



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

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F/SER31: KL

JAN 31 2017

Lieutenant R. A. Sadowitz
Chief, Waterways Management
U.S. Coast Guard Sector Miami
100 MacArthur Causeway
Miami Beach, Florida 33139

Dear Lieutenant Sadowitz:

The enclosed Biological Opinion ("Opinion") responds to your request for consultation with us, the National Marine Fisheries Service (NMFS), pursuant to Section 7 of the Endangered Species Act for the following action.

Applicant(s)	SER Number	Project Type(s)
U.S. Coast Guard (USCG)	SER-2016-18083	Port of Miami Anchorage Areas

The Opinion considers the effects of redesigning the Port of Miami Anchorage areas by the USCG on the following listed species and/or critical habitat: sea turtles, smalltooth sawfish, and designated critical habitat for elkhorn and staghorn corals. NMFS concludes that the proposed action is not likely to adversely affect sea turtles and smalltooth sawfish. NMFS also concludes that the proposed action is not likely to result in the destruction or adverse modification of designated critical habitat for elkhorn and staghorn coral.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions on this consultation, please contact Kelly Logan, Consultation Biologist, by phone at 727-460-9258, or by email at Kel.Logan@noaa.gov.

Sincerely,

for
Roy E. Crabtree, Ph.D.
Regional Administrator

Enclosure (s) Enc.: Biological Opinion
cc: Jocelyn.Karazsia@noaa.gov
File: 1514-22.H




**Endangered Species Act - Section 7 Consultation
Biological Opinion**

Action Agency: U.S. Coast Guard
Activity: Redesign Port of Miami Anchorage Areas, Miami, Florida.

Consulting Agency: Protected Resources Division
Southeast Regional Office
National Marine Fisheries Service

Consultation Number SER-2016-18083

Approved by: 

Roy E. Crabtree, Ph.D., Regional Administrator
NMFS, Southeast Regional Office
St. Petersburg, Florida

Date Issued: JAN 31 2017

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Acronyms and Abbreviations

DPS	Distinct Population Segment
ESA	Endangered Species Act
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
MLW	Mean Low Water
NMFS	National Marine Fisheries Service
SAFMC	South Atlantic Fisheries Management Council
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service

Units of Measurement

ft	Feet
ft ²	Square feet

m ²	Square meters
mi ²	Square miles
ac	Acres

Background

Section 7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1531 et seq.), requires each federal agency to “insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species.” Section 7(a)(2) requires federal agencies to consult with the appropriate Secretary on any such action. National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) share responsibilities for administering the ESA.

Consultation is required when a federal action agency determines that a proposed action “may affect” listed species or designated critical habitat. Consultation is concluded after NMFS determines that the action is not likely to adversely affect listed species or critical habitat or issues a Biological Opinion (“Opinion”) that identifies whether a proposed action is likely to jeopardize the continued existence of a listed species, or destroy or adversely modify critical habitat. The Opinion states the amount or extent of incidental take of the listed species that may occur, develops measures (i.e., reasonable and prudent measures - RPMs) to reduce the effect of take, and recommends conservation measures to further the recovery of the species. Notably, no incidental destruction or adverse modification of designated critical habitat can be authorized, and thus there are no RPMs—only reasonable and prudent alternatives that must avoid destruction or adverse modification.

This document represents NMFS’s Opinion based on our review of impacts associated with the proposed action to issue a permit within Miami Dade County, Florida. This Opinion analyzes the project’s effects on threatened and endangered species and designated critical habitat, in accordance with Section 7 of the ESA. We based it on project information provided by the USCG and other sources of information, including the published literature cited herein.

1 CONSULTATION HISTORY

We received your letter requesting consultation on June 24, 2016. Through meetings and phone calls with USCG and Florida Department of Environmental Protection (FDEP) we designed a survey protocol for ESA listed corals and critical habitat. The survey was completed in November, 2016, and documented several colonies of mountainous star coral. FDEP and NMFS’s Habitat Conservation Division decided to relocate the existing ESA-listed corals outside of the proposed anchorage areas so that they would not be impacted by the future use of the anchorage. As such, a dive team relocated all of the colonies of mountainous star coral on December 8 and 9, 2016, under a special activity license issued to FDEP, Coral Reef Conservation Program. Corals were transferred to the University of Miami for outplanting to their nursery. We received the final survey information on December 15, 2016, and initiated formal consultation on that date.

2 DESCRIPTION OF THE PROPOSED ACTION AND ACTION AREA

2.1 Proposed Action

The USCG intends to issue a proposed rule to redesign the Miami Anchorage areas which provides anchoring for passenger vessels, cargo ships, and tankers waiting to enter the Port of Miami as well as smaller cargo vessels navigating the Miami River. These vessels generally range in size from 25- 294 meters (m) in length. Waters (2015), found that the most common vessels using the anchorage were 90 m in length and that the average use of the anchorage is approximately 1 vessel per day or less. The existing anchorage is approximately 3.65 square miles (mi²) (Figure 1 and Table 1) and includes approximately 700 acres of coral reef habitat. The proposed rule to redesign the anchorage would reduce the existing designated anchorage area to approximately 1.4 mi². Similar to the existing anchorage area, the coordinates for the new anchorage areas will be published in the Code of Federal Regulations and will be broadcast to mariners as well as distributed in the Coast Pilot and Local Notice to Mariners. The proposed anchorage areas consist of 2 smaller areas located entirely within the previous anchorage area and would reduce the amount of coral habitat impacted by anchoring activities (Figure 2).

Ships sometimes deploy enough anchor chain to equal approximately seven times the depth of water (the 7:1 anchoring rule) they are anchoring in (House 2007). Therefore, we have included a buffer around each anchorage area based on the average amount of chain typically used for the corresponding water depth (i.e. if a ship anchors on the very edge of the area and uses the full 7 ft of chain per 1 ft water depth) (Figure 3). Of the 2 proposed anchorage areas, the eastern offshore anchorage area (including the buffer area) is located completely within sandy habitat and lacks the essential features of elkhorn and staghorn designated critical habitat. This area can accommodate very large (>75 meter [m]) vessels. The western nearer shore anchorage area is positioned in an area of mostly sand with patches of reef resources including consolidated hardbottom, corals, and sponges, and includes 30.73 acres (ac) of designated critical habitat for elkhorn and staghorn corals. This area provides safe anchoring for smaller (<75 m) vessels. The buffer area around the western anchorage box includes an additional 28.1 ac of coral critical habitat. According to resource surveys conducted by FDEP, neither of the 2 anchorage locations contains seagrasses. All ESA-listed corals have been previously relocated from within the project area. Table 1 summarizes the areas of the existing and proposed anchorages, the affected areas of coral critical habitat, and the reduction in anchorage areas to be affected by the proposed action.

Table 1. Summary of Total Area and Area of Designated Critical Habitat within Existing and Proposed Anchorages

Anchorage Areas	Total Area		Total Coral Critical Habitat Area Affected	
	Square miles	Acres	Square Miles	Acres
Current Anchorage Area	3.65	2,336	1.09	699.31
New Eastern Anchorage Area	1.2	768	0	0
New Western Anchorage Area	0.3	192	0.092	58.83 (30.73 inside, 28.1 buffer)
New Total Anchorage Area	1.5	960	0.092	58.83
Reduction in Anchorage Areas	2.15	1376	0.998	640.48

2.2 Action Area

The action area is defined by regulation as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action” (50 CFR 402.02). The coordinates of the 2 anchorage areas can be found in Tables 2 and 3, below.

Table 2. Small western anchorage area (approximate water depths: 45 feet [ft])

Corner	Latitude (North American Datum 1983)	Longitude
Northwest	25.799358°N	80.093674°W
Northeast	25.799261°N	80.090685°W
Southeast	25.775401°N	80.090853°W
Southwest	25.775433°N	80.093852°W

Table 3. Large eastern anchorage area (approximate water depths: 120 ft)

Corner	Latitude (North American Datum 1983)	Longitude
Northwest	25.803845°N	80.083099°W
Northeast	25.801283°N	80.067939°W
Southeast	25.775753°N	80.074552°W
Southwest	25.775769°N	80.083271°W

The action area includes the proposed eastern and western anchorage areas as well as a buffer comprised of swing circles based on the longest amount of chain necessary to anchor vessels that would be using the area. The buffer was determined using the 7:1 anchoring rule (7 ft of chain per 1 ft of water depth).. The action area includes 30.73 ac of elkhorn and staghorn designated critical habitat within the western anchorage area and 28.1 ac within the buffer area. The eastern

anchorage area and buffer area are comprised entirely of sand habitat and lack the essential features of designated coral critical habitat.

