

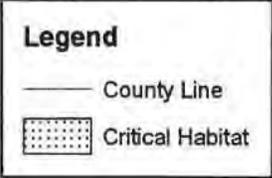
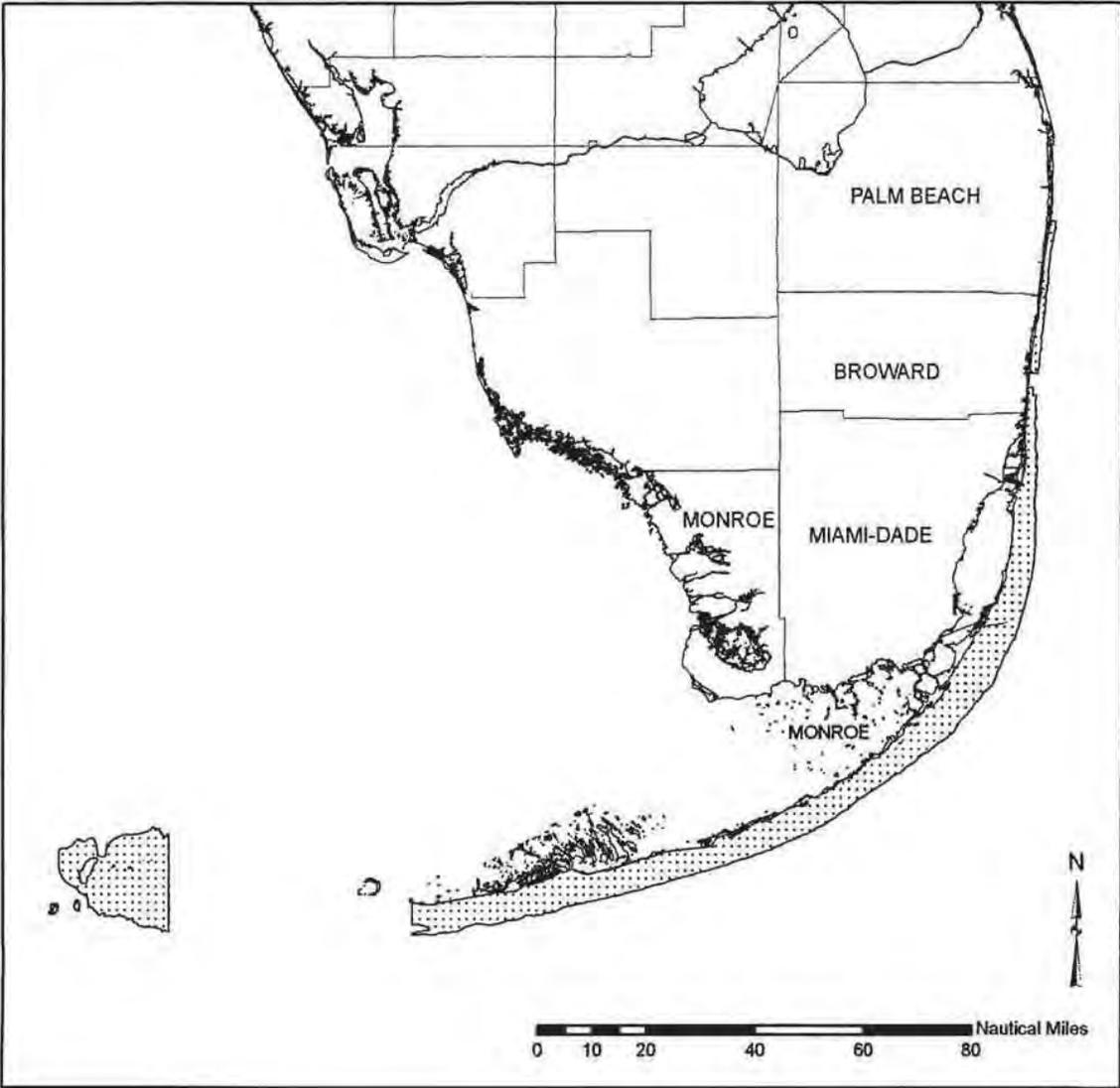


# Florida Panhandle Coastal Dune Lakes

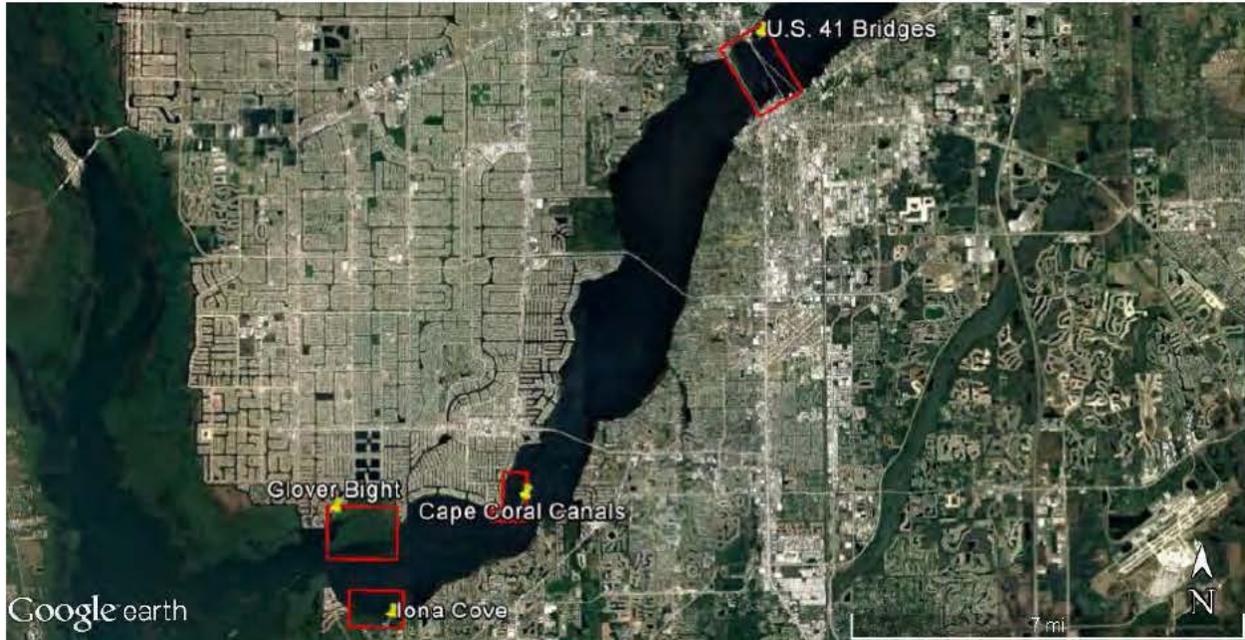


# Regional General Permit SAJ-13 Attachment 2.

**Critical Habitat for Elkhorn and Staghorn Corals  
Area 1: Florida**



### Attachment 3. Smalltooth sawfish limited exclusion zones



The locations of very small juveniles shown as red dots (©2012 Google; red dots based on the National Sawfish Encounter Database, May 2011).

