

who have completed a comparable threat assessment, such as the threat assessment TSA conducts on commercial drivers with a hazardous materials endorsement, will pay the Reduced TWIC Fee. These applicants are not charged for the FBI Segment and pay a reduced fee for the Full Card Production/Security Threat Assessment Segment.

In the preamble of the final rule, we discussed the potential range of fees that would be charged for each Segment but did not publish specific fees for each Segment in the final rule text because the contract for enrollment and card production services was not finalized at that time. We explained that when the contract was executed and final fee amounts determined, we would publish a notice in the **Federal Register** announcing them. TSA has executed the contract for TWIC enrollment and card production and, with this notice, announces the final fee amounts. The Enrollment Segment fee is \$43.25, the Full Card Production/Security Threat Assessment Segment fee is \$72, and the FBI Segment fee is \$22. Therefore, the total Standard TWIC Fee is \$137.25 (\$43.25 + 72 + 22). For applicants who have completed a prior comparable threat assessment, there is no FBI Segment fee and the Card Production/Security Threat Assessment Segment fee is \$62. Therefore, the total Reduced TWIC Fee is \$105.25 (\$43.25 + 62).

As stated in the final rule, the fee for a replacement credential is \$36, but we do not believe that amount adequately funds TSA's card replacement costs. Our calculations indicate that \$60 is the correct amount for card replacement costs and invited comment on that issue.<sup>3</sup> The comment period for increasing the card replacement fee closed on February 26, 2007. We will examine all comments received and determine the final card replacement fee. We will amend the rule text to include all of the fees discussed in this notice and the card replacement fee, so that they will appear in the Code of Federal Regulations, at 49 CFR 1572, subpart F, Fees for Security Threat Assessments for Transportation Worker Identification Credential (TWIC).

Issued in Arlington, Virginia, on March 14, 2007.

**Kip Hawley,**

*Assistant Secretary, Transportation Security Administration.*

[FR Doc. 07-1328 Filed 3-19-07; 8:45 am]

**BILLING CODE 9110-05-P**

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

**RIN 1018-AI41**

#### **Endangered and Threatened Wildlife and Plants; Reclassification of the American Crocodile Distinct Population Segment in Florida From Endangered to Threatened**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), are reclassifying the American crocodile (*Crocodylus acutus*) distinct vertebrate population segment (DPS) in Florida from endangered to threatened, under the authority of the Endangered Species Act of 1973, as amended (Act). The endangered designation no longer correctly reflects the current status of this DPS due to a substantial improvement in the species' status. This action is based on a review of all available data, which indicate, for example, that since its listing in 1975, the American crocodile population in Florida has more than doubled and its distribution has expanded. Land acquisition has also provided protection for many important nesting areas. We have determined that the American crocodile in its range in Florida meets the criteria of a DPS as stated in our policy of February 17, 1996. With this rule, we are designating the American crocodile in Florida as a DPS, and this DPS will remain protected as a threatened species under the Act. The status of the American crocodile throughout the remainder of its range, as described in our December 18, 1979, final rule, will remain endangered.

**DATES:** This final rule is effective April 19, 2007.

**ADDRESSES:** Comments and materials received, as well as supporting documentation used in the preparation of this final rule, are available for public inspection, by appointment, during normal business hours at the South Florida Ecological Services Office, U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, FL 32960.

You may obtain copies of the final rule from the field office address above, by calling 772-562-3909, or from the Service's Division of Policy and Directives Management Web site at <http://www.fws.gov/policy/frsystem/default.cfm>.

#### **FOR FURTHER INFORMATION CONTACT:**

Cindy Schulz, at the South Florida Ecological Services Office (see **ADDRESSES**) (telephone 772-562-3909, extension 305; facsimile 772-562-4288).

#### **SUPPLEMENTARY INFORMATION:**

**Note:** Please refer to our March 24, 2005, proposed rule (70 FR 15052) for detailed information concerning the biology of the American crocodile.

#### **Background**

The American crocodile is a large, greenish-gray reptile. It is one of two native crocodilians (the other being the American alligator (*Alligator mississippiensis*)) that occur in the continental United States, and is limited in distribution in the United States to south Florida. At hatching, crocodiles are yellowish-tan to gray in color with vivid dark bands on the body and tail. As they grow older, their overall coloration becomes more pale and uniform, and the dark bands fade. All adult crocodiles have a hump in front of the eye, and tough, asymmetrical, armor-like scutes (scale-like plates) on their backs.

The American crocodile is distinguished from the American alligator by a relatively narrow, more pointed snout and by an indentation in the upper jaw that leaves the fourth tooth of the lower jaw exposed when the mouth is closed. Another distinguishing feature is that in alligators the two nostrils are clearly separated by a bony septum covered in skin while in crocodiles the nostrils lie touching, close together in a single depression (P. Ross, 2005). In Florida, the crocodile ranges in size from 26.0 centimeters (cm) (10.3 inches (in)) at hatching, to an upper length of 3.8 meters (m) (12.5 feet (ft)) (Moler 1991a, pp. 6-7). The largest specimens in Florida historically were reported to be up to 4.6 m (15.1 ft) in length (Service 1979, p. 3), and individuals as large as 6 to 7 m (19.7 to 23.0 ft) have been reported outside the United States (Thorbjarnarson 1989, p. 228).

The American crocodile occurs within the jurisdictional boundaries of many different countries in the western hemisphere, including Belize, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Mexico, Panama, Peru, United States (Florida), and Venezuela. The species occurs in coastal regions of the Atlantic and Pacific, including the Pacific coast of Mexico, Central America, and northern South America, as well as the Greater Antilles (with the exception of Puerto Rico).

<sup>3</sup> 72 FR 3507-3508.

(Thorbjarnarson 1989, p. 228; P. Ross, 2005). It reaches the northern extent of its range in south Florida (Kushlan and Mazzotti 1989a, p. 5; Thorbjarnarson 1989, p. 229).

The first documented occurrence of a crocodile in the United States was in Florida from a collection in the Miami River off Biscayne Bay in 1869, although crocodiles were earlier suspected to occur there (Kushlan and Mazzotti 1989a, p. 1). Within the United States, the historic core geographic range of crocodiles included Miami-Dade, Broward, and Monroe Counties, but reports indicated that they occupied areas as far north as Indian River County on the east coast of Florida (Kushlan and Mazzotti 1989a, pp. 1–2). Crocodiles were probably never common on the west coast of Florida, but credible reports suggest that they occurred at least periodically as far north as Sanibel Island and Sarasota County (Kushlan and Mazzotti 1989a, p. 2).

The primary historic nesting area in Florida was on the mainland shore of Florida and Biscayne Bays, including many of the small islands near shore, in what is today Everglades National Park (ENP) (Kushlan and Mazzotti 1989a, p. 2). Nesting was also historically well documented in the upper Keys from Key Largo south to Lower Matecumbe Key (Kushlan and Mazzotti 1989a, p. 2). Crocodiles have probably nested regularly on northern Key Largo since the 1920s, when the borrow pits (excavated areas where material has been dug for use as fill at another location) and canals were created in early and unsuccessful attempts to develop north Key Largo during the “boom” years preceding the 1929 depression (Ogden 1978, p. 185).

Today, the crocodile population in Florida has grown to an estimated 1,400 to 2,000 individuals, not including hatchlings (P. Moler, 2005a; F. Mazzotti, 2005). This estimate, developed by two established American crocodile experts, is based on a demographic characteristic, derived from both Nile crocodiles and American alligators, where breeding females make up 4 to 5 percent of the non-hatchling population and where approximately 75 percent of reproductively mature females breed and nest each year. This estimate exhibits a large confidence interval, because the researchers used a range of 70 to 80 crocodile nests in Florida in their calculations (P. Moler, 2005a; F. Mazzotti, 2005). We believe this is a reasonable but conservative estimate, because as described below, nesting has increased to between 91 and 94 documented nests in 2005.

The nesting range has also expanded on both the east and west coasts of the State, and crocodiles are frequently seen throughout most of their historical range. Nesting has extended back into Biscayne Bay on Florida’s east coast, and now commonly occurs at the Turkey Point Power Plant (TPPP) (Gaby *et al.* 1985, p. 197; Brandt *et al.* 1995, p. 29). Although crocodiles have been nesting on Marco Island since 1997, none of the nests have produced a viable clutch (S. Bertone, 2005). Based on peer review comments and because the relatedness and origin of these animals are unknown, we did not include the nesting attempts of these animals in estimating population size above (see “Peer Review Comments” below for further detail). Nesting has been increasing for several years (Brandt *et al.* 1995, p. 31; Mazzotti *et al.* 2000, p. 5; 2002, p. 14; Mazzotti and Cherkiss 2001, pp. 4–5), and during 2005, 91 to 94 crocodile nests were documented in south Florida (S. Klett, 2005; M. Cherkiss, 2005a; J. Wasilewski, 2005a). Surveyors detect approximately 80 to 90 percent of nests (F. Mazzotti, 2005; J. Wasilewski, 2006) and are generally unable to distinguish those nests that contain more than one clutch of eggs from different females without excavating the nests. In some instances, surveyors are able to determine that more than one female has laid eggs at a communal nest by visiting the nest over a series of days and observing hatching of separate nests (J. Wasilewski, 2005b). In instances where communal nests are not distinguishable, we believe this lends to a possible underestimation of nests or females, because on occasion two females lay eggs in the same nest.

The breeding range of the American crocodile is still restricted relative to its reported historic range (Kushlan and Mazzotti 1989a, p. 5), with most breeding occurring on the mainland shore of Florida Bay between Cape Sable and Key Largo (Mazzotti *et al.* 2002, pp. 9–14). In the recent past, it was thought that crocodiles no longer regularly occur in the Keys south of Key Largo (Jacobsen 1983, p. 13; P. Moler, 2002). However, confirmed sightings are occurring with increasing frequency in many of the lower Keys, and we believe that these observations may indicate that crocodiles are expanding their range back into the Keys. From 2003 to 2005, one individual has successfully nested on Lower Matecumbe (M. Cherkiss, 2005a). A crocodile was also observed as far south as Fort Jefferson in the Dry Tortugas in May 2002 (O. Bass, 2002); however, nesting has not been recorded at this location. In addition, a

crocodile was documented as far north as Indian River County in October 2004.