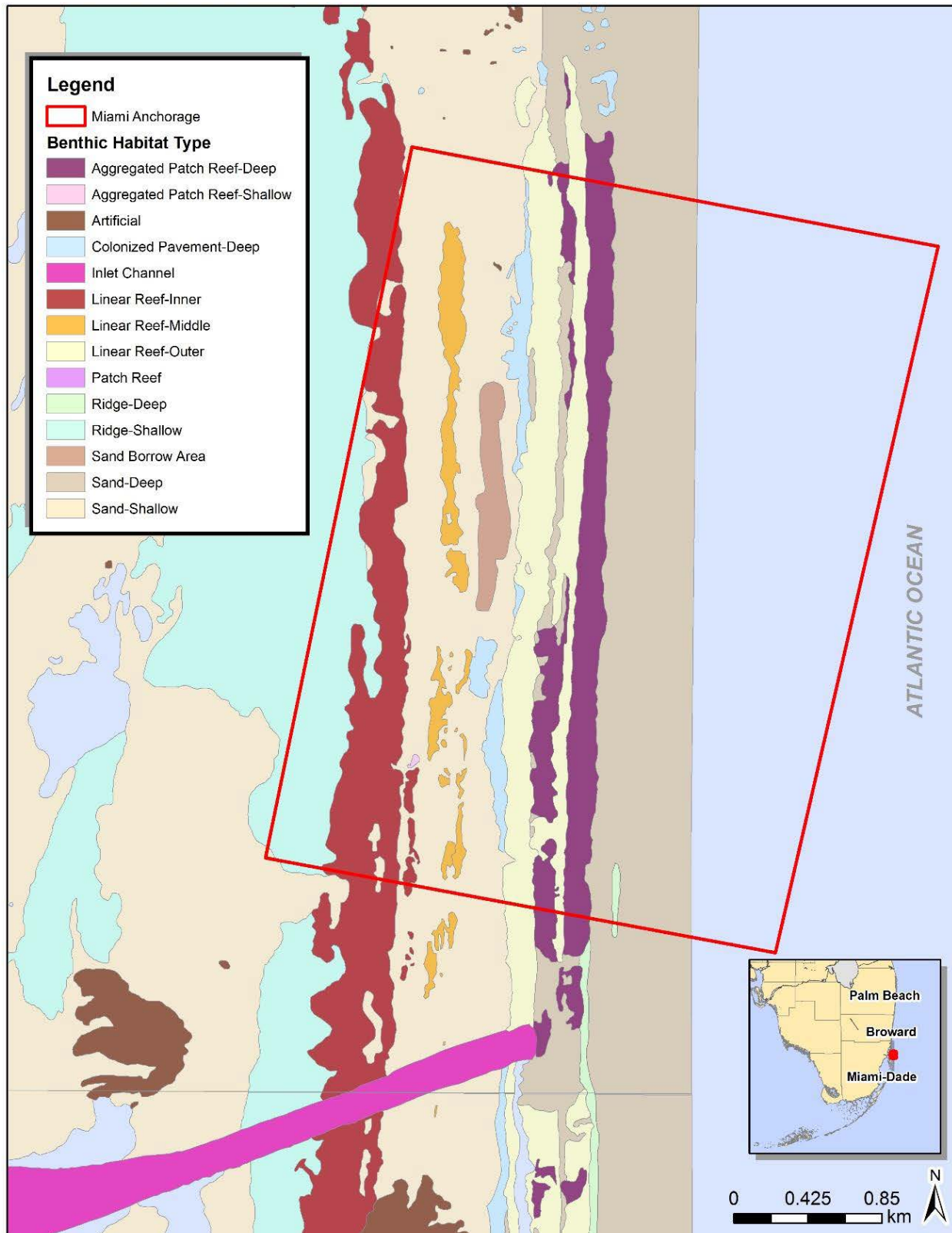


Figure 1. Current Port Miami anchorage location overlain on benthic habitat maps created by (Walker 2010).

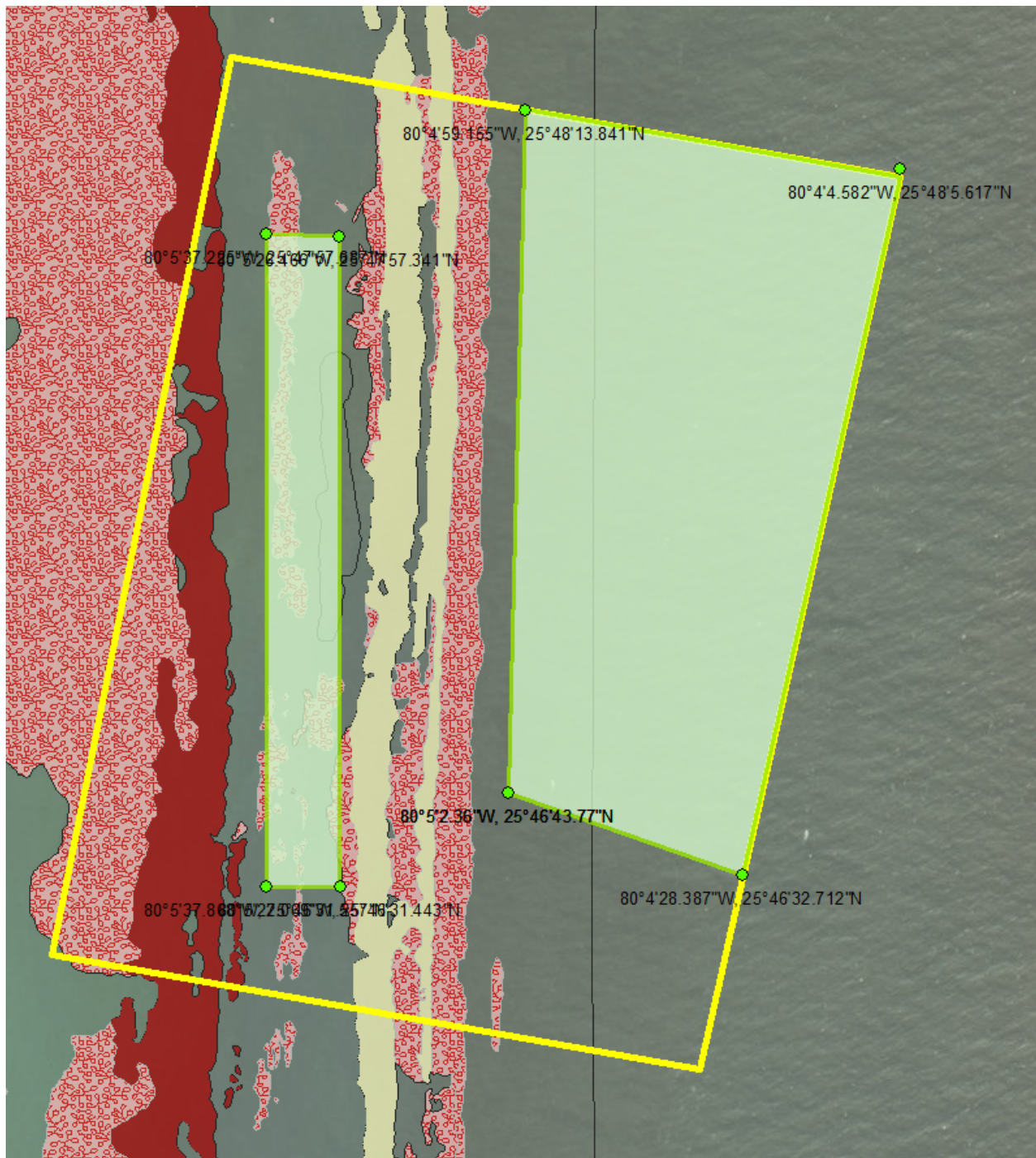


Figure 2. Proposed Anchorage indicated by green boxes (figure created by Lauren Waters, FDEP)

