## SOUTH ATLANTIC REGIONAL BIOLOGICAL OPINION (SARBO) UPDATE



Harbor and Navigation Committee

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World-Class Delivery...
Real-World Impact!





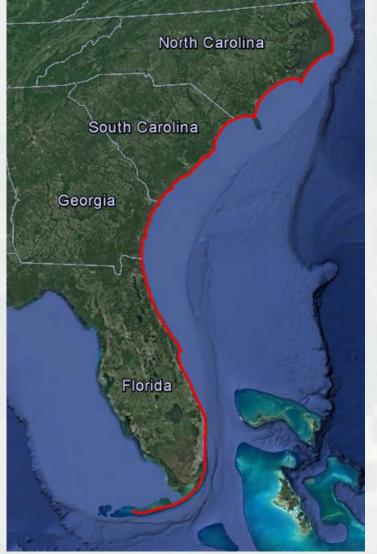
## SARBO History & Schedule

- 1997 Current BiOp Amended 1995 opinion
- 2007: Formally reinitiate consultation
- 2007: NMFS tells Corps to keep dredging while under consultation
- 2012 1214: Additional species listed
- July 2018: Significant agreements reached on long standing critical elements
- March 2019: Draft Project Design Criteria (PDCs) received from NMFS; Corps/Industry Review
- August 2019: USACE receives final DRAFT of SARBO
- March 27 2020: SARBO Signed





#### What is the action area?



#### ■2020 SARBO Action Area:

■The action area for this programmatic Opinion ("2020 SARBO action area") includes 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.









### **Proposed Action**

#### Five types of activities covered under the 2020 SARBO

- 1. Dredging
- Maintenance dredging
- Dredging/sand mining in borrow sites
- Restoration dredging/muck dredging to improve water quality
- 2. Dredge material placement
- Sand placement for beach nourishment
- Nearshore placement
- Placement in an ODMDS
- Upland placement

- 3. Transportation of dredge materials between dredging and material placement locations.
- 4. G&G surveys performed by or authorized by the USACE necessary to complete dredging and material placement projects
- 5. Monitoring for and handling of ESA-listed species encountered during projects covered under this Opinion.



## 2020 SARBO Species covered

Species Covered in 2020 SARBO					
Species	Sub-Species				
Sea Turtles	Kemp's Ridley, green, hawksbill, leatherback, loggerhead				
Sturgeon	Short Nose, Atlantic				
Whales	North Atlantic Right Whale, Blue, Blue, Fin, Sei, Sperm				
Corals	Boulder star, elkhorn, Lobed star, Mountainous star, Pillar, rough cactus, staghorn				

Nassau Grouper	Critical Habitat covered in 2020 SARBO		
Giant manta ray	Species	Sub-Species	
Scalloped Hammerhead Shark	Corals	Elkhorn/Staghorn	
Smalltooth Sawfish	Sea Turtles	Green, leatherback, loggerhead	
Oceanic Whitetip Shark	Johnsons Seagrass		
Johnsons Seagrass	North Atlantic Right Whale		
	Atlantic Sturgeon		



This is a considerable expansion of listed species and critical habitat coverage from the 1997 Opinion.



#### What stays the same and what changes

- The same:
- South Atlantic Division is still the lead agency for the Opinion.
- Covers regulatory and Civil Work projects.
- Covers only maintenance, not new work.
- Changes:
- The 2020 SARBO is executed and managed in partnership with BOEM through the use of Project Design Criteria (PDCs).
- 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 but includes operational reporting.
- Take is averaged over 3-years.
- New dredging technologies may be considered under the SARBO Supersede review process





## Project Design Criteria

- These are used to describe how project will be executed and are used in lieu of Terms and Conditions and Conservation Recommendations.
- The areas where projects can occur within the broader action area are limited by the PDCs of this Opinion.
- In order for an action to be covered by the SARBO, the execution of the project must be done consistent with the PDCs, however,
- In limited instances, projects that deviate from this Opinion's PDCs in a minor way, including location, may be covered under the Supersede process outlined in Section 2.9.5 of the SARBO.





#### 2020 SARBO Incidental Take Statement

Table 52. Anticipated Future Take Per 3 Consecutive Year Period

Species	Nonlethal Take - Observed	Lethal Take - Observed	Lethal Take - Unobserved	Total Lethal Observed + Unobserved Take	Sea Turtle Lost Egg Clutch
Green Sea Turtle NA DPS	742	59	59	118	3
Green Sea Turtle SA DPS	40	4	4	8	0
Kemp's Ridley Sea Turtle	1340	58	58	116	1
Leatherback Sea Turtle	369	0	4	4	6
Loggerhead Sea Turtle NWA DPS	5270	107	107	214	65
Atlantic Sturgeon South Atlantic DPS	499	73	0	73	N/A
Atlantic Sturgeon Carolina DPS	319	47	0	47	N/A
Atlantic Sturgeon Chesapeake Bay DPS	91	14	0	14	N/A
Atlantic Sturgeon New York Bight DPS	34	5	0	5	N/A
Atlantic Sturgeon Maine DPS	1	1	0	1	N/A
Shortnose Sturgeon	6	8	6	14	N/A
Giant manta ray	89	0	0	0	N/A

Table 53. Anticipated Future Take Per Other Defined Time Period

Species	Nonlethal Take - Observed	Lethal Take - Observed	Lethal Take - Unobserved
Smalltooth sawfish (U.S. DPS)	1 total per 3 year period	1 total per 9 year period	
Elkhorn Coral	2 total per 10 year period	1 total per 10 year period	Monitoring required = no unobserved
Staghorn Coral	1,105 total per 10 year period	195 total per 10 year period	Monitoring required = no unobserved
Lobed star Coral	43 total per 10 year period	8 total per 10 year period	Monitoring required = no unobserved
Mountainous star Coral	136 total per 10 year period	25 total per 10 year period	Monitoring required = no unobserved
Boulder star Coral	63 total per 10 year period	11 total per 10 year period	Monitoring required = no unobserved





### Species Specific Restrictions

- Turtles No dredging windows; placement windows during nesting on high density beaches (USFW)
- Atlantic Sturgeon Some windows on small non-routinely dredged channels; No in-water placement in sturgeon rivers w/ critical habitat
- NARW Speed reductions if in the winter and a whale is spotted within 38NM for 36 hours
- Corals No overflow w/in 500' (5%) or 1000' (10%) for a maximum of 18 days per location; no overflow for >10%; relocate corals on pipeline corridors
- Sea Grass Turbidity curtains required if using mechanical dredges



#### **SARBO** Benefits

- Significantly reduces the need for stand alone BiOps Civil Works and Regulatory
- Adopts a risk based approach to multiple species management no longer turtle centric
- Levels National Dredge Schedules reduces bottlenecks
- Incorporates NARW Conservation Plan expands aerial surveillance
- Higher takes limits for recovered species; i.e. Green Sea Turtles
- Supersede for one offs and technology improvements





## Additional Ongoing Research

- Tickler chains in lieu of deflectors
- DO drops around a dredge
- Turbidity Plume Modeling
- Sediment Transport Modeling
- Fate of Fines





# Questions?

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