

An Endangered Species Act Listing and Critical Habitat Rule Update





Gulf of Mexico Shrimp Advisory Panel Meeting October 19, 2023

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Presentation Overview

- Endangered Species Act (ESA) Rules
- What Critical Habitat Is
- Critical Habitat Designation and Fisheries
- Review of Each Critical Habitat Rule
 - Timeline Background
 - Proposed or Final Essential Feature or Features
 - Proposed or Final Critical Habitat Areas
- Proposed Rule to Change the ESA Status of Pillar Corals from Threatened to Endangered
 - Why Originally Listed
 - Why We Are Proposing to Change the Status
 - What the New Status Would Mean
- If/How These Rules May Impact the Shrimp Industry



Recent ESA Listing/Critical Habitat Rules

- NOAA Fisheries recently published 3 ESA listing/critical habitat proposed rules:
 - O Green Sea Turtle Critical Habitat Proposed Rule (88 FR 46572, 07/19/2023)
 - Comment period closed October 17, 2023.
 - Rice's Whales Critical Habitat Proposed Rule (88 FR 47453, 07/24/2023)
 - Comment period closed October 6, 2023.
 - O Pillar Coral Uplisting Proposed Rule (88 FR 59494, 08/29/2023)
 - Comment period closes October 30, 2023.
- Generally within one year of the date of the proposed rule, NOAA Fisheries must:
 - Review and consider public comments and any new data.
 - Withdraw the proposed rule or publish a final rule.
- NOAA Fisheries also published a final rule designating critical habitat for 5
 Threatened Caribbean Corals (88 FR 54026, 08/09/2023)
 - Effective since September 8, 2023.



Critical Habitat: What Is It?

- The ESA requires that we designate critical habitat, to the maximum extent prudent and determinable, when a species is listed under the ESA.
- Critical habitat is defined as:
 - Specific areas within the geographical area occupied by the species at the time of listing that contain <u>physical or biological features essential to conservation of the</u> <u>species</u> and that <u>may require special management</u> considerations or protection.
- We are required to designate critical habitat <u>based on the best available scientific</u> <u>data.</u> We must also <u>consider the economic</u>, <u>national security</u>, <u>and other relevant</u> <u>impacts</u> of specifying a particular area as critical habitat.

For More Information about ESA Critical Habitat:

https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat



Who and What Is Affected (Or Not) By Critical Habitat Designation

What Does it Mean for Fisheries?

- Designation does not directly affect citizens engaged in recreational activities, such as recreational boating and fishing, or limit their access to the critical habitat area.
- Designation does not create any new regulations or restrictions on fisheries. Only federal agencies are directly affected by a critical habitat designation; non-federal entities may be affected if their activities involve federal funding, permitting, or authorization.
- Federal agencies must consult with us to ensure that any activities they authorize, fund, or carry out are not likely to destroy or adversely modify the critical habitat. Federal agencies already consult with NOAA Fisheries on actions that may affect the listed species.
- Consultation on designated critical habitat would evaluate whether a proposed federal action would adversely affect the designated area and any of the habitat attributes influencing its value.