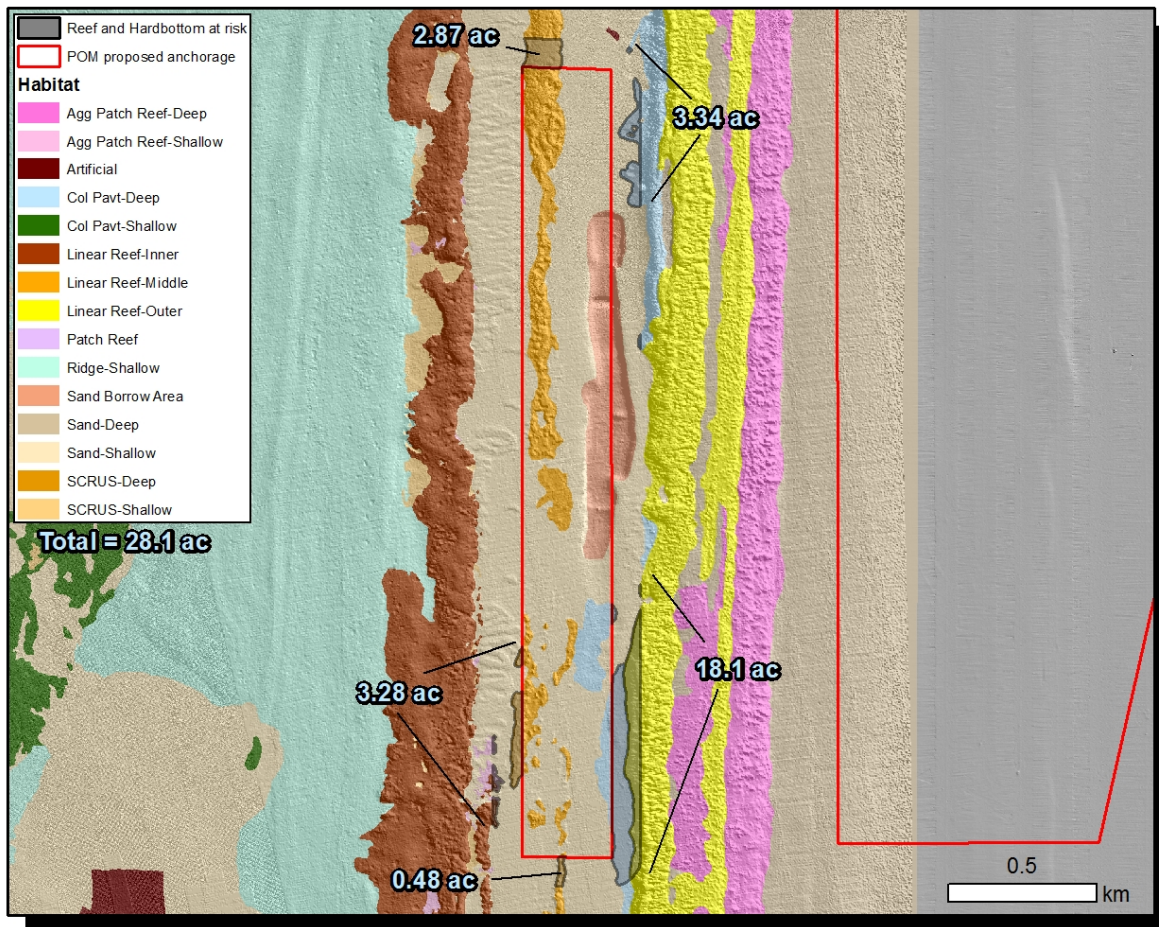


Figure 3. Additional potential impact area from cable drag if vessels were to anchor on the edges of the western anchorage box (figure created by Brian Walker, Nova Southeastern University).

3 STATUS OF LISTED SPECIES AND CRITICAL HABITAT

The following species under the jurisdiction of NMFS may occur in or near the action area. Table 4 below provides a list of the ESA-listed species and critical habitat that may be affected by the proposed action.

Table 4. Effects Determination(s) for Species the Action Agency or NMFS Believes May Be Affected by the Proposed Action

Species	ESA Listing Status	Action Agency Effect Determination	NMFS Effect Determination
Sea Turtles			
Green (North and South Atlantic distinct population segments [DPSs])	T	NLAA	NLAA
Kemp's ridley	E	NLAA	NLAA

Species	ESA Listing Status	Action Agency Effect Determination	NMFS Effect Determination
Leatherback	E	NLAA	NLAA
Loggerhead (Northwest Atlantic Ocean DPS)	T	NLAA	NLAA
Hawksbill	E	NLAA	NLAA
Fish			
Smalltooth sawfish (U.S. DPS)	E	NLAA	NLAA
Invertebrates			
Mountainous Star Coral	T	NLAA	NE
Pillar Coral	T	NLAA	NE
Rough Cactus Coral	T	NLAA	NE
Lobed Star Coral	T	NLAA	NE
Boulder Star Coral	T	NLAA	NE
Elkhorn Coral	T	NLAA	NE
Staghorn Coral	T	NLAA	NE
Critical Habitat			
Elkhorn and Staghorn Coral	Florida Unit	LAA	LAA
Loggerhead sea turtle	Unit Logg-N-19	NLAA	NLAA
E = endangered; T = threatened; NLAA = may affect, not likely to adversely affect; NE = no effect			

You determined that the proposed change in anchorage may affect but is not likely to adversely affect mountainous star coral, pillar coral, rough cactus coral, lobed star coral, boulder star coral, elkhorn coral, and staghorn coral species. Resource surveys indicated that none of these species have been documented within the proposed anchorage area with the exception of mountainous star coral; however, all colonies of mountainous star coral were previously relocated outside of the area. Therefore, we believe there are no ESA-listed corals within the project area and no potential routes of effects to these species from the proposed redesign of the anchorage areas.

3.1 Species and Critical Habitat Not Likely to be Adversely Affected

3.1.1 Sea Turtles and Smalltooth Sawfish

All 5 ESA-listed sea turtles and smalltooth sawfish can be found in or near the action area and may be affected by the project. We have concluded that these species are not likely to be adversely affected by the proposed action for the reasons described below.

Direct Physical Effects

Direct, physical injury impacts to sea turtles and smalltooth sawfish are not expected from vessel use of the anchorage area because sea turtles and smalltooth sawfish have the ability to detect and move away from vessels and descending anchors. As mentioned above, Waters (2015) indicates that average vessel usage of the anchorage is less than 1 vessel per day. Based on the

limited usage and the ability of sea turtles and sawfish to move away from vessel anchors, we believe that direct physical impacts will be extremely unlikely to occur and is therefore discountable.

Foraging and Refuge

Sea turtles and smalltooth sawfish may be temporarily unable to use portions of the project site for forage and shelter habitat due to avoidance of vessels and anchors. We expect these effects will be temporary, intermittent, and small in nature. The proposed western anchorage area contains non ESA listed corals and sponges used by sea turtles and sawfish for foraging and shelter. Sea turtles and sawfish may temporarily avoid feeding and sheltering activities in areas where vessels are anchored. However, anchoring (which is a current, ongoing activity) is expected to be temporary, infrequent, and short in duration (less than 1 vessel per day up to several hours per event) and there is similar habitat available throughout the surrounding area and immediately adjacent to the anchorage area. Given that sawfish and sea turtles are mobile we believe they can forage in the adjacent areas and effects from temporary avoidance of foraging and refuge habitat will be insignificant for these species.

3.1.2 Loggerhead Sea Turtle Designated Critical Habitat

The project area is located within critical habitat unit LOGG-N-19 for the Northwest Atlantic (NWA) Ocean DPS of loggerhead sea turtles.

Loggerhead Sea Turtle (NWA DPS) Breeding Habitat: Primary constituent elements (PCEs) that support this habitat include high densities of reproductive male and female loggerhead sea turtles, proximity to primary Florida migratory corridor, and proximity to Florida nesting grounds. This project has no potential routes of effect that are of a sufficient magnitude to reduce local sea turtle densities or alter distance to Florida nesting grounds. Further, use of the anchorage area by less than 1 vessel on average per day for up to several hours per event will not significantly impede or alter access to the migratory corridor. Sea turtles can easily maneuver around any anchored vessels. Therefore, , we do not expect any impacts from the proposed project to affect this critical habitat component.

Loggerhead Sea Turtle (NWA DPS) Constricted Migratory Habitat: This habitat is defined as high-use migratory corridors that are constricted (i.e., limited in width) by land on one side and the edge of the continental shelf and Gulf Stream on the other side. PCEs that support this habitat include constricted continental shelf area relative to nearby continental shelf waters that concentrate migratory pathways, and passage conditions to allow for migration to and from nesting, breeding, and/or foraging areas. Use of the anchorage area by less than 1 vessel on average per day for up to several hours per event will not significantly impede or interfere with migratory pathways, and passage conditions to allow for migration to and from nesting, breeding, and/or foraging areas. Sea turtles can easily maneuver around any anchored vessels. Therefore, we believe that effects to constricted migratory habitat from the project will be insignificant.