Name	Latitude	Longitude
<b>U.S. 41 Bridges (the area between the following coordinates)</b>		
U.S. 41 NW	26.660413°N	81.885243°W
U.S. 41 NE	26.666827°N	81.872966°W
U.S. 41 SW	26.642991°N	81.873880°W
U.S. 41 SE	26.649405°N	81.861605°W
<b>Iona Cove (the area between the following coordinates)</b>		
IC NW	26.521437°N	81.991586°W
IC NE	26.521212°N	81.976191°W
IC SW	26.511762°N	81.991762°W
IC SE	26.511537°N	81.976368°W
<b>Glover Bight (the area between the following coordinates)</b>		
GB NW	26.542971°N	81.997791°W
GB NE	26.542678°N	81.977745°W
GB SW	26.529478°N	81.998035°W
GB SE	26.529185°N	81.977992°W
<b>Cape Coral (the area between the following coordinates)</b>		
CC 1	26.551662°N	81.947412°W
CC 2	26.551561°N	81.940683°W
CC 3	26.539075°N	81.940916°W
CC 4	26.539205°N	81.951049°W
CC 5	26.542181°N	81.951047°W
CC 6	26.542133°N	81.947776°W

Attachment 4. Federally Listed Species in Florida:

**U.S. Fish and Wildlife Service**

Common Name	Latin Name	Status	Date of Listing	Federal Register Notice of Species Listing	Date of CH Designation	Federal Register Notice of Designated Critical Habitat
	<b>MAMMALS</b>					
Wolf, Red	<i>Canis rufus</i>	E	3/11/1967	32 FR 4001	None	No
Bat, Florida Bonneted	<i>Eumops floridanus</i>	E	10/2/2013	78 FR 61003 61043	N/A	
Vole, Florida Salt Marsh	<i>Microtus pennsylvanicus dukecampbelli</i>	E	1/14/1991	56 FR 1457 1459	None	No
Bat, Grey	<i>Myotis grisescens</i>	E	4/28/1976	41 FR 17736 17740	None	No
Woodrat, Key Largo	<i>Neotoma floridana smalli</i>	E	9/21/1983	48 FR 43040 43043	None	No
Deer, Key	<i>Odocoileus virginianus clavium</i>	E	3/11/1967	32 FR 4001	None	No
Rice Rat (Lower FL Keys)	<i>Oryzomys palustris natator</i>	E	4/30/1991	56 FR 19809 19814	N/A	
Mouse, Key Largo Cotton	<i>Peromyscus gossypinus allapaticola</i>	E	9/21/1983	48 FR 43040 43043	N/A	
Mouse, Choctawhatchee Beach	<i>Peromyscus polionotus allophrys</i>	E	6/6/1985	50 FR 23872 23889	10/12/2006	71 FR 60238 60370
Mouse, Southeastern Beach	<i>Peromyscus polionotus niveiventris</i>	T	5/12/1989	54 FR 20598 20602	N/A	
Mouse, St. Andrew Beach	<i>Peromyscus polionotus peninsularis</i>	E	12/18/1998	63 FR 70053 70062	10/12/2006	71 FR 60238 60370
Mouse, Anastasia Island Beach	<i>Peromyscus polionotus phasma</i>	E	5/12/1989	54 FR 20598 20602	N/A	
Mouse, Perdido Key Beach	<i>Peromyscus polionotus trissyllepsis</i>	E	6/6/1985	50 FR 23872 23889	10/12/2006	71 FR 60238 60370
Panther, Florida	<i>Puma concolor coryi</i>	E	3/11/1967	32 FR 4001	N/A	
Rabbit, Lower Keys Marsh	<i>Sylvilagus palustris hefneri</i>	E	6/21/1990	55 FR 25588 25591	N/A	
Manatee, West Indian	<i>Trichechus manatus</i>	E	4/5/2017	82 FR 16668	9/22/1977	42 FR 47840 47845
	<b>BIRDS</b>					
Sparrow, Cape Sable Seaside	<i>Ammodramus maritimus mirabilis</i>	E	3/11/1967	32 FR 4001	11/6/2007	72 FR 62736 62766
Sparrow, Florida Grasshopper	<i>Ammodramus savannarum floridanus</i>	E	7/31/1986	51 FR 27492 27495	N/A	
Jay, Florida Scrub	<i>Aphelocoma coerulescens</i>	T	6/3/1987	52 FR 20715 20719	N/A	
Rufus red knot	<i>Calidris canutus rufa</i>	T	1/12/2015	79 FR 73705 73748	N/A	
Woodpecker, Ivory-billed	<i>Campephilus principalis</i>	E	3/11/1967	32 FR 4001	N/A	
Plover, Piping	<i>Charadrius melodus</i>	T	12/11/1985	50 FR 50726 50734	7/10/2001	66 FR 36038 36143
Warbler, Kirtland's	<i>Dendroica kirtlandii</i>	E	3/11/1967	32 FR 4001	N/A	
Eastern black rail	<i>Laterallus jamaicensis jamaicensis</i>	C	10/9/2018	83 FR 50610 (Proposed Rule; Threatened)	N/A	
Stork, Wood	<i>Mycteria americana</i>	E	6/30/2014	79 FR 37077 37103	N/A	
Woodpecker, Red-cockaded	<i>Picoides borealis</i>	E	10/13/1970	35 FR 16047 16048	N/A	

Caracara, Audubon's Crested	<i>Polyborus plancus audubonii</i>	T	7/6/1987	52 FR 25229 25232	N/A	
Kite, Everglade Snail	<i>Rostrhamus sociabilis plumbeus</i>	E	3/11/1967	32 FR 4001	9/22/1977	42 FR 47840 47845
Tern, Roseate	<i>Sterna dougallii dougallii</i>	T	11/2/1987	52 FR 42064 42068	N/A	
Warbler, Bachman's	<i>Vermivora bachmanii</i>	E	3/11/1967	32 FR 4001	N/A	
<b>REPTILES &amp; AMPHIBIANS</b>						
Salamander, Reticulated Flatwoods	<i>Ambystoma bishopi</i>	E	2/10/2009	74 FR 6700 6774	3/12/2009	74 FR 6700 6774
Salamander, Frosted Flatwoods	<i>Ambystoma cingulatum</i>	T	4/1/1999	64 FR 15691 15704	3/12/2009	74 FR 6700 6774
Sea Turtle, Loggerhead (Northwest Atlantic Ocean DPS)	<i>Caretta caretta</i>	T	4/1/1999	64 FR 15691 15704	7/10/2014	79 FR 39856
Sea Turtle, Green; (North Atlantic and South Atlantic DPS)	<i>Chelonia mydas</i>	E	4/6/2016	81 FR 20057	9/2/1998	63 FR 46693
Crocodile, American	<i>Crocodylus acutus</i>	E	4/19/2007	72 FR 13027 13041	9/22/1977	42 FR 47840 47845
Sea turtle, Leatherback	<i>Dermochelys coriacea</i>	E	6/2/1970	35 FR 8491	3/23/1979	44 FR 17710
Snake, Eastern Indigo	<i>Drymarchon corais couperi</i>	T	1/31/1978	43 FR 4026 4029	N/A	
Sea Turtle, Hawksbill	<i>Eretmochelys imbricata</i>	E	6/2/1970	35 FR 8491	9/2/1998	63 FR 46693
Skink, Bluetail Mole	<i>Eumeces egregius lividus</i>	T	11/6/1987	52 FR 42658 42662	N/A	
Gopher Tortoise	<i>Gopherus polyphemus</i>	C	12/2/2016	81 FR 87246	N/A	
Sea Turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	E	12/2/1970	35 FR 18319	N/A	
Skink, Sand	<i>Neoseps reynoldsi</i>	T	11/6/1987	52 FR 42658 42662	N/A	
Snake, Atlantic Salt Marsh	<i>Nerodia clarkii taeniata</i>	T	12/29/1977	42 FR 60743 60745	N/A	
Newt, Striped	<i>Notophthalmus perstriatus</i>	C	6/7/2011	76 FR 32911 32929	N/A	
<b>FISH</b>						
Sturgeon, Gulf	<i>Acipenser oxyrinchus desotoi</i>	T	9/30/1991	56 FR 49653	3/19/2003	68 FR 13370
Darter, Okaloosa	<i>Etheostoma okaloosae</i>	T	5/2/2011	76 FR 18087	N/A	
<b>INVERTEBRATES</b>						
Three-ridge, Fat	<i>Amblema neislerii</i>	E	4/15/1998	63 FR 12664 12687	12/17/2007	72 FR 64285 64340
Butterfly, Florida Leafwing	<i>Anaea troglodyta floridaalis</i>	E	9/11/2014	79 FR 47221	9/11/2014	79 FR 47179
Beetle, Miami Tiger	<i>Cicindelidia floridana</i>	E	11/4/2016	81 FR 68985	N/A	
Butterfly, Miami Blue	<i>Cyclargus (=Hemiargus) thomasi bethunebakeri</i>	E	4/6/2012	77 FR 20947	N/A	
Slabshell, Chipola	<i>Elliptio chipolaensis</i>	T	4/15/1998	63 FR 12664 12687	12/17/2007	72 FR 64285 64340
Pigtoe, Narrow	<i>Fusconaia escambia</i>	T	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
Ebonysshell, Round	<i>Fusconaia rotulata</i>	E	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
Sandshell, Southern	<i>Lampsilis australis</i>	T	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
Moccasinshell, Gulf	<i>Medionidus penicillatus</i>	E	4/15/1998	63 FR 12664 12687	12/17/2007	72 FR 64285 64340
Moccasinshell, Ochlockonee	<i>Medionidus simpsonianus</i>	E	4/15/1998	63 FR 12664 12687	12/17/2007	72 FR 64285 64340
Moccasinshell, Suwanee	<i>Medionidus walkeri</i>	T	11/7/2016	81 FR 69417 69425	N/A	

