

EVOLUTION AND FUTURE OF DREDGING PROJECTS FROM AN ENVIRONMENTAL STANDPOINT: A 2020 SOUTH ATLANTIC REGIONAL BIOLOGICAL OPINION (SARBO) PERSPECTIVE



Presentation for WEDA Eastern Chapter Meeting

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2020 SOUTH ATLANTIC REGIONAL BIOLOGICAL OPINION OVERVIEW

Signed on March 27 2020; revised July 30, 2020

Covers Regulatory (RD) and Civil Works (CW)

Covers maintenance only (not new work)

<https://www.fisheries.noaa.gov/content/endangered-species-act-section-7-biological-opinions-southeast>
(First link under "U.S. Army Corps of Engineers")

Consulting Agencies:

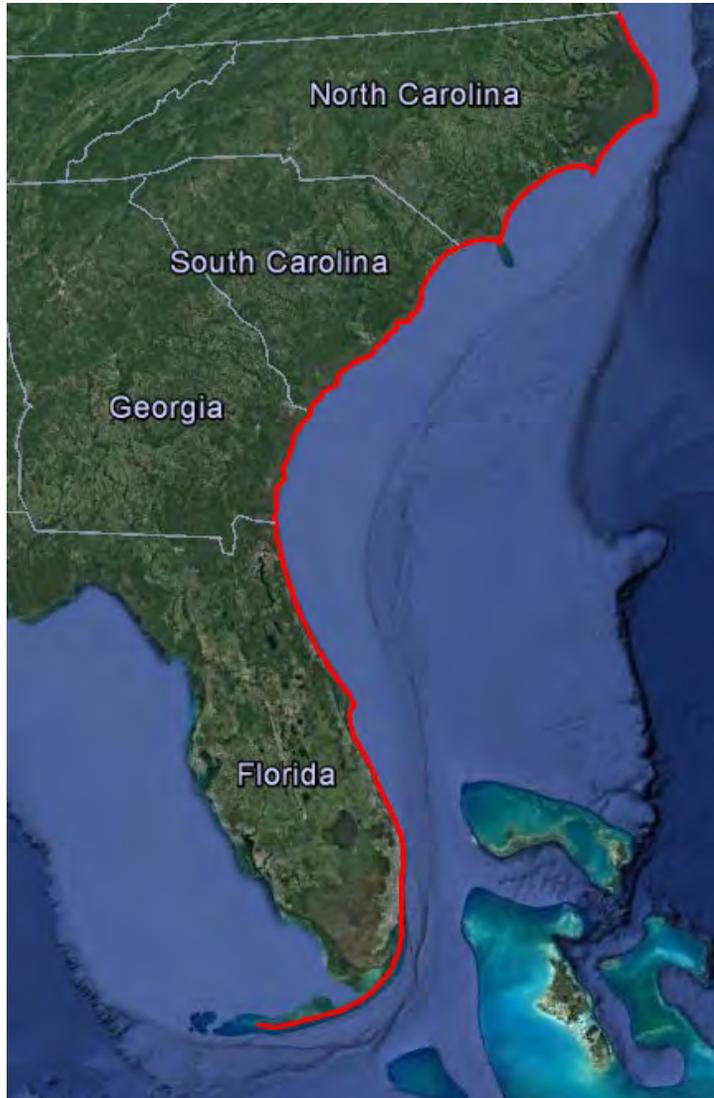
- National Marine Fisheries Service (NMFS), Southeast Regional Office (SERO), Protected Resources Division (PRD)
- South Atlantic Division, USACE
- Bureau of Ocean and Energy Management (BOEM)



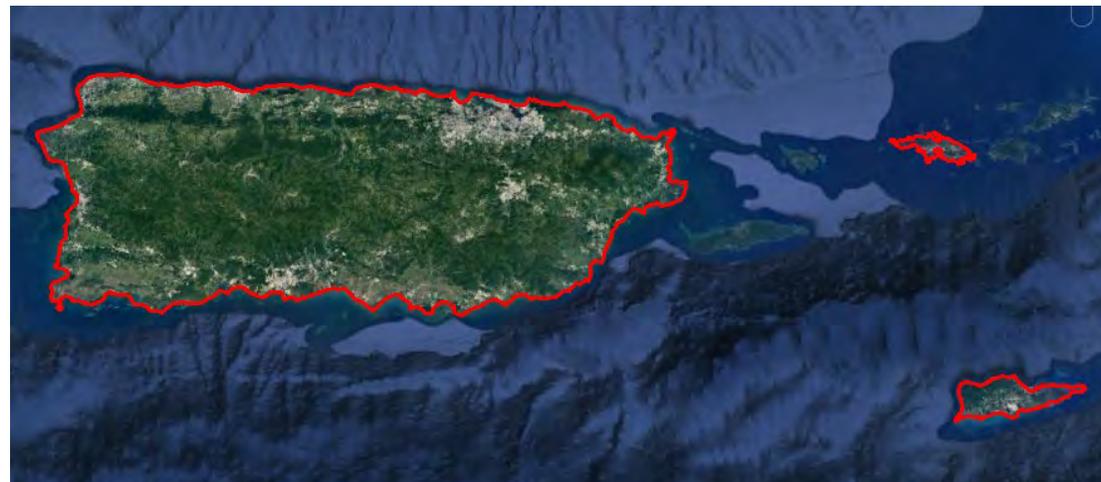
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ACTION AREA