Females do not become reproductively active until they reach a total length of approximately 2.3 m (7.4 ft) (Mazzotti 1983, p. 30, 33), which generally corresponds to an age of 10 to 13 years (LeBuff 1957, p. 27; Moler 1991a, p. 7). Females construct earthen nests (mounds or holes) on elevated, well-drained sites near the water, such as ditch-banks and beaches. Nests have been reported in sand, marl, and organic peat soils, and the nests constructed in these different soils may be susceptible to different environmental conditions and different threats (Lutz and Dunbar-Cooper 1984, p. 153; Moler 1991b, p. 1, 3). Female crocodiles nest only one time per year and may not nest every year after they reach sexual maturity. Studies conducted in Florida found that they lay an average of 38 eggs (Kushlan and Mazzotti 1989b, p. 14), which hatch after an incubation period of approximately 90 days (Mazzotti 1989, p. 221). Flooding, over-drying, and raccoon predation all pose threats to nests and developing eggs (Mazzotti *et al.* 1988, pp. 68–69; Mazzotti 1999, pp. 557–558), and suitable nest sites that are protected from these threats may be limited. For the Florida population, the reported percentage of nests from which eggs successfully hatch in any 1 year ranges from 33 to 78 percent (Ogden 1978, p. 190; Kushlan and Mazzotti 1989b, p. 15; Moler 1991b, p. 4; Mazzotti *et al.* 2000, p. 4; Mazzotti and Cherkiss 2001, p. 4). Typically, a nest was considered successful if at least one hatched eggshell or hatchling crocodile was documented. However, Moler (1991b, p. 2) classified a nest as successful if “it appeared to have been opened by an adult crocodile. In all but one case, hatchling crocodiles were tagged near each successful nest.”

Unlike alligators, female crocodiles do not defend nest sites (Kushlan and Mazzotti 1989b, p. 14). However, females remain near their nest sites and usually excavate young from the nest after hatching (Kushlan and Mazzotti 1989b, p. 15). Kushlan (1988, p. 784) reported that females may be very sensitive to disturbance at the nest site; most females that were disturbed near their nests did not return to excavate their young after hatching. In Florida, female crocodiles show little parental care at hatching, and the young generally become independent shortly after hatching, although the duration or extent of maternal care can vary throughout the species’ range (J. Thorbjarnarson, 2005). Shortly after hatching, the hatchlings disperse from nest sites to nursery habitats that are

generally more sheltered, have lower salinity (1 to 20 parts per thousand (ppt)), shallower water (generally), and more vegetation cover. Hatchlings remain in these nursery habitats until they grow larger. Growth during the first year can be rapid, and crocodiles may double or triple in size (Moler 1991a, p. 6). Growth rates in hatchling crocodiles depend primarily on the availability of fresh water and food in the nursery habitat they occupy and may also be influenced by temperature (Mazzotti *et al.* 1986, pp. 195–196).

Land acquisition efforts by many agencies have provided protection for crocodiles and their habitat in south Florida. Approximately 95 percent of current nesting habitat for crocodiles in Florida is protected (F. Mazzotti, 2006). Crocodile Lake National Wildlife Refuge (CLNWR) was acquired in 1980 to provide over 2,205 ha (5,000 acres) of crocodile nesting and nursery habitat. In 1980, ENP established a crocodile sanctuary in northeastern Florida Bay. A total of 46 public properties (including CLNWR and ENP), owned and managed by Federal, State, or county governments, as well as three privately-owned properties (including TPPP), are managed at least partially or wholly for conservation purposes and contain potential crocodile habitat within the coastal mangrove communities in south Florida. For example, in the early 1980s, ENP plugged canals, which allowed crocodiles to begin nesting on the canal berms. In 1976, the C-107 canal was completed and provides habitat for crocodiles at TPPP.

#### Previous Federal Action

We proposed listing of the United States population of the American crocodile as endangered on April 21, 1975 (40 FR 17590). The proposed rule stated that only an estimated 10 to 20 breeding females remained in Florida, mostly concentrated in northern Florida Bay. The primary threats cited included development pressures, lack of adequate protection of crocodiles and their habitat, and the risk of extinction inherent to a small, isolated population. Comments on the proposed rule were received from 14 parties including representatives of the State of Florida, and all supported listing the American crocodile as endangered in Florida. We published a final rule on September 25, 1975, listing the United States population of the American crocodile as endangered (40 FR 44149).

On December 16, 1975, we published a proposal to designate critical habitat for the American crocodile (40 FR 58308). The proposed critical habitat included portions of Biscayne Bay south

of TPPP; northeast Florida Bay, including the Keys; and the mainland extending as far west as Flamingo. We published a final rule designating critical habitat on September 24, 1976 (41 FR 41914). The final rule expanded the critical habitat to include a portion of ENP, including northern Florida Bay to the west of the previously proposed area.

On April 6, 1977, we published a proposed rule to list as endangered all populations of the American crocodile with the exception of those in Florida, and all populations of the saltwater (estuarine) crocodile (*Crocodylus porosus*) due to their similarity in appearance to the American crocodile in Florida (42 FR 18287). We did not, however, publish a final rule for this action.

On February 5, 1979, we provided notice in the **Federal Register** that a status review was being conducted for the American crocodile (outside of Florida) and the saltwater crocodile. The notice specified that we had information to suggest that the American crocodile and the saltwater crocodile may have experienced population declines and extensive habitat loss during the previous decade (44 FR 7060).

On July 24, 1979, we published a proposed rule (44 FR 43442) that recommended listing the American and saltwater crocodiles as endangered throughout their ranges outside of Papua New Guinea, citing widespread loss of habitat and extensive poaching for their hides. The Florida population of the American crocodile was not included because it was previously listed as endangered.

On December 18, 1979, we published a final rule (44 FR 75074) that listed both the American crocodile (with the exception of the previously listed population in Florida) and the saltwater crocodile throughout its range (with the exception of the Papua New Guinea population) as endangered. This action provided protection to these crocodilians worldwide.

The first recovery plan for the American crocodile was approved February 12, 1979 (Service 1979). For a complete discussion, see “Recovery Accomplishments” below. On March 24, 2005, we published a proposed rule to reclassify the American crocodile from endangered to threatened in Florida, and to designate crocodiles in Florida as a distinct population segment.

#### Summary of Comments and Recommendations

In the March 24, 2005, proposed rule, we requested that all interested parties submit comments and information concerning the proposed reclassification of the American crocodile DPS in Florida (70 FR 15052). We also initiated, and requested information for incorporation into, a status review of the American crocodile in Florida. We contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. We provided notification of the publication of the proposed rule through e-mail, facsimile, telephone calls, letters, and news releases sent to the appropriate Federal, State, and local agencies, county governments, elected officials, media outlets, local jurisdictions, scientific organizations, interest groups, and other interested parties. We also posted the proposed rule on the Service’s South Florida Ecological Services Office Internet website following the rule’s publication.

We accepted public comments on the proposed rule for 60 days, ending May 23, 2005. By that date, we received 11 written comments (including 3 from peer reviewers). Of the comments received, five supported reclassification of the American crocodile DPS in Florida from endangered to threatened, and four opposed the reclassification. The proponents of the reclassification included the International Union for the Conservation of Nature and Natural Resources (IUCN)—Species Survival Commission’s Crocodile Specialist Group. Two of the commenters did not state support or opposition to the proposed downlisting. No one expressed comments that the species was recovered or recommended that it should be delisted, and we received no public hearing requests.

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited independent opinions from three knowledgeable individuals who have expertise with the species and the geographic region where the species occurs, and are familiar with conservation biology principles. We received comments from all three of the peer reviewers, which are included in the summary below and incorporated into the final rule. The reviewers were affiliated with the State of Florida, a Florida university, and a nonprofit organization. Reviewers provided additional factual information, as well as minor corrections and input on our interpretation of existing information. In general, all peer reviewers supported or

concurred with the downlisting of the American crocodile DPS in Florida to threatened status.

We reviewed all comments received from the peer reviewers and the public for substantive issues and new information regarding the proposed reclassification of the American crocodile DPS in Florida. Substantive comments received during the comment period have been addressed below and, where appropriate, incorporated directly into this final rule. The comments are grouped below according to peer review or public comments.

#### *Peer Review/State Comments*

(1) *Comment:* One reviewer expressed concern over current efforts to restore the hydrology in the Florida Everglades and the potential to increase the crocodile's exposure to contaminants. Monitoring the population for nonlethal and endocrine disruptive effects of contaminants was recommended.

*Response:* All properties being acquired for the Comprehensive Everglades Restoration Plan (CERP) are subject to a rigorous environmental site assessment for contaminants, using a protocol developed by the South Florida Water Management District (SFWMD) and the Service. Environmental Risk Assessments (ERAs) are also conducted if the Service deems it necessary. If any contaminant issues are identified, the Service works with the SFWMD to remediate the site. Before water is put on the site, the Service must be convinced that there are either no risks or insignificant risks to Service trust resources, including wildlife. If a contaminant problem is suspected, fish and wildlife are monitored at the project sites, where it would be easier to detect a problem than monitoring crocodiles located off-site. If a problem is found at these sites, then crocodiles may be added to the monitoring plan.

Contaminants were evaluated from eggs in a sampling of nests in the early 1970s through the early 1980s. Eggs were tested for organochlorines and heavy metals, and no exceptional levels were reported (Mazzotti and Cherkiss 2003, p. 18). The Service is not aware of any studies regarding endocrine-disrupting chemicals and their effects on crocodiles.

One contaminant that will be addressed by monitoring post-construction (rather than prospective ERAs) is mercury. CERP projects have the potential to increase the bioavailability of mercury. As fish-eaters, crocodiles could potentially be exposed to some mercury, although they are downstream from where mercury impacts would be greatest. The SFWMD

has a monitoring plan in place with performance criteria. If the criteria were exceeded, the SFWMD would have to correct the problem.

(2) *Comment:* The reviewer was concerned that specific information was not provided on road mortality, which this reviewer characterized as one of the sole remaining human influences of any significance on the crocodile population. The reviewer suggested that if mortality reaches levels of 5 to 15 percent in subadult and adult size classes, then population growth and stability may be affected.

*Response:* The Service, in cooperation with the Florida Fish and Wildlife Conservation Commission (FWC), documents all reported mortalities, including road mortalities. From 1999 to 2005, a total of 33 vehicle-related mortalities and 5 non-vehicle-related mortalities were documented with no consistent increase in mortalities occurring over the years. The largest number of reported mortalities we recorded was 11, in 2002 (nine vehicle-related and two non-vehicle-related). We recorded seven vehicle-related mortalities and one non-vehicle-related mortality in 2005 (B. Muiznieks, 2005). The maximum number of recorded deaths for any given year has never exceeded 11 mortalities.

For mortality to exceed the minimal threshold of 5 percent (P. Ross, 2005), the lowest point where recruitment and reproductive capacity could be compromised, more than 70 crocodile deaths would have to occur annually based on a population of 1,400 individuals, which we consider to be a conservative population estimate. The actual population could be as high as 2,000. Even with undocumented mortalities, we do not believe we are near this threshold of 70 even though we were conservative in all of our estimates. Despite all of the reported mortalities (not just vehicle collisions), total nesting effort has continued to increase in recent years.

