

# Queen Conch ESA Listing and Effects on Permitted Projects and Projects Under Regulatory Review

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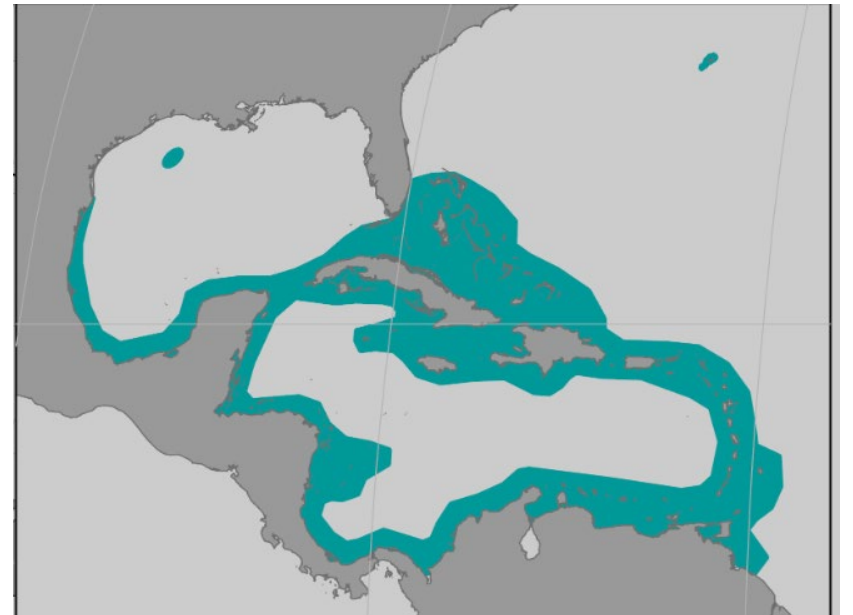
# INTRODUCTION TO THE QUEEN CONCH

- Species was listed as Threatened throughout its range on February 14, 2024 with effective date of March 15, 2024.
- Queen conchs are long lived and reach maturity around 25 to 30 years old. Believed to reach sexual maturity around 3.5 to 4 years of age.
- Benthic-grazing herbivores which feed on algal and plant material. Found in range of habitats: adults prefer sandy algal flats but also found on gravel, coral rubble, and hardbottom. Juveniles are often found in seagrass beds.
- Queen conch tend to avoid silty/sand and mud habitats due to intake of particles in their gills.



# INTRODUCTION TO THE QUEEN CONCH

- NMFS Reasons for Listing as Threatened- low reproductive densities, overharvesting of juveniles, illegal fishing, and broken connectivity
- Florida thought to be a sink, meaning not much is cycled back into Florida waters. NMFS believes that focusing on the entire known queen conch habitat will improve Florida populations.
- Information/research gaps
  - Distribution
  - Preferred Habitats in Florida
  - Biology and Behavior





# History of the ESA Listing of Queen Conch

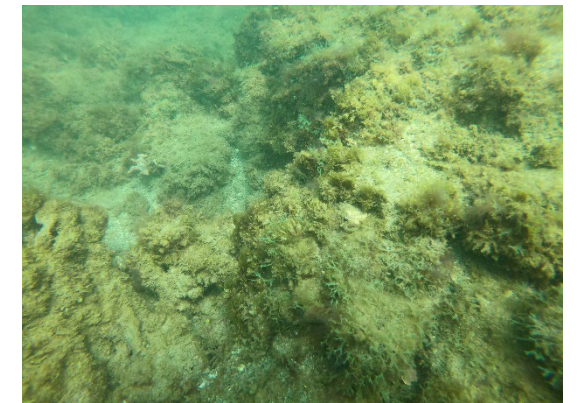
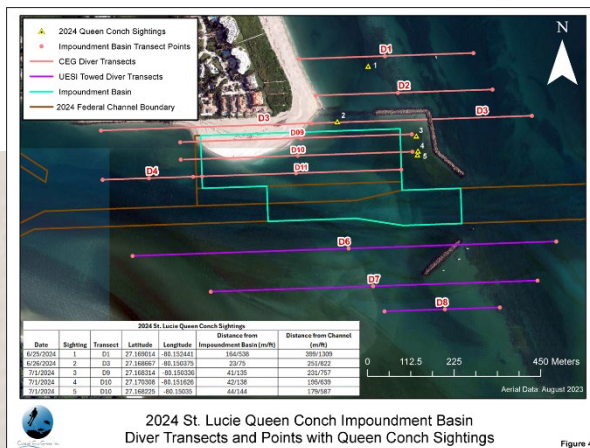
- Listing of Queen Conch was opposed by FWC by letter dated Nov. 2022
- FWC believes that Florida population is unique - functionally isolated from the remainder of the Caribbean. Florida has managed harvest prohibition since 1985.
- Studies in the Florida Keys conducted since 1999 indicate that queen conch do not reproduce in warm, nearshore waters
- Relocation works - FWC studies have found that relocation of from nearshore to offshore restored reproductive fitness (queen conch didn't spawn in shallow warmer waters but did spawn after relocation to deeper waters).
- FWC supported more direct actions to manage and restore Florida's queen conch population but did not support listing under the ESA.





