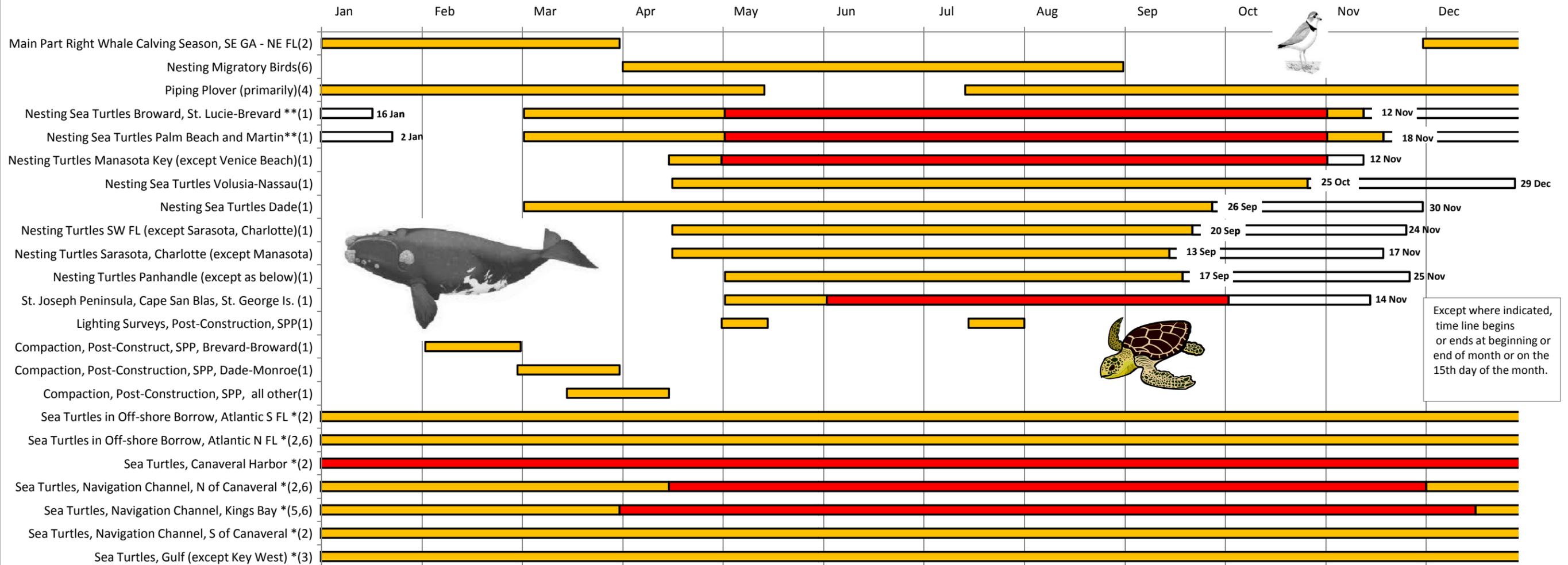


Revised Environmental Windows: Dredging and Beach Placement (7)

March 2015



Except where indicated, time line begins or ends at beginning or end of month or on the 15th day of the month.



* Applies to Hopper Dredging
 In Gulf of Mexico, monitoring required if surface water temperatures are 11°C or more.
 Key West Harbor is included in the South Atlantic Regional Biological Opinion
 ** Late nesting season relocation may end earlier for many locations
 Beach placement prohibition starts later for certain locations

Either Hopper Dredging or Beach Placement Prohibited

Monitoring and/or Relocation Required

Beach Work Requiring Prior Monitoring and Relocation

References: (1) Statewide Programmatic Biological Opinion, revised March 2015, FWS (2015-SPBO) (2) South Atlantic Regional Biological Opinion, 1995, NMFS (3) Gulf Regional Biological Opinion, 2007 revision, NMFS (4) Programmatic Piping Plover Biological Opinion (T&C 8), 22 May 2013, FWS (5) SAD Management Protocol for SARBO (6) SAJ Guide Specs 3.1.5.12a (Migratory Birds) and 3.1.5.2 (Hopper dredge) (7) For restrictions in Important Manatee Areas, see maps http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Manatee/County_Maps_2013.pdf
 For post-construction monitoring requirements for sea turtle nesting, see terms and conditions of Statewide Programmatic Biological Opinion.
 For late season monitoring: 7 days without a nests, can stop monitoring once electronic mail concurrence is received from FWS or FWC.
 Generally, monitoring and relocation of sea turtle nests during nesting season begins 65 days prior to start of work (70 days prior for the Panhandle) or at the beginning of the nesting season whichever comes last.

