees providing support. Approximately 15 teachers could participate in each workshop.

Objective 2.8 Beginning in 2008, facilitate at least two opportunities per year for accredited colleges, universities, or private/nonprofit environmental or historical organizations to conduct wildlife dependent or historical college level courses or administer informal educational camps.

Strategy 2.8.1 During 2007, seek partners who may be interested in offering educational programs on Midway Atoll and set schedules for trial courses or camps in 2008.

Strategy 2.8.2 By March 2008, monument staff will develop, design, and offer a mandatory 1-day orientation that all guides and instructors must attend before hosting a class on Midway for the first time.

Strategy 2.8.3 Assist with classes/camps on Midway, providing guidance to avoid impacts on wildlife resources and monitoring group activities.

Discussion: Organizations have already shown their interest in using Midway for educational experiences, since it provides unparalleled wildlife dependent educational opportunities. Organizations will be held responsible for providing instructors and leading their participants. The co-trustees will provide guidance during the mandatory advance orientation. When possible, FWS or monument staff can provide learning opportunities that engage participants in biological and historical projects such as habitat restoration or historic preservation. FWS staff will also monitor group activities to ensure Midway's wildlife and historic resources are protected.

Objective 2.9 In 2008, initiate a distance learning program from Midway Atoll to bring the Papahānaumokuākea Marine National Monument to classrooms across the Nation.

Strategy 2.9.1 Working with our monument partners, study the physical feasibility of offering a long distance environmental education program from Midway Atoll.

Discussion: FWS has long been interested in offering a distance learning program from Midway, but doing so from such a remote location is challenging. As technologies improve, we will work with NOAA and the State of Hawai'i to evaluate the possibility of establishing such a program that could bring the Northwestern Hawaiian Islands into Hawai'i classrooms in particular, but also to other educational venues. In order to provide support for staff, researchers, and distance learning, NOAA has offered to install high-speed satellite uplinks on Midway Atoll.

4.7 Provide Quality Interpretation of Key Resources

“We will communicate fish, wildlife, habitat, and other resource issues to visitors of all ages and abilities through effective interpretation. We will tailor core messages and delivery methods to provide interpretation to refuge visitors and present them in appropriate locations.”

Fish and Wildlife Service Manual, 605 FW 1

The rich natural and human history of Midway Atoll provides a unique opportunity to promote visitor understanding of and appreciation for America’s natural and historic resources. Interpretation provides opportunities for visitors to make their own connections to the resource so that a sense of stewardship and respect for these resources develops. To ensure our interpretive products remain focused, we develop interpretive themes that guide development of all interpretive products on the refuge.

The primary interpretive themes for Midway Atoll are:

- Encircled by the earth’s largest ocean, these small islands and coral reefs – just like those throughout the Northwestern Hawaiian Islands – provide a scarce and safe haven for diverse native wildlife species to raise their young; to rest, grow, and play; and to survive into the future.
- Unique and remote atolls host complex reef ecosystems dominated by apex predators and rich in species found nowhere else in the world.
- Just as human actions can destroy wildlife and their habitat, through sound science and special care, people can restore island ecosystems to benefit both wildlife and mankind.
- Throughout history, Midway has served as a vital outpost for humans as they explored their world, expanded their horizons, protected their boundaries, and sought peace in the world.
- Brave young men – far from home and loved ones – risked their lives at Midway to defend America, and in doing so, turned the tide of war in the Pacific to ensure our freedom.

These themes are designed to encompass the tremendous wildlife and historical treasury found at Midway. Through a variety of interpretive methods, these themes will be conveyed to our visitors.

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Objective 2.10 By 2008, improve onsite interpretation and interpretive facilities to better educate visitors about Midway Atoll and the Northwestern Hawaiian Islands.

Strategy 2.10.1 Offer wildlife-oriented guided tours to all visitors on at least a weekly basis.

Strategy 2.10.2 Develop and install wildlife interpretive panels along remote trails and in viewing blinds to educate visitors and encourage proper wildlife viewing etiquette by June 2008.

Strategy 2.10.3 Transition the wildlife-related visitor center into a Papahānaumokuākea Marine National Monument visitor center by September 2008, to provide an educational window to the monument.

Strategy 2.10.4 Provide additional opportunities for visitors to learn about ongoing management and research projects through field talks and evening programs.

Strategy 2.10.5 Offer evening programs in the Midway theater, including slide talks, videos, and other presentations on Midway's natural and human history.

Strategy 2.10.6 Support and monitor the Friends of Midway Atoll National Wildlife Refuge gift store.

Discussion: The refuge interpreters will offer guided walks and bicycle/golf cart tours focused on natural history themes on at least a weekly basis. To ensure a quality experience, tour groups will be no larger than 25 people (except during cruise ship visits). Tour routes will vary depending on the physical ability of the participants, the weather, and wildlife use patterns. All visitors should have the opportunity to tour Sand Island. Dependent upon the weather and availability of transportation, visitors may also have the opportunity to have a guided tour of Eastern Island, which will combine both natural and historic resource features. Tours on Eastern Island generally walk from the boat pier to and along the historic World War II runways and Battle of Midway memorials. All beaches on Eastern Island are closed to visitors to protect Hawaiian monk seals and sea turtles, and tour routes will vary to accommodate wildlife needs.

Self-discovery and exploration is a key component of the Midway experience. To enhance their experience, interpretive panels regarding Midway's natural resources will be placed at a limited number of remote locations along existing trails on Sand Island. These panels may include reminders of wildlife viewing etiquette, as appropriate. If a significant number of non-English-speaking visitors come to Midway, translated versions of these panels will be made available as handouts.

The natural resource interpretive exhibits in the Midway visitor center will be reviewed for currency and updated as necessary, working in cooperation with the co-trustees.