3.2 Status of Critical Habitat Likely to be Adversely Affected

3.2.1 Elkhorn and Staghorn Coral Designated Critical Habitat

On November 26, 2008, a Final Rule designating elkhorn and staghorn critical habitat was published in the Federal Register. Within the geographical area occupied by a listed species, critical habitat consists of specific areas on which are found those physical or biological features essential to the conservation of the species. The feature essential to the conservation of *Acropora* species (also known as the essential feature) is substrate of suitable quality and availability in water depths from the mean high water line to 30 m in order to support successful larval settlement, recruitment, and reattachment of fragments. “Substrate of suitable quality and availability” means consolidated hard bottom or dead coral skeletons free from fleshy macroalgae or turf algae and sediment cover. Areas containing this feature have been identified in 4 locations within the jurisdiction of the United States: the Florida area, which comprises approximately 1,329 square miles (3,442 sq km) of marine habitat; the Puerto Rico area, which comprises approximately 1,383 square miles (3,582 sq km) of marine habitat; the St. John/St. Thomas area, which comprises approximately 121 square miles (313 sq km) of marine habitat; and the St. Croix area, which comprises approximately 126 square miles (326 sq km) of marine habitat. The total area covered by the designation is thus approximately 2,959 square miles (7,664 sq km).

The essential feature can be found unevenly dispersed throughout the critical habitat units, interspersed with natural areas of loose sediment, fleshy or turf macroalgae covered hard substrate. Existing federally authorized or permitted man-made structures such as artificial reefs, boat ramps, docks, pilings, channels or marinas do not provide the essential feature. The proximity of this habitat to coastal areas subjects this feature to impacts from multiple activities including dredging and disposal activities, stormwater run-off, coastal and maritime construction, land development, wastewater and sewage outflow discharges, point and non-point source pollutant discharges, fishing, placement of large vessel anchorages, and installation of submerged pipelines or cables. The impacts from these activities, combined with those from natural factors (i.e., major storm events), significantly affect the quality and quantity of available substrate for these threatened species to successfully sexually and asexually reproduce.

A shift in benthic community structure from coral-dominated to algae-dominated that has been documented since the 1980s means that the settlement of larvae or attachment of fragments is often unsuccessful (Hughes and Connell 1999). Sediment accumulation on suitable substrate also impedes sexual and asexual reproductive success by preempting available substrate and smothering coral recruits.

While algae, including crustose coralline algae and fleshy macroalgae, are natural components of healthy reef ecosystems, increases in the dominance of algae since the 1980s impedes coral recruitment. The overexploitation of grazers through fishing has also contributed fleshy macroalgae to persist in reef and hard bottom areas formerly dominated by corals. Impacts to water quality associated with coastal development, in particular nutrient inputs, are also thought to enhance the growth of fleshy macroalgae by providing them with nutrient sources. Fleshy macroalgae are able to colonize dead coral skeleton and other hard substrate and some are able to overgrow living corals and crustose coralline algae. Because crustose coralline algae is thought to provide chemical cues to coral larvae indicating an area is appropriate for settlement, overgrowth by macroalgae may affect coral recruitment (Steneck 1986). Several studies show

that coral recruitment tends to be greater when algal biomass is low (Birrell et al. 2005; Connell et al. 1997; Edmunds et al. 2004; Hughes 1985; Rogers et al. 1984; Vermeij et al. 2006). In addition to preempting space for coral larval settlement, many fleshy macroalgae produce secondary metabolites with generalized toxicity, which also may inhibit settlement of coral larvae (Kuffner and Paul 2004). The rate of sediment input from natural and anthropogenic sources can affect reef distribution, structure, growth, and recruitment. Sediments can accumulate on dead and living corals and exposed hard bottom, thus reducing the available substrate for larval settlement and fragment attachment.

In addition to the amount of sedimentation, the source of sediments can affect coral growth. In a study of 3 sites in Puerto Rico, Torres (2001) found that low-density coral skeleton growth was correlated with increased re-suspended sediment rates and greater percentage composition of terrigenous sediment. In sites with higher carbonate percentages and corresponding low percentages of terrigenous sediments, growth rates were higher. This suggests that re-suspension of sediments and sediment production within the reef environment does not necessarily have a negative impact on coral growth while sediments from terrestrial sources increase the probability that coral growth will decrease, possibly because terrigenous sediments do not contain minerals that corals need to grow (Torres 2001).

Long-term monitoring of sites in the USVI indicate that coral cover has declined dramatically; coral diseases have become more numerous and prevalent; macroalgal cover has increased; fish of some species are smaller, less numerous, or rare; long-spined black sea urchins are not abundant; and sedimentation rates in nearshore waters have increased from one to 2 orders of magnitude over the past 15 to 25 years (Rogers et al. 2008). Thus, changes that have affected elkhorn and staghorn coral and led to significant decreases in the numbers and cover of these species have also affected the suitability and availability of habitat.

Elkhorn and staghorn corals require hard, consolidated substrate, including attached, dead coral skeleton, devoid of turf or fleshy macroalgae for their larvae to settle. Atlantic and Gulf of Mexico Rapid Reef Assessment Program data from 1997-2004 indicate that although the historic range of both species remains intact, the number and size of colonies and percent cover by both species has declined dramatically in comparison to historic levels (Ginsburg and Lang 2003). Monitoring data from the USVI TCRMP indicate that the 2005 coral bleaching event caused the largest documented loss of coral in USVI since coral monitoring data have been available with a decline of at least 50% of coral cover in waters less than 25 m deep (Smith et al. 2011). Many of the shallow water coral monitoring stations showed at most a 12% recovery of coral cover by 2011, 6 years after the loss of coral cover due to the bleaching event (Smith et al. 2011). The lack of coral cover has led to increases in algal cover on area hard bottom, including the critical habitat essential feature.

Figure 4, below, shows the boundaries of the Florida area of Elkhorn and staghorn critical habitat. The Florida area contains 3 sub-areas. The shoreward boundary for Florida sub-area A begins at the 6-ft (1.8 m) contour at the south side of Boynton Inlet, Palm Beach County at 26° 32' 42.5" N; then runs due east to the point of intersection with the 98-ft (30 m) contour; then follows the 98-ft (30 m) contour to the point of intersection with latitude 25° 45' 55" N, Government Cut, Miami-Dade County; then runs due west to the point of intersection with the 6-

ft (1.8 m) contour, then follows the 6-ft (1.8 m) contour to the beginning point. The shoreward boundary of Florida sub-area B begins at the mean low water (MLW) line at 25° 45' 55" N, Government Cut, Miami-Dade County; then runs due east to the point of intersection with the 98-ft (30 m) contour; then follows the 98-ft (30 m) contour to the point of intersection with longitude 82°W; then runs due north to the point of intersection with the South Atlantic Fishery Management Council (SAFMC) boundary at 24° 31' 35.75" N; then follows the SAFMC boundary to a point of intersection with the MLW line at Key West, Monroe County; then follows the MLW line, the SAFMC boundary (see 50 CFR 600.105(c)), and the COLREGS line (see 33 CFR 80.727, 730, 735, and 740) to the beginning point. The seaward boundary of Florida sub-area C (the Dry Tortugas) begins at the northern intersection of the 98-ft (30 m) contour and longitude 82° 45' W; then follows the 98-ft (30 m) contour west around the Dry Tortugas, to the southern point of intersection with longitude 82° 45' W; then runs due north to the beginning point.

Critical habitat does not include the following particular areas: (1) all areas subject to the 2008 Naval Air Station Key West Integrated Natural Resources Management Plan, (2) all areas containing existing (already constructed) federally authorized or permitted man-made structures such as aids-to-navigation (ATONs), artificial reefs, boat ramps, docks, pilings, maintained channels, or marinas, (3) all waters identified as existing (already constructed) federally authorized channels, and (4) all waters of the Restricted Anchorage Area as described at 33 CFR 334.580, beginning at a point located at 26° 05' 30" N, 80° 03' 30" W.; proceed west to 26° 05' 30" N, 80° 06' 30" W; thence, southerly to 26° 03' 00" N, longitude 80° 06' 42" W; thence, east to latitude 26° 03' 00" N, 80° 05' 44" W.; thence, south to 26° 01' 36" N, 80° 05' 44" W.; thence, east to 26° 01' 36" N, 80° 03' 30" W; thence, north to the point of beginning.

The proposed project takes place in sub-area A within the Florida area of critical habitat. The entire Florida area is comprised of 1,329 square miles of designated critical habitat.

Threats

The final critical habitat rule for elkhorn and staghorn coral identifies several sources of threat to the essential feature. Suitable habitat available for larval settlement and recruitment, and asexual fragment reattachment and recruitment of these coral species is particularly susceptible to impacts from human activity because of the shallow water depth range (less than 98 ft/30 m) in which elkhorn and staghorn corals commonly grow and the essential feature occurs. The proximity of this habitat to coastal areas subject this feature to impacts from multiple activities, including, but not limited to dredging and disposal activities, stormwater run-off, coastal and maritime construction, land development, wastewater and sewage outflow discharges, point and non-point source pollutant discharges, fishing, placement of large vessel anchorages, and installation of submerged pipelines or cables. The impacts from these activities, combined with those from natural factors (e.g., major storm events), significantly affect the quality and quantity of available substrate for these threatened species to successfully sexually and asexually reproduce.