Snail, Stock Island Tree	<i>Orthalicus reses</i>	T	8/2/1978	43 FR 28932 28935	N/A	
Shrimp, Squirrel Chimney Cave	<i>Palaemonetes cummingi</i>	T	6/21/1990	55 FR 25588- 25591	N/A	
Pigtoe, Oval	<i>Pleurobema pyriforme</i>	E	4/15/1998	63 FR 12664 12687	12/17/2007	72 FR 64285 64340
Pigtoe, fuzzy	<i>Pleurobema strodeanum</i>	T	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
Panama City Crayfish	<i>Procambarus econfinae</i>	C	1/3/2018	83 FR 330	N/A	
Kidneyshell, southern	<i>Ptychobranthus jonesi</i>	E	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
Pigtoe, tapered	<i>Quincuncina burkei</i>	T	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
Butterfly, Bartrams's Hairstreak	<i>Strymon acis bartrami</i>	E	9/11/2014	79 FR 49023	9/11/2014	79 FR 47179
Bean, Choctaw	<i>Villosa choctawensis</i>	E	11/9/2012	77 FR 61663	11/9/2012	77 FR 61663
	<b>PLANTS</b>					
Silverbrush, Blodgett's	<i>Argythamnia blodgettii</i>	T	9/29/2016	81 FR 66842	N/A	
Brickell-bush, Florida	<i>Brickellia mosieri</i>	E	9/4/2014	79 FR 52567	8/17/2015	80 FR 49845
Pea, Big Pine Partridge	<i>Chamaecrista lineata keyensis</i>	E	9/29/2016	81 FR 66842	N/A	
Sandmat, Pineland	<i>Chamaesyce deltoidea pinetorum</i>	T	10/6/2016	82 FR 46691	N/A	
Spurge, Wedge	<i>Chamaesyce deltoidea serpyllum</i>	E	9/29/2016	81 FR 66842	N/A	
Spurge, Garber's	<i>Chamaesyce garberi</i>	T	7/18/1985	50 FR 29345	N/A	
Fringe-tree, Pygmy	<i>Chionanthus pygmaeus</i>	E	1/21/1987	52 FR 2227	N/A	
Thoroughwort, Cape Sable	<i>Chromolaena frustrata</i>	E	10/24/2013	78 FR 63795	1/8/2014	79 FR 1551
Aster, Florida Golden	<i>Chrysopsis floridana</i>	E	5/16/1986	51 FR 17974	N/A	
Cladonia, Florida Perforate	<i>Cladonia perforata</i>	E	4/27/1993	?	N/A	
Pigeon Wings	<i>Clitoria fragrans</i>	T	4/27/1993	58 FR 25746	N/A	
Rosemary, Short-leaved	<i>Conradina brevifolia</i>	E	7/12/1993	58 FR 37432	N/A	
Rosemary, Etonia	<i>Conradina etonia</i>	E	7/12/1993	58 FR 37432	N/A	
Rosemary, Apalachicola	<i>Conradina glabra</i>	E	7/12/1993	58 FR 37432	N/A	
Cactus, Florida Semaphore	<i>Consolea corallicola</i>	E	10/24/2013	78 FR 63795	1/22/2016	81 FR 3865
Harebells, Avon Park	<i>Crotalaria avonensis</i>	E	4/27/1993	58 FR 25746	N/A	
Gourd, Okeechobee	<i>Cucurbita okeechobeensis okeechobeensis</i>	E	7/12/1993	58 FR 37432	N/A	
Prairie-clover, Florida	<i>Dalea carthagenensis floridana</i>	E	10/6/2017	82 FR 46691	N/A	
Pawpaw, Beautiful	<i>Deeringothamnus pulchellus</i>	E	9/26/1986	51 FR 34415	N/A	
Pawpaw, Rugel's	<i>Deeringothamnus rugelii</i>	E	9/26/1986	51 FR 34415	N/A	
Mint, Garrett's	<i>Dicerandra christmanii</i>	E	11/1/1985; 9/21/1989	50 FR 45621; 54 FR 38946	N/A	
Mint, Longspurred	<i>Dicerandra cornutissima</i>	E	11/1/1985	50 FR 45621	N/A	
Mint, Scrub	<i>Dicerandra frutescens</i>	E	11/1/1985; 9/21/1989	50 FR 45621; 54 FR 38946	N/A	
Mint, Lakela's	<i>Dicerandra immaculata</i>	E	5/15/1985	50 FR 20212	N/A	
Crabgrass, Florida Pineland	<i>Digitaria pauciflora</i>	T	10/6/2017	82 FR 46691	N/A	
Buckwheat, Scrub	<i>Eriogonum longifolium gnaphalifolium</i>	T	4/27/1993	58 FR 25746	N/A	
Snakeroot	<i>Eryngium cuneifolium</i>	E	1/21/1987	52 FR 2227	N/A	
Spurge, Telephus	<i>Euphorbia telephioides</i>	T	5/8/1992	57 FR 19813	N/A	
Milkpea, Small's	<i>Galactia smallii</i>	E	7/18/1995	50 FR 29345	N/A	