Researchers and biologists will be encouraged to offer field talks to describe their work and/or provide insights into the world of individual wildlife species. NOAA-Fisheries has expressed an interest in providing guided tours to view monk seals in an unobtrusive manner, and frequently researchers provide presentations or demonstrations to broaden knowledge of their activities. By better understanding the needs of each species for its survival, visitors will gain knowledge of how they can help protect these animals.

Over the years, numerous films and documentaries about the Battle of Midway and other aspects of the atoll's history and its wildlife have been produced. Sharing these with visitors in the historic Midway theater enhances their learning experience and enjoyment.

Through the Friends of Midway Atoll National Wildlife Refuge, a gift store on Midway offers visitors the opportunity to purchase Midway Atoll-related items such as books, posters, postcards, coffee mugs, tee shirts, and note cards. Refuge staff will monitor sales items to ensure they accurately interpret refuge and monument natural and historic resources. These items will also be available on the Friends website, broadening the distribution of these interpretive materials.

Objective 2.11 By 2008, develop at least two offsite exhibits and programs to educate the general public about the Northwestern Hawaiian Islands and Midway Atoll in particular.

Strategy 2.11.1 In 2007, develop and install a visitor access exhibit in NOAA's Mokuapapa Discovery Center in Hilo, Hawai'i, as part of the updating of the facility.

Strategy 2.11.2 Work with the other venues to incorporate information about Midway Atoll and the Northwestern Hawaiian Islands in their exhibits.

Discussion: Since the number of visitors to Midway Atoll will always be relatively small, FWS will work with partner entities to provide information about the Northwestern Hawaiian Islands and Midway Atoll to a broader audience. The Mokuapapa Discovery Center in Hilo, Hawai'i, informs an average of 60,000 visitors per year about the new monument. As funding is available, FWS will work with NOAA to incorporate an exhibit about Midway Atoll and visitor opportunities. Additional opportunities, such as within the Northwestern Hawaiian Islands exhibit at the Waikiki Aquarium, will be sought in 2008 and beyond.

Goal 3. Honor, maintain, and interpret the unique historical resources of Midway Atoll, with emphasis on its status as the Battle of Midway National Memorial.

Objective 3.1 By 2008, improve onsite interpretation and interpretive facilities to better educate visitors about the Battle of Midway National Memorial and Midway's human history.

Strategy 3.1.1 Offer a history-oriented guided tour to all visitors on at least a weekly basis.

Strategy 3.1.2 Update the self-guided Sand Island historical tour map and leaflet by November 2007.

Strategy 3.1.3 Install existing history-related interpretive panels at significant sites by November 2007.

Strategy 3.1.4 Establish a temporary museum/library with history-related exhibits on Midway Atoll by January 2008.

Strategy 3.1.5 As funding is made available, develop an interpretive plan for a permanent museum/library in a restored historic building to recognize and honor Midway's – and the Northwestern Hawaiian Islands' – distinguished history.

Strategy 3.1.6 Partner with NOAA to develop interpretive materials and displays about the submerged cultural sites (shipwrecks and aircraft) located within the monument to enhance existing historic interpretation.

Discussion: Much like the natural history tours, historic resource guided tours will be offered by refuge staff on at least a weekly basis. To ensure a quality experience, tour groups will be no larger than 25 people (except during cruise ship visits). Depending upon the physical ability of the participants, the weather, the length of the tour route, and the potential impacts on wildlife, these tours may be on foot, by bicycle, or by golf cart. On Sand Island, the history tour will be separate from the wildlife-oriented tour; on Eastern Island, both topics will be covered in one visit.

Sand Island's historic structures are found in all corners of the island. A self-guided historic resource tour map with descriptive information was developed in 1996 and will be updated for current visitor use. Interpretive panels regarding several of Midway's historic resources were produced in 2002. Because the regularly scheduled visitor program was no longer active, the panels were temporarily placed on portable stands for use only during cruise ship visits. Now that visitors are returning on a more regular basis to Midway, these panels will be mounted as originally planned at their designated sites to bring history to life along the self-guided tour.

History-related exhibits are currently housed on the first floor in the airport hangar. Because that location is rarely visited by visitors and because the building is deteriorating, the exhibits will be moved to a new temporary location in the visitor center early in 2008. The new site will be more readily accessible to visitors.

In the longer term, one of the historic buildings – probably within the “Midway Mall” – will be restored to house a permanent museum/library. In accordance with the *Midway Atoll National Wildlife Refuge Historic Preservation Plan*, FWS does not plan to acquire materials currently preserved in museums, archival institutions, and private collections to bring them to Midway's harsh environmental conditions. It is more appropriate to acquire copies of such materials for Midway, allowing the originals to remain secured at existing facilities or in a repository in Hawai'i. Interpretive exhibits will be developed to reflect all of Midway's “eras,” from prerecorded history to discovery, to shipwrecks and the Commercial Pacific Cable Company days, the Pan American Flying Clipper period, the Battle of Midway, and on through the Cold War and Vietnam conflicts. Broader based exhibits about cultural and historic sites throughout the Northwestern Hawaiian Islands will also be developed in partnership with NOAA's cultural resources program and the State of Hawai'i.

***Objective 3.2* By 2009, develop at least two offsite exhibits to educate the general public about the Battle of Midway National Memorial.**

Strategy 3.2.1 Seek partnership opportunities in Honolulu, Hawai'i's Pearl Harbor Historic District to provide their visitors with information about the Battle of Midway National Memorial.

Strategy 3.2.2 Work with the U.S. Navy’s Naval Historical Center to explore the possibility of including the Battle of Midway National Memorial in their facility and/or with the National Park Service at the National World War II Memorial in Washington, D.C.