Green Sea Turtle DPSs Proposed Critical Habitat Designation



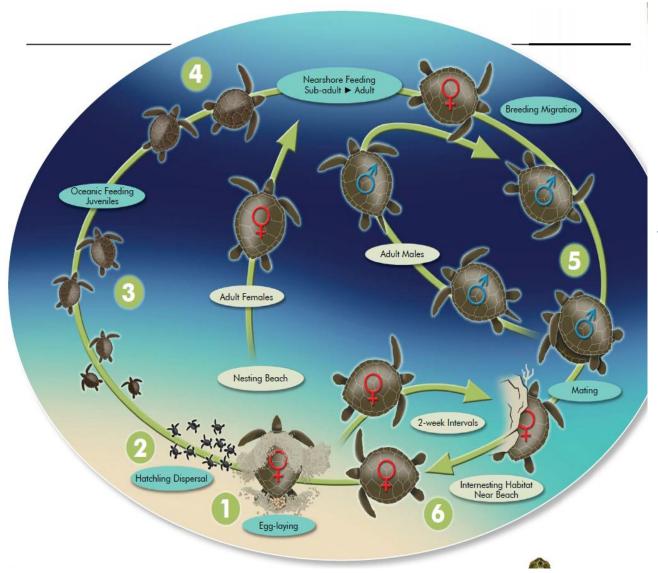


Green Sea Turtle DPSs Critical Habitat Timeline

- April 6, 2016: NMFS and USFWS published a final rule to list 11 green turtle distinct population segments (DPSs) as threatened or endangered (81 FR 20057). Replaced the original listing for the species; concluded that previously designated critical habitat remained in effect for the North Atlantic DPS.
- January 8, 2020: Center for Biological Diversity, Sea Turtle Oversight
 Protection, and Turtle Island Restoration Network filed a complaint, alleging
 failure to designate critical habitat by the statutory deadline.
- August 21, 2020: parties entered into a settlement agreement stipulating that NMFS and USFWS submit proposed determinations concerning the designation of critical habitat to the Federal Register on or before June 30, 2023.
- July 19, 2023: NMFS and USFWS published proposed rules to designate critical habitat (88 FR 46572 and 88 FR 46376).



Green Sea Turtle: Marine Habitat Needs



- 1. Nesting females to/from beach
- 2. Hatchling dispersal
- 3. Surface-pelagic foraging/resting
- 4. Nearshore foraging/resting
- 5. Breeding migration
- 6. Mating, internesting



Proposed Features Essential to the Conservation of Green Sea Turtle DPSs

• **Reproductive (not East Pacific DPS)**: From the <u>mean high water line to 20 m dept</u>h, sufficiently dark and unobstructed nearshore waters adjacent to nesting beaches designated as critical habitat by USFWS, to allow for the transit, mating, and internesting of reproductive individuals and the transit of post-hatchlings.

• **Migratory (North Atlantic and East Pacific DPSs only):** From the mean high water line to 20 m depth (North Atlantic DPS) or 10 km offshore (East Pacific DPS), sufficiently unobstructed waters that allow for unrestricted transit of reproductive individuals between benthic foraging/resting and

reproductive areas.

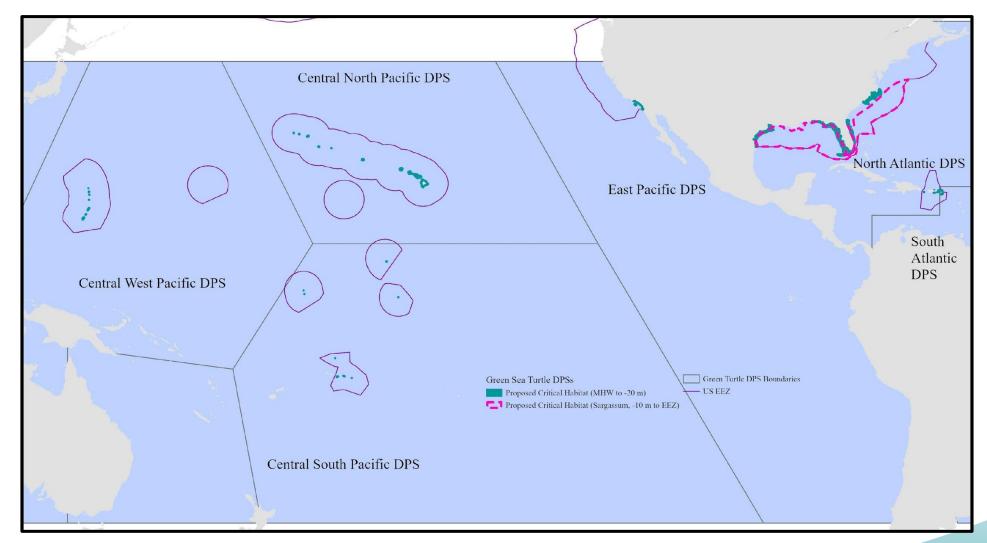
• **Benthic foraging/resting**: From the <u>mean high water line to 20 m depth</u>, underwater refugia and food resources (i.e., seagrasses, macroalgae, and/or invertebrates) of sufficient condition, distribution, diversity, abundance, and density necessary to support survival, development, growth, and/or

reproduction.

• **Surface-pelagic foraging/resting ("Sargassum;" North Atlantic DPS only)**: Convergence zones, frontal zones, surface-water downwelling areas, the margins of major boundary currents, and other areas that result in concentrated components of the Sargassum-dominated drift community, as well as the currents which carry turtles to Sargassum-dominated drift communities, which provide sufficient food resources and refugia to support the survival, growth, and development of post-hatchlings and surface-pelagic juveniles, and which are located in sufficient water depth (at least 10 m) to ensure offshore transport via ocean currents to areas which meet forage and refugia requirements.