Beauty, Harper's	Harperocallis flava	E	10/2/1979	44 FR 56862	N/A	
Prickly-apple, Aboriginal	Harrisia (=Cereus) aboriginum (=gracilis)	E	10/24/2013	78 FR 63795	1/22/2016	81 FR 3865
Hypericum, Highlands Scrub	Hypericum cumulicola	E	1/21/1987	52 FR 2227	N/A	
Jacquemontia, Beach	Jacquemontia reclinata	E	11/24/1993	58 FR 62046	N/A	
Water-willow, Cooley's	Justicia cooleyi	E	1/13/1997	62 FR 1691	N/A	
Blazingstar, Scrub	Liatris ohlingerae	E	7/27/1989	54 FR 31190	N/A	
Flax, Sand	Linum arenicola	E	9/29/2016	81 FR 66842	N/A	
Flax, Carter's Small-flowered	Linum carteri carteri	E	9/4/2014	79 FR 52567	8/17/2015	80 FR 49845
Lupine, Scrub	Lupinus aridorum	E	4/7/1987	52 FR 11172	N/A	
Birds-in-a-nest, White	Macbridea alba	T	5/8/1992	57 FR 19813	N/A	
Beargrass, Britton's	Nolina brittoniana	E	4/27/1993	58 FR 25746	N/A	
Whitlow-wort, Papery	Paronychia chartacea	T	1/21/1987	52 FR 2227	N/A	
Cactus, Key tree	Pilosocereus robinii	E	7/19/1984	49 FR 29234	N/A	
Butterwort, Godfrey's	Pinguicula ionantha	T	7/12/1993	58 FR 37432	N/A	
Polygala, Lewton's	Polygala lewtonii	E	4/27/1993	58 FR 25746	N/A	
Polygala, Tiny	Polygala smallii	E	7/18/1985	50 FR 29345	N/A	
Wireweed	Polygonella basiramia	E	1/21/1987	52 FR 2227	N/A	
Sandlace	Polygonella myriophylla	E	4/27/1993	58 FR 25746	N/A	
Plum, Scrub	Prunus geniculata	E	1/21/1987	52 FR 2227	N/A	
Rhododendron, Chapman	Rhododendron chapmanii	E	4/24/1979	44 FR 24248	N/A	
Gooseberry, Miccosukee	Ribes echinellum	T	7/18/1985	50 FR 29338	N/A	
Chaffseed, American	Schwalbea americana	E	9/29/1992	57 FR 44703	N/A	
Skullcap, Florida	Scutellaria floridana	T	5/8/1992	57 FR 19813	N/A	
Bully, Everglades	Sideroxylon reclinatum ssp. austrofloridense	T	10/6/2017	82 FR 46691	N/A	
Campion, Fringed	Silene polypetala	E	1/18/1991	56 FR 1932	N/A	
Pinkroot, Gentian	Spigelia gentianoides	E	11/26/1990	55 FR 49046	N/A	
Meadowrue, Cooley's	Thalictrum cooleyi	E	2/7/1989	54 FR 5935	N/A	
Torreya, Florida	Torreya taxifolia goveniana	E	1/23/1984	49 FR 2783	N/A	
Fern, Florida Bristle	Trichomanes punctatum ssp. floridanum	E	10/6/2015	80 FR 60439	N/A	
Warea, Wide-leaf	Warea amplexifolia	E	4/29/1987	52 FR 15501	N/A	
Mustard, Carter's	Warea carteri	E	1/21/1997	52 FR 2227	N/A	
Ziziphus, Florida	Ziziphus celata	E	7/27/1989	54 FR 31190	N/A	
<b>Acronyms</b>						
T	Threatened					
E	Endangered					
C	Candidate Species or Proposed for Listing					

## National Marine Fisheries Service

Species	Latin Name	Effect Determination <sup>1</sup>	ESA Listing Status	Species Listing	FR Notice of Species Listing	Date of CH Designation	FR Notice of CH Designation
	<b>Reptiles</b>						
Loggerhead sea turtle	<i>Caretta caretta</i>		T	9/22/2011	76 FR 58868	7/10/2014	79 FR 39856
Green sea turtle	<i>Chelonia mydas</i>		T	4/6/2016	81 FR 20057	9/2/1998	63 FR 46693
Leatherback sea turtle	<i>Dermochelys coriacea</i>		E	6/2/1970	35 FR 8491	N/A	
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>		E	6/2/1970	35 FR 8491	9/2/1998	63 FR 46693
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>		E	12/2/1970	35 FR 18319	N/A	
	<b>Fishes</b>						
Shortnose sturgeon	<i>Acipenser brevirostrum</i>		E	3/11/1967	32 FR 4001	N/A	
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>		T	9/30/1991	56 FR 49653	3/19/2003	68 FR 13370
Atlantic sturgeon	<i>Acipenser oxyrinchus oxyrinchus</i>		T/E	2/6/2012	77 FR 5914	8/17/2017	82 FR 39160
Oceanic White Tipped shark	<i>Carcharinus longimanus</i>		T	1/30/2018	83 FR 4153	N/A	
Nassau grouper	<i>Epinephelus striatus</i>		T	6/29/2016	81 FR 42268	N/A	
Giant Manta ray	<i>Manta birostris</i>		T	1/22/2018	83 FR 2916	N/A	
Smalltooth sawfish	<i>Pristis pectinata</i>		E	4/1/2003	68 FR 15674	9/2/2009	74 FR 45353
Scalloped hammerhead shark	<i>Sphyrna lewini</i>		T	7/3/2014	79 FR 38213	N/A	
	<b>Corals</b>						
Elkhorn coral	<i>Acropora palmata</i>		T	5/9/2006	71 FR 26852	11/26/2008	73 FR 72210
Staghorn coral	<i>Acropora cervicornis</i>		T	5/9/2006	71 FR 26852	11/26/2008	73 FR 72210
Pillar coral	<i>Dendrogyra cylindrus</i>		T	9/10/2014	79 FR 53852	N/A	
Rough cactus coral	<i>Mycetophyllia ferox</i>		T	9/10/2014	79 FR 53852	N/A	
Lobed star coral	<i>Orbicella annularis</i>		T	9/10/2014	79 FR 53852	N/A	
Mountainous star coral	<i>Orbicella faveolata</i>		T	9/10/2014	79 FR 53852	N/A	
Boulder star coral	<i>Orbicella franksi</i>		T	9/10/2014	79 FR 53852	N/A	
	<b>Plants</b>						
Johnson's seagrass	<i>Halophila johnsonii</i>		T	9/14/1998	63 FR 49035	4/5/2000	65 FR 17786
	<b>Mammals</b>						
Sei whale	<i>Balaenoptera borealis</i>		E	12/2/1970	35 FR 18319	N/A	
Brydes whale	<i>Balaenoptera edeni</i>		C	12/8/2016	81 FR 88639	N/A	

Blue whale	<i>Balaenoptera musculus</i>		E	12/2/1970	35 FR 18319	N/A	
Fin whale	<i>Balaenoptera physalus</i>		E	12/2/1970	35 FR 18319	N/A	
North Atlantic right whale	<i>Eubalaena glacialis</i>		E	12/2/1970	35 FR 18319	1/27/2016	81 FR 4837
Sperm whale	<i>Physeter macrocephalus</i>		E	12/2/1970	35 FR 18319	N/A	
<b>Acronyms</b>							
T	Threatened						
E	Endangered						
C	Candidate Species or Proposed for Listing						

## Project Design Criteria (PDCs) for In-Water Activities

**AP.7. Education and Observation:** The permittee must ensure that all personnel associated with the project are instructed about the potential presence of species protected under the ESA and the Marine Mammal Protection Act (MMPA). All on-site project personnel are responsible for observing water-related activities for the presence of protected species. All personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing ESA-listed species or marine mammals. To determine which species may be found in the project area, please review the relevant Protected Species List at:

[http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/threatened\\_endangered/index.html](http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/index.html)

**AP.8. Reporting Interactions with Protected Species:**

- a) Any collision(s) with and/or injury to any sea turtle, sawfish, whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (1-727-824-5312) or by email to: [takereport.nmfs@noaa.gov](mailto:takereport.nmfs@noaa.gov) and [SAJ-RD-Enforcement@usace.army.mil](mailto:SAJ-RD-Enforcement@usace.army.mil).
- b) Smalltooth sawfish: Report sightings to 1-844-SAWFISH or email: [Sawfish@MyFWC.com](mailto:Sawfish@MyFWC.com)
- c) Sturgeon: Report dead sturgeon to 1-844-STURG 91 (1-844-788-7491) or email: [nmfs.ser.sturgeonnetwork@noaa.gov](mailto:nmfs.ser.sturgeonnetwork@noaa.gov)
- d) Sea turtles and marine mammals: Report stranded, injured, or dead animals to 1-877-WHALE HELP (1-877-942-5343).
- e) North Atlantic right whale: Report injured, dead, or entangled right whales to the USCG via VHF Channel 16.