Discussion: In establishing the Battle of Midway National Memorial, FWS was charged with helping others keep knowledge of this important battle alive for future generations. With a limited and expensive visitor program at Midway Atoll, we need to look beyond the memorial’s boundaries to reach a far broader audience. In the near term, our first efforts will be at Pearl Harbor with its many World War II in the Pacific themed attractions. We will also seek partners to help place an exhibit in Washington, D.C.

Objective 3.3 Work with and encourage qualified groups or individuals to develop specialized historical programs that honor the Battle of Midway.

Strategy 3.3.1 Conduct research to identify appropriate vendors or groups and initiate contact to introduce the Battle of Midway National Memorial and its opportunities for visitors.

Discussion: FWS will explore opportunities to bring historical tours, either through commercial tour groups or veterans organizations, to Midway Atoll in recognition of its status as the Battle of Midway National Memorial. All such tours will be reviewed and approved through the monument permitting process.

4.8 Manage for Other Recreational Use Opportunities

“We may allow other recreational uses that support or enhance one of the wildlife-dependent recreational uses or minimally conflict with any of the wildlife-dependent recreational uses when we determine they are both appropriate and compatible. We will allow uses that are either legally mandated or occur due to special circumstances.”

Fish and Wildlife Service Manual, 605 FW 1

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Objective 2.12 Allow residents and visitors to engage in other recreational uses on Midway that have been determined to be compatible.

Strategy 2.12.1 Allow residents and visitors to ride bicycles and jog for exercise on existing roads.

Strategy 2.12.2 Allow residents and visitors to play tennis and volleyball at designated facilities.

Strategy 2.12.3 Allow beach uses such as swimming and sunbathing for visitors and residents.

Strategy 2.12.4 Allow amateur radio use from Midway Atoll in accordance with stipulations that make the use compatible.

Discussion: The refuge manager has determined that several forms of nonwildlife-dependent recreation are compatible with the Refuge System mission and the refuge purposes, and therefore monument permits may include special conditions to allow them. These activities will take place only during daylight hours on Sand Island, and most are within developed areas. Bicycling and jogging will be restricted to hard surface roads, including along the edges of the runway, or along the cart path of the West Beach trail. Volleyball will only be allowed in the designated court area adjacent to the Captain Brooks facility. The tennis court is located at the airport hangar building.

Swimming and sunbathing may only occur on the open public beach along the northern shore of Sand Island during daylight hours (from one-half hour after sunrise to one-half hour before sunset) for visitor safety. Use of the “buddy system” will be required. During the mandatory orientation session, visitors will be advised of appropriate behavior if a monk seal or sea turtle approaches them in the water.

Because of potential bird strikes on amateur radio antennae, limitations will be placed on this use. FWS will work with amateur radio enthusiasts to implement a compatible program, as long as it does not displace wildlife-dependent visitors wanting to visit Midway Atoll. Placement of the outdoor antennae must be approved by the refuge manager.

4.9 Communicate Key Issues with Off-Site Audiences

“Effective outreach depends on open and continuing communication and collaboration between the refuge and its many publics. Effective outreach involves determining and understanding the issues, identifying audiences, listening to stakeholders, crafting messages, selecting the most effective delivery techniques, and evaluating effectiveness. If conducted successfully, the results we achieve will further refuge purpose(s) and the Refuge System mission.”

Fish and Wildlife Service Manual, 605 FW 1

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Objective 2.13 On a continuing basis, maintain outreach efforts to Midway’s diverse audiences to update them on the visitor program and wildlife-oriented news stories.

Strategy 2.13.1 On a continuing basis, update the monument and refuge websites with current information about the visitor program and wildlife viewing opportunities.

Strategy 2.13.2 On an as-needed basis, issue news releases and write articles for publication in newsletters, magazines, or other periodicals to keep key publics informed about the visitor program on Midway Atoll and wildlife issues throughout the monument.

Strategy 2.13.3 Continue to support reporters and documentary filmmakers in developing appropriate articles and films/television productions about the wildlife and history of Midway Atoll.

Discussion: Midway Atoll, the Battle of Midway National Memorial, and the new monument have been highly visible in the public eye for some time. The atoll has a broad following by government officials, Members of Congress, veterans' organizations, environmental organizations, media, former residents, past and potential visitors, World War II historians, and others who can be defined as "key publics." Rather than being "local community" members, Midway's supporters are spread across the Nation and around the world.

As individual issues arise regarding Midway, refuge staff on Midway and in Honolulu will work together with their counterparts in the monument to reach out to our publics with timely and accurate information. The Midway Atoll website (<http://www.fws.gov/midway>) and monument website (<http://www.hawaiiireef.noaa.gov>) will be continuously updated with news of Midway's wildlife, ongoing visitor activities, Battle of Midway-related events, and other monument-related topics. News releases will be issued to the media as appropriate, and information or articles for periodicals will be provided as requested.

Documentary filmmakers and videographers will be accommodated to the extent possible under monument permits so that we can reach the broadest audiences. Staffing levels may limit the number of filmmakers that can be accommodated.

Objective 2.14 By March 2008, evaluate the effectiveness of the visitor program marketing effort.

Strategy 2.14.1 Assess the need to contract with a marketing firm to promote the visitor program.

Discussion: Although FWS will promote the visitor program at Midway to the best of its ability, the specialized skills of a marketing company may be needed to develop sufficient demand to make the program financially self-sustaining. If the evaluation indicates additional work is needed, FWS would work closely with the marketing firm to ensure appropriate and accurate information is distributed to target audiences.

Goal 3. Honor, maintain, and interpret the unique historical resources of Midway Atoll, with emphasis on its status as the Battle of Midway National Memorial.

Objective 3.4 Working with partners, offer special events and programs on Midway and at other offsite locations that honor its history.

Strategy 3.4.1 Commemorate the 65th anniversary of the Battle of Midway with a special event on Midway Atoll on June 4, 2007.

Strategy 3.4.2 Work with outside entities to sponsor history-related programs and events on Midway.