**Critical Habitat for Elkhorn and Staghorn Corals
Area 1: Florida**

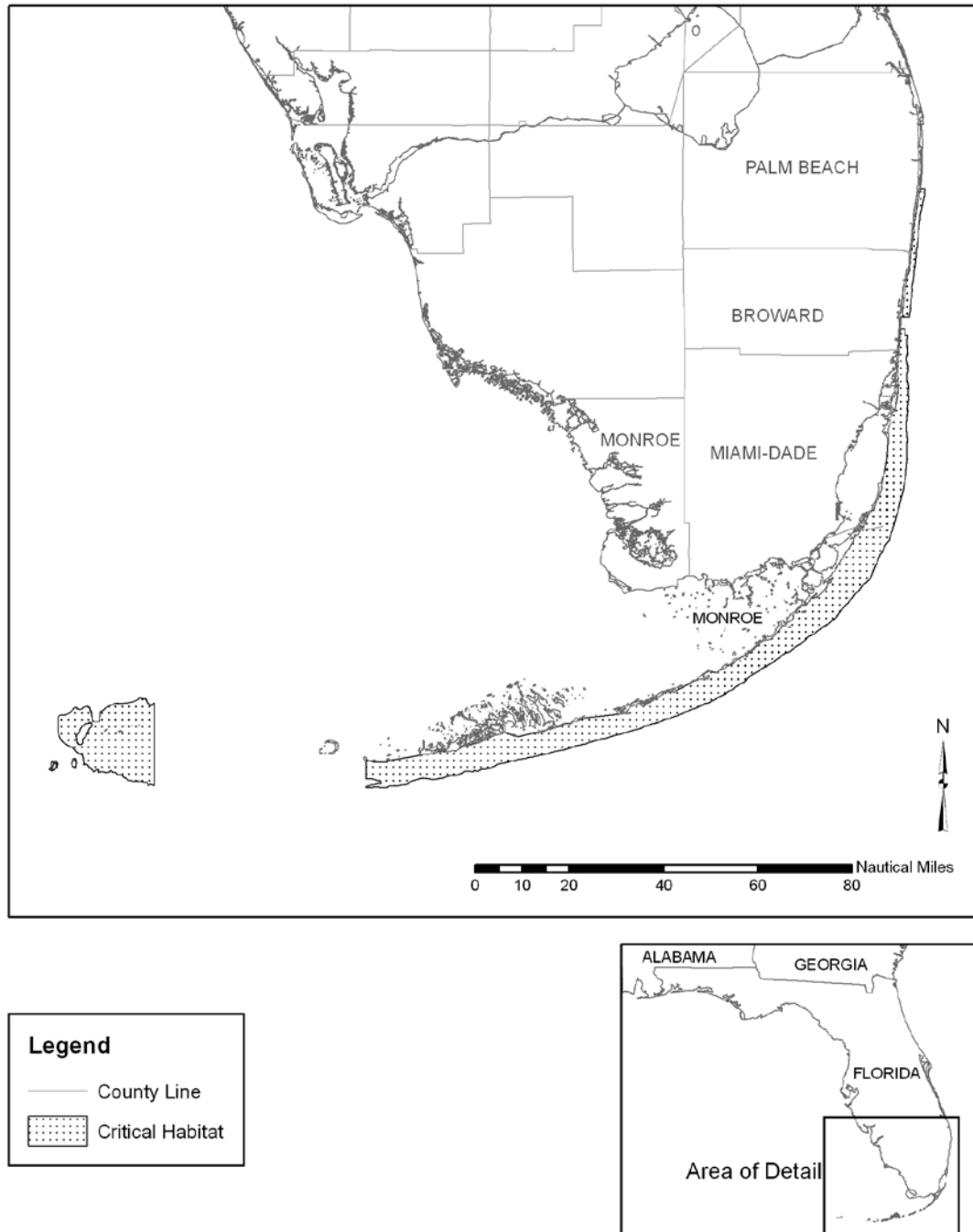


Figure 4. Florida unit designated critical habitat for elkhorn and staghorn coral (50 CFR Parts 223 and 226 Endangered and Threatened Species; Critical Habitat for Threatened Elkhorn and Staghorn Corals; Final Rule)

4 ENVIRONMENTAL BASELINE

This section is an analysis of the effects of past and ongoing human and natural factors leading to the current status of the species, its habitat (including designated critical habitat), and the

ecosystem, within the action area. The environmental baseline is a “snapshot” of a species’ health at a specified point in time. It does not include the effects of the action under review in this consultation.

By regulation, environmental baselines for Biological Opinions include the past and present impacts of all state, federal, or private actions and other human activities in the action area. We identify the anticipated impacts of all proposed federal projects in the specific action area of the consultation at issue, that have already undergone formal or early Section 7 consultation as well as the impact of state or private actions which are contemporaneous with the consultation in process (50 CFR 402.02).

Focusing on the impacts of the activities in the action area specifically, allows us to assess the prior experience and state (or condition) of the endangered and threatened individuals, and areas of designated critical habitat that occur in an action area, and that will be exposed to effects from the actions under consultation. This is important because, in some phenotypic states or life history stages, listed individuals will commonly exhibit, or be more susceptible to, adverse responses to stressors than they would be in other states, stages, or areas within their distributions. The same is true for localized populations of endangered and threatened species: the consequences of changes in the fitness or performance of individuals on a population's status depends on the prior state of the population. Designated critical habitat is not different: under some ecological conditions, the physical and biotic features of critical habitat will exhibit responses that they would not exhibit in other conditions.

4.1 Status of Elkhorn and Staghorn Coral Designated Critical Habitat within the Action Area

In Section 3.2.1, we described the range-wide status of designated elkhorn and staghorn critical habitat. In summary, the Florida area of elkhorn and staghorn critical habitat comprises approximately 1,329 square miles (3,442 square kilometers) of marine habitat offshore of Palm Beach, Broward, Miami-Dade, and Monroe counties, Florida, and encompasses the entire Florida Reef Tract beginning east of Palm Beach County and extending south along the Florida Keys. Based on the resource surveys conducted by FDEP in November, 2016, there are approximately 30.73 ac of designated critical habitat within the proposed western anchorage area (Table 1 and Figure 2) and an additional 28.1 ac within the buffer area around the western anchorage area (Figure 3).

4.2 Factors Affecting Critical Habitat within the Action Area

Localized adverse effects to designated critical habitat in the action area are from many of the same stressors discussed in Section 3.2.1 affecting the critical habitat throughout their range, namely activities that may increase turf- or macroalgal cover (i.e., releases of nutrients or reduction in herbivory) or increase sediment cover.

4.2.1 Federal Actions

Numerous activities funded, authorized, or carried out by federal agencies have been identified as threats and may affect elkhorn and staghorn corals’ critical habitat in the action area. To date, however, few consultations on activities affecting critical habitat within the action area have been completed.

- **USACE-permitted dredge-and-fill activities.** The activities may impact critical habitat by physically altering or removing benthic habitat suitable for colonization. Dredge-and-fill activities may also cause increases in sedimentation that may cause loss of substrate for fragment reattachment or larval settlement. The 1997 South Atlantic Regional Biological Opinion on navigation channel maintenance using hopper dredges is currently undergoing a reinitiation of consultation, to address the impacts of these activities on coral critical habitat among other things, and will evaluate the effects of certain dredge-and-fill activities that occur within the action area. The Port of Miami Harbor dredging and expansion project was recently completed just south of the anchorage project area. The project impacted over 200 ac of coral critical habitat through direct removal and sedimentation.
- **Environmental Protection Agency (EPA)-regulated discharge of pollutants, such as oil, toxic chemicals, radioactivity, carcinogens, mutagens, teratogens, or organic nutrient-laden water, including sewage water, into the waters of the United States.** Elevated nutrients can lead to increased algal growth. The EPA has been involved in ongoing litigation over the sufficiency of standards promulgated by the State of Florida to regulate discharges of nutrients into state waters, including habitats occupied by the listed and proposed corals. NMFS is engaged in consultation with the EPA regarding their approval of the state's standards.