**AP.9. Vessel Traffic and Construction Equipment:** All vessel operators must watch for and avoid collision with species protected under the ESA and MMPA. Vessel operators must avoid potential interactions with protected species and operate in accordance with the following protective measures:

- a) *Construction Equipment*:
  - i) All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while operating in water depths where the draft of the vessel provides less than a 4-foot (ft) clearance from the bottom, and in all depths after a protected species has been observed in and has departed the area.
  - ii) All vessels will follow marked channels and/or routes using the maximum water depth whenever possible.
  - iii) Operation of any mechanical construction equipment, including vessels, shall cease immediately if a listed species is observed within a 50-ft radius of construction equipment and shall not resume until the species has departed the area of its own volition.
  - iv) If the detection of species is not possible during certain weather conditions (e.g., fog, rain, wind), then in-water operations will cease until weather conditions improve and detection is again feasible.

- b) *All Vessels:*
  - i) Sea turtles: Maintain a minimum distance of 150 ft.
  - ii) North Atlantic right whale: Maintain a minimum 1,500-ft distance (500 yards).
  - iii) Vessels 65 ft in length or longer must comply with the Right Whale Ship Strike Reduction Rule (50 CFR 224.105) which includes reducing speeds to 10 knots or less in Seasonal Management Areas (<http://www.fisheries.noaa.gov/pr/shipstrike/>).
  - iv) Mariners shall check various communication media for general information regarding avoiding ship strikes and specific information regarding right whale sightings in the area. These include NOAA weather radio, USCG NAVTEX broadcasts, and Notices to Mariners.
  - v) Marine mammals (i.e., dolphins, whales [other than North Atlantic right whales], and porpoises): Maintain a minimum distance of 300 ft.
  - vi) When these animals are sighted while the vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until they have left the area.
  - vii) Reduce speed to 10 knots or less when mother/calf pairs or groups of marine mammals are observed, when safety permits.

- AP.10. Turbidity Control Measures during Construction:** Turbidity must be monitored and controlled. Prior to initiating any of the work covered under this Opinion, the Permittee shall install turbidity curtains as described below. In some instances, the use of turbidity curtains may be waived by the USACE project manager if the project is deemed too minimal to generate turbidity (e.g., certain ATON installation, scientific survey device placement, marine debris removal) or if the current is too strong for the curtains to stay in place. Turbidity curtains specifications:
- a) Install floating turbidity barriers with weighted skirts that extend to within 1 ft of the bottom around all work areas that are in, or adjacent to, surface waters.
  - b) Use these turbidity barriers throughout construction to control erosion and siltation and ensure that turbidity levels within the project area do not exceed background conditions.
  - c) Position turbidity barriers in a way that does not block species' entry to or exit from designated critical habitat.
  - d) Monitor and maintain turbidity barriers in place until the authorized work has been completed and the water quality in the project area has returned to background conditions.
  - e) In the range of ESA-listed corals (St. Lucie Inlet, Martin County south to the Dry Tortugas and the U.S. Caribbean) and Johnson's seagrass (Turkey Creek/Palm Bay south to central Biscayne Bay in the lagoon systems on the east coast of Florida):
    - i. Projects that include upland earth moving (e.g., grading to install a building or parking lot associated with a dock and seawall project), must install sediment control barriers to prevent any upland sediments from reaching estuarine or marine waters.
    - ii. The turbidity curtain requirement cannot be waived for any project that moves or removes sediment (e.g., dredging, auger to create a pile, trenching to install a cable

line). If turbidity curtains are not feasible in an area based on site conditions such as water current, high wave action, or stormy conditions, the project must undergo individual Section 7 consultation and is not covered under this Programmatic Opinion.

**AP.11. Entanglement:** All turbidity curtains and other in-water equipment must be properly secured with materials that reduce the risk of entanglement of marine species (described below). Turbidity curtains likewise must be made of materials that reduce the risk of entanglement of marine species.

- a) In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) must be stiff, taut, and non-looping. Examples of such lines are heavy metal chains or heavy cables that do not readily loop and tangle. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, must be enclosed in a plastic or rubber sleeve/tube to add rigidity and prevent the line from looping and tangling. In all instances, no excess line is allowed in the water.
- b) Turbidity curtains and other in-water equipment must be placed in a manner that does not entrap species within the construction area or block access for them to navigate around the construction area.

## Project Design Criteria (PDCs) for In-Water Noise from Pile and Sheet Pile Installation

### Open Water

The letters A-E in the tables below specify the PDC category. Activities labeled A-D must follow the corresponding PDCs for labeled Category A-D below. Activities labeled E are excluded from this Opinion, as stated in Category E below.

	Trench and	Pilot hole (auger or	Jetting	Vibratory	Impact hammer
Wood piles 14-inch (in) diameter or less when installed via impact hammer and 36-in or less for all other installation methods	A	A	A	A	B
Concrete pile 24-in diameter/width or less in open	A	A	A	A	B
Metal pipe pile 36-in diameter or less	A	A	A	A	E
2 metal boatlift I-beams	A	A	A	A	B
Concrete slab wall- any size	A	A	A	A	B
Vinyl sheet pile- any size	A	A	A	A	B
Metal sheet pile- any size	A	A	A	A	E

### Confined Space

In Florida, we consider the confined space to be any area that has a solid object (e.g., shorelines or seawalls) within 150 ft of the pile installation site and in the U.S. Caribbean we consider confined space to be any area that has a solid object within 260 ft of the pile installation site.

	Trench and	Pilot hole (auger or	Jetting	Vibratory	Impact hammer
Wood pile 14-in diameter or less when installed via impact hammer and 36-in or less for all other installation methods	A	A	A	A	B
Concrete pile 24-in diameter/width or less (5 piles	A	A	A	A	C
Concrete pile 24-in diameter/width or less (6-10	A	A	A	A	D
Metal pipe pile 36-in diameter or less	A	A	A	A	E
2 metal boatlift I-beams	A	A	A	A	B
Vinyl sheet pile – any size	A	A	A	A	B
Concrete slab wall- any size (5 slabs or less	A	A	A	A	C
Concrete slab wall- any size (6-10 slabs installed/day)	A	A	A	A	D
Metal sheet pile- any size	A	A	A	A	E

- A. The Projects identified as A above must comply with PDCs identified for all projects in this Opinion. Specific PDCs related to noise include:**
1. All work must occur during daylight hours only (PDC AP.6).
  2. All construction personnel are responsible for observing water-related activities to detect the presence of these species and avoid them (PDC AP.7).
- B. The projects identified as B above must follow all of the conditions under A, above, **AND** also must limit the maximum number of piles installed per day to no more than 10 piles per day.**
- C. The projects identified as C above must follow all of the conditions under A, above, **AND** also must limit the maximum number of piles installed per day to no more than 5 piles per day.**
- D. The projects identified as D above must follow all of the conditions under A and B, above, **AND** also must abide by one of the noise abatement measures below, as chosen by the applicant:**
1. Bubble curtain: The bubble curtain design must adhere to the guidelines for unconfined and confined bubble curtains described in Appendix B.
  2. Temporary noise attenuation pile (TNAP) also known as a pile isolation casing: The TNAP design must be constructed of a double-walled tubular casing (a casing within a larger casing), with at least a 5-in-wide area between the casings that is dewatered to create a hollow space or 5-in wide area between the casings completely filled with closed-cell foam or other noise dampening material between the walls. The TNAP must be long enough to be seated firmly on the sea bottom, fit over the pile being driven, and extend at least 3 ft above the surface of the water.
  3. The use of any other alternative noise control method must receive prior approval by NMFS and the USACE, as described in Section 2.3.
- E. The projects identified as E are not covered under this Opinion.**



## **Vessel Strike Avoidance Measures and Reporting for Mariners NOAA Fisheries Service, Southeast Region**

### **Background**

The National Marine Fisheries Service (NMFS) has determined that collisions with vessels can injure or kill protected species (e.g., endangered and threatened species, and marine mammals). The following standard measures should be implemented to reduce the risk associated with vessel strikes or disturbance of these protected species to discountable levels. NMFS should be contacted to identify any additional conservation and recovery issues of concern, and to assist in the development of measures that may be necessary.