“...waters off of the Atlantic coast, from the North Carolina/Virginia border south to the tip of Florida including the Florida Keys, and waters off of the Islands of Puerto Rico and the U.S. Virgin Islands.”
(Section 2.8)



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WHAT STAYS THE SAME AND WHAT IS NEW

What's the same?

- South Atlantic Division is still the lead agency for the Opinion
- Covers Regulatory & Civil Works projects
- Covers only maintenance, not new work

What's new?

- Inclusion of the North Atlantic Right Whale (NARW) Conservation Plan
- Focuses on managing all species, not just turtles
- Increased reporting requirements for all projects, not just takes and includes operational reporting
- Take is a rolling 3-year total
- New dredging technologies may be considered under SARBO Supersede review process (Section 2.9.5)



SPECIES COVERED BY 2020 SARBO

SWIMMING SEA TURTLES:

- Loggerhead* (NWA DPS)
- Green* (NA and SA DPS)
- Kemp's ridley
- Leatherback*
- Hawksbill

FISH

- Atlantic sturgeon* (SA DPS)
- Shortnose sturgeon
- Nassau grouper

ELASMOBRANCHS

- Giant manta ray
- Oceanic whitetip shark
- Smalltooth sawfish (US DPS)
- Scalloped hammerhead shark (Central and SWA DPS)

WHALES

- North Atlantic right whale* (NARW)
- Blue
- Fin
- Sei
- Sperm

NON-MOBILE SPECIES:

CORALS

- Elkhorn*
- Staghorn*
- Boulder star
- Lobed star
- Mountainous star
- Pillar
- Rough Cactus

MARINE PLANTS

- Johnson's seagrass*

*Denotes Designated Critical Habitat (DCH) covered by the 2020 SARBO

References

- *Section 3 – Potential Routes of Effect to ESA-listed species and critical habitat*
- *Section 4 – Status of Species Likely to be Adversely Affected*



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PROPOSED ACTION

Five types of activities are covered under the 2020 SARBO:

1. Dredging

- Maintenance dredging
- Dredging/sand mining in borrow sites
- Restoration dredging/muck dredging to improve water quality

(Section 2.3)

2. Dredged Material Placement

- Sand placement for beach nourishment
- Nearshore placement
- Placement in an ODMDS
- Upland placement

(Section 2.4)

3. Types of equipment and transportation of dredge materials between dredging and material placement locations

(Section 2.5)

4. G&G surveys performed by or authorized by the USACE necessary to complete dredging and material placement projects

(Section 2.6)

5. Monitoring for and handling of ESA-listed species encountered during projects covered under this Opinion

(Section 2.7)



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PROJECT DESIGN CRITERIA (PDC)

- Describe how projects will be executed
- Used in lieu of Terms and Conditions and Conservation Recommendations
- Provides limitations to where projects can occur within the broader action area
- Project execution must be consistent with PDCs in order for an action to be covered by the SARBO

“Substantially similar” means the effects of the proposed project are consistent with the effects analyzed in the SARBO. In other words, the project does not result in effects to an ESA-listed species or critical habitat not considered in the SARBO.

Supersede Process (*Section 2.9.5*)

- Supersede 1 – Inclusion of projects that deviate slightly from the PDCs
- Supersede 2 – New construction methodologies or equipment types that deviate from the proposed actions covered in the SARBO
- Supersede 3 – Minor revisions to 1 or more PDCs for future projects
- Supersede 4 – Project-specific review for relocation of ESA-listed corals

All Supersede requests must be coordinated through SAD and require written approval from NMFS prior to authorizing the project

Effects must be “substantially similar” to effects covered in the SARBO



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PDC AND SURVEY REQUIREMENTS

- Coral Hardbottom Survey Requirements: Appendix C, Section 2
 - Hardbottom surveys will be completed within 2 years prior to the start of dredging
 - Coral PDCs require surveying to identify the presence of coral hardbottom as a protection for both Acropora critical habitat feature and as a simplified way to identify areas where ESA listed corals may occur
 - If corals are identified, additional measures may be required to complete the project including limiting certain types of equipment used, restricting the length of time construction can occur near coral hardbottom, or relocating the ESA-listed corals in the hardbottom area
- Johnson's seagrass Survey Requirements: Appendix D, Section 2 & 3
 - A visual seagrass survey will be conducted to determine the presence Johnson's seagrass and/or to quantify the loss of the ESA-listed species
 - Seagrass surveys will be conducted within 1 year prior to the start of dredging and preferably during the peak growing season between June 1 and September 30