Strategy 3.4.3 Seek other venues and opportunities to participate in special events that connect to Midway's history.

Discussion: Occasionally, special events will be offered at Midway, particularly in relation to its status as the Battle of Midway National Memorial. As staffing allows, we will also participate in other offsite events to bring the history of Midway to larger numbers of people.

On June 4, 2007, FWS will sponsor a special event to commemorate the 65th anniversary of the Battle of Midway, with support from the U.S. Navy and the International Midway Memorial Foundation. A charter aircraft will bring visitors to Midway on that date. A cruise ship also has scheduled a visit to Midway to participate in the event and tour the island.

FWS continues to believe the historic aspects of Midway Atoll are an important draw for visitors. In addition to organizations such as the International Midway Memorial Foundation, which is dedicated to honoring and preserving the memory and values of the Battle of Midway, many individuals who were stationed on Midway during the Cold War era have expressed an interest in returning to the atoll with their families.

4.10 Build Volunteer Programs and Partnerships with Midway Atoll Support Groups

“Volunteer and Friends organizations fortify refuge staffs with their gifts of time, skills, and energy. They are integral to the future of the Refuge System. Where appropriate, refuge staff will initiate and nurture relationships with volunteers and Friends organizations and will continually support, monitor, and evaluate these groups with the goal of fortifying important refuge activities. The National Wildlife Refuge System Volunteer and Community Partnership Enhancement Act of 1998 strengthens the Refuge System’s role in developing effective partnerships with various community groups. Whether through volunteers, Friends organizations, or other important partnerships in the community, refuge personnel will seek to make the refuge an active community member, giving rise to a stronger Refuge System.”

Fish and Wildlife Service Manual, 605 FW 1

Goal 1. Conserve and restore the natural diversity and abundance of native plants and animals, both terrestrial and marine, at Midway Atoll, emphasizing seabirds and shorebirds, threatened and endangered species, and coastal and marine communities.

Objective 1.1 Incorporate at least 75 percent of visitors staying 3 days or longer into the volunteer program for habitat restoration.

Strategy 1.1.1 Plan weekly invasive plant pulling parties to involve visitors in invasive weed control.

Strategy 1.1.2 Provide trash bags for visitors to take with them as they walk along the open beach so they can collect marine debris as they find it.

Strategy 1.1.3 Schedule monthly beach cleanups to pick up marine debris on closed beaches where monument staff have determined no monk seals or sea turtles are resting.

Discussion: Hand pulling of weeds is labor intensive, but it is also an effective tool in the continuing battle against invasive plant species. On most areas of Midway Atoll, the sandy substrate makes weed pulling relatively easy. Many visitors want to “give something back” to the wildlife during their time on the atoll, and this activity will help restore acres of habitat for nesting seabirds.

Beach cleanups are also a valuable tool, not only to protect wildlife species but also to educate visitors about the marine debris problem. By involving them in cleanup efforts, they are more likely to seek solutions and educate others about the problem. Refuge or other designated biologists would first ensure no resting monk seals or sea turtles are present in the stretch of beach to be cleaned. Areas to be cleaned would be rotated around the islands from one month to the next so that all beaches would be cleaned twice a year, if possible.

Objective 1.2 Provide 25 percent of visitors staying 3 days or longer opportunities to assist with wildlife population monitoring as volunteers.

Strategy 1.2.1 As refuge staff or long-term biological volunteers are available, offer interested visitors the opportunity to assist with seabird monitoring and banding activities.

Strategy 1.2.2 As refuge staff, U.S. Geological Survey-Biological Resources Discipline staff, or long-term biological volunteers are available, allow interested visitors the opportunity to assist with Laysan duck monitoring activities.

Discussion: Much like the habitat restoration work above, visitors gain a better appreciation for wildlife and their needs with direct involvement in a monitoring program. All such work would be under the direct supervision of a trained biologist to prevent impacts on the animals. This program will be limited in size and nature, and will be continually monitored by the refuge biologist and refuge manager to ensure it is useful to both the wildlife populations and the visitor.

Objective 1.3 Continue efforts to support the habitat restoration program sponsored by the Friends of Midway Atoll National Wildlife Refuge.

Strategy 1.3.1 Support the Friends of Midway Atoll invasive plant eradication and native plant restoration project on Midway that began in November.

Strategy 1.3.2 Support further grants to allow the Friends of Midway habitat restoration assistance project to continue in future years.

Discussion: The Friends of Midway Atoll National Wildlife Refuge has been awarded a \$25,000 grant from the National Fish and Wildlife Foundation's Pulling Together Initiative to support a collaborative effort between FWS, the Friends group, and the Biological Conservation Assistance Program to control *Verbesina encelioides* or golden crownbeard on Midway Atoll and re-establish native vegetation in important wildlife habitat. They brought two groups of volunteers (about 15 people in total) to Midway from December 2006 through March 2007. In May 2007, FWS will hire two year-round biological technicians to work on *Verbesina* control full time. During the Friends group volunteers' time on Midway Atoll, they are also participating in the development of educational materials about invasive species. After leaving Midway, volunteers will communicate their experiences and what they have learned about invasive species to their communities and beyond. If additional funding can be found in future years, this project will be repeated annually for at least 5-10 years or until golden crownbeard is manageable with refuge staff or eradicated.

Goal 2. Offer visitors, residents, and people afar opportunities to discover, enjoy, and appreciate the Northwestern Hawaiian Islands ecosystem through wildlife-dependent activities.

Objective 2.15. Seek long-term well qualified volunteers to assist monument staff with the operation of the visitor services program.

Discussion: As a complement to Midway Atoll's ongoing biological volunteer program, we will offer opportunities for qualified volunteers to assist with interpretive programs on Midway. Monument staff will explore the possibility of offering an intern program for college students or other similarly trained volunteers.