Statewide Programmatic Biological Opinion (2015-SPBO)

- Lighting (Beach Renourishment Projects) A10. Two surveys shall be conducted of all lighting visible from the beach placement area by the Applicant or Corps, using standard techniques for such a survey (**Appendix C**), in the year following construction. The first survey shall be conducted between May 1 and May 15 and a brief summary provided to the Service. The second survey shall be conducted between July 15 and August 1. A summary report of the surveys, including any actions taken, shall be submitted to the Service by December 1 of the year in which surveys are conducted. After the annual report is completed, a meeting shall be set up with the Applicant, county or municipality, FWC, Corps, and the Service to discuss the survey report, as well as any documented sea turtle disorientations in or adjacent to the project area. If the project is completed during the nesting season and prior to May 1, the Corps may conduct the lighting surveys during the year of construction.

- Monitor and Relocate Turtles (all Beach Placement) [Monitor and relocate nests in nesting season. No beach work main part of nesting season in high density nesting areas] *

- Compaction and Escarpment. A12. (beach renourishment) Sand compaction shall be monitored in the area of sand placement immediately after completion of the project and prior to the dates in Table 19 for 3 subsequent years. If tilling is needed, the area shall be tilled to a depth of 36 inches...* B10. (navigation placement) Sand compaction shall be monitored in the area of dredged material placement immediately after completion of the project and prior to the dates in Table 19 for 3 subsequent years...[if material remains on the beach]. See A13 and B11 on Escarpments.*

*See complete Terms and Conditions for details, page 124 for beach renourishment and page 145 for navigation placement
<http://www.fws.gov/verobeach/verobeach_old-dont_delete/images/biologicalopinion/20150313_BO_Sand_Placement_Statewide_final.pdf>

Gulf Regional Biological Opinion

4. *Observers [Jan 9, 2007]: The COE shall arrange for NMFS-approved protected species observers to be aboard the hopper dredges to monitor the hopper bin, screening, and dragheads for sea turtles and Gulf sturgeon and their remains...between April 1 and November 30, and whenever surface water temperatures are 11°C or greater [year-round in South Florida].*

SAJ Guide Specs (01 57 20)

- Migratory Birds, 3.1.5.12a: Monitoring of Construction Area: In order to meet these responsibilities, the Contractor shall conduct monitoring of the construction area beginning 1 April through 31 August, if construction activities occur during that period. Daily monitoring using the Daily Bird Monitoring Report shall be conducted during the dawn or dusk time frames by a bird monitor approved by the Contracting Officer.

- Hopper Dredge, 3.1.5.2 During dredging operations, observers approved by the National Oceanic and Atmospheric Administration - Fisheries (NOAA-Fisheries) sea turtles, sturgeon and [whales] shall be aboard to monitor for the presence of the species. Observer coverage shall be 100 percent (24hr/day) and shall be conducted year round. During transit to and from the disposal area, the observer shall monitor from the bridge during daylight hours for the presence of endangered species, especially the Northern right whale, during the period December through March. During dredging operations, while dragheads are submerged, the observer shall continuously monitor the inflow and/or overflow screening for turtles and/or turtle parts and sturgeon and/or sturgeon parts. Upon completion of each load cycle, dragheads should be monitored as the draghead is lifted from the sea surface and is placed on the saddle in order to assure that sea turtles that may be impinged within draghead are not lost and un-accounted for. Observers shall physically inspect dragheads and inflow and overflow screening/boxes for threatened and endangered species take.

Programmatic Piping Plover Biological Opinion (P3BO)

- Optimal Piping Plover Habitat. For one full piping plover migration and winter season (beginning July 15 to May 15) prior to construction, and 2 years following each dredging and sand placement event, bimonthly (twice-monthly) surveys for piping plovers shall be conducted in the beach fill and in any other intertidal or shoreline areas within or affected by the project. If a full season is not available, at least 5 consecutive months with three surveys per month spaced at least 9 days apart are required. During emergency projects, the surveys will begin as soon as possible prior to, and up to implementing the project. Piping plover identification, especially when in non-breeding plumage, can be difficult. If pre-construction monitoring is not practicable, it will be so indicated in the notification to the Service (see Term and Condition #2 above) and the Service will decide whether to require a separate individual consultation.