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CHANGES TO HOW USACE DOES BUSINESS

- Project execution must adhere to PDCs in order for an action to be covered by the SARBO
- This risk-based approach potentially reduces costs for dredging by allowing operations during times of year that have less volatile weather and expands coverage for species listed since the previous SARBO
- Jacksonville District – Coral and Seagrass Surveys now required for current projects including O&M
- This new way of doing business needs to be collaborative between USACE, agencies, and industry to ensure success



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USACE AND THE NEW 2020 SARBO PROCESS

Broward County Shore Protection Project (SPP)

- Placing sand on the beaches of Mizell-Johnson State Park, Dania Beach, Hollywood and Hallandale, and is 100 percent federally funded via the Flood Control and Coastal Emergency Act (Public Law 84-99) and the Bipartisan Budget Act of 2018 (Public Law 115-123)
- Segment II ~390,000 cubic yards of beach-quality sand from an upland mine along 8.9 miles of eroded Atlantic Ocean shoreline in central Broward County
- Segment III ~125,000 cubic yards of beach-quality sand above the mean high water (MHW) level to avoid water quality impacts



BROWARD COUNTY SPP

Hardbottom Surveys Required

- Surveys from the county used for some reaches
- Needed additional surveys
- Surveys identified hardbottom and corals
- 2020 SARBO required coral relocation
 - For beach nourishment projects, the USACE will contact NMFS prior to relocating corals located between the proposed beach fill template ETOF and 500 ft waterward of the ETOF to determine if relocation is necessary based on the likelihood of turbidity or sedimentation reaching corals within this area.
 - This assessment will consider the material to be placed, site conditions, hydrology, and likelihood of potential burial of corals in the area during or after sand placement.



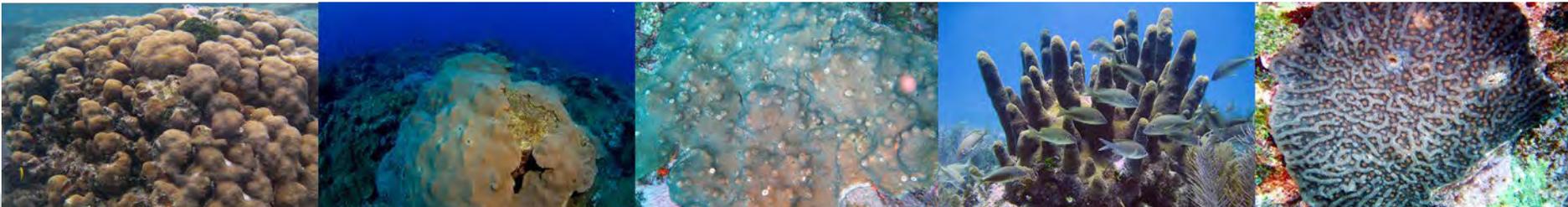
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BROWARD COUNTY SPP

2020 SARBO Compliance Path Forward with NMFS

- Mapped the estimated toe of fill (ETOF), the construction toe of fill (CTOF), and the Hardbottom Edge
- Mapped where the corals are located
- Mapped a line that is 200' from the ETOF and 500' from the ETOF to show where the corals are located in comparison to the ETOF
- Proposed additional monitoring in lieu of relocating corals to meet the PDC
- Coordinating this information with NMFS to determine if any corals need to be relocated or if monitoring would be sufficient to protect the corals and to meet the PDC



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Broward Segment III Park Section

FDEP Monuments R-87.5 to R-92

R-90 Corals located ~300 ft from ETOF

R-92 Corals located over 500 ft from ETOF



Legend

- CTOF
- ESAListed Coral Locations
- Hardbottom Edge
- Range Monuments

RECOMMENDATIONS

Best Practices!

- **Begin** coordination **early** and **maintain communication!**
- Document everything! This includes start/stop dates, quantities, R- monuments/locations
- Research to be aware of existing resources you can use
 - Resource surveys, monitoring plan, ongoing survey efforts by others
 - Surveys should follow protocol in the SARBO
- Maintain a repository of existing surveys
 - Update existing protocols if they don't match the SARBO
- Strive to meet the **intent** of the SARBO PDCs – if it is not an exact fit, use the Supersede Process

Regulatory Permits ...

- Review all special conditions – SARBO has new requirements
- Existing permits using 1997 SARBO much now adhere to the 2020 SARBO
 - Request permit modification to ensure all conditions & reporting requirements are accurate
 - Email RD.SARBO.GRBO@usace.army.mil if you are starting work in the next fiscal year to make sure all surveys and risk assessments are complete



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QUESTIONS



<https://noradep.gov/~/media/biscayne-bay-marine-life-preserve/2013/04/14/14-johnson-seagrass>



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