Goal 3. Honor, maintain, and interpret the unique historical resources of Midway Atoll, with emphasis on its status as the Battle of Midway National Memorial.

Objective 3.5 Seek grant funds to bring at least two groups of volunteers to Midway each year to work on historic restoration projects under the guidance of FWS' cultural resources staff and/or historic preservation specialists.

Strategy 3.5.1 In 2008, apply for a *Save America's Treasures* (SAT) grant for historic rehabilitation work on Midway Atoll.

Discussion: The SAT grant requires a 50/50 match, which FWS can accrue through volunteer service, direct contributions, or material donations. FWS received a SAT grant in 1999 that included termite control work, theater building window restoration, a condition assessment report for the interior of the theater and the Commercial Pacific Cable Company Station, reroofing of one cable building, restoration of an ARMCO hut, and collection of oral histories and memorabilia. A similar program could be reinitiated in the future.

Objective 3.6 Provide at least 15 percent of visitors staying 3 days or longer opportunities to assist with historic preservation tasks and activities.

Strategy 3.6.1 Much like the habitat restoration projects, volunteers will be offered opportunities to help accomplish historic preservation tasks that require few technical skills.

Discussion: FWS' Cultural Resources Team or Historic Preservation Specialist will update the list yearly or as needed to meet the refuge staff recommendations. Volunteers could greatly facilitate the maintenance of historic resources and give the public a greater appreciation and involvement with historic preservation.

4.11 Refuge Law Enforcement

At the present time, Midway Atoll does not have a law enforcement officer on staff, and a law enforcement zone officer in Honolulu or other refuge officer in Hawai'i provides support on an as-needed basis. For large events, such as the 65th anniversary of the Battle of Midway, the zone officer is assembling a group of officers from refuges throughout the Pacific Islands to provide law enforcement. As funding becomes available, a law enforcement position will be added to the Midway staff, perhaps as soon as Fiscal Year 2008. This position will also assist with law enforcement issues for the monument.

4.12 Concession Operations

Because this is an interim visitor program until the monument management plan is completed, we do not currently envision operating with a concessionaire under this visitor services plan. This small-scale program will allow visitors to return to Midway Atoll without further delay. Developing a solicitation for a concessionaire, seeking proposals, and evaluating them can take up to a year to complete.

The one exception to this could be a snorkeling/SCUBA diving concession, which was briefly discussed above in the wildlife observation standard. If interest is expressed in such a program, FWS and its co-trustees will evaluate the feasibility of a diving concession at Midway in 2008 or beyond.

As we develop the monument management plan, we will evaluate the possibility of operating the broader visitor program through a concession.

4.13 Fee Programs

Midway Atoll National Wildlife Refuge has charged access fees for its visitor program since 1997, when it received approval under the Recreation Fee Demonstration Program. That

program has now been renamed the Recreation Fee Program, established through the Federal Lands Recreation Enhancement Act of 2004 (Public Law 108-447). Almost all of the original fee program sites transitioned into the new program. The entrance fee for Midway Atoll National Wildlife Refuge is \$5.00 per person per day.

With no additional FWS funding available to support a visitor program, the refuge has been charged by FWS with developing a visitor program that is financially self-sustaining. To help us meet this goal, Congress has also given the refuge receipts authority, which allows the refuge to keep reasonable fees collected for services provided at Midway Atoll. These fees will be used to offset costs of implementing the visitor services program.

The following fee schedule reflects actual costs for visiting Midway. The entrance fee is collected under the authority of the Federal Lands Recreation Enhancement Act. Lodging and meal fees cover additional hotel and food services staffing, hotel supplies, and food costs. The visitor fee is collected under Midway’s receipt authority and contributes toward the cost of additional refuge staffing or extended on-island volunteers needed to work with visitors, as well as enhancing visitor facilities. The on-island transportation rental fees will enable repair and replacement of these items as necessary. Round-trip airfare is based on the actual cost of the current flight, divided by the number of passengers that can be accommodated on the aircraft. If that cost can be reduced in the future, the airfare will be reduced accordingly.

Table 4.13.1 Visitor Program Fee Schedule

Description	Fee
Entrance fee	\$5 per day
Round trip airfare	\$2,000 per person
Lodging	\$125 per night
Meals	\$45 per day
Visitor fee	\$55 per day
Bicycle rental (optional)	\$5 per day
Golf cart rental (optional)	\$25 per day
Snorkel rental (optional)	\$25 per week

In the *Midway Atoll National Wildlife Refuge Visitor Program Market Analysis and Feasibility Study*, Pandion Systems surveyed similar tourism providers to ascertain a typical cost range. Excluding transportation costs, typical costs ranged from \$200 to \$400 per day. Thus the Midway fees above are considered reasonable for the experience offered.

FWS recognizes the extremely high airfare costs associated with our current charter aircraft. As indicated in Objective 2.2 above, we will continue to seek a more cost-efficient means of transportation for our visitors.

4.14 Permitting

General Permit Requirements

As part of the newly established monument, activities within the Midway Atoll Special Management Area will be managed differently than at other national wildlife refuges. Typically, and with few exceptions, lands and waters within the Refuge System, including Midway Atoll National Wildlife Refuge, are closed to all public access and use unless FWS has specifically opened the use or use program on that refuge. The process of opening a refuge includes planning, appropriateness review and compatibility determinations, public review and comment, and NEPA compliance. Some uses, such as sport fishing or hunting, may also require the adoption of refuge-specific regulations under the Administrative Procedure Act involving public comment and publication in the Federal Register. Throughout the Refuge System, this process is used to open a refuge for general access, a particular use, or suite of uses. The refuge manager may also require a special use permit for specialized uses.