4.2.2 State or Private Actions

The State of Florida regulates activities that involve and occur in coral reefs in Florida. Statutes and rules protect all corals from collection, commercial exploitation, and injury/destruction on the seafloor (FS 253.001, 253.04, Chapter 68B-42.008 and 68B-42.009), except as authorized by a Special Activity License for the purpose of research. Therefore, the State regulates alterations to the reef. Additionally, Florida has a comprehensive state regulatory program that regulates most land, including upland, wetland, and surface water alterations throughout the state, resulting in regulation of land-based sources of nutrients or sediment that may adversely affect elkhorn and staghorn critical habitat.

Vessel groundings and anchor damage from commercial and recreational vessels within southeast Florida have historically resulted in severe negative impacts to the Florida Reef Tract. According to Sansgaard (2013) the FDEP Coral Reef Conservation Program has responded to, and managed, 124 of incidents related to vessel groundings and anchor damage. Typically only large vessel groundings alter the substrate to render it unconsolidated. However, several of the documented events have been large vessels. For example, in 2006, the M/V Clipper Lasco (a 645-ft cargo ship) grounded offshore of Fort Lauderdale resulting in over 6,000 ft² of reef impacted. However, due to the large number of vessel groundings in the area, the U.S. Coast Guard relocated the anchorage and no large vessel groundings have occurred since 2009.

4.2.3 Conservation and Recovery Actions Shaping the Environmental Baseline

The National Oceanic and Atmospheric Association Coral Reef Conservation Program provides funding for several activities with an education and outreach component for informing the public about the importance of the coral reef ecosystem and the status of listed corals. The Southeast Regional Office of NMFS has also developed outreach materials regarding the listing of elkhorn

and staghorn corals, the Section 4(d) regulations, and the designation of critical habitat. These materials have been circulated to constituents during education and outreach activities and public meetings, and as part of other Section 7 consultations, and are readily available on the website: <http://sero.nmfs.noaa.gov/pr/esa/acropora.htm>.

Numerous management mechanisms exist to protect corals and the habitats on which they grow, thus indirectly benefiting elkhorn and staghorn designated critical habitat. The Coral Reef Conservation Act and the 2 Coral and Coral Reef Fishery Management Plans under the Magnuson-Stevens Act require the protection of corals and prohibit the collection of hard corals. Depending on the specifics of zoning plans and regulations, marine protected areas (MPAs) can help prevent damage from collection, fishing gear, groundings, and anchoring; however, no MPAs occur within the action area.

5 EFFECTS OF THE ACTION ON CRITICAL HABITAT

Effects of the action include direct and indirect effects of the action under consultation. Indirect effects are those that result from the proposed action, occur later in time (i.e., after the proposed action is complete), but are still reasonably certain to occur.

As described below, NMFS believes that the proposed action will have both beneficial and adverse effect on designated critical habitat for elkhorn and staghorn coral. Because the action will result in adverse effects we must evaluate whether the action is likely to cause destruction or adverse modification to the critical habitat.

The Florida area, which will be affected by the proposed action, comprises approximately 1,329 square miles (mi²) of listed coral critical habitat. The physical feature essential to the conservation of staghorn and elkhorn corals is defined as substrate of suitable quality and availability, in water depths from mean high water to 30 m, to support larval settlement and recruitment, and reattachment of asexual fragments. Substrate of suitable quality and availability is defined as natural consolidated hard bottom or dead coral skeleton that is free from turf or fleshy macroalgae cover and sediment cover.

There are approximately 30.73 ac of coral critical habitat that may be adversely affected by the project via anchor damage within the western anchorage area. The habitat in the impact area includes the middle linear reef tract.

Studies have shown that reefs with chronic anchoring impacts due to high numbers of recreational boating activities have less relative coral cover, increased algal cover, and higher incidences of physically damaged corals (Dustan and Halas 1987; Jameson et al. 1999). Anchoring causes acute reef trauma whereby reef biota may be injured or removed from the substrate and the reef framework can become fractured or unconsolidated. Anchoring can transform the habitat into rubble. Repeated anchor damage can eventually turn consolidated reef into sand habitat (Dinsdale and Harriott 2004), effectively removing the essential feature of the critical habitat.

Waters (2015) found that on average less than 1 vessel per day uses the Miami anchorage area (371 anchoring events recorded over 389 days = 0.95 vessels per day). The most common vessel size using the anchorage is 90 m with a draft of 3 m, although vessels ranged from 25 m to 294 m. According to anchor manufacturers, a 90 m vessel requires a 500 pound anchor which has dimensions of 58.5 in by 19 in at the bottom (www.thomasnet.com). This gives a surface area of 1,112 square inches, or 7.72 ft² of surface area (58.5 x 19 = 1111.5). So, each time a 90 m vessel anchors on the essential feature it has the potential to damage 7.72 ft² of habitat from the anchor. This is a conservative estimate because most vessels that would anchor within the western anchorage box would be smaller than 90 m in length.

We must also consider the potential removal of critical habitat from chain drag. Although the federal register ships regulations state that “All vessels seeking to anchor shall lie at anchor with as short a cable as conditions will permit,” ships may still use the 7:1 rule (7 ft of chain per 1 ft of water depth) (House 2007). The maximum depth of the western anchorage area is approximately 45 ft. To be conservative we will use 7:1 for the chain length. Therefore, chain length is equal to 270 ft (45 ft x 7 = 45 ft) in the western area. This is a conservative estimate as the actual amount of chain in contact with the bottom will depend on weather and currents within the area affecting the amount of tension on the chain. Damage to critical habitat from swing circles (chain drag as the vessel moves around due to waves and weather) can then be calculated using the area of the chain length as the radius of the circle which gives us an area of 228,906 ft² ($\pi 270^2 = 228,906$) damaged by cable drag each time a vessel anchors on or within the swing radius of the critical habitat. Based on these calculations and the fact that the anchorage would be maintained at this location into perpetuity we can assume that eventually damage from anchoring and cable drag would lead to the complete removal of the essential feature within and around the western anchorage area.

Waters (2015) indicated that vessels were more likely to anchor on the reef (64%) than in the sand habitat (46%) and smaller vessels tended to anchor on the linear reef while larger vessels (>150m) were found in deeper waters. Although only 1 vessel or less is currently using the anchorage area per day, the anchorage is expected to remain in this location into perpetuity, with the majority of vessels anchoring on the reef, including the areas designated as critical habitat. Given the size of the anchors and the additional damage that could be caused by chain drag, we believe that continuous long term use of the anchorage could lead to decline of the reef structure, eventually converting it to rubble and sand habitat. Therefore, in order to be conservative we must assume that eventually the impacts from daily use of the anchorage will remove the entire 30.73 ac of critical habitat from this area.

The buffer around the western anchorage area was calculated based on the 7:1 rule and is approximately 270 ft around the outside edge of the area (7 x 45 = 45 ft). According to the habitat maps provided by Brian Walker (Figure 3, above), there are an additional 28.1 ac of critical habitat within the buffer area around the western anchorage. If a vessel were to anchor right on the edge of the anchorage area adjacent to one of the hardbottom areas using the 7:1 rule, it could potentially impact designated critical habitat due to cable drag. However, the federal register regulations state that “All vessels seeking to anchor shall lie at anchor with as short a cable as conditions will permit” and other evidence suggests that pilots generally use 5:1 or less chain when anchoring (pers. comm. Lauren Waters, FDEP to Kelly Logan, NMFS).

January 20, 2017). Further, the USCG indicates that pilots are required to anchor within the area and they would err on the side of caution anchoring in the middle of the area, making swing circle damage outside the area extremely rare (pers. comm. Paul Lehmann, USCG to Kelly Logan, NMFS January 19, 2017). Based on the above mentioned conditions, and the fact that the average usage of the entire anchorage area (east and west combined) is less than 1 vessel per day, we believe that impacts to elkhorn and staghorn designated critical habitat from cable drag due to anchoring along the very edges of the western anchorage area are extremely unlikely to occur and are therefore discountable.

The project also includes beneficial effects to critical habitat. As seen above in Section 2 and Figure 1, the existing Miami anchorage includes approximately 700 ac of reef habitat, much of which is functioning as critical habitat. By redesigning the anchorage into 2 smaller areas the majority of reef habitat (approximately 670 ac) will be removed from the area thereby eliminating future impacts to the critical habitat in those areas.

6 CUMULATIVE EFFECTS

Cumulative effects include the effects of future state, tribal, local or private actions that are reasonably certain to occur in the action area considered in this Biological Opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to Section 7 of the ESA.

NMFS is not aware of any future projects that may contribute to cumulative effects.

Within the action area, major future changes are not anticipated in addition to the ongoing human activities described in the environmental baseline. The present human uses of the action area are expected to continue, though some may occur at increased levels, frequency or intensity in the near future.