### **Protected Species Identification Training**

Vessel crews should use an Atlantic and Gulf of Mexico reference guide that helps identify protected species that might be encountered in U.S. waters of the Atlantic Ocean, including the Caribbean Sea, and Gulf of Mexico. Additional training should be provided regarding information and resources available regarding federal laws and regulations for protected species, ship strike information, critical habitat, migratory routes and seasonal abundance, and recent sightings of protected species.

### **Vessel Strike Avoidance**

In order to avoid causing injury or death to marine mammals and sea turtles the following measures should be taken when consistent with safe navigation:

1. Vessel operators and crews shall maintain a vigilant watch for marine mammals and sea turtles to avoid striking sighted protected species.
2. When whales are sighted, maintain a distance of 100 yards or greater between the whale and the vessel.
3. When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards or greater between the animal and the vessel whenever possible.
4. When small cetaceans are sighted while a vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
5. Reduce vessel speed to 10 knots or less when mother/calf pairs, groups, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity; therefore, prudent precautionary measures should always be exercised. The vessel shall attempt to route around the animals, maintaining a minimum distance of 100 yards whenever possible.

6. Whales may surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel and when safety permits, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

### **Additional Requirements for the North Atlantic Right Whale**

1. If a sighted whale is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yards be maintained from the animal (50 CFR 224.103 (c)).
2. Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System.
3. Mariners shall check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard NAVTEX broadcasts, and Notices to Mariners. Commercial mariners calling on United States ports should view the most recent version of the NOAA/USCG produced training CD entitled "A Prudent Mariner's Guide to Right Whale Protection" (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD).
4. Injured, dead, or entangled right whales should be immediately reported to the U.S. Coast Guard via VHF Channel 16.

### **Injured or Dead Protected Species Reporting**

Vessel crews shall report sightings of any injured or dead protected species immediately, regardless of whether the injury or death is caused by your vessel.

Report marine mammals to the Southeast U.S. Stranding Hotline: 877-433-8299

Report sea turtles to the NMFS Southeast Regional Office: 727-824-5312

If the injury or death of a marine mammal was caused by a collision with your vessel, responsible parties shall remain available to assist the respective salvage and stranding network as needed. NMFS' Southeast Regional Office shall be immediately notified of the strike by email ([takereport.nmfsser@noaa.gov](mailto:takereport.nmfsser@noaa.gov)) using the attached vessel strike reporting form.

### **For additional information, please contact the Protected Resources Division at:**

NOAA Fisheries Service  
Southeast Regional Office

263 13<sup>th</sup> Avenue South  
St. Petersburg, FL 33701

Tel: (727) 824-5312

Visit us on the web at <http://sero.nmfs.noaa.gov>

## **Project Design Criteria (PDCs) for Gulf Sturgeon Critical Habitat Migratory Restriction Zones**

1. This Opinion does not apply to the placement of living shoreline, oyster reef, and artificial reef materials (Activity 7, PDC A7.26) and temporary platform, fill, and cofferdams (Activity 10, PDC A10.11) in Gulf sturgeon critical habitat migratory restriction zones.
2. This Opinion does not apply to new transmission and utility line installation in the Gulf sturgeon critical habitat migratory restriction zones between September and March, when sturgeon are likely to be present in these areas. Emergency repair/replacement of transmission and utility lines may occur in these areas during this time frame if the work is conducted without the use of heavy in-water equipment (e.g., dredging equipment) (Activity 8, PDC A8.10).
3. This Opinion does not apply to the installation of metal piles and metal sheet piles by impact hammer in the areas identified as Gulf sturgeon critical habitat migratory restriction zones.
4. The allowable pile and sheet pile driving activities vary depending on the width of the project action area, as described below.
5. Areas that are 0-500 ft wide: In areas up to 500 ft wide, the allowable pile or sheet pile driving activities within the Gulf sturgeon critical habitat migratory restriction zones are:
  - a. Creating a pilot hole for any type of pile using an auger or drop punch
  - b. Trenching a shoreline with mechanical equipment to create a space to install any type of sheet pile and backfilling behind it
  - c. Installing any type of piles and sheet piles by jetting.
6. Areas that are 501-1,400 ft wide: In areas over 500 ft wide, but less than 1,400 ft wide, the allowable pile or sheet pile driving activities within the Gulf sturgeon critical habitat migratory restriction zones are:
  - a. The activities described in 1-3 above, and
  - b. Installing any type of piles and sheet piles by vibratory hammer.
7. Areas over 1,401 ft wide: In areas 1,401 ft wide or wider, the allowable pile or sheet pile driving activities within the Gulf sturgeon critical habitat migratory restriction zones are:
  - a. The activities described in 1-4 above, and
  - b. Installing wood, vinyl, and concrete piles and sheet piles by impact hammer.

## Project Design Criteria (PDCs) for Mangroves, Seagrasses, Corals and Hard Bottom for All Projects

Note: **For projects authorized in reliance on this Opinion only**, the PDCs below supercede any other guidance documents otherwise applicable to reduce or avoid impacts to mangroves, seagrasses, and corals. This includes the NMFS's *Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation, Marsh, or Mangrove Habitat* dated August 2001, and NMFS's *Key for Construction Conditions for Docks or Other Minor Structures Constructed in or over Johnson's Seagrass (Halophila johnsonii)*, dated October 2002. NMFS may still apply these guidance documents in other consultations, including consultations on Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act, as appropriate.

### **AP.12. Mangroves:**

- a) To qualify for coverage under this Opinion, all projects must be sited and designed to avoid or minimize impacts to mangroves.
- b) Mangrove removal must be conducted in a manner that avoids any unnecessary removal and is limited to the following instances:
  - i. Removal to install up to a 4-ft-wide walkway for a dock.
  - ii. Removal to install up to an 8-ft-wide walkway for public docks, where the walkway is necessary to address compliance with the Americans with Disability Act (ADA).
  - iii. Removal to install culverts necessary to improve water quality or restore hydrology between 2 water bodies. Such mangrove removal is limited to a maximum of 20 linear feet (lin ft) of shoreline per culvert opening.
  - iv. Removal of mangroves above mean high water (MHW) provided that the tree does not have any prop roots that extend into the water below the MHWL.
- c) Mangrove Trimming. Mangrove trimming is regulated by FDEP, Puerto Rico Department of Natural and Environmental Resources, and U.S. Virgin Islands Department of Planning and Natural Resources. Consistent with those authorities, when used in this Opinion, mangrove trimming refers to the removal (using hand equipment such as chain saws and/or machetes) of lateral branches (i.e., no alteration of the trunk of the tree) in a manner that ensures survival of the tree. This Opinion does not limit or supersede any restrictions on mangrove removal required under any federal, state, or local law.
  - i. This Opinion only covers projects with associated mangrove trimming occurring waterward of MHW if such trimming (1) occurs within the area where the authorized structures are placed or will be placed (e.g., removal of branches that overhang a dock),
  - ii. (2) is necessary to provide temporary construction access, and (3) is conducted in a manner that avoids any unnecessary trimming.

- iii. The Opinion does not apply to projects proposing to remove red mangrove props roots waterward of MHW, except for removal to install the dock walkways, as described above (up to a 4-ft walkway and up to a 8-ft ADA compliant walkway) and to install culverts necessary to improve water quality or restore hydrology between 2 water bodies.