The majority of the road mortalities have occurred on U.S. 1 or Card Sound Road between Florida City and Key Largo. Currently, the Florida Department of Transportation (FDOT) is modifying/widening U.S. Route 1 between Florida City and Key Largo. They will be installing 16, 6 foot by 10 foot, box culverts in various locations along the project corridor. The box culverts will be installed in areas where vehicle-related mortality of crocodiles has occurred. To prevent crocodiles from entering the roadway, FDOT will install a continuous 6-foot-high fence along the western roadway shoulder from approximately Jewfish Creek to

just south of the C-111 Canal. Along the eastern roadway shoulder, FDOT will install two, 100 foot long by 6-foot-high, wing fences in association with each box culvert. To further discourage crocodiles from entering the roadway, the roadside slopes in the vicinity of the box culverts and wildlife crossings will be as steep as practicable. The potential for vehicle-related crocodile mortality will also be reduced by the removal of the Lake Surprise Causeway and the construction of a new bridge over Lake Surprise. Moreover, signs will be posted on the new Lake Surprise and Jewfish Creek bridges alerting drivers to possibility of crocodiles crossing the roadway (J. Wrublik, 2005).

(3) *Comment:* One of the reviewers cautioned that the future health of the crocodile population in Florida Bay is dependent on the restoration of a more natural freshwater flow to the area. The seasonal timing of nesting is determined to a large degree by the availability of fresh water, which improves the survivorship of young crocodiles by reducing the salinity and increasing the availability of invertebrate prey. Hatching of the nests coincides with the beginning of the annual wet season, ensuring that hatchlings emerge from the nests during a period of high fresh water availability. A reduction of freshwater flow into the area could have negative impacts on the younger age classes of crocodiles in Florida Bay.

*Response:* Proposed restoration activities in and around Taylor Slough and the C-111 canal could increase the amount of fresh water entering the estuarine system, and extend the duration of freshwater flow into Florida Bay (U.S. Army Corps of Engineers (Corps) and SFWMD 1999, p. 4-28, K-135). Alternative D13R hydrologic plan simulation (Corps and SFWMD 1999, p. 1-20) predicts that the addition of fresh water could occur throughout many of the tributaries and small natural drainages along the shore of Florida Bay, instead of primarily from the mouth of the C-111 canal. Salinities in nesting areas, including Joe, Little Madeira, and Terrapin Bays, are projected to be lower for longer periods than they currently are within this area (based on alternative D13R hydrologic plan simulation) (Corps and SFWMD 1999, pp. D-24, D-A-81 to D-A-83, K-135). This restoration project should increase the amount and suitability of crocodile habitat in northern Florida Bay, and increase juvenile growth rates and survival (Mazzotti and Brandt 1995, p. 7).

While the overall volume of freshwater flow to Biscayne Bay will likely decrease as a result of CERP,

substantial tracts of degraded coastal wetlands in central and southern Biscayne Bay will realize improvements in crocodile habitat quality because the fresh water that is currently discharged into the bay through conveyance canals will be redirected into the natural creek systems. The goal is to reestablish flow through a series of natural creek systems along this part of the coastline. If successful, the recreation of these natural creeks systems should significantly improve crocodile habitat along this part of Biscayne Bay. Even if the volume discharged into the wetlands is less than what is currently flowing through the canals, this should improve habitat for crocodiles in this area. One of the performance measures for the Biscayne Bay Coastal Wetlands Project focuses on improvement of juvenile crocodile habitat.

(4) *Comment:* A proactive approach should be undertaken to develop a sound strategy for “Living with Crocodiles” in south Florida. The development of a strong public education program alerting people to the growing presence of crocodiles is recommended. Strategies for dealing with “problem” crocodiles are needed.

*Response:* While an informal education campaign is currently being implemented, we will continue to work with our State partners to develop a more formal, proactive education campaign for living with crocodiles. The FWC, with participation from the Service and the National Park Service, completed a human-crocodile interaction response plan in 2005, and through its implementation will continue gathering information on how crocodiles respond to translocation (FWC 2005, pp. 1–8). We agree that we need to conduct additional studies on habitat use and movement patterns with particular emphasis on translocation of individuals. We need to determine if translocating individuals meets the desired objectives. Some nuisance animals that have been translocated in the past have returned to their original capture location.

(5) *Comment:* One of the reviewers commented that no successful nesting has occurred on the southwest coast north of the Ten Thousand Islands. Although several nests have been produced annually in the Marco Island area and occasional nests have been encountered near the Imperial River and on Sanibel Island, these nests have failed for unknown reasons. Also, preliminary genetics analysis suggests that at least some of these animals may not be of Florida origin.

*Response:* Because of the uncertainty of the origin of these individuals and

because none of these nests have ever produced a viable clutch (S. Bertone, 2005), these crocodiles (i.e., their clutches) were not included in any population estimate calculations. At present, the origin of these animals is unknown. They may have originated from 1 to 2 clutches of Key Largo crocodiles that were released in the Naples area in the early 1970s, or from another release of crocodiles from Mexico, Jamaica, Panama, and Ecuador (Behler 1978, pp. 35–41; F. Mazzotti, 2005).

#### *Public Comments*

The following public comments address issues that were not raised by the peer reviewers. If an issue brought up by a peer reviewer was also raised by the public, it is discussed above in the peer review comment section rather than below.

(6) *Comment:* One commenter noted that the five factors under section 4(a)(1) of the Act that are considered when a species is listed must also be considered in this action to reclassify the American crocodile DPS in Florida. The commenter also noted that four of these five factors still affect the crocodile and therefore it must remain endangered.

*Response:* We define an endangered species as one that is in danger of extinction throughout all or a significant portion of its range (50 CFR 424.02(e)). We believe that this designation no longer correctly reflects the current status of this taxon in Florida due to a substantial improvement in the species' status. The population in Florida has increased from an estimated 10 to 20 breeding females in 1975 (40 FR 17590) to an estimated 1400–2000 total individuals (not including hatchlings) (P. Moler, 2005a; F. Mazzotti, 2005) producing 91 to 94 nests in 2005 (S. Klett, 2005; M. Cherkiss, 2005a; J. Wasilewski, 2005a), the species distribution has expanded within its historic range, and occupied and potential crocodile habitat are now under public ownership. However, we believe that the status of the species still meets the definition of threatened because the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. As discussed by the commenter, the crocodile is still affected by some threats, such as development within coastal areas. The five factors are discussed in depth in the section titled “Summary of Factors Affecting the Species.”

(7) *Comment:* One commenter stated that many of the actions in the recovery plan for the American crocodile have yet to be conducted.

*Response:* Recovery plans are not regulatory documents and are instead intended to provide guidance to the Service, States, and other partners on methods of minimizing threats to listed species and on criteria that may be used to determine when recovery is achieved. There are many paths to accomplishing recovery of a species, and recovery may be achieved without all criteria being fully met. For example, one or more criteria may have been exceeded while other criteria may not have been accomplished. In that instance, the Service may judge that over all criteria, the threats have been minimized sufficiently, and the species is robust enough, to reclassify the species from endangered to threatened or perhaps to delist the species. In other cases, recovery opportunities may have been recognized that were not known at the time the recovery plan was finalized. These opportunities may be used instead of methods identified in the recovery plan. Likewise, information on the species may be learned that was not known at the time the recovery plan was finalized. The new information may change the extent that criteria need to be met for recognizing recovery of the species. Overall, recovery of species is a dynamic process requiring adaptive management, and our assessment of recovery progress may, or may not, fully adhere to the guidance provided in a recovery plan depending on circumstances that may have changed since completion of the plan.

In this particular instance, we have met the reclassification criteria outlined in the South Florida Multi-Species Recovery Plan (MSRP). Recovery actions will continue for the crocodile under the MSRP, and some actions, such as “control human-induced crocodile mortality and disturbance,” remain to be completed.

(8) *Comment:* One commenter stated that the potential effects of sea-level rise should be of concern because of the vulnerability of natural nest sites to increases in water levels.

*Response:* The forecasted temperature increases and the associated sea-level rise over the next 100 years, based on climate models, have changed over time (Westbrook 1998, pp. 1–2). In the early 1980s, forecasters were predicting a 100-year sea-level rise of 7 to 7.9 m (23 to 26 feet) (Westbrook 1998, p. 1). By 1990, the predicted rise was less than 0.9 m (3 feet) (Westbrook 1998, p. 1). The current Intergovernmental Panel on Climate Change forecasts are for a rise of about 0.46 m (1.5 feet), and other forecasts are even lower (Westbrook 1998, p. 1). Recent reports of what many consider to be the best computer models

indicate a rise of about 3.1 degrees Fahrenheit with a sea level rise of approximately 20 cm (8 inches) (Westbrook 1998, p. 2). Depending upon the extent of sea-level rise, some nests on exposed shorelines and creek banks could potentially disappear.

Fortunately, crocodiles will readily use artificial substrates for nests, providing a management option to compensate for negative impacts to existing nesting areas if the need arises (Mazzotti 1999, p. 558). The Service is aware of this issue and will continue to monitor it, but at present we do not believe it represents a significant threat to the crocodile population.

(9) *Comment*: Three commenters expressed concern over poaching or illegal harvest.

*Response*: With this final rule, the American crocodile DPS in Florida will remain protected as threatened under the Act. Our regulations at 50 CFR 17.31, pursuant to section 4(d) of the Act, prohibit the take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct) of threatened species (without a special exemption).

Only two potential incidences of illegal poaching/taking have been documented in recent years. One occurred in 2002 at the Sexton Cove Estates in Key Largo. A more recent incident of an illegally killed crocodile occurred at Manatee Bay Marina in Miami-Dade County in 2005. This incident is still under law enforcement investigation.

(10) *Comment*: One commenter was concerned about depredation of nests by fire ants and raccoons.

*Response*: The Service recognizes both of these issues and realizes that they have the potential to affect nesting success, but depredation of nests by fire ants and raccoons has not been documented on a regular basis and could vary from year to year. For example, in 2005, 13 nests were depredated in ENP by raccoons (M. Cherkiss, 2005c). We will continue to monitor nesting sites and attempt to appropriately manage for this concern.

(11) *Comment*: One commenter asked if a long term assessment of pesticide and heavy metal contamination levels in crocodile eggs was being conducted.

*Response*: Recovery actions will continue to be funded according to resource availability and the priority given to the recovery action. Long-term assessment of pesticide and heavy metal contamination is a recommended recovery action in the MSRP; however, no long-term assessment is currently being conducted. Contaminants were

evaluated from eggs from a sampling of nests in the early 1970s through the early 1980s. Eggs were tested for organochlorines and heavy metals; however, no exceptional levels were reported (Mazzotti and Cherkiss 2003, p. 18).