However, Proclamation 8031 alters the regulatory regime under which the Midway Atoll National Wildlife Refuge is operated as part of the monument. The proclamation established new requirements and methods of management throughout the Northwestern Hawaiian Islands. By overlaying the Midway Atoll and Hawaiian Islands National Wildlife Refuges, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, and State of Hawai'i marine refuge with the monument, the proclamation created a mechanism to ensure the co-trustees provide consistent, unified management while meeting their respective obligations under other applicable statutes and regulations. Specifically, the Midway National Wildlife Refuge is a location where the FWS conducts compatibility determinations in consultation with the co-trustees to aid the Secretaries of the Interior and Commerce, in their discretion, to issue a co-signed monument permit in one of six permit categories described in the proclamation, provided the Secretaries find the activity:

(i) is research designed to further understanding of monument resources and qualities; (ii) will further the educational value of the monument; (iii) will assist in the conservation and management of the monument; (iv) will allow Native Hawaiian practices; (v) will allow a special ocean use; or (vi) will allow recreational activities.

Furthermore, the Secretaries may not issue any permit unless they find:

- the activity can be conducted with adequate safeguards for the resources and ecological integrity of the monument;
- the activity will be conducted in a manner compatible⁴ with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance monument resources, qualities, and ecological integrity, and indirect, secondary, or cumulative effects of the activity, and the duration of such effects;
- there is no practicable alternative to conducting the activity within the monument;

⁴ Note the use of this word is not necessarily consistent with the same terminology from the Administration Act and FWS policy and regulations promulgated thereunder.

- the end value of the activity outweighs its adverse impacts on monument resources, qualities, and ecological integrity;
- the duration of the activity is no longer than necessary to achieve its stated purpose;
- the applicant is qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct;
- the applicant has adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct;
- the methods and procedures proposed by the applicant are appropriate to achieve the proposed activity's goals in relation to their impacts to monument resources, qualities, and ecological integrity;
- the applicant's vessel has been outfitted with a mobile transceiver unit approved by NOAA Office of Law Enforcement and complies with the requirements of this proclamation; and
- there are no other factors that would make the issuance of a permit for the activity inappropriate⁵.

The six categories of monument permits are:

1. Conservation and Management;
2. Native Hawaiian Practices;
3. Research;
4. Education;
5. Recreation; and,
6. Special Ocean Use.

Permits for Visitor Services at Midway Atoll

Permit applications for visitor services at Midway Atoll will be considered using the findings required by Proclamation 8031 as described above. As discussed in sections 4.5-4.10, 4.12, and 4.13, the plan anticipates recreational, ecotourism, volunteer, and educational activities, which would require monument permits in the recreation, special ocean use, conservation and management, or education categories.

Additional Requirements for Individual Recreational Uses

Recreational uses conducted by individuals at Midway Atoll, such as snorkeling from North Beach, must also comply with additional requirements. For the purposes of this chapter, the monument recreation permit requirement applies to recreational visitors and transients within the Midway Atoll Special Management Area. The Secretaries may not issue a recreation permit unless they find:

- the activity is for the purpose of recreation when defined as “an activity conducted for personal enjoyment that does not result in the extraction of monument resources and that does not involve a fee-for-service transaction”

⁵ Note the use of this word is not necessarily consistent with the same terminology from the Administration Act and FWS policy and regulations promulgated thereunder

- the activity is not associated with any for-hire operation; and
- the activity does not involve any extractive use.

Additional Requirements for Special Ocean Uses

Enterprises offering recreational use opportunities at Midway Atoll that generate revenue or profits for one or more of the persons associated with the activity or use (e.g., ecotourism, cruise ship companies, filmmakers, and potentially some education and research activities) must comply with not only the special ocean use permit requirements from the proclamation (see Appendix C), but also two additional requirements:

- the Secretaries find the activity furthers the conservation and management of the monument; and
- the refuge manager has found the use compatible with the purposes for which Midway Atoll National Wildlife Refuge was designated.

For the purposes of this chapter, a FWS special use permit as described in the Administration Act or regulation or associated policy at the Midway Atoll National Wildlife Refuge would instead be issued as a monument special ocean use permit.

Permits for Recreational⁶ Uses within Midway Atoll Special Management Area

The permitting regime for the visitor services program for compatible wildlife-dependent recreational uses within the Midway Atoll Special Management Area will be as follows. This plan makes a distinction between visitors (those who visit Midway Atoll specifically to participate in some form of recreational, historical or memorial-related activity covered under this plan) and transients (those who visit Midway Atoll to conduct work or other permitted activities but wish to recreate in their off-duty hours) and island residents. Island residents include FWS staff (employees and volunteers), NOAA staff, and various resident contractors living on Midway Atoll. Island residents' participation in recreational activities is part of the FWS morale, welfare, and recreation program. As such, it is covered under the FWS conservation and management monument permit and is not discussed further in this plan. However, all morale, welfare, and recreation activities must adhere to all other requirements and stipulations; it is only in the form of permitting that these activities may differ.

This visitor services plan and its associated findings of appropriateness, compatibility determinations, and environmental assessment evaluate broad categories of recreational uses which will generally be allowed or prohibited. Visitors and transients who desire to participate in any one of the uses approved within this plan may apply for a monument permit. However, in order to be user-friendly and minimize paperwork, these individuals will be provided a monument permit application as part of their registration forms instead of using the unified application process in advance. This paper form (see draft Visitor Registration and Report Form in Appendix J) will fulfill the needs of the unified monument permit application without placing an undue burden on the individuals or the monument staff who must review them. Monument

⁶ "Recreational" is used here as defined in the National Wildlife Refuge System Administration Act of 1966, as amended.

recreation permits are free under this interim visitor services plan, and valid for the remainder of the existing Federal fiscal year (October 1 – September 30 of the following calendar year).

The Midway Atoll National Wildlife Refuge manager is responsible for summarizing all individual monument permits issued as described above during a fiscal year for the FWS annual public use report and the monument permit tracking system.