# Queen Conch Surveys and Relocation in Florida to Date

- Coastal Eco-Group was the first group issued a Special Activities License by FWC to relocate queen conch in Florida in July 2024 for the St Lucie Inlet Maintenance Dredging Project-
- Multiple habitat types surveyed- 4 sub-adult/intermediate queen conch were located during initial survey, all 4 relocated approximately 3 weeks later. All 4 were within about 100 m of the original sightings
- Second during construction survey conducted about 4 weeks after first relocation, 5 more sub-adults were found and relocated to nearshore hardbottom- 9 in total







# Queen Conch Survey Considerations

- Range of survey conditions in nearshore and ability to detect queen conch on the bottom
- Need for qualified individuals to do surveys- several species of conch occur in southeast Florida





# WHAT HAVE WE LEARNED AND MOVING FORWARD

- Difficulty of implementing survey guidelines in the range of project habitats
  - Low visibility conditions
  - Safety concerns- Navigation channels and deep water
  - Different survey methods must be considered
- Survey data need to feed back into revision of survey requirements and guidelines
- We have not found any queen conch in offshore sand borrow areas in Martin and Palm Beach County- do we need to continue to survey unconsolidated sand with no consolidated hardbottom within 1,000 ft of sand borrow areas?
- In 2024, juvenile queen conch were commonly observed on nearshore hardbottom in Broward County and south Boca Raton in south Palm Beach County but there are limited observations on nearshore hardbottom offshore of Palm Beach