(12) *Comment*: One commenter mentioned threats from introduced nonnative wildlife, particularly the Nile monitor (*Varanus niloticus*), a species known to be a predator on nests and young of the larger and more aggressively protective Nile crocodile (*Crocodilus niloticus*).

*Response*: No adverse impacts on the American crocodile by the Nile monitor have been documented. Although *Varanus* spp. have been observed in Miami-Dade County, there is no evidence of reproducing populations (Enge *et al.* 2004, p. 572). If Nile monitors are documented in the vicinity of crocodile nesting areas, appropriate measures will need to be taken to eradicate them from the area.

(13) *Comment*: With the rapidly growing human population in south Florida, anthropogenic threats to the crocodile will increase. Specific threats include vehicle collisions, boat propellers, and lead poisoning from fishing sinkers.

*Response*: The Service documents all reported crocodile mortalities. From 1999 to 2005, a total of 33 vehicle-related mortalities and 5 non-vehicle-related mortalities were documented, with no consistent increase in mortalities occurring over the years. See response to comment 2. Boat propellers and lead poisoning have accounted for only a small proportion of the documented mortalities. Given the annually increasing population size, we do not believe that the recruitment and reproductive capacity of the population is being compromised by these mortalities.

(14) *Comment*: One commenter was concerned that if the crocodile is reclassified to threatened there will not be as much pressure for continued and increased flows of fresh water to Florida and Biscayne Bays.

*Response*: See response to comment 3 above.

(15) *Comment*: One commenter was concerned about the loss of nesting habitat due to invasive species, particularly tide-dispersed species such as beach naupaka (*Scaevola taccada*) and Asiatic Colubrina (*Colubrina asiatica*).

*Response*: Although invasive plant species occur in crocodile nesting areas, invasive plant species have not been documented to negatively affect selection of nesting locations. Overall,

land managers are concerned about the invasion of nonnative plants, but more for the conversion of native to nonnative habitats than for the direct loss of crocodile nesting habitat.

Protection and enhancement of nesting habitat within each of the three primary crocodile nesting areas has been ongoing for many years. Land managers at the three primary nesting areas control exotic vegetation. Containment and elimination of invasive, exotic vegetation species is part of the ENP's Strategic Plan. CLNWR has an exotic plant control program and has received additional funding in recent years from the Florida Keys Invasive Exotics Task Force. For instance, the swamp fern (*Blechnum serrulatum*), a native of Florida but not of the Keys, is removed from the crocodile nesting berms at CLNWR. Chemical and mechanical removal of the swamp fern is conducted on an as-needed basis. As another example, TPPP has designated nesting "sanctuaries" where habitat management includes exotic vegetation control (primarily Australian pine and Brazilian pepper) and encouragement of the growth of low-maintenance native vegetation.

(16) *Comment*: Two commenters stated that the Service's previous recovery documents identified recovery goals of 60 breeding females and therefore reclassifying the crocodile because 61 nests were documented in 2003 is premature. One of these commenters also indicated that recovery criteria should be based on the present and future availability of suitable habitat.

*Response*: Crocodile nest numbers have been steadily increasing since 2001, and in the 2005 nesting year, nest numbers totaled 91 to 94 nests (S. Klett, 2005; M. Cherkiss, 2005a; J. Wasilewski, 2005a). The crocodile has been at or above the recovery criterion of 60 breeding females for 3 consecutive years. Further, the population in Florida has more than doubled, and the species distribution has expanded within its historic range. In addition, approximately 95 percent of nesting habitat for crocodiles in Florida is under public ownership or otherwise protected (F. Mazzotti, 2006). The recommendation that recovery criteria should be based on suitable habitat will be considered in the next revision of the recovery plan for this species.

(17) *Comment*: Another commenter recommended that we stop all surveys because they are harassment and constitute danger and injury for crocodiles.

*Response*: For the surveys to be conducted, a section 10(a)(1)(A) permit

is required under the Act. Before such a permit can be issued, all activities must be justified in relation to enhancement of survival and recovery, effects to the species, and qualifications of permittees. By definition, authorized activities should benefit species' recovery with minimal adverse effects by qualified permittees. None of the permitted activities, like surveys, are expected to result in death or injury to any individuals, and any injury or mortality will be incidental to other actions. By contrast, the information gained from permitted research is necessary for the conservation and management of the crocodile, which is needed to aid in the survival and recovery of the species in the wild.

(18) *Comment*: One commenter recommended that reclassification should not occur until after the CERP fresh water restoration projects are completed, and 10 percent of the documented hatchlings in 2003 survive to become subadults.

*Response*: We believe we have already met the reclassification criteria for the crocodile because the population in Florida has more than doubled, the species distribution has expanded within its historic range, and occupied and potential crocodile habitat is protected, as outlined in the "Summary of Factors Affecting the Species" section.

Attempts were made to mark crocodiles hatched in 2003, but all hatchlings may not have been marked because dispersal may have occurred prior to the researchers arriving at the nest. A crocodile is considered a subadult from 2 to 6 years of age and can start breeding at 7 years of age. CERP projects, such as the C-111 canal (which is anticipated to have construction completed in 2012), will be completed after the hatchlings marked in 2003 become subadults. Therefore, we will have information on survivorship obtained through monitoring of any hatchling crocodiles marked in 2003 before CERP projects like the C-111 canal are completed.

(19) *Comment*: One commenter noted that a population having 50 breeding females would be ranked as "critically endangered" under the IUCN criteria.

*Response*: The comments the Service received on the proposed rule from the Co-Regional Chairman of the North American Region IUCN SSC Crocodile Special Group Steering Committee stated that "it is the opinion of the CSG [Crocodile Specialist Group] members familiar with the species in Florida, that criteria for reclassification, as outlined in the reclassification proposal have been met." The Service has reviewed

the IUCN definition of critically endangered and because the crocodile population in Florida has more than doubled, the species distribution has expanded within its historic range, and occupied and potential habitat are now under public ownership, the Service does not believe that the crocodile population in Florida meets this definition.

(20) *Comment*: One commenter questioned the scientific veracity of data used in the proposed rule.

*Response*: The population and nesting data utilized by the Service were obtained from FWC crocodile experts, crocodile experts at State universities, and a Florida Power and Light (FPL) crocodile biologist. These individuals have been monitoring crocodiles and conducting research on the species for much of their careers. The population and nesting data we are relying on to make our decision in this instance were not published in a peer-reviewed journal; however, that is typical for most wildlife monitoring data. Our overall analyses and conclusions based on that data, combined with other information from peer-reviewed journal articles, were reviewed by three peer reviewers (see "Peer Review" comments above), all of whom concurred with proceeding with reclassification. The three peer reviewers agreed that the American crocodile DPS in Florida has significantly increased since listing and that the majority of the species' habitat is protected or under special management consideration. We have used the best available scientific data in determining to reclassify the American crocodile DPS in Florida from endangered to threatened.

#### **Distinct Vertebrate Population Segment Analysis**

The Act defines "species" to include " \* \* \* any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." On February 7, 1996, we published in the **Federal Register** our Policy Regarding the Recognition of Distinct Vertebrate Population Segments (DPS Policy) (61 FR 4722). For a population to be listed under the Act as a distinct vertebrate population segment, three elements are considered: (1) The discreteness of the population segment in relation to the remainder of the species to which it belongs; (2) the significance of the population segment to the species to which it belongs; (3) the population segment's conservation status in relation to the Act's standards for listing (i.e., is the population segment endangered or threatened?). The best available scientific information

supports recognition of the Florida population of the American crocodile as a distinct vertebrate population segment. We discuss the discreteness and significance of the DPS within this section; the remainder of the document discusses the status of the Florida DPS.

*Discreteness*: The DPS policy states that vertebrate populations may be considered discrete if they are markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors, and/or they are delimited by international governmental boundaries within which significant differences exist in control of exploitation, management of habitat, conservation status, or regulatory mechanisms.

The Florida population segment represents the northernmost extent of the American crocodile's range (Kushlan and Mazzotti 1989a, p. 5; Thorbjarnarson 1989, p. 229). It is spatially separated by approximately 90 miles of open ocean from the nearest adjacent American crocodile population in Cuba (Kushlan 1988, pp. 777-778). The Gulf Stream, or the Florida Current (the southernmost leg of the Gulf Stream), flows through this 90-mile (145-km) gap. This strong current makes it unlikely that crocodiles would regularly, or even occasionally, move between Florida and Cuba. Behaviorally, American crocodiles are not predisposed to travel across open ocean. They prefer calm waters with minimal wave action, and most frequently occur in sheltered, mangrove-lined estuaries (Mazzotti 1983, p. 45). No evidence is available to suggest that crocodiles have crossed the Florida Straits. There are no other American crocodile populations in close proximity to Florida (Richards 2003, p. 1) that would allow direct interaction of animals. The Florida population is effectively isolated from other crocodile populations and functions as a single demographic unit. Consequently, we conclude that the Florida population of the American crocodile is discrete from other crocodile populations as a consequence of physical and behavioral factors.

The genetic makeup of the Florida population of the American crocodile is recognizably distinct from populations in other geographic areas within its range (M. Forstner, 1998). Analysis of mitochondrial DNA suggests that the Florida population may be genetically more closely related to American crocodile populations in Central and South America than to those in Jamaica and Hispaniola (P. Moler, 2005b).



**Significance:** The DPS policy states that populations that are found to be discrete will then be examined for their biological or ecological significance. This consideration may include evidence that the loss of the population would create a significant gap in the range of the taxon. The Florida population of the American crocodile represents the northernmost portion of the species' range in the world (Kushlan and Mazzotti 1989a, p. 5; Thorbjarnarson 1989, p. 229) and the only population in the United States. Loss of this population would result in a significant reduction to the extent of the species' range and ecological variability. Maintaining this species throughout its historic and current range is important to ensure its genetic diversity and population viability. While it is difficult to determine to what degree the Florida population of the crocodile contributes substantially to the security of the species as a whole, the apparent isolation and evidence of genetic uniqueness (M. Forstner, 1998) suggest that the Florida population substantially contributes to the overall diversity within the species and is biologically or ecologically significant.

#### Recovery Accomplishments

The first recovery plan for the American crocodile was approved on February 12, 1979 (Service 1979, pp. 1–24). The recovery plan was revised on February 2, 1984 (Service 1984, pp. 1–37). The recovery plan for the American crocodile was revised again and included as part of the MSRP, which was approved in May 1999 (Service 1999, pp. 4–505 to 4–528); this version represents the current recovery plan for this species.