7 DESTRUCTION/ADVERSE MODIFICATION ANALYSIS

NMFS's regulations define destruction or adverse modification to mean a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features (50 CFR § 402.02). Other alterations that may destroy or adversely modify critical habitat may include impacts to the area itself, such as those that would impede access to or use of the essential features. We intend the phrase "significant delay" in development of essential features to encompass a delay that interrupts the likely natural trajectory of the development of physical and biological features in the designated critical habitat to support the species' recovery. NMFS will generally conclude that a federal action is likely to "destroy or adversely modify" designated critical habitat if the action results in an alteration of the quantity or quality of the essential physical or biological features of designated critical habitat, or that precludes or significantly delays the capacity of that habitat to develop those features over time, and if the effect of the alteration is to appreciably diminish the value of critical habitat for the conservation of the species. This analysis takes into account the

geographic and temporal scope of the proposed action, recognizing that “functionality” of critical habitat necessarily means that it must now and must continue in the future to support the conservation of the species and progress toward recovery. Destruction or adverse modification does not depend strictly on the size or proportion of the area adversely affected, but rather on the role the action area serves with regard to the function of the overall designation, and how that role is affected by the action.

The critical habitat rule for elkhorn and staghorn corals identified specific areas where the feature essential to the conservation of Atlantic *Acropora* species (also known as essential feature) occurs in 4 units within the jurisdiction of the United States: Florida, Puerto Rico, St. Thomas/St. John, and St. Croix. The action area is within the Florida critical habitat unit.

The Florida unit comprises approximately 1,329 mi² (850,560 ac) of ESA-designated critical habitat. The key objective for the conservation and recovery of elkhorn and staghorn corals that is the basis for the critical habitat designation is the facilitation of an increase in the incidence of sexual and asexual reproduction. Recovery cannot occur without protecting the essential feature of coral critical habitat from destruction or adverse modification because the quality and quantity of suitable substrate for ESA-listed corals affects their reproductive success. As noted in the rule designating elkhorn and staghorn coral critical habitat (73 FR 72210, November 26, 2008), the loss of suitable habitat is one of the greatest threats to the recovery of listed elkhorn and staghorn coral populations. Man-made stressors have the greatest impact on habitat quality for listed elkhorn and staghorn corals.

The loss of the essential feature or a diminution in the function of the essential feature affects the reproductive success of listed elkhorn and staghorn corals because substrate for sexual recruits to settle is lost or unavailable. Critical habitat was designated for elkhorn and staghorn corals, in part, because further declines in the low population sizes of the species could lead to threshold levels that make the chances for recovery low. More specifically, low population sizes for these species could lead to an Allee effect (decline in individual fitness at low population size or density that can result in critical population thresholds below which populations crash to extinction), lower effective density (of genetically distinct adults required for sexual reproduction), and a reduced source of fragments for asexual reproduction and recruitment. In other words, colonies may be separated by too much distance for successful sexual reproduction to occur. Isolation of settlement habitat and declines in the quality of habitat for coral larvae to settle and grow make the problem worse.

Therefore, the key conservation objective of designated elkhorn and staghorn coral critical habitat is to increase the potential for successful sexual and asexual reproduction, which in turn facilitates increases in the species’ abundance, distribution, and genetic diversity. To this end, our analysis seeks to determine whether or not the proposed action is likely to destroy or adversely modify designated critical habitat, in the context of the Status of Elkhorn and Staghorn Coral Critical Habitat (Section 3.2.1), the Environmental Baseline (Section 4), the Effects of the Action (Section 5), and Cumulative Effects (Section 6). Ultimately, we seek to determine if critical habitat would remain functional to serve the intended conservation role for the species with the implementation of the proposed action, or whether the conservation function and value of critical habitat is appreciably diminished through alterations to the physical or biological

features essential to the conservation of a species or because of significant delays in the development of these features. The first step in this analysis is to evaluate the project's expected effects on the species' ability to meet identified recovery objectives relevant to the key conservation objective of critical habitat, given the effects of the proposed action.

The final recovery plan for elkhorn and staghorn corals contains Criterion 1, relating to coral abundance, which indicates that a recovered population of staghorn coral requires achieving a density of one colony (≥ 0.5 m diameter in size) per square meter, throughout approximately 5% of consolidated reef habitat in 5-20 m water depth throughout the species' range. We assume that the expected conservation potential of critical habitat can be estimated by applying this metric for a recovered population to the area of critical habitat adversely affected by a particular action. Therefore, we applied this criterion to the area of critical habitat predicted to be permanently adversely affected by the proposed action, to calculate the number of colonies of certain size and density the area would have needed to support, to fulfill the population viability requirements identified by the recovery team in Criterion 1. First we determined the proportion of the area that will be adversely affected that would satisfy the habitat requirement, by calculating the acreage representing 5% of the adversely affected area. This results in an area of 6,217 m² (5% of 30.73 ac (124,359.90 m²) = 6,217 m²). Multiplying this affected area by the number of colonies needed per square meter (one colony ≥ 0.5 m diameter) results in a total of 3,108 staghorn coral (6,217 x .5 = 3,108). Thus, the 30.73 ac of critical habitat could be expected to support 3,108 colonies of staghorn coral post recovery.

Similarly a recovered elkhorn population requires achieving a density of one colony (≥ 0.25 m diameter in size) per square meter, throughout approximately 10% of consolidated reef habitat in 5-20 m water depth throughout the species' range. Thus, the 30.73 ac area within the proposed anchorage could be expected to support 3,106 coral colonies (10% cover on 30.73 ac = 3.07 ac x 0.25 colonies per m² = 3,106 colonies) post recovery.

Another relevant recovery objective in the Acropora Recovery Plan related to the redesign of the anchorage effects on critical habitat is Criterion 6.

Criterion 6: Loss of Recruitment Habitat (Listing Factor A)

Abundance (Criterion 1) addresses the threat of Loss of Recruitment Habitat because the criterion specifies the amount of habitat occupied by the 2 species. If [Abundance] Criterion 1 is met, then this threat is sufficiently abated;

or

Throughout the range of these 2 species, at least 40% of the consolidated reef substrate in 1 – 20 m depth within the fore-reef zone remains free of sediment and macroalgal cover as measured on a broad reef to regional spatial scale.

As discussed above, 30.73 ac of future settlement habitat will be unavailable due to the proposed action, resulting in the potential preclusion of 3,108 future staghorn colonies and 3,106 future elkhorn colonies. If these corals would have developed, survived, and reproduced, the action would then have resulted in a future reduction in reproductive output of the species. We do not

believe these potential future losses will significantly affect the survival of elkhorn coral larvae or render recruitment in the action area less likely. We base this determination on the limited number of recruits expected to be affected within the proposed anchorage area versus the large areas containing the essential feature of elkhorn and staghorn coral critical habitat in the surrounding area that would continue to function as settlement and recruitment habitat.

While the project will result in loss of a small area of potential recruitment habitat (30.73 ac is less than 0.004% of the available critical habitat within the Florida unit [$30.73 \text{ ac} \div 850,560 \text{ total ac} * 100 = 0.004\%$]), we do not expect these impacts to significantly affect the recruitment of elkhorn and staghorn corals into the action area, and thus will not impede achieving the second prong of criterion 6 above. There are no elkhorn or staghorn corals within the footprint of the proposed anchorage area at this time. There are large areas of critical habitat containing the essential feature adjacent to the proposed anchorage area. These areas are within the 1-20 m depth specified in Criterion 6 and, as discussed in Section 6.2, we do not expect areas outside the anchorage areas to be affected by use of the anchorage areas. We expect the hard bottom and reef habitats adjacent to the proposed anchorage area to continue to function as settlement and recruitment habitat.

Based on the fact that impacts will be concentrated in the area of the proposed anchorage with approximately 30.73 ac of that containing the essential feature of coral critical habitat, we do not believe that the proposed action will appreciably reduce the Florida unit's ability to retain the essential feature for elkhorn and staghorn coral critical habitat. The potential loss of 30.73 ac of coral critical habitat would affect approximately 0.004% of the existing areas in the Florida coral critical habitat unit. Based on the above, we conclude that of the proposed action will not appreciably diminish the conservation value of designated critical habitat in the Florida unit for elkhorn and staghorn coral.

In the status of the species section, we document that there has been a significant decline of elkhorn and staghorn coral throughout their range, with recent population stability at low percent coverage. We also concluded that absolute abundance is at least hundreds of thousands of colonies, but likely to decrease in the future with projected increases in threats. Our analysis for the Port of Miami Anchorage has shown that the proposed action will not appreciably diminish the Florida unit's conservation value. Thus, we do not believe recovery of the species will be delayed as a result of the proposed action. Therefore, we do not believe the proposed action is likely to appreciably reduce the conservation value of the Florida unit of critical habitat for elkhorn and staghorn coral. We therefore conclude the project is not likely to destroy or adversely modify designated critical habitat for elkhorn and staghorn coral.