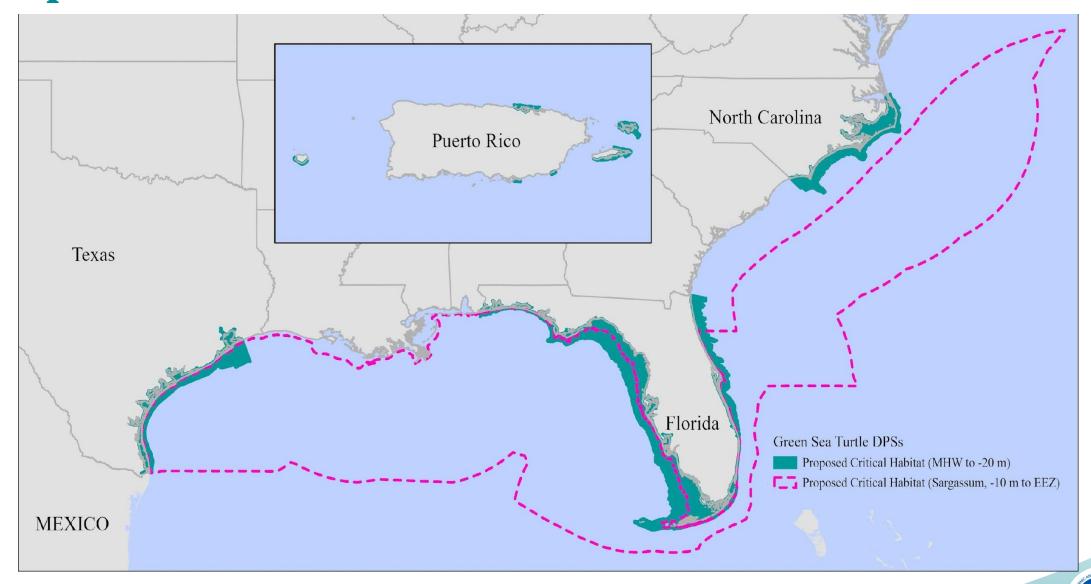


Proposed Marine Critical Habitat for Six Green Sea Turtle DPSs





Proposed Marine Critical Habitat for North Atlantic DPS



Rice's Whale Proposed Critical Habitat





Rice's Whale Proposed Critical Habitat Timeline

- 2019 NOAA Fisheries listed "Gulf of Mexico Bryde's whales" as endangered under the Endangered Species Act (84 FR 15446). Critical habitat was not determinable at the time of listing.
- 2020 Scientists determined based on morphological and genetic data that the previously known subspecies "Gulf of Mexico Bryde's whale" represents a whole new species, the Rice's whale.
- 2020 A complaint was filed seeking an order to compel NOAA Fisheries to designate critical habitat for the whale, which is subject to statutory timelines under the ESA.
- 2021- The ESA listing was revised to Rice's whale to reflect the change in the scientifically accepted taxonomy and nomenclature of the species (86 FR 47022).
- 2022 The U.S. District Court for the District of Columbia approved a modified settlement agreement which stipulates that NMFS will submit to the Federal Register a determination and, if critical habitat is proposed: a proposed rule by July 15, 2023; and a final rule by June 15, 2024.
- 2023 NOAA Fisheries published a proposed rule to designate critical habitat for Rice's whale.

Rice's Whale Proposed Critical Habitat Proposed Essential Feature

Gulf of Mexico continental shelf and slope associated waters between the 100 and 400 m isobaths that support individual growth, reproduction, and development, social behavior, and overall population growth.

The following attributes of this feature support Rice's whales' ability to forage, develop, communicate, reproduce, rear calves, and migrate throughout the Gulf of Mexico continental shelf and slope waters and influence the value of the feature to the conservation of the species:

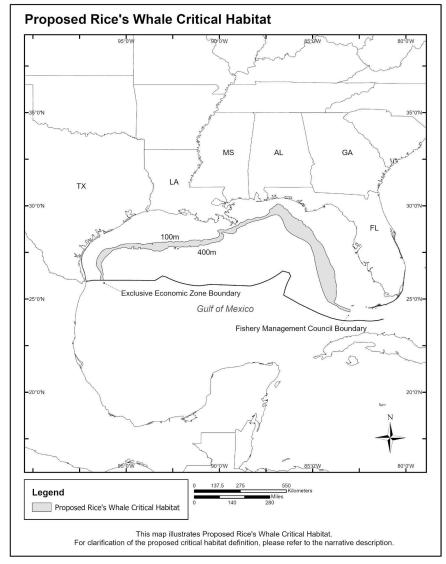
- 1. Sufficient density, quality, abundance, and accessibility of small demersal and vertically migrating prey fish species, including scombriformes, stomiiformes, myctophiformes, and myopsida;
- 2. Marine water with elevated productivity, bottom temperatures of 10-19 degrees Celsius, and levels of pollutants that do not preclude or inhibit any demographic function; and
- 3. Sufficiently quiet conditions for normal use and occupancy, including intraspecific communication, navigation, and detection of prey, predators, and other threats.