The MSRP identifies 10 primary recovery actions for the crocodile. Species-focused recovery actions include: (1) Conduct surveys to determine the current distribution and abundance of crocodiles; (2) protect and enhance existing colonies of crocodiles; (3) conduct research on the biology and life history of crocodiles; (4) monitor the south Florida crocodile population; and (5) inform the public about the recovery needs of crocodiles. Habitat-focused recovery actions include: (1) Protect nesting, basking, and nursery habitat of crocodiles in south Florida; (2) manage and restore suitable habitat of crocodiles; (3) conduct research on the habitat relationships of the crocodile; (4) continue to monitor crocodile habitat; and (5) increase public awareness of the habitat needs of crocodiles. All of these primary recovery actions have been initiated.

Nest surveys and subsequent hatchling surveys around nest sites are conducted in all areas where crocodiles are known to nest (Mazzotti *et al.* 2000, p. 3; Mazzotti and Cherkiss 2003, p. 24). Nest monitoring has been conducted nearly continuously at each of the three primary nesting areas (CLNWR, ENP, and TPPP) since 1978. In addition, detailed surveys and population monitoring have been conducted annually since 1996 throughout the crocodile's range in Florida. These surveys documented distribution, habitat use, population size, and age class distribution. During both surveys and nest monitoring, crocodiles of all age classes are captured and marked (Mazzotti and Cherkiss 2003, p. 24). These marked individuals provide information on survival, longevity, growth, and movements (Mazzotti and Cherkiss 2003, p. 24). All captured individuals are marked by clipping tail scutes in a prescribed manner so that each crocodile is given an individual identification number (Mazzotti and Cherkiss 2003, pp. 24–25). In addition, hatchlings at TPPP are marked with microchips placed under the skin.

Ecological studies have been initiated or continued in recent years. Laboratory (e.g., Dunson 1982, p. 375; Richards 2003, p. 29) and field (e.g., Mazzotti *et al.* 1986, p. 192) studies have continued on the effects of salinity on the growth rate and survival of crocodiles in the wild. Analyses of contaminants in crocodile eggs have been conducted in south Florida, and these analyses contribute to a record of contaminants data as far back as the 1970s (Hall *et al.* 1979, p. 90; Stoneburner and Kushlan 1984, p. 192).

Protection and enhancement of habitat within each of the three primary American crocodile nesting areas have been ongoing for many years. TPPP has implemented management actions to minimize disturbance to crocodiles and their nesting habitat. This includes the designation of nesting "sanctuaries" where access and maintenance activities are minimized. Habitat management in these areas includes exotic vegetation control and encouraging the growth of low-maintenance native vegetation. On CLNWR, management has focused on maintaining suitable nesting substrate. The organic soils that compose the nesting substrate have subsided over time, leading to the potential for increased risk of flooding or unfavorable microclimate. Nesting substrate has been augmented and encroaching vegetation in nesting areas has been removed. In ENP, management has included screening or barricades around active nest sites to prevent raccoon

depredation or human disturbance of nest sites (M. Cherkiss, 2005b).

Signs have been in place for several years along highways in the areas where most road kills have occurred to alert motorists to the presence of crocodiles. Fences were also erected along highways to prevent crocodiles from crossing, although several of these fences were later removed because they were ineffective when not properly maintained and may have contributed to additional road kills by trapping animals on the road. The remaining sections of fence are intended to funnel crocodiles to culverts where they can cross underneath roads without risk. Other efforts to reduce human-caused mortality include law enforcement actions and signs that inform the public about crocodiles in areas where crocodiles and people are likely to encounter each other, such as at fish cleaning stations along Biscayne Bay.

The FWC established a standard operating protocol in 1988 to manage crocodile-human interactions. This protocol established a standard procedure that included both public education to encourage tolerance of crocodiles and translocation of crocodiles in situations that may threaten the safety of either crocodiles or humans. While the protocol has led to the successful resolution of many complaints, many of the large crocodiles that have been translocated under the protocol have shown strong site fidelity and returned to the areas from which they were removed (Mazzotti and Cherkiss 2003, p. 18, table 5). Translocation appears to be effective with small crocodiles (generally less than 6 ft total length), but may not completely resolve human-crocodile interactions involving larger, older animals. Developing an effective, proactive protocol to address human-crocodile interactions is necessary to ensure the safety of crocodiles of all age groups near populated areas and to help maintain a positive public perception of crocodiles and their conservation. The FWC, with participation from the Service and National Park Service, completed a human-crocodile interaction response plan in 2005, and through its implementation will continue gathering information on how crocodiles respond to translocation.

#### Recovery Plan Provisions

The MSRP specifies a recovery objective of reclassifying the species to threatened, and describes recovery criteria as:

Previous recovery efforts identified the need for a minimum of 60 breeding females within the population before reclassification



could be considered. Since these criteria were developed, new information, based on consistent surveys, has indicated that the total number of nesting females has increased substantially over the last 20 years, from about 20 animals to about 50, and that nesting has remained stable at the major nesting areas. Based on the fact that the population appears stable, and that all of the threats as described in the original listing have been eliminated or reduced, reclassification of the crocodile will be possible, provided existing levels of protection continue to be afforded to crocodiles and their habitat, and that management efforts continue to maintain or enhance the amount and quality of available habitats necessary for all life stages.

Based on these criteria outlined in the MSRP, the crocodile can be reclassified as threatened in Florida at this time because the species and its habitat are protected and management efforts continue to maintain or enhance the amount and quality of available habitat. In addition, the nesting range has expanded on both the east and west coasts of the State; crocodiles are frequently documented throughout most of their historical range; nesting has returned to Biscayne Bay on Florida's east coast and now commonly occurs at TPPP; and nesting has been increasing for several years. Since 2001, when there were 50 known nests in Florida, the number of documented nests in Florida has continued to increase to between 91 and 94 in 2005, which satisfies the MSRP recommended minimum of having 60 breeding females before reclassification can be considered. The level of protection currently afforded to the species and its habitat, as well as the status of habitat management, are outlined in the "Summary of Factors Affecting the Species" section of this rule.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Act and regulations promulgated to implement the listing provisions of the Act (50 CFR part 424) set forth five criteria to be used in determining whether to add, reclassify, or remove species on the List of Endangered and Threatened Wildlife and Plants. These five factors and their application to the American crocodile are as follows:

##### *A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*

The original rule proposing listing (40 FR 17590, April 12, 1975) identified intensive human development and subsequent loss of habitat as a primary threat to crocodiles. Since listing, much of the nesting habitat has remained

intact and been afforded some form of protection. In addition, nesting activity that was concentrated in a small portion of the historic range in northeastern Florida Bay at the time of listing now occurs on the eastern, southern, and southwestern portions of the Florida peninsula. The primary nesting areas in northern Florida Bay that were active at the time of listing are protected and under the management of ENP, which has consistently supported the largest number of nests and the largest population of American crocodiles in Florida. The habitat in ENP is protected and maintained for crocodiles, and ongoing hydrologic restoration efforts may improve the quality of the habitat in ENP. Managers at ENP emphasize maintaining high quality natural habitat that includes crocodile nesting areas. Restoration of disturbed sites, hydrologic restoration, and removal of exotic vegetation like Australian pine (*Casuarina equisetifolia*) and Brazilian pepper (*Schinus terebinthifolius*) have improved nesting sites, nursery habitat, and other areas frequented by crocodiles.

Since the original listing, we have acquired and protected an important nesting area for crocodiles: CLNWR on Key Largo. The acquisition of CLNWR in 1980 provided protection for over 2,205 ha (5,000 acres) of crocodile nesting and nursery habitat. Habitat on CLNWR is protected and managed to support the local crocodile population. Almost all of the nesting on Key Largo occurs within CLNWR on artificial substrates composed of spoil taken from adjacent ditches that were dredged prior to acquisition of the property. These sites and the surrounding high quality nursery habitat consistently support five to eight nests each year. Nest success on CLNWR is strongly influenced by environmental factors, and typically only about half of the nests are successful (P. Moler, 2005b).

The nesting substrate on CLNWR has begun to settle and, in an effort to maintain nesting habitat, the substrate has been augmented at two sites to return it to its original elevation. Nesting has been documented at both of the elevated sites. In order for these areas to remain as nesting and nursery sites, they need to be cleared of invasive exotics. Encroachment of native and exotic plants along the levees needs to be controlled for these areas to remain suitable for nesting crocodiles and their young. In general, CLNWR is closed to public access; access is granted by special use permit only.

Both CLNWR and ENP have implemented programs that provide for maintenance of natural conditions that

will benefit the crocodile; ENP is in the process of preparing a General Management Plan that will formalize ongoing management actions and further protect crocodile habitat (S. Snow, 2006), and CLNWR has finalized their plan (Service 2006, pp. 1–127). A management plan as defined here and throughout this rule is not regulatory. These plans are developed by the property owners, and outline strategies and alternatives needed to conserve habitat and in some cases species on the property. Implementation of the plan is not mandatory. The plan should be updated on a regular basis so that managers and staff have the latest information and guidance for crocodile management.

In addition to the two primary, publicly-owned, crocodile nesting sites, additional nesting habitat has been created within the historic range on a site that may not have historically supported nesting. TPPP, owned and operated by FPL, contains an extensive network of cooling canals (built in 1974) that provides good crocodile habitat in Biscayne Bay. The site is approximately 1,214 ha (3,000 acres), and the majority is considered crocodile habitat. The number of nests at this site has risen from 1 to 2 per year between 1978 and 1981 (Gaby *et al.* 1985, p. 193), to 10 to 15 nests per year in the 1990s (Brandt *et al.* 1995, p. 31; Cherkiss 1999, p. 15; J. Wasilewski, 1999, 2005a), and supported 25 nests in 2005 (J. Wasilewski, 2005a). This property now supports the second largest breeding aggregation of crocodiles in Florida. TPPP has developed and implemented a management plan that specifically addresses crocodiles. TPPP is also closed to access other than personnel who work at the facility. FPL personnel maintain the canals and crocodile habitat through activities like exotic vegetation control and planting of low-maintenance native vegetation. FPL personnel also have supported an extensive crocodile monitoring program since 1976. Operation of the TPPP is licensed by the Nuclear Regulatory Commission through 2032, and FPL plans to continue crocodile management and monitoring while the plant is in operation (B. Bertleson, 2002).

FPL has also developed the Everglades Mitigation Bank along the western shore of Biscayne Bay immediately adjacent to the TPPP, which may help bolster the crocodile population in Biscayne Bay in coming years. This site is a wetlands mitigation bank, approximately 5,665 ha (14,000 acres) in size, of which about 5,050 ha (10,000 acres) is crocodile habitat. As of November 2005, crocodile nesting has

not been recorded on this site, but it is anticipated that nesting will occur in the near future (J. Wasilewski, 2005b). It is difficult to estimate in advance how many potential nesting sites will occur here, but we believe that it will be roughly equivalent to the TPPP site. This area will be protected in perpetuity and may help offset any loss of the artificial habitat at TPPP if that site is modified after the current operating license expires in 2032.