8 CONCLUSION

After reviewing the current status of the critical habitat, the environmental baseline, the effects of the proposed action, and cumulative effects, it is NMFS's Biological Opinion that the proposed action is not likely to destroy or adversely modify critical habitat designated for elkhorn and staghorn coral.

9 CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs federal agencies to use their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are designed to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

NMFS believes the following conservation recommendations further the conservation of listed species. NMFS strongly recommends that these measures be considered and implemented by USACE and/or the applicant:

1. NMFS recommends that the USCG provide coral reef educational materials to vessel operators explaining the value of the reefs and habitat in Southeast Florida.
2. NMFS recommends that the USCG provide figures or maps to vessel operators indicating the approximate location of reef resources within the anchorage and requesting that vessels avoid these areas and anchor in sandy areas whenever possible.

Please notify NMFS if the federal action agency carries out any of these recommendations so that we will be kept informed of actions that are intended to improve the conservation of listed species or their designated critical habitats.

10 REINITIATION OF CONSULTATION

This concludes NMFS's formal consultation on the proposed actions. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary federal action agency involvement or control over the action has been retained, or is authorized by law, and if: (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the agency action on listed species or designated critical habitat in a manner or to an extent not considered in this Opinion, (3) the agency action is subsequently modified in a manner that causes an effect on the listed species or critical habitat not considered in this Opinion, or (4) a new species is listed or critical habitat designated that may be affected by the action.

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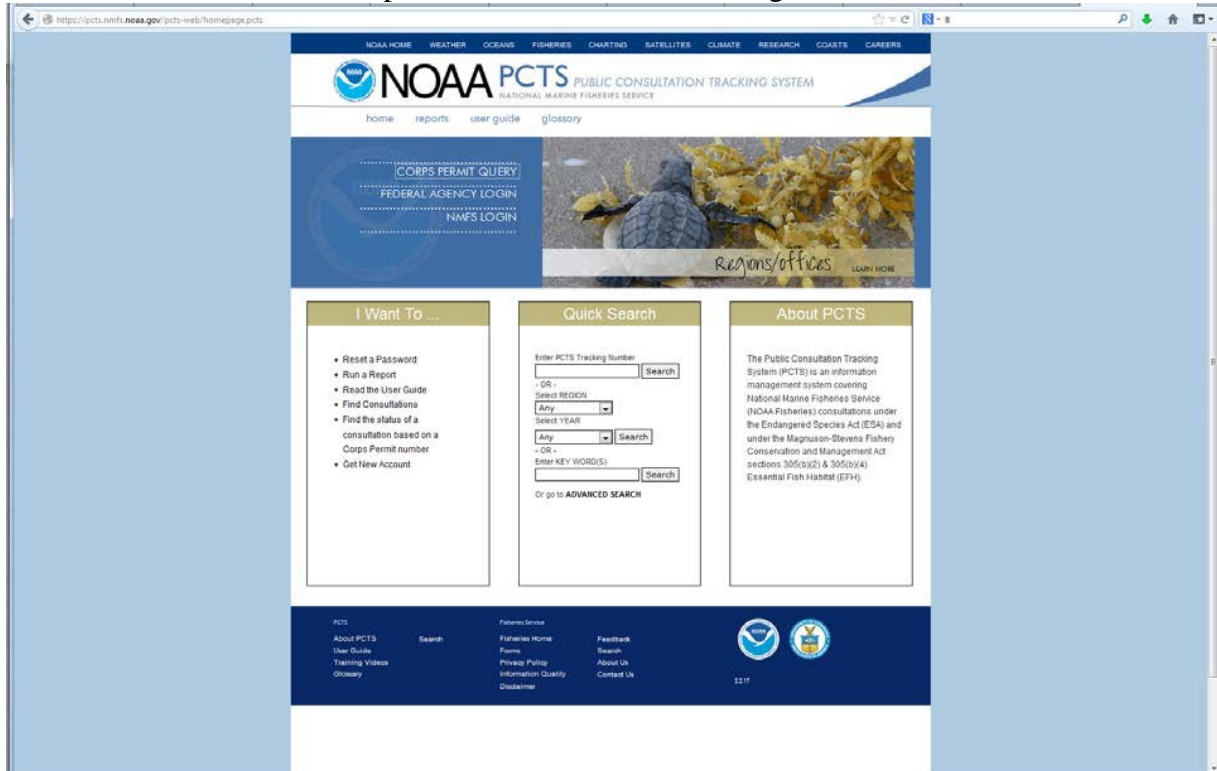
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PCTS Access and Additional Considerations for ESA Section 7 Consultations (Revised 03-10-2015)

Public Consultation Tracking System (PCTS) Guidance: PCTS is a Web-based query system at <https://pcts.nmfs.noaa.gov/> that allows all federal agencies (e.g., U.S. Army Corps of Engineers - USACE), project managers, permit applicants, consultants, and the general public to find the current status of NMFS's Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations which are being conducted (or have been completed) pursuant to ESA Section 7 and the Magnuson-Stevens Fishery Conservation and Management Act's (MSA) Sections 305(b)(2) and 305(b)(4). Basic information including access to documents is available to all.

The PCTS Home Page is shown below. For USACE-permitted projects, the easiest and quickest way to look up a project's status, or review completed ESA/EFH consultations, is to click on either the "Corps Permit Query" link (top left); or, below it, click the "Find the status of a consultation based on the Corps Permit number" link in the golden "I Want To..." window.

The screenshot shows the NOAA PCTS homepage. At the top is a navigation bar with links: NOAA HOME, WEATHER, OCEANS, FISHERIES, CHARTING, SATELLITES, CLIMATE, RESEARCH, COASTS, CAREERS. Below this is the NOAA logo and the text "NOAA PCTS PUBLIC CONSULTATION TRACKING SYSTEM NATIONAL MARINE FISHERIES SERVICE". A secondary navigation bar includes: home, reports, user guide, glossary. The main content area features a large banner with a sea turtle and the text "Regions/offices" and "LEARN MORE". Below the banner are three columns: "I Want To ..." with links like "Reset a Password", "Run a Report", "Read the User Guide", "Find Consultations", "Find the status of a consultation based on a Corps Permit number", and "Get New Account"; "Quick Search" with fields for "Enter PCTS Tracking Number", "Select REGION", "Select YEAR", and "Enter KEY WORD(S)"; and "About PCTS" with a description of the system. The footer contains links for "About PCTS", "Search", "Privacy Policy", "Information Quality", "Disclaimer", "Feedback", "Sign Up", "About Us", and "Contact Us".

Then, from the "Corps District Office" list pick the appropriate USACE district. In the "Corps Permit #" box, type in the 9-digit USACE permit number identifier, with no hyphens or letters. Simply enter the year and the permit number, joined together, using preceding zeros if necessary after the year to obtain the necessary 9-digit (no more, no less) number. For example, the USACE Jacksonville District's issued permit number SAJ-2013-0235 (LP-CMW) must be typed in as 201300235 for PCTS to run a proper search and provide complete and accurate results. For querying permit applications submitted for ESA/EFH consultation by other USACE districts, the procedure is the same. For example, an inquiry on Mobile District's permit MVN201301412 is entered as 201301412 after selecting the Mobile District from the "Corps District Office" list. PCTS questions should be directed to Kelly Shotts at Kelly.Shotts@noaa.gov or (727) 551-5603.

EFH Recommendations: In addition to its protected species/critical habitat consultation requirements with NMFS' Protected Resources Division pursuant to Section 7 of the ESA, prior to proceeding with the proposed action the action agency must also consult with NMFS' Habitat Conservation Division (HCD) pursuant to the MSA requirements for EFH consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-.930, subpart K). The action agency should also ensure that the applicant understands the ESA and EFH processes; that ESA and EFH consultations are separate, distinct, and guided by different statutes, goals, and time lines for responding to the action agency; and that the action agency will (and the applicant may) receive separate consultation correspondence on NMFS letterhead from HCD regarding their concerns and/or finalizing EFH consultation.

Marine Mammal Protection Act (MMPA) Recommendations: The ESA Section 7 process does not authorize incidental takes of listed or non-listed marine mammals. If such takes may occur an incidental take authorization under MMPA Section 101 (a)(5) is necessary. Please contact NMFS' Permits, Conservation, and Education Division at (301) 713-2322 for more information regarding MMPA permitting procedures.

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006