Proposed Rice's Whale Critical Habitat

Proposed Critical Habitat Area

- Includes approximately 73,220.65 square kilometers (28,270.65 square miles)
- Gulf of Mexico continental shelf and slope associated waters between the 100 and 400 meter isobaths
- Between the U.S. Exclusive Economic Zone boundary off of Texas to the boundary between the South Atlantic Fishery Management Council and the Gulf of Mexico Fishery Management Council off of Florida





Critical Habitat Designation For 5 Caribbean Corals

- Boulder star coral (Orbicella franksi)
- Lobed star coral (O. annularis)
- Mountainous star coral (O. faveolata)
- Pillar coral (*Dendrogyra cylindrus*)
- Rough cactus coral (*Mycetophyllia ferox*)





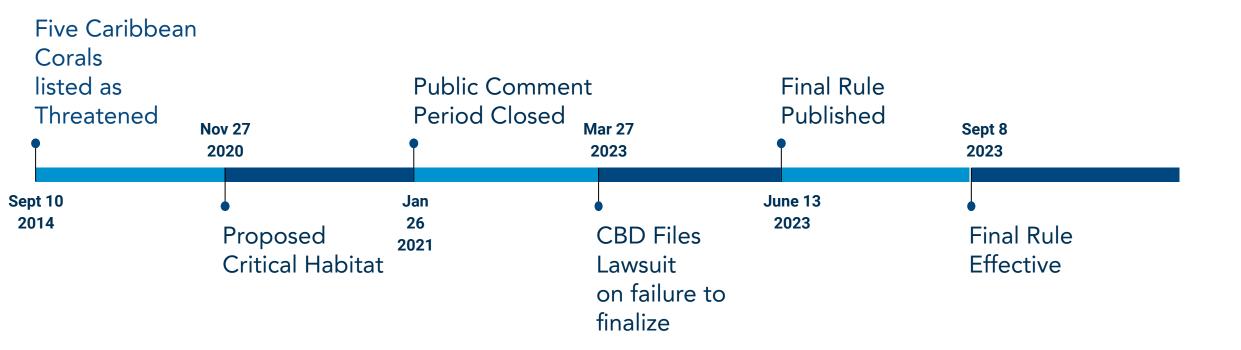








Timeline





Final Physical and Biological Feature

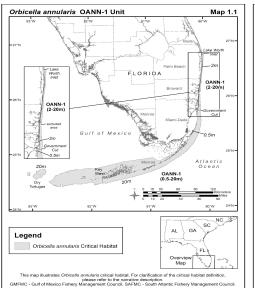
Sites that support the normal function of all life stages of the corals, including reproduction, recruitment, and maturation: natural, consolidated hard substrate or dead coral skeleton, which is free of algae and sediment at the appropriate scale at the point of larval settlement or fragment reattachment, and the associated water column.

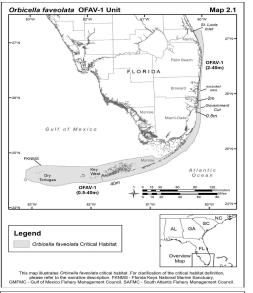
Several attributes of these sites determine the quality of the area and influence the value of the associated feature to the conservation of the species:

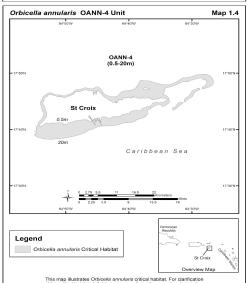
- 1. Substrate with the presence of crevices and holes that provide cryptic habitat, the presence of microbial biofilms, or presence of crustose coralline algae;
- 2. Reefscape with no more than a thin veneer of sediment and low occupancy by fleshy and turf macroalgae;
- 3. Marine water with levels of temperature, aragonite saturation, nutrients, and water clarity that have been observed to support any demographic function; and
- 4. Marine water with levels of anthropogenically-introduced (from humans) chemical contaminants that do not preclude or inhibit any demographic function.

