

CHAPTER 3
Affected Environment
(SDEIS)



INTRODUCTION

This chapter describes the existing environment of Biscayne National Park and the surrounding region. It is focused on the park resources, uses, facilities, and socioeconomic characteristics that have the potential to be affected if any of the alternatives were implemented. Some features, such as endangered species, are discussed because they provide context or must be considered in an environmental impact statement.

Refer to pages 119–182 of the 2011 Draft GMP/EIS, found at: <http://parkplanning.nps.gov/documentsList.cfm?parkID=353&projectID=11168>, for full descriptions of the following topics:

- Geographic and biological descriptions of these areas:
 - The Bay
 - The Mangrove Shoreline
 - The Keys
- Natural Resources
 - Fisheries
 - Special Status Species (see table 7)
 - Submerged Aquatic Communities
 - Coral Reefs
 - Wetlands
 - Soundscapes
- Cultural Resources
 - Introduction
 - Types of Cultural Resources
 - Historic Overview
 - Archeological Resources
 - Cultural Landscapes
 - Historic Buildings and Structures
- Visitor Experience
 - Overview
 - Visitation Levels
 - Visitor Information
 - Interpretation and Education
 - Recreational Activities
- NPS Operations

- Administration
- Facilities
- Marine Operations
- Socioeconomic Environment
 - Introduction
 - Demographics
 - Local Economic Base

In consideration of the affected environment related to historic buildings and structures, one substantial change has occurred regarding Fowey Rocks Lighthouse since the 2011 Draft GMP/EIS was released. Readers are referred to the following text in place of the description in the 2011 Draft GMP/EIS.

FOWEY ROCKS LIGHTHOUSE

The Fowey Rocks Lighthouse is a pile reef light built in 1878 to supersede the Key Biscayne Lighthouse at Cape Florida. Located east of Soldier Key, it is one of six built on the Florida Coral Reef between 1852 and 1880. Its lamp was first lit on June 15, 1878, and it still functions as an aid to navigation. Like the Eiffel Tower in Paris, cast iron skeletal girders comprise its main octagonal construction. Known as the “Eye of Miami,” the lighthouse was named for the nearby reef, Fowey Rocks, which itself was named for the 1748 shipwreck (*HMS Fowey*) that rests nearby.

The 110-foot-tall dark brown tower of the lighthouse has an attached residence and enclosed stair cylinder. During the mid-1930s, the light was changed from incandescent oil vapor to electric power from generators, and a radio beacon was installed. The light was automated in 1972.

The history and architectural character of the lighthouse are an integral part of park history. The structure is listed in the National Register of Historic Places (NRHP) under

criteria A and C because of its association with the history of 19th- and 20th-century shipping and transportation off the Florida coast and its iron architecture that is typical of pile reef lights along the Florida coast (NPS 1999; USCG 2010).

The Fowey Rocks Lighthouse was designed and built by the United States Lighthouse Board (Department of the Treasury) and managed by the same agency until it was disestablished in favor of the United States Lighthouse Service (Department of Commerce) in 1910. The Lighthouse Service maintained the light until 1939 when it merged with the U.S. Coast Guard (USCG) (Armed Forces). In 2012, the U.S. Coast Guard was prepared to excess the lighthouse under the authority of the National Historic Lighthouse Preservation Act of 2000 (NHLPA) and make it available for auction or for transfer to a public or private entity prepared to preserve and interpret the lighthouse to the public. Because of the historic significance of the lighthouse and its location within the boundary of Biscayne National Park, the National Park Service chose to exercise its option under the National Historic Lighthouse Preservation Act and request direct transfer of the structure from the U.S. Coast Guard to the National Park Service. In 2012, the transfer was completed and the lighthouse became NPS property, although maintenance of the

functioning aid to navigation remains the responsibility of the U.S. Coast Guard. The National Park Service intends to maintain the lighthouse in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and has initial plans in place to complete repairs that will stabilize the structure, protect it from further deterioration, and potentially provide visitor access in the future. It is currently closed to visitation because of safety concerns.

LISTED SPECIES

Since the release of the 2011 DEIS, seven stony coral species that occur throughout the park are newly proposed for listing as federal protected species under the Endangered Species Act. Two previously listed federally threatened species are now proposed for listing as endangered.

In addition, the Miami blue butterfly, analyzed in the 2011 Draft GMP/EIS as a special status species, is now listed as endangered under the Endangered Species Act.

These species are indicated as proposed in table 7 and impacts to these species are analyzed in chapter 4.

TABLE 7. FEDERALLY LISTED AND CANDIDATE SPECIES KNOWN TO OCCUR IN BISCAYNE NATIONAL PARK

Common Name	Scientific Name	Federal Status / Notes ¹
Mammals		
West Indian manatee	<i>Trichechus manatus</i>	E, CH
Reptiles		
American crocodile	<i>Crocodylus acutus</i>	T, CH
American alligator	<i>Alligator mississippiensis</i>	T/SA
Green sea turtle ²	<i>Chelonia mydas</i>	E
Hawksbill sea turtle ²	<i>Eretmochelys imbricata</i>	E
Leatherback sea turtle ²	<i>Dermochelys coriacea</i>	E
Loggerhead sea turtle ²	<i>Caretta caretta</i>	T
Kemp's Ridley sea turtle ²	<i>Lepidochelys kempii</i>	E
Eastern indigo snake	<i>Drymarchon corais couperi</i>	T
Fishes		
Smalltooth sawfish ³	<i>Pristis pectinata</i>	E
Invertebrates		
Schaus swallowtail butterfly	<i>Heracles aristodemus ponceanus</i>	E
Miami blue butterfly	<i>Cyclargus thomasi bethunebakeri</i>	E
Staghorn coral ³	<i>Acropora cervicornis</i>	T/Proposed E, CH
Elkhorn coral ³	<i>Acropora palmata</i>	T/Proposed E, CH
Boulder star coral ³	<i>Montastraea annularis</i>	Proposed E
Mountainous star coral ³	<i>Montastraea faveolata</i>	Proposed E
Star coral ³	<i>Montastraea franksi</i>	Proposed E
Pillar coral ³	<i>Dendrogyra cylindrus</i>	Proposed E
Rough cactus coral ³	<i>Mycetophyllia ferox</i>	Proposed E
Elliptical star coral ³	<i>Dichocoenia stokesii</i>	Proposed T
Lamarck sheet coral ³	<i>Agaricia lamarcki</i>	Proposed T
Plants		
Florida semaphore cactus	<i>Consolea corallica</i>	C

¹E=Endangered; T=Threatened; C=Candidate; SA=Similarity of Appearance to a listed species, CH = Critical Habitat designated

²Sea turtles are jointly administered. NOAA Fisheries has the lead responsibility for the conservation and recovery of sea turtles in the marine environment, and U.S. Fish and Wildlife Service has the lead responsibility for the conservation and recovery of sea turtles on nesting beaches.

NOAA Fisheries has lead responsibility rather than the U.S. Fish and Wildlife Service.

NOTE: Per NPS policy, the park manages both federally listed and species of concern as if listed.