The minimum information to be collected includes the full name and signature of applicant, home address and telephone number, types of approved uses in which permission is sought to engage, date(s) of participation, approximate time spent in each activity, etc.

Enterprises who wish to offer fee-for-service visitor opportunities in accordance with this plan must apply for a monument special ocean use permit using the unified monument permit application. These monument special ocean use permits include permission “to transit the monument as necessary to enter the Midway Atoll Special Management Area” and will be issued in accordance with all proclamation special ocean use findings, criteria, and requirements, such as being valid for no more than 5 years, requiring the provider to carry insurance or a bond, etc. These permits will carry a variable fee based on recovering the government’s cost in reviewing, issuing, and monitoring the permit under this interim visitor services plan. These permits may also include a per passenger fee, profit-sharing agreements, or use of government facilities.

Nothing in this plan is intended to limit the ability of the co-trustees to actively seek for-profit enterprises to enter into concession agreements or other legal relationships to provide specific for-fee services that help achieve refuge and monument purposes or goals and this plan.

Emergency Provisions

In addition to Proclamation 8031’s exemption to prohibitions for emergencies and law enforcement activities (“The prohibitions required by this proclamation shall not apply to activities necessary to respond to emergencies threatening life, property, or the environment, or to activities necessary for law enforcement purposes”), the Administration Act contains similar provisions which apply only to the national wildlife refuge portions of the monument. These provisions are:

- Notwithstanding any other provision of this Act, the Secretary [of the Interior] may temporarily suspend, allow, or initiate any activity in a refuge in the [National Wildlife Refuge] System if the Secretary [of the Interior] determines it is necessary to protect the health and safety of the public or any fish or wildlife population.
- These provisions include, but are not limited to, compatibility and permitting requirements. Recreational uses previously found to be appropriate and compatible may be suspended for the protection of human health, life, or safety; property; general environment; or fish or wildlife population.

The refuge manager’s execution of these provisions should be conducted in consultation with the monument co-trustees in advance when practicable, or as quickly as practicable once the immediate emergency or threat has passed.

4.15 Cooperating Association/Friends Groups

Midway Atoll National Wildlife Refuge is fortunate to have a dedicated support group in the form of the Friends of Midway Atoll National Wildlife Refuge. This nonprofit group was formed in 1999 and currently has more than 200 members from across the Nation. The Friends group was formed to:

- support Midway Atoll National Wildlife Refuge in its efforts to preserve, protect, and restore the biological diversity and historical resources of Midway Atoll, while providing opportunity for wildlife-dependent recreation, education, and scientific research.
- make available interpretive and educational books and pamphlets primarily through retail book sales outlets and free distribution to add to the visitor's understanding of the refuge's management problems and programs, the natural and historic resources of the area, the Refuge System, and FWS.
- contribute funds, goods, and services for FWS interpretation, recreation, and educational programs. Interpretive, recreational, and educational facilities may also be constructed, rehabilitated, or maintained with the use of Friends donations.

The Friends of Midway Atoll operate a gift store on Midway, making such refuge or monument-related items as books, posters, postcards, coffee mugs, tee shirts, and note cards available to visitors and residents. Donations from the Friends group are used to improve, maintain, and update Midway Atoll's interpretive, educational, recreational, or biological programs or facilities. In the past, the Friends have purchased bicycles for the refuge and financially supported the annual albatross count by volunteers. They sought grants to fund invasive species control work by volunteers that began in December 2006.

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Chapter 5 Implementing the Plan

5.1 Proposed Staffing

Current FWS staffing at Midway Atoll includes a refuge manager, wildlife biologist, equipment operator, and administrative officer (stationed in Honolulu). With the very limited visitor program currently operating at Midway Atoll, this staff has been able to provide occasional tours. When cruise ships are scheduled to stop at Midway, the cruise ship company covers the cost of bringing additional visitor services staff to the atoll from the main Hawaiian Islands.

This interim plan includes activities that can be implemented with funded staff, but longer term development of the visitor program will require additional staff. These could include a supervisory outdoor recreation planner, a refuge law enforcement officer, and two refuge interpretive rangers. Long-term qualified volunteers may also assist with staffing. In addition, our operations contractor will need to hire additional staff to support the visitor program. These positions will be phased in over the next 2 years as the program is implemented. Staffing may also be augmented by other monument staff from NOAA or the State of Hawai‘i should those resources become available.

5.2 Table of Projects

The table below summarizes the various strategies and projects outlined in this visitor services plan. Implementation of these projects is dependent upon the availability of funding.

Table 5.2.1 Summary of Strategies/Projects

Strategy	Project	Target Date
2.3.2	Working with NOAA, identify appropriate anchoring/mooring site for cruise ships	05/31/2007
3.4.1	Conduct special event to commemorate 65 th anniversary of the Battle of Midway	06/04/2007
2.1.1	Hire Refuge Ranger (Interpretation)	09/30/2007
2.5.4	Plant additional native vegetation as blind for Turtle Beach	10/15/2007
2.4.6	Work with contractor to implement visitor feedback form	10/31/2007
2.5.6	Rehabilitate refuge pontoon boat for short-term visitor program use	10/31/2007
2.5.5	Acquire new snorkel gear for visitor program	10/31/2007
2.5.1	Develop wildlife viewing calendar	10/31/2007
2.5.1	Develop/update bird and fish checklists	10/31/2007
3.1.2	Update self-guided Sand Island historical tour map/leaflet	10/31/2007
3.1.3	Install history-related interpretive panels	10/31/2007
2.5.2	Improve West Beach trail	10/31/2007
2.4.3	Complete reference notebooks for visitor rooms	11/01/2007
2.1.6	Hire Supervisory Visitor Services Manager	11/30/2007
3.1.4	Create temporary Battle of Midway National Memorial museum/library	12/31/2007
2.5.5	Work with NOAA to evaluate feasibility of dive program	12/31/2007
2.11.1	Develop and install exhibit at Mokuapapa Discovery Center	12/31/2007
2.2.2	Complete evaluation of existing island infrastructure to identify and seek solutions for shortcomings	01/15/2008