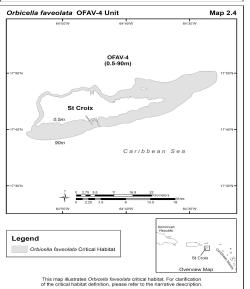


Final Critical Habitat Units









- 5 Species
- 1 unit for each species based on depth distribution in each geographic area it occurs
- 28 total units
- Within each geographic area, units are mostly overlapping
- 1 excluded area Navy South Florida Ocean Measuring Facility near Dania Beach, FL

Changes from Proposed Rule to Final Rule:

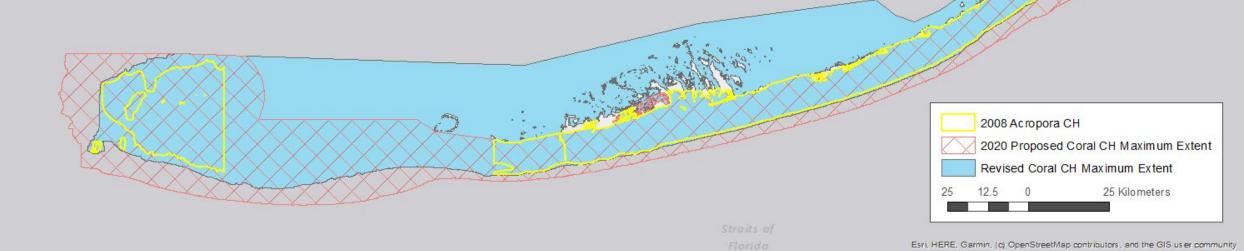
- Changed deep boundary from 90 m to 40m
- Added back side of Florida Keys

Acropora CH Area: 3,553 sq km

Proposed Maximum Area: 7,948 sq km

Final Maximum Area: 9,570 sq km

Delta: 1,622 sq km



Florida

Flower Garden Banks:

Changes from Proposed Rule to Final:

- Changed shallow boundary from 17 m to 16m
- Added Bright, McGrail, and Geyer Banks 16-90 m



Acropora CH Area:

Proposed Rule Maximum Area: 4

Final Rule Maximum Area:

Delta:

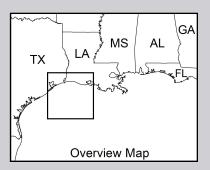
0 sq km

41 sq km

89 sq km

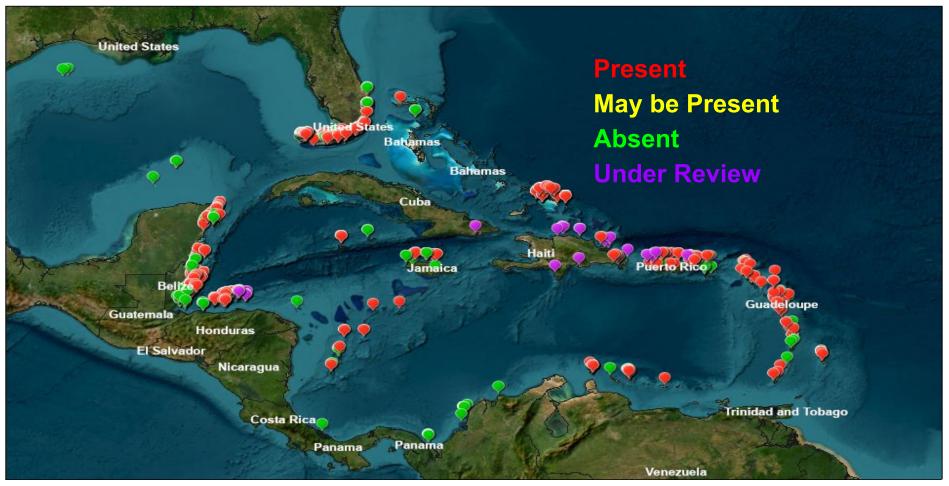
sq km







Proposed Rule to Change the ESA Status of Pillar Corals from Threatened to Endangered