**AP.13. Seagrass:**

- a) Pile-supported structures must follow the PDCs for *Docks or Other Minor Structures* (PDC A2.17, Section 2.2.2)

**Johnson's seagrass:**

- b) This Opinion does not apply to projects where Johnson's seagrass is found within the project footprint except for:
  - i. Installation of pile-supported structures that meet the PDCs for *Docks or Other Minor Structures* (PDC A2.17, Section 2.2.2).
  - ii. Maintenance dredging of previously authorized areas. This is limited to the removal of no more than 0.1 acre (ac) (4,356 ft<sup>2</sup>) of Johnson's seagrass per year (Activity 3; see Section 2.2.3).
  - iii. Transmission/utility line repairs within the same footprint of the lines being repaired (Activity 8; see Section 2.2.8).

**Non-listed seagrasses:**

- a) All impacts to non-ESA listed native, non-invasive seagrasses should be avoided and minimized to the extent practicable.
- b) This Opinion does not apply to projects located within the geographic boundary of U.S. Caribbean sea turtle critical habitat (hawksbill, leatherback, and the NA DPS of green sea turtle critical habitat identified in Section 2.1.1.5) if non-ESA listed, native, non-invasive seagrasses are found within the project footprint.
- c) This Opinion does not apply to projects that may affect, directly or indirectly, ESA-listed corals.
- d) Projects occurring within in the Florida Keys National Marine Sanctuary (FKNMS) may require separate consultation or authorization from NOAA's FKNMS. Projects authorized to occur in the FKNMS shall comply with any measures NOAA FKNMS has developed to avoid, minimize, and/or mitigate any effects on non-listed corals. For projects occurring outside of the FKNMS, if non-listed corals are found within the project footprint, we recommend relocating all non-listed corals, when possible, in a manner that is protective of the corals.

**AP.14. Coral and Hard Bottom Habitat:**

- a) This Opinion does not apply to projects that may affect, directly or indirectly, ESA-listed corals.
- b) Projects occurring within in the Florida Keys National Marine Sanctuary (FKNMS) may require separate consultation or authorization from NOAA's FKNMS. Projects authorized to occur in the FKNMS shall comply with any measures NOAA FKNMS has developed to avoid, minimize, and/or mitigate any effects on non-listed corals. For projects occurring outside of the FKNMS, if non-listed corals are found within the project footprint, we recommend relocating all non-listed corals, when possible, in a manner that is protective of the corals.
- c) This Opinion does not apply to projects where hard bottom habitat is found within the project footprint, except for the temporary placement (up to 24 months) of scientific survey devices (Activity 5) that have a footprint of less than 1 square foot (ft<sup>2</sup>) per device and are installed in a manner that does not permanently alter the hardbottom (e.g., the devices are not installed by drilling). For this Opinion, we define hard bottom in 2 ways:
  - i. Natural consolidated hard substrate that is suitable to support corals, coral larval settlement, reattachment and recruitment of asexual coral fragments. These areas of hard bottom or dead coral skeleton must be free from fleshy or turf macroalgae cover and sediment cover.
  - ii. Nearshore and surf-zone, low-profile hard bottom outcroppings (e.g., worm-rock reef [sabellariid worm reefs] and eolianite, granodiorite). This habitat can be persistent or ephemeral, cycling through periods of exposure and cover by sand. The range of this hard bottom habitat extends along the southeastern coast of Florida from Cape Canaveral to Miami-Dade County and in the U.S. Caribbean. It is an important developmental habitat for juvenile hawksbill and green sea turtles, which use it for both foraging and refuge.

## Attachment 10:

### PDCs Specific to Activity 2 - Pile-Supported Structures and Anchored Buoys:

- A2.1. Activities covered by this Opinion include the installation, repair, replacement, and removal of structures as described below:
- A2.1.1. The pile-supported and anchored structures included in this Opinion are: docks and piers, boatlifts, mooring piles and dolphin piles associated with docks/piers; ATONs and PATONs; floating vessel platforms; pile-supported chickees (i.e., small, back-country, over-water, pile-supported, primitive camping shelters); boardwalks (as long as they are designed and clearly marked to prohibit fishing and vessel mooring); and other minor pile-supported structures. This does not include structures that support large commercial vessels including ferries, tankers, and cargo ships such as ferry terminals and large ports.
  - A2.1.2. Pile-supported docks/piers for single-family residential lot are limited to 4 slips for motorized vessels. Slips for non-motorized vessels (e.g., kayak, canoe, and paddleboard) and associated launching areas do not count toward the total slip number.
  - A2.1.3. Pile-supported structures for marinas, multi-family facilities (e.g., condo complexes, trailer parks, subdivisions when the homeowners association owns and controls the in-water structures). Docks and piers for multi-family residential properties (e.g., condos, trailer parks, apartment complexes), and marinas are limited to a maximum of 50 total slips (i.e., combination of wet and dry slips for existing plus proposed slips).
  - A2.1.4. Anchored buoys and temporary pile-supported structures associated with marine events. Upon completion of the event, these structures must be removed and, to the maximum extent practical, the site must be restored to pre-construction elevations. Water depths in the area of marine events must be deep enough to support at least 5 ft of water depth under the keel of a vessel and between the keel of a vessel and ESA-listed coral colonies when transiting to the mooring areas. There is no limit on the number of vessel slips allowed for temporary structures associated marine events such as boat shows.
  - A2.1.5. Mooring fields are limited to a maximum of 50 motorized vessels.
  - A2.1.6. All pile-supported structures constructed must comply with PDC 2.17 for *Docks or Other Minor Structures Constructed in Florida Under this Opinion* (see below).

### The following PDCs apply to all the activities described in PDC A2.1 above:

- A2.2. For commercial, multi-family, or public facilities, and marine events, signs must be posted in a visible location(s), alerting users of listed species in the area susceptible to vessel strikes and hook-and-line captures. The most current version of the signs that must be downloaded and sign installation guidance are available at: [http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/protected\\_species\\_educational\\_signs/index.html](http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html)). The signs required to be posted by area are stated below:

- A2.2.1. All projects in Florida shall use the Save Sea Turtle, Sawfish, and Dolphin sign. These signs shall include contact information to the sea turtle and marine mammal stranding networks and smalltooth sawfish encounter database.
  - A2.2.2. Projects within the North Atlantic right whale educational sign zone (as defined in Section 2.1.1.4) shall post the Help Protect North Atlantic Right Whales sign.
  - A2.2.3. On the east coast of Florida, projects located within the St. John's River and those occurring north of the St. Johns River to the Florida-Georgia line shall post the Report Sturgeon sign. On the west coast of Florida, projects occurring from the Cedar Key, Florida north to the Florida-Alabama line.
  - A2.2.4. We are still developing the signs to be used in the U.S. Caribbean. Once developed, those signs will be included at the website above.
- A2.3. For commercial, multi-family, or public facilities, monofilament recycling bins must be provided at the docking facility to reduce the risk of turtle or sawfish entanglement in or ingestion of marine debris. Monofilament recycling bins must:
- A2.3.1. Be constructed and labeled according to the instructions provided at <http://mrrp.myfwc.com>.
  - A2.3.2. Be maintained in working order and emptied frequently (according to <http://mrrp.myfwc.com> standards) so that they do not overflow.
- A2.4. For any dock project (new construction, repair, or replacement) at a private residence located within 11 nautical miles of North Atlantic right whale critical habitat (as measured in a radius from the center of the nearest inlet to open ocean and described in Section 2.1.1.4), the property owner will be provided a handout with their USACE permit describing the presence of North Atlantic right whales in the area and the Federal regulations governing the approach to North Atlantic right whales (Appendix C).
- A2.5. ATONs and PATONs must be approved by and installed in accordance with the requirements of the USCG (see 33 CFR, chapter I, subchapter C, part 66 and RHA Section 10 and any other pertinent requirements).
- A2.6. Chickees must be less than 500 ft<sup>2</sup> and support no more than 2 slips.
- A2.7. No activities associated with municipal or commercial fishing piers are covered under this Opinion.
- A2.8. Docks installed within visible distance of ocean beaches are required to comply with turtle-friendly lighting, if lighting is necessary to the project. Turtle-friendly lighting is explained and examples are provided on the Florida Fish and Wildlife Conservation Commission website: <http://myfwc.com/wildlifehabitats/managed/sea-turtles/lighting/>

A2.9. Project construction will take place from uplands or from floating equipment (e.g., barge); prop or wheel-washing is prohibited.