Strategy	Project	Target Date
2.2.1	Hire refuge law enforcement officer	01/31/2008
2.2.1	Hire second Refuge Ranger (Interpretation)	01/31/2008
2.4.5	Complete Midway Atoll sign plan	01/31/2008
2.5.3	Construct observational blind at water catchment	02/28/2008
2.7.1	Design standards-based workshop for teachers on Midway	03/01/2008
2.14.1	Assess need to seek marketing expertise	03/31/2008
3.5.1	Apply for Save America's Treasures grant	04/30/2008
2.10.2	Develop and install wildlife interpretive panels	05/31/2008
2.8.1	Seek partners interested in offering education programs on Midway	05/31/2008
2.10.3	Update wildlife-related visitor center exhibits	09/30/2008
2.5.6	Acquire new vessel to support visitor services program	10/31/2008
3.1.5	Develop and implement interpretive plan for Battle of Midway National Memorial museum/library	10/31/2008
2.2.3	Seek larger capacity aircraft to service Midway Atoll on a regular basis	11/30/2008
2.7.2	Implement teacher workshop on Midway	12/31/2008
2.8.3	Implement wildlife-dependent college educational classes or educational camps	12/31/2008
3.2.1	Develop Battle of Midway National Memorial interpretive exhibit in Pearl Harbor Historic District	12/31/2008
3.2.2	Develop Battle of Midway National Memorial interpretive exhibit in Washington, D.C.	12/31/2008
2.9.1	Initiate a distance learning program from Midway Atoll	Dependent upon availability of funding
2.5.7	Establish remote viewing cameras on sensitive species	Dependent upon availability of funding
	Rehabilitate historic housing to support visitor program ⁷	Dependent upon availability of funding
	Enhance Charlie Barracks ⁷	Dependent upon availability of funding
	Replace roof on Charlie Barracks ⁷	Dependent upon availability of funding

⁷ Although not mentioned in this interim visitor services plan, these activities will affect the visitor program and are noted here. Such activities are also included in Refuge Operations and Maintenance budget plans and will be addressed in the Midway Atoll Site Operations Plan.

5.3 Partnership Funding and Resources

Midway Atoll has several partnering opportunities with other government entities. Henderson Field, Sand Island's airport, is operated in partnership with the Department of Transportation's Federal Aviation Administration (FAA). Significant funding has been provided by FAA to not only operate the facility but to upgrade its facilities to meet their Part 139 standards. In addition to serving Midway Atoll needs, the airfield is operated as an emergency landing site for twin-engine aircraft flying across the Pacific Ocean.

As part of the monument, the refuge also partners with NOAA's National Marine Sanctuary Program, which shares jurisdiction for the monument with FWS. We are also committed to working with the State of Hawai'i on monument programs and issues. Opportunities to share resources and projects with these entities will bring enhanced efficiencies and effectiveness to all of our work in the Northwestern Hawaiian Islands.

NOAA's National Marine Fisheries Service also monitors Hawaiian monk seals on Midway. It also established a monk seal "captive care and release" program on Midway to enhance survivability rates for female monk seal pups as a cooperative conservation effort between NOAA, FWS, and nongovernmental organizations.

NOAA's Office of Law Enforcement provides significant support by enforcing monument regulations, including at Midway Atoll.

Another Department of the Interior agency, the U.S. Geological Survey, worked with refuge staff to bring the endangered Laysan duck to Midway, establishing only the second wild population of the species in the world. The National Park Service has provided funding for historic preservation on Midway through the "Save America's Treasures" program and has also provided interpreters to assist with guided tours when large groups visit Midway.

Together, FWS and its co-trustees coordinate with the U.S. Coast Guard as they exercise their law enforcement, search and rescue, and medical evacuation responsibilities in the central Pacific. The Coast Guard is working with FWS to store aircraft fuel on Midway for mission-related use, and occasionally crews will stay on Midway during extended operations.

The monument co-trustees also partner with universities to conduct research on Midway that will lead to better management of its resources and with documentary filmmakers and photographers who broaden public knowledge of Midway's wildlife and historic resources.

Other valued partners include our dedicated refuge volunteers, who generally give 3 months or more of their time working on Midway, and the Friends of Midway Atoll, our refuge support group.

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Appendices

- A Glossary of Terms
- B *Midway Atoll National Wildlife Refuge Visitor Program Market Analysis and Feasibility Study, Conclusions and Recommendations*
- C Presidential Proclamation 8031, Establishment of the Papahānaumokuākea Marine National Monument
- D Programmatic Agreement Among the Pacific Division, Naval Facilities Engineering Command, the Advisory Council on Historic Preservation, and the U.S. Fish and Wildlife Service
- E Midway Atoll National Wildlife Refuge Cruise Ship Requirements
- F Appropriateness Findings and Compatibility Determinations
 - F.1 Wildlife Observation and Photography
 - F.2 Environmental Education and Interpretation
 - F.3 Participatory Management/Research
 - F.4 Airport Operation (for Nonadministrative Purposes)
 - F.5 Nonwildlife-dependent Beach Use
 - F.6 Nonwildlife-related Outdoor Sports
 - F.7 Amateur Radio Use
- G Environmental Assessment for the Interim Visitor Services Program at Midway Atoll National Wildlife Refuge and the Battle of Midway National Memorial
- H ESA Section 7 Consultations
- I Disease and Introduced Species Prevention Protocol
- J Draft Visitor Registration and Report Form
- K List of Preparers
- L Summary of Public Comment and FWS Responses
- M Finding of No Significant Impact

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