Even though nesting habitat at TPPP is created rather than natural, and all of the nesting at CLNWR and some areas of ENP is on artificial or created substrate, crocodiles have successfully moved into and used these habitats. We believe that it is important to continue to provide protection for the artificial habitats that crocodiles opportunistically use within their current range.

Outside of these areas that now comprise primary nesting habitat for crocodiles, land acquisition has provided protection to many other areas of potential habitat for crocodiles in Florida. A total of 44 public properties, owned and managed by Federal, State, or county governments, as well as two privately-owned properties managed at least partially or wholly for conservation purposes, contain potential habitat for crocodiles. Thirty-five of these conservation lands operate under management plans (e.g., Florida Department of Environmental Protection 2001, pp. 1–103). All of the plans prescribe management actions that will provide conditions beneficial for crocodiles and maintain or improve crocodile habitat and potential nesting sites. A common action called for in many of the plans is exotic vegetation control, and some plans (e.g., Rookery Bay National Estuarine Research Reserve, Collier-Seminole State Park) have goals to restore the natural freshwater flow patterns through hydrological restoration (e.g., Florida Department of Environmental Protection 2000, p. 4). These 44 public properties contain about 28,330 ha (70,000 acres) of potential crocodile habitat, whereas together ENP and CLNWR contain about 131,120 ha (324,000 acres). A total of approximately 166,000 ha (410,000 acres) of mangrove-dominated vegetation communities are present in south Florida on public and private lands (i.e., TPPP) that are managed at least partially for conservation purposes. Approximately 10,117 ha (25,000 acres) of mangrove habitat occurs in south Florida outside of conservation lands. Only a small fraction (<5 percent) of known nests

currently occur on unprotected sites (F. Mazzotti, 2006).

With the majority of crocodile nesting habitat under protection for conservation purposes, the total Florida crocodile population estimated between 1,400 and 2,000 individuals (not including hatchlings), the expansion of the nesting range on both the east and west coast of Florida, and with crocodiles seen throughout most of their historical range, we believe that the species now meets the definition of threatened. However, the rapid rate of development in coastal areas in south Florida will limit population future expansion through habitat loss, fragmentation, and interactions with humans (as discussed under Factor E) and therefore still poses a threat to full recovery of crocodiles in Florida because current populations are not sufficient to withstand habitat pressure. The current population size and distribution are not yet sufficient to consider the American crocodile in Florida free of threats, so additional habitat conservation will be necessary before the crocodile is ready for delisting. In addition, since most of the nesting occurs on artificial substrate that must be maintained through active management, recovery of the species will depend on continued maintenance of existing nesting areas and/or expansion of nesting into areas with natural substrates.

#### *B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

Prior to listing in 1975, crocodiles were frequently collected for museums and zoos, and at least occasionally shot for sport. Though it is difficult to estimate the magnitude of collection and sport hunting, several lines of evidence suggest that they may have significantly impacted the Florida population prior to listing. Moore (1953, p. 54) reported on a collector who advertised that he would pay for any live crocodiles anywhere in south Florida; these were added to his collection at a zoological garden. This collector claimed to have the largest collection of American crocodiles in the United States. Incidental and intentional killing by fishermen in Florida Bay was common (Moore 1953, pp. 55–56). At the time of listing in 1975, the final rule stated that poaching for skins and eggs still sometimes occurred and crocodiles were occasionally shot for sport from passing boats. Ogden (1978, p. 193) reported that 4 of the 10 human-caused crocodile deaths he was aware of between 1971 and 1975 resulted from shooting.

Since listing in 1975, few malicious killings have been recorded (Kushlan 1988, p. 784; Moler 1991a, pp. 3–4; P. Moler, 2006a). Kushlan (1988, p. 784) reported that only 3 of 13 human-caused mortalities between 1975 and 1984 resulted from shooting (approximately 23 percent). Moler (1991a, pp. 3–4) reported 27 human-caused mortalities from 1980 to 1991, of which only one shooting was reported (approximately 4 percent of human-caused mortalities). Since 1991, no crocodile mortalities resulting from shooting have been recorded. This declining trend in the number of recorded shootings suggests reduced risk to crocodiles from this threat. The few cases involving illegal take of crocodiles in south Florida have been publicized and may have deterred poaching and killing of crocodiles. Stories in newspapers and other popular press, as well as radio and television reports and documentaries, have aided in informing residents and visitors about the status and legal protection of American crocodiles.

CLNWR and TPPP both have restricted access and are in general closed to the public. ENP also restricts access to crocodile nesting areas during the breeding season. Adults and hatchlings produced in these areas are protected as a result of this restricted access.

We only receive a few requests for recovery permits during any given year for commercial or scientific purposes related to the crocodile in Florida. We have no reason to believe that trade or any other type of current or future utilization poses a risk to the American crocodile population in Florida, and therefore, the best available information on this factor contributes to reclassification to threatened status.

#### *C. Disease or Predation*

Depredation of crocodile nests by raccoons was cited as a threat in the original listing. Nest predation in ENP has been variable with an increasing trend that has not been tested for statistical significance (F. Mazzotti, 2004). For example, the majority of nests near Little Madeira Bay, within ENP, have been depredated by raccoons from year to year (Mazzotti and Cherkiss 2001, p. 4). While a few years ago most of the predation in ENP was on nests in artificial substrates, now most is on nests at beach sites, which are historically the most productive in ENP (F. Mazzotti, 2004). This is of concern as these are the only nests on natural habitat left in the United States. On average, 20.1 percent of nest failures resulted from raccoon depredation in all areas where nesting surveys were

conducted, including areas outside of ENP (Kushlan and Mazzotti 1989b, pp. 14–15; Mazzotti 1989, p. 222; Mazzotti *et al.* 2000, p. 4, 8; Mazzotti and Cherkiss 2001, p. 4, 7). Of the 56 to 59 nests at ENP in 2005, 13 (22 to 23 percent) were depredated by raccoons (M. Cherkiss, 2005c). Predation of nests by raccoons at TPPP and CLNWR has not been observed (F. Mazzotti, 2004).

Predation of nests by fire ants has occurred at ENP (one nest) and TPPP (several nests) (F. Mazzotti, 2004). No fire ant problems have been recorded at CLNWR.

While depredation of nests has not prevented an increase in the crocodile population to date, the increasing incidence of predation on natural beach nesting sites indicates that a threat remains.

There is no evidence of disease in the American crocodile population in Florida. Therefore, disease does not present a known threat to the crocodile in Florida.

#### *D. The Inadequacy Of Existing Regulatory Mechanisms*

The Act currently provides protection for the American crocodile as an endangered species, and these protections will not be significantly reduced by this reclassification to threatened status.

The State of Florida provides legal protection for the crocodile within its boundaries. In 1967, the State listed the crocodile as “protected.” This status was revised in 1972, when the crocodile was listed as “endangered” under Chapter 68A–27 of the Florida Wildlife Code. Chapter 68A–27.003 of the Florida Code, entitled “Designation of endangered species; prohibitions; permits” specifies that “no person shall pursue, molest, harm, harass, capture, possess, or sell” any of the endangered species that are listed. Violation of these prohibited acts can be considered a third degree felony, and is punishable by up to 5 years in prison and a \$10,000 fine (Florida Statute 372.0725). At this time, the FWC is not reviewing the crocodile’s status, but a change in Federal status is likely to initiate a State review (P. Moler, 2006b). The FWC currently operates under a cooperative agreement with us, under section 6 of the Act that formalizes a cooperative approach to the development and implementation of programs and projects for the conservation of threatened and endangered species.

On June 28, 1979, the American crocodile was added to Appendix II of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). This designation

reflected that the species, while not currently threatened with extinction, may become so without trade controls. On June 6, 1981, the crocodile was moved to Appendix I, indicating that it was considered to be in danger of extinction. Generally, no commercial trade is allowed for Appendix I species. Effective February 17, 2005, the Cuban population was downlisted to Appendix II. CITES is a treaty established to monitor international trade to prevent further decline in wild populations of plant and animal species. CITES permits may not be issued if import or export of the species may be detrimental to the species’ survival, or if specimens are not legally acquired. CITES does not regulate take or domestic trade, so it would not apply to take within Florida or the United States. Reclassification of the crocodile in Florida from endangered to threatened will not affect the species’ CITES status.

Several other Federal regulations may provide protection for crocodiles or their habitat. Section 404 of the Clean Water Act (33 U.S.C. 1344 *et seq.*) requires the issuance of a permit from the Corps for the discharge of any dredged or fill material into waters of the United States. The Corps may deny the issuance of a permit if the project might adversely affect wildlife and other natural resources. Also, sections 401 and 403 of the Rivers and Harbors Act (33 U.S.C. 304 *et seq.*) prohibit the construction of bridges, roads, dams, docks, weirs, or other features that would inhibit the flow of water within any navigable waterway. The Rivers and Harbors Act ensures the protection of estuarine waters from impoundment or development and indirectly protects natural flow patterns that maintain crocodile habitat. In addition, the Federal agencies responsible for ensuring compliance with the Clean Water Act and the Rivers and Harbors Act are required to consult with the Service if the issuance of a permit may affect listed species or their designated critical habitat, under section 7(a)(2) of the Act (see “Available Conservation Measures” section below).

The Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661 *et seq.*, as amended) requires equal consideration and coordination of wildlife conservation with other water resources development. This statute allows us and State fish and game agencies to review proposed actions and address ways to conserve wildlife and prevent loss of or damage to wildlife resources. The Fish and Wildlife Coordination Act allows us to help ensure that crocodiles and their habitat are not degraded by water development projects and allows us to

incorporate improvements to habitat whenever practicable.

Additionally, ENP has established regulations for general wildlife protection in units of the National Park System that prohibit the taking of wildlife; the feeding, touching, teasing, frightening, or intentional disturbing of wildlife nesting, breeding, or other activities; and possessing unlawfully taken wildlife or portions thereof (36 CFR 2.2). CLNWR and TPPP do not have these issues as they are both generally closed to the public. The Service believes that the regulatory mechanisms in place have helped bring the species to the point where reclassification to threatened is appropriate and their continued implementation will aid in the species’ recovery.

#### *E. Other Natural or Manmade Factors Affecting Its Continued Existence*

As explained in the original listing (40 FR 44149), crocodile nest sites were vulnerable to disturbance from increasing human activity because of the remoteness and difficulty of patrolling nesting areas. Human disturbance can cause crocodiles to abandon habitat or nest sites (Kushlan and Mazzotti 1989b, p. 14). Acquisition of nesting, juvenile, and nursery sites and other crocodile habitat by Federal, State, and local governments and implementation of management plans on these properties have resulted in crocodile conservation.