RESTRICTIONS AND MONITORING REQUIREMENTS FOR HOPPER DREDGING ACTIVITIES IN THE ATLANTIC WATERS OF THE COE SOUTH ATLANTIC DIVISION

AREA	WHALE MONITORING for beach nourishment, navigation channels, and transit	SEA TURTLE MONITORING: NAVIGATION CHANNELS		SEA TURTLE MONITORING: BEACH NOURISHMENT ACTIVITIES	
		WINDOWS	MONITORING	WINDOWS	MONITORING ¹
North Carolina to Pawles Island, SC (includes channels at Oregon Inlet, Morehead City and Wilmington)	100% dedicated daytime whale observer coverage between 1 Dec and 31 Mar. Monitoring by sea turtle observer between 1 Apr and 30 Nov.	Year Round	100% observer monitoring from 1 Apr - 30 Nov	Year Round	100% observer monitoring from 1 Apr - 30 Nov
Pawles Island, SC to Tybee Island, GA (includes channels at Charleston, Port Royal and Savannah)	100% dedicated daytime whale observer coverage between 1 Dec and 31 Mar. Monitoring by sea turtle observer between 1 Apr - 30 Nov.	1 Nov - 31 May	100% observer monitoring from 1 Nov - 30 Nov and 1 Apr - 31 May	Year Round	100% observer monitoring from 1 Apr - 30 Nov
Tybee Island, GA to Titusville, FL (includes channels at Brunswick, Kings Bay, Jacksonville, St. Augustine, and Ponce de Leon Inlet)	Aerial surveys in right whale critical habitat, 1 Dec thru 31 Mar. 100% dedicated daytime whale observer coverage between 1 Dec and 31 Mar.	1 Dec - 15 Apr	100% observer monitoring from 1 Apr - 15 Apr	Year Round	100% observer monitoring from 1 Apr - 15 Dec
Titusville, FL to Key West, FL (includes channels at West Palm Beach, Miami and Key West)	Whale observations are not necessary beyond those conducted between monitoring of dredge spoil.	Year Round	100% observer monitoring year round	Year Round	100% observer monitoring year round

¹ 100% of the dredge material must be screened and 100% of the screened material must be observed.

**South Atlantic Division Corps of Engineers
Hopper Dredging Protocol for Atlantic Coast**

- Sea turtle deflecting dragheads will be used at all times.
- Districts will inspect sea turtle deflecting dragheads systems to ensure that they are fully operational, prior to initiation of work.
- Districts will ensure that draghead operators know how to properly use the sea turtle deflecting system.
- Maintenance dredging at Savannah, Brunswick and Kings Bay Harbors must be restricted to 15 December through the end of March. Maintenance dredging at Charleston and Wilmington Harbors must be restricted to 1 December through the end of March where the sea turtle deflecting draghead system can not be used effectively. Dredging may begin as soon as mid-November in those portions of the Wilmington and Charleston Harbor channels where the sea turtle deflecting draghead can be used effectively. All Districts will cooperate to ensure that their scheduling of hopper dredging contracts, does not interfere with this Division priority work area.
- Sea turtle observers, inflow screens and overflow screens will be used during all dredging operations, except for the months of January and February, which are optional. variations from this provision may be granted by Division, but must be justified from a technical perspective.
- All sea turtle takes will be reported promptly to SAD-ET-CO/PD and posted at usace.sad.turtle newsgroup on the Internet.
- If two sea turtle takes occur within 24 hours, you should immediately notify the Division POC so that he can initiate reconsultation with National Marine Fisheries service.
- If a third take occurs on the project the district will cease operations and notify the South Atlantic Division. continuation of dredging will occur only after cleared by Division. Upon taking three turtles, District will develop a risk assessment along with an appropriate risk management plan, and submit that to Division for assessment. Generally relative abundance and relocation trawling would be an integral part of a risk assessment and management plan. Should a total take of 5 sea turtles occur, for whatever reason, all work will be terminated unless other prior agreements had been reached with Division.
- If a total of two endangered species of sea turtles are taken during a project, work will be suspended until further guidance from Division has been received.
- Arrangements will be made for appropriate observation of all species of whales. The hopper dredge must not get closer than 750 yards of a right whale. Jacksonville and Savannah Districts will contribute their share of funding for the Right Whale Early Warning system early enough in the year to ensure that this is not a cause for delay in the program.
- From Jacksonville District north through Wilmington District, sea turtle observers will also be responsible for monitoring takes of shortnose sturgeon. All takes of shortnose sturgeon must be reported to Division. Should a total take of three shortnose sturgeons occur, District will terminate hopper dredging until further guidance has been received from Division.