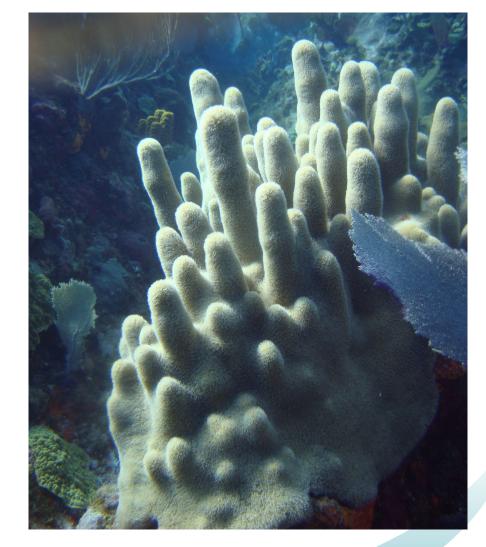


Kramer, P.R., Roth, L., and Lang, J. 2019. Map of Stony Coral Tissue Loss Disease Outbreak in the Caribbean. www.agrra.org. ArcGIS Online. August 24, 2023



Pillar Coral Proposed Rule

- Listed as threatened in 2014 because of its susceptibility to multiple threats and demographic risks.
- Since listed, the species has experienced substantial population decline, primarily due to its high susceptibility to stony coral tissue loss disease (SCTLD).
- A requirement of the ESA is to review the status of listed species at least every 5 years. During the most recent 5-year review, NOAA Fisheries determined that pillar coral met the definition of an endangered species and recommended a change in its listing status.





What is the Difference between Endangered and Threatened?

Endangered: a species is considered "endangered" if it is in danger of extinction throughout all or a significant portion of its range.

- An "endangered species" is interpreted to be presently at risk of extinction.
- Endangered species are automatically protected by prohibitions of several types of "take" including harming, harassing, collecting, or killing, under Section 9 of the ESA.

Threatened: defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

- A "threatened species" is interpreted as a species that is not currently at risk of extinction but is likely to become so in the foreseeable future.
- Threatened species can receive protections through separate regulations issued under Section 4(d)
 of the ESA. These regulations occur separately from the listing. Also called 4(d) rules, they can
 include the same prohibitions under Section 9 of the ESA.
 - 4(d) rules allows us to customize prohibitions and regulate activities to provide for the conservation of threatened species.



Timeline

August 29, 2023

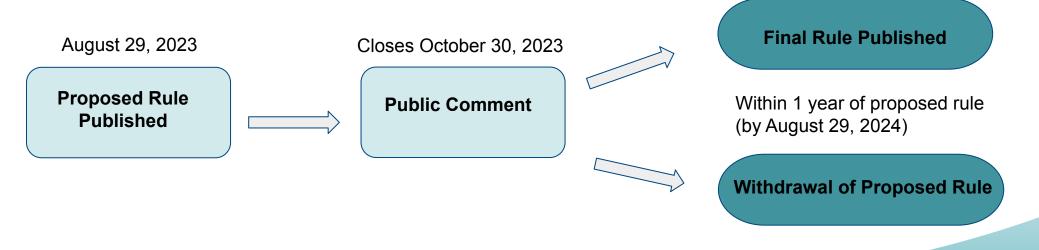
Proposed rule issued to change the status of pillar coral to Endangered

October 30, 2023

60 day comment period closes

By August 29, 2024

Final determination on whether to change the status of pillar coral under the ESA





What Would Listing Pillar Coral as Endangered Mean for Federal Agency consultations under ESA Section 7?

- Federal agencies that authorize, fund, or carry out activities that
 may affect pillar coral will <u>continue</u> to consult with NOAA Fisheries.
 Consultation requirements and processes will not change with a
 change in status of pillar coral from Threatened to Endangered.
- If a project is likely to result in adverse effects to pillar coral and is not likely to jeopardize its continued existence, a biological opinion will be issued with terms and conditions set forth by NMFS in an incidental take statement.



Shrimp Industry Consideration

- SERO is voluntarily <u>conferencing</u> on proposed designations and listing proposals.
 - A process which involves informal discussions between a Federal agency and the Service under section 7(a)(4) of the Act regarding the impact of an action on proposed species or proposed critical habitat and recommendations to minimize or avoid the adverse effects.
- Overlap between shrimping and proposed and final critical habitats
 - There is the most overlap between shrimping and proposed green sea turtle critical habitat.
 - Overlap with Rice's whale proposed critical habitat is limited to royal red shrimp effort.
 - Protective regulations in place prohibit or limit trawling in areas where corals are most likely to occur.
- In areas where there is overlap, we do not expect shrimping to affect any
 of the essential or physical and biological features.



Questions?