Of the three primary properties that support nesting (ENP, CLNWR, and TPPP), only CLNWR and TPPP have a management plan in place that specifically addresses the crocodile. This plan calls for activities such as road maintenance, vehicle access, and construction to be conducted in crocodile habitat only at certain times or locations based on the crocodile’s activity to reduce human disturbance. In addition, TPPP is closed to access other than personnel who work at the facility. ENP has established rules that provide protection from disturbance to benefit the crocodile, even without a species-specific management plan. At ENP, protection from disturbance is based on guidelines for general public use, such as instructions to stay on marked trails. CLNWR is generally closed to public access. Activities on or near the nesting sites are conducted during the non-breeding season to minimize crocodile disturbance. CLNWR has finalized a management plan that formalizes ongoing actions and future projects and more specifically addresses crocodiles (Service 2006, p. 38), and ENP is preparing their General Management Plan (S. Snow, 2006). In addition, ENP

is preparing a draft plan that will benefit the crocodile mostly by general prescribed changes in public use in portions of ENP.

In addition to these primary nesting sites, disturbance as a threat is also being addressed on approximately 44 public properties, managed as conservation lands by Federal, State, or county governments, that provide potential habitat for crocodiles in south Florida. In addition, two other privately-owned sites provide potential crocodile habitat that are maintained as conservation lands or that conduct natural lands management. Thirty-five of these properties operate under current management plans. Only two specifically mention management actions intended to benefit the crocodile. However, actions mentioned in the other plans that will reduce disturbance to crocodiles include restrictions on public use, implementation of boat speed limits (including areas of no-wake zones), and prohibition of wildlife harassment. Managing potential human-crocodile conflicts remains an important factor in providing adequate protection for and reducing disturbance to crocodiles.

As the crocodile population and the human population in south Florida have grown, the number of human-crocodile interactions has increased (T. Regan, 2006). The FWC's response plan to manage these interactions both encourages tolerance of crocodiles and translocates crocodiles in situations that may threaten the safety of either crocodiles or humans. While this has led to the successful resolution of many complaints, it is likely that additional crocodiles will need to be translocated as development in south Florida continues. These human interactions may limit dispersal of individuals within the species' historic range. In addition, large, mature individuals that cannot be effectively translocated may have to be removed from the wild. The FWC, with participation from the Service and National Park Service, will continue to address this threat.

The original proposed listing cites the risk of a hurricane or another natural disaster as a serious threat to the crocodile (40 FR 17590, April 21, 1975). Hurricanes and freezing temperatures may kill some adults (Moler 1991a, p. 4), but their susceptibility to mortality from extreme weather is poorly documented. These events still have the potential to threaten the historically restricted nesting distribution of the American crocodile. However, increased nesting activity in western Florida Bay, Cape Sable, and TPPP has broadened the nesting range. Nesting now occurs

on the eastern, southern, and southwestern portions of the Florida peninsula. While a single storm could still easily affect all portions of the population, it is now less likely that the impact to all population segments would be severe.

The original listing rule cited the restriction of the flow of fresh water to the Everglades because of increasing human development as a potential threat to the American crocodile. Ongoing efforts to restore the Everglades ecosystem and restore a more natural hydropattern to south Florida will affect the amount of fresh water entering the estuarine systems. Because growth rates of hatchling crocodiles are closely tied to the salinity in the estuaries (Mazzotti and Cherkiss 2003, p. 13), restoration efforts will affect both quality and availability of suitable nursery habitat. Decreased salinity should increase growth rates and survival among hatchling crocodiles. Proposed restoration activities in and around Taylor Slough and the C-111 canal, as discussed in the Central and South Florida Project Comprehensive Review Study (Corps and SFWMD 1999, p. 4-28, K-135), could increase the amount of fresh water entering the estuarine system and extend the duration of freshwater flow into Florida Bay. Alternative D13R hydrologic plan simulation (Corps and SFWMD 1999, p. 1-20) predicts that the addition of fresh water could occur throughout many of the tributaries and small natural drainages along the shore of Florida Bay, instead of primarily from the mouth of the C-111 canal. Salinities in nesting areas, including Joe, Little Madeira, and Terrapin Bays, are projected to be lower for longer periods than they currently are within this area (based on alternative D13R hydrologic plan simulation) (Corps and SFWMD 1999, pp. D-24, D-A-81 to D-A-83, K-135). This restoration project should increase the amount and suitability of crocodile habitat in northern Florida Bay, and increase juvenile growth rates and survival (Mazzotti and Brandt 1995, p. 7).

Hydrological restoration may also affect crocodile habitat in Biscayne Bay. Reductions in freshwater discharge will occur in the Miami River, Snake Creek, north and central Biscayne Bay, and Barnes Sound (extreme southern end of the Biscayne Bay system) (P. Pitts, Service, 2005). These projected changes will likely reduce habitat quality in the more urbanized northern half of Biscayne Bay. Freshwater flows to south Biscayne Bay are predicted to increase with CERP, thus increasing habitat quality in this area. More importantly, a

primary objective of CERP's Biscayne Bay Coastal Wetlands and C-111 Spreader Canal projects is to rehydrate degraded coastal wetlands in south Biscayne Bay and Barnes Sound by redirecting fresh water from conveyance canals to wetlands. This will have the effect of lowering salinities in the wetlands, thus increasing habitat quality for crocodiles, particularly juveniles. Currently, the potential area affected by these projects in the Biscayne Bay system is on the order of 24,000 ha (60,000 acres). Considering the bay as a whole, Everglades restoration should increase the amount and suitability of crocodile habitat and benefit the species.

Mortality of crocodiles on south Florida roads has consistently been the primary source of adult mortality, and this trend has not changed (Mazzotti and Cherkiss 2003, p. 22, table 6). Road kills have occurred throughout the crocodile's range in Florida, but most have occurred on Key Largo and around Florida Bay, especially around Card and Barnes Sounds (Mazzotti and Cherkiss 2003, p. 22, table 6). Signs cautioning drivers of the risk of colliding with crocodiles have been posted along the major highways throughout crocodile habitat. As discussed above, measures identified to help reduce road kill mortality include installing fencing in appropriate places to prevent crocodiles from entering roadways and installation of box culverts under roadways so that crocodiles can safely cross roads. Many of the recorded crocodile road kills are adults, which may result from the increased likelihood of large individuals being reported. We cannot accurately estimate the proportion of road-killed crocodiles that are reported. Therefore, it is difficult to accurately assess the magnitude of this threat or its effect on the population.

The success of crocodile nesting is largely dependent on the maintenance of suitable egg cavity moisture throughout incubation, and flooding may also affect nest success. On Key Largo and other islands, failure of nests is typically attributed to desiccation due to low rainfall (Moler 1991b, p. 5). Data compiled by Mazzotti and Cherkiss (2003, p. 13, figure 5) document an average of 48 percent nest success from 1978 through 1999 (excluding 1991 and 1992 due to lack of data) at CLNWR on north Key Largo. Nest failures on the mainland may be associated with flooding or desiccation (Mazzotti *et al.* 1988, pp. 68-69; Mazzotti 1989, pp. 224-225). In certain areas, flooding and over-drying affect nest success. Data compiled by Mazzotti and Cherkiss (2003, p. 13, table 5, 7) document an

average of 64.4 percent nest success from 1970 through 1999 at ENP (excluding 1975, 1976, 1983, 1984, and 1996 due to lack of data) and 98 percent nest success from 1978 through 1999 at TPPP (excluding 1980 and 1982 due to lack of data). However, overall, the crocodile population in Florida has more than doubled its size since it was listed to an estimated 1,400 to 2,000 individuals and appears to be compensating for these threats.

The final listing rule did not reference contaminants as a potential threat. Several studies have shown that contaminants occur in crocodiles and their eggs in south Florida (Hall *et al.* 1979, p. 88; Stoneburner and Kushlan 1984, pp. 192–193), including organochlorine pesticides (DDT, DDE, and dieldrin, among others), and PCBs, however, no exceptional levels have been reported (Mazzotti and Cherkiss 2003, p. 18). Acute exposure to high levels of these contaminants may result in death, while prolonged exposure to lower concentrations may cause liver damage, reproductive failure, behavioral abnormalities, or deformities. Little information is known at this time about what constitutes dangerous levels of these contaminants in crocodiles or other crocodilians. Therefore, at this time we have no data to support a determination that contaminants pose a threat to further crocodile recovery.

Protection and management of the three primary nesting areas and other potential habitat along with the anticipated outcome of Everglades restoration efforts and a reduction in threat from hurricanes and other natural disasters contributed to our determination to reclassify the American crocodile in Florida. However, human-crocodile interactions, vehicle strikes, and environmental contaminants remain as threats to the crocodile.

## Conclusion

We have carefully assessed the best scientific and commercial data available regarding the past, present, and future threats faced by the crocodile in Florida in preparing this final rule. Based on this evaluation, we have determined that the crocodile in its range in Florida meets the criteria of a DPS as stated in our policy of February 17, 1996 (61 FR 4722). In regard to its status, we designate the American crocodile in Florida as a DPS, and reclassify it from an endangered species to a threatened species. The recovery plan for the crocodile states that, “Based on the fact that the population appears stable, and that all of the threats as described in the original listing have been eliminated or

reduced, reclassification of the crocodile will be possible, provided existing levels of protection continue to be afforded to crocodiles and their habitat, and that management efforts continue to maintain or enhance the amount and quality of available habitats necessary for all life stages.” We believe, based on our analysis of the 5 listing factors under the Act, that the Florida DPS of the American crocodile is no longer in danger of extinction, however, the crocodile continues to require protection under the Act as a threatened species because population size and distribution is insufficient to consider crocodiles free from threats. The following are still needed to avoid the threat of extinction:

(1) Crocodile habitat in Florida continues to need maintenance and enhancement to provide protection for all life stages of the existing crocodile population and to ensure that available habitat can support population growth and expansion; and

(2) Further acquisition of nesting and nursery sites and additional crocodile habitat by Federal, State, and local governments and implementation of management on these publicly-owned properties are necessary to ensure protection to crocodiles and their nests and enable expansion of populations size and distribution.

## Available Conservation Measures

Two of the three primary nesting areas for crocodiles in Florida occur on Federal conservation lands and are consequently afforded protection from development and large-scale habitat disturbance. Crocodiles also occur on a variety of State-owned properties, and existing State and Federal regulations provide protection on these sites. The fact that crocodile habitat is primarily wetlands also assures the opportunity for consultation on most projects that occur in crocodile habitat under the authorities described below.