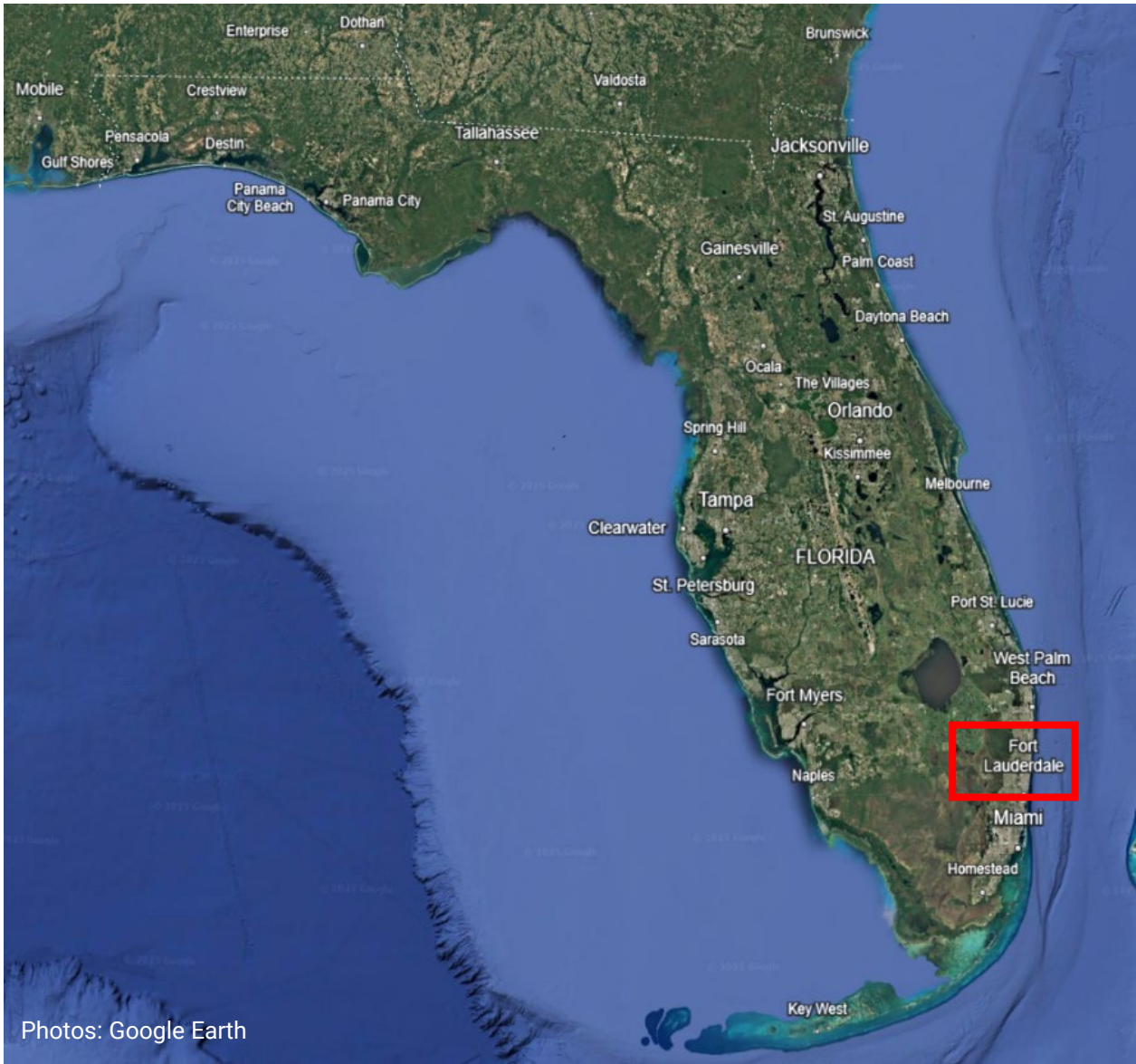


# CONSIDERATIONS MOVING FORWARD

- USACE is currently in the RAI process for queen conch to be included under the SARBO- unknown timeline
- December 2024 Survey and Relocation guidelines only apply to small projects less than 1,000 m<sup>2</sup> in size with no more than 10 queen conch (juvenile or adult)- to qualify for informal, expedited consultation
- December 2024 Guidelines also do not apply to any mechanical dredging activities due to potential for adverse impacts from sediment resuspension. Formal consultation may be required.



# Active Projects in Broward County



Photos: Google Earth



# Mitigation Reef

- ◆ Remaining construction with limestone boulders (~3 acres)
- ◆ Required by Federal and State permits from a 2016 beach nourishment project
- ◆ Estimated total construction cost: \$16.5M
- ◆ Conch present in project area
- ◆ Current status: Expedited informal consultation
- ◆ Expected timeline: 6 months



# Port Everglades Sand Bypass

- ◆ Environmentally beneficial project, decades to design and permit
- ◆ Estimated total construction cost: \$80M
  - County has a contractor on the books for initial construction (\$60M)
- ◆ Conch present in project area
- ◆ Current status: Formal consultation
- ◆ Expected timeline: 12 months





# Challenges and Actions Taken

## ◆ Challenges

- Stuck in the middle
- Newly listed species protocol for projects
- Sand Bypass BO and BMP included conservation measures
- USACE project manager changes

## ◆ Actions taken

- Coordination with all parties (County, consultant, USACE, NMFS) have been extremely helpful
- Keeping lines of communication open



# Previously Permitted Coastal Projects

- ◆ Projects with existing Federal Permits
- ◆ SARBO requirements
- ◆ Trigger (and need?) for re-consultation

# 2025 Construction Examples

- ◆ Are there conch in the project vicinity?
- ◆ Field Surveys (just to make sure)
- ◆ USACE Notice
- ◆ What's next?

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