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing increases public awareness of threats to the crocodile, and promotes conservation actions by Federal, State, and local agencies; private organizations; and individuals. The Act provides for possible land acquisition and cooperation with the State, and requires that recovery actions be carried out. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to the crocodile and its designated critical habitat (41 FR 41914, September 24, 1976). Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. If a Federal action may affect the crocodile or its designated critical habitat, the responsible Federal agency must consult with the Service to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of the crocodile or result in the destruction or adverse modification of its critical habitat. Federal agency actions that may require consultation include the Corps’ involvement in projects such as residential development that requires dredge/fill permits, the construction of roads and bridges, and dredging projects. Power plant development and operation under license from the Federal Energy Regulatory Commission/Nuclear Regulatory Commission may also require consultation with respect to licensing and re-licensing. Road construction activities funded or authorized by the Federal Highway Administration may require consultation.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all threatened wildlife. The prohibitions, codified at 50 CFR 17.21 and 50 CFR 17.31, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, and pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to Service agents and agents of State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving threatened wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.32. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in the course of otherwise lawful activities. For threatened species, permits also are available for zoological exhibition, educational purposes, or special purposes consistent with the purposes of the Act.

Questions regarding whether specific activities will constitute a violation of section 9 should be directed to Cindy Schulz of the South Florida Ecological Services Office (see **ADDRESSES** section). Requests for copies of the regulations regarding listed species and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Ecological Services Division, 1875 Century Boulevard, Suite 200, Atlanta, Georgia 30345 (telephone 404/679-4176, facsimile 404/679-7081).

This final rule formally recognizes that the American crocodile DPS in Florida is no longer in danger of extinction throughout all or a significant portion of its range. This reclassification does not significantly change the protection afforded this species under the Act. Anyone taking, attempting to take, or otherwise possessing an American crocodile, or parts thereof, in violation of section 9 is subject to a penalty under section 11 of the Act. Pursuant to section 7 of the Act, all Federal agencies must ensure that any actions they authorize, fund or carry out are not likely to jeopardize the continued existence of the American crocodile or destroy or adversely modify its critical habitat.

Recovery actions directed at the crocodile will continue to be implemented as outlined in the MSRP, including: (1) Determining the current distribution and abundance; (2) protecting and enhancing existing crocodile colonies; (3) conducting research on biology and life history; (4) monitoring the population; and (5) informing the public about recovery needs of crocodiles. The MSRP also outlines restoration activities that should be undertaken to adequately restore the mangrove community occupied by the crocodile. These actions include: (1) Protecting nesting, basking, and nursery habitat; (2) managing and restoring suitable habitat; (3) conducting research on the habitat relationships of the crocodile; (4)

continuing to monitor habitat; and (5) increasing public awareness of habitat needs of the crocodile.

This final rule does not constitute an irreversible commitment on our part. Reclassification of the American crocodile in Florida to endangered status would be investigated if changes occur in management, population status, habitat, or other actions that detrimentally affect the population or increase threats to its survival.

#### Required Determinations

##### *Paperwork Reduction Act of 1995*

Office of Management and Budget (OMB) regulations at 5 CFR part 1320, which implement provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), require that Federal agencies obtain approval from OMB before collecting information from the public. This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

##### *National Environmental Policy Act*

We have determined that we do not need to prepare an Environmental Assessment or Environmental Impact Statement, as defined in the National Environmental Policy Act of 1969, in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

##### *Energy Supply, Distribution or Use (E.O. 13211)*

On May 18, 2001, the President issued Executive Order 13211 on regulations

that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rule is not expected to significantly affect energy supplies, distribution, and use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

#### References Cited

A complete list of references cited is available upon request from the South Florida Ecological Services Office (see **ADDRESSES** section).

#### Author

The primary author of this document is the South Florida Ecological Services Office (see **ADDRESSES** section).

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

#### Regulation Promulgation

■ For the reasons given in the preamble, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

#### PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

##### § 17.11 [Amended]

■ 2. Amend § 17.11(h) by revising the entry in the List of Endangered and Threatened Wildlife for “Crocodile, American” under REPTILES to read as follows:

##### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

SPECIES		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
REPTILES							
*	*	*	*	*	*		*
Crocodile, American	<i>Crocodylus acutus</i> ..	U.S.A. (FL), Mexico, Caribbean, Central and South America.	Entire, except in U.S.A. (FL).	E	87	NA	NA
Do .....	do .....	do .....	U.S.A. (FL) .....	T	10, __	17.95(c)	NA
*	*	*	*	*	*		*

Dated: February 22, 2007.

**Kenneth Stansell,**

*Acting Director, Fish and Wildlife Service.*

[FR Doc. E7-5037 Filed 3-19-07; 8:45 am]

BILLING CODE 4310-55-P

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 229

[Docket No. 030221039-7060-44; I.D. 031307D]

#### Taking of Marine Mammals Incidental to Commercial Fishing Operations; Atlantic Large Whale Take Reduction Plan

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Temporary rule.

**SUMMARY:** The Assistant Administrator for Fisheries (AA), NOAA, announces temporary restrictions consistent with the requirements of the Atlantic Large Whale Take Reduction Plan's (ALWTRP) implementing regulations. These regulations apply to lobster trap/pot and anchored gillnet fishermen in an area totaling approximately 1,631 nm<sup>2</sup> (5,594 km<sup>2</sup>) in March and approximately 832 nm<sup>2</sup> (2854 km<sup>2</sup>) in April, southeast of Boston, MA, for 15 days. The purpose of this action is to provide protection to an aggregation of northern right whales (right whales).

**DATES:** Effective beginning at 0001 hours March 22, 2007, through 2400 hours April 5, 2007.

**ADDRESSES:** Copies of the proposed and final Dynamic Area Management (DAM) rules, Environmental Assessments (EAs), Atlantic Large Whale Take Reduction Team (ALWTRT) meeting summaries, and progress reports on implementation of the ALWTRP may also be obtained by writing Diane Borggaard, NMFS/Northeast Region, One Blackburn Drive, Gloucester, MA 01930.

**FOR FURTHER INFORMATION CONTACT:** Diane Borggaard, NMFS/Northeast Region, 978-281-9300 x6503; or Kristy Long, NMFS, Office of Protected Resources, 301-713-2322.

#### SUPPLEMENTARY INFORMATION:

##### Electronic Access

Several of the background documents for the ALWTRP and the take reduction planning process can be downloaded

from the ALWTRP web site at <http://www.nero.noaa.gov/whaletrp/>.

#### Background

The ALWTRP was developed pursuant to section 118 of the Marine Mammal Protection Act (MMPA) to reduce the incidental mortality and serious injury of three endangered species of whales (right, fin, and humpback) due to incidental interaction with commercial fishing activities. In addition, the measures identified in the ALWTRP would provide conservation benefits to a fourth species (minke), which are neither listed as endangered nor threatened under the Endangered Species Act (ESA). The ALWTRP, implemented through regulations codified at 50 CFR 229.32, relies on a combination of fishing gear modifications and time/area closures to reduce the risk of whales becoming entangled in commercial fishing gear (and potentially suffering serious injury or mortality as a result).

On January 9, 2002, NMFS published the final rule to implement the ALWTRP's DAM program (67 FR 1133). On August 26, 2003, NMFS amended the regulations by publishing a final rule, which specifically identified gear modifications that may be allowed in a DAM zone (68 FR 51195). The DAM program provides specific authority for NMFS to restrict temporarily on an expedited basis the use of lobster trap/pot and anchored gillnet fishing gear in areas north of 40° N. lat. to protect right whales. Under the DAM program, NMFS may: (1) require the removal of all lobster trap/pot and anchored gillnet fishing gear for a 15-day period; (2) allow lobster trap/pot and anchored gillnet fishing within a DAM zone with gear modifications determined by NMFS to sufficiently reduce the risk of entanglement; and/or (3) issue an alert to fishermen requesting the voluntary removal of all lobster trap/pot and anchored gillnet gear for a 15-day period and asking fishermen not to set any additional gear in the DAM zone during the 15-day period.

A DAM zone is triggered when NMFS receives a reliable report from a qualified individual of three or more right whales sighted within an area (75 nm<sup>2</sup> (139 km<sup>2</sup>)) such that right whale density is equal to or greater than 0.04 right whales per nm<sup>2</sup> (1.85 km<sup>2</sup>). A qualified individual is an individual ascertained by NMFS to be reasonably able, through training or experience, to identify a right whale. Such individuals include, but are not limited to, NMFS staff, U.S. Coast Guard and Navy personnel trained in whale identification, scientific research survey

personnel, whale watch operators and naturalists, and mariners trained in whale species identification through disentanglement training or some other training program deemed adequate by NMFS. A reliable report would be a credible right whale sighting.

On March 9, 2007, an aerial survey reported two sightings of right whales in two different areas: the first location is in the proximity of 41° 37' N lat. and 69° 32' W long. (7 whales), and the second is in the proximity of 41° 31' N lat. and 69° 21' W long. (3 whales). Both positions lie southeast of Boston, MA. After conducting an investigation, NMFS ascertained that the reports came from a qualified individual and determined that the report was reliable. Thus, NMFS has received a reliable report from a qualified individual of the requisite right whale density to trigger the DAM provisions of the ALWTRP.

Once a DAM zone is triggered, NMFS determines whether to impose restrictions on fishing and/or fishing gear in the zone. This determination is based on the following factors, including but not limited to: the location of the DAM zone with respect to other fishery closure areas, weather conditions as they relate to the safety of human life at sea, the type and amount of gear already present in the area, and a review of recent right whale entanglement and mortality data.

NMFS has reviewed the factors and management options noted above relative to the DAM under consideration. As a result of this review, NMFS prohibits lobster trap/pot and anchored gillnet gear in this area during the 15-day restricted period unless it is modified in the manner described in this temporary rule. In March, the DAM Zone is bound by the following coordinates:

41° 57' N., 69° 24' W (NW Corner)  
41° 57' N., 69° 07' W  
41° 50' N., 69° 07' W  
41° 50' N., 68° 57' W  
41° 13' N., 68° 57' W  
41° 13' N., 69° 46' W  
41° 17' N., 69° 46' W  
41° 17' N., 69° 58' W  
41° 40' N., 69° 58' W and follow the coastline north to  
41° 45' N., 69° 56' W  
41° 45' N., 69° 33' W  
41° 49' N., 69° 24' W  
41° 57' N., 69° 24' W (NW Corner)

In April, when the restrictions on anchored gillnet and lobster trap/pot fishing gear become effective in the Great South Channel and overlap a portion of the DAM zone, the DAM zone is divided into a northern and southern sector. Special note for gillnet and lobster trap/pot fishermen: This DAM