**Additional PDCs for Activity 2 applicable in critical habitat:**

*In addition to the PDCs above, the project must be designed to meet the following PDCs if the project occurs in the critical habitat as described below.*

A2.10. *Acropora* critical habitat and the U.S. Caribbean: This Opinion does not cover new and expanded pile-supported structures in *Acropora* critical habitat where the essential features are present. The distance from ATONs to ESA-listed corals and *Acropora* critical habitat shall ensure there are no impacts to the corals or the essential feature of *Acropora* critical habitat from the movement of buoys and tackle. The appropriate distance shall be based on the size of the anchor chain or other tackle to be installed to secure the buoy to its anchor, particularly when the design of the ATON does not prohibit contact of tackle with the marine bottom. In all cases, buoy tackle will include flotation to ensure there is no contact between the anchor chain or line and the marine bottom.

A2.11. Gulf sturgeon critical habitat: Additional noise restrictions are required for pile and sheet pile installation in the Gulf sturgeon critical habitat migratory restriction zones defined in Section 2.1.1.2. The noise restrictions are described in that section.

A2.12. Smalltooth sawfish critical habitat: This Opinion does not cover activities occurring in areas identified as smalltooth sawfish limited exclusion zones defined in Section 2.1.1.1.

A2.13. North Atlantic right whale critical habitat: This Opinion does not cover installation of anchored ATONs and permanent buoys in North Atlantic right whale critical habitat; temporary buoys for marine events are allowed in North Atlantic right whale critical habitat.

A2.14. Johnson's seagrass critical habitat: This Opinion does not cover new marinas or multi-family facilities in Johnson's seagrass critical habitat. Repair, replacement, and reconfiguration of existing marinas or multi-family facilities may be covered if it (1) occurs within same overall footprint (out to the perimeter of the facility, including the outer limits of the structure and permitted mooring locations), (2) does not increase the total aerial extent (i.e., area of coverage from the dock structures) of the existing facility, and (3) does not affect Johnson's seagrass. Mooring fields are allowed in Johnson's seagrass critical habitat and within the range of Johnson's seagrass so long as they occur in waters deeper than -13 ft (-4 m).

A2.15. NWA DPS of loggerhead sea turtle critical habitat: ATONs (pile-supported and anchored buoys) are allowed in nearshore reproductive habitat of the NWA DPS of loggerhead sea turtles under this Opinion. No other pile-supported structures are allowed in nearshore reproductive habitat under this Opinion.

A2.16. U.S. Caribbean sea turtle critical habitat (hawksbill, leatherback, and the NA DPS of green sea turtle critical habitat): ATONs (pile-supported and anchored buoys) are allowed near sea turtle nesting beaches under this Opinion. No other pile-supported structures are allowed near sea turtle nesting beaches under this Opinion.

### **A2.17. PDCs for Docks or Other Minor Structures**

These PDCs address the anticipated dock construction scenarios expected within Florida and the U.S. Caribbean and provide NMFS PRD’s construction guidelines for projects occurring (1) within Johnson’s seagrass critical habitat; (2) within the range of Johnson’s seagrass<sup>1</sup>, but outside of Johnson’s seagrass critical habitat; and (3) outside of both the range and critical habitat for Johnson’s seagrass. These scenarios consider whether a seagrass survey was conducted for projects within the range of Johnson’s seagrass or located in Johnson’s seagrass critical habitat. Surveys must be completed within 1 year prior to submittal of the application to the action agency for project authorization. There is no seasonal restriction for Johnson’s seagrass surveys; however, Johnson’s seagrass is found within the range of other seagrass species that exhibit a seasonal pattern of growth and distribution. For comparison, NMFS Habitat Conservation Division’s recommended sampling window for non-listed species is June 1 to September 30.

#### **Dock Construction Scenarios**

	<b>Within Johnson’s seagrass critical habitat</b>	<b>Within the Range of Johnson’s seagrass (outside of critical habitat)</b>	<b>In the U.S. Caribbean and Florida (outside of the range and critical habitat of Johnson’s seagrass)</b>
<b>Dock replacement in the exact footprint (i.e., same location/configuration/ size) as the previous dock with...</b>			
<b>No native seagrass under dock</b>	A	A	A
<b>Johnson’s seagrass under dock</b>	B	B	N/A
<b>Native seagrass, other than Johnson’s seagrass, under the dock</b>	B	A	A

<sup>1</sup>The range of Johnson’s seagrass is defined as Turkey Creek/Palm Bay south to central Biscayne Bay in the lagoon systems on the east coast of Florida

No current seagrass survey	B	B	A
<b>New docks or dock expansions with...</b>			
No native seagrasses within property limits	B	A	A
Johnson's seagrass within property limits	B	B	N/A
Native seagrass, other than Johnson's seagrass, within property limits	B	A	A
No current seagrass survey	B	B	A

A= No additional PDCs

B= Dock must meet PDCs below

N/A = not applicable; Johnson's seagrass could not occur under the dock because the dock project is outside the range of Johnson's seagrass

**Dock PDCs for Scenario B in the table above:**

1. To avoid and minimize impacts to Johnson's seagrass and native, non-listed seagrasses to the maximum extent practicable:
  - The dock must be positioned to avoid and minimize effects to Johnson's seagrass
  - Over any area that contains Johnson's seagrass or native, non-listed seagrasses, the dock shall be oriented in a north-south orientation to the maximum extent that is practicable to allow maximum sunlight under the structure.
  - If practicable, terminal platforms shall be placed in deep water, waterward of Johnson's seagrass beds or native, non-listed seagrasses beds or in an area devoid of Johnson's seagrass or native, non-listed seagrasses.
  - Piles must be spaced a minimum of 10 ft apart in any area that contains Johnson's seagrass to minimize direct impacts.
  - Piles shall be installed in a manner that will not result in the formation of sedimentary deposits (e.g., donuts or halos) around the newly installed pilings.
  - No covered boat lifts are allowed over any Johnson's seagrass.
  
2. Decking options: Deck surfaces (parallel with the water) that are located waterward of the MHWL must be constructed of grated materials or plank construction or a combination of the both methods (e.g. plank decking on the walkway and grated decking on the terminal platform). These decking options are described below:

*Grated decking:*

- Height requirement: The surface of the structure must be a minimum of 3 ft above MHW when constructed with grated decking.
- Size limitations: The dock walkway (narrow portion connecting the terminal platform to the shore) is limited to a width of 4 ft. The terminal platform is limited to a total

area of 160 ft<sup>2</sup>. Marginal docks are limited to a width of 5 ft.

- Material description: Decking materials shaped in the form of grids, grates, lattices, etc., to allow the passage of light through the open spaces. These materials must provide a minimum of 43% open space.

*Plank decking:*

- Height requirement: The surface of the structure must be a minimum of 5 ft above MHW when constructed of plank decking.
- Size limitations: The dock walkway (narrow portion connecting the terminal platform to the shore) is limited to a width of 4 ft. The terminal platform is limited to a total area of 120 ft<sup>2</sup>. Marginal docks are limited to a width of 5 ft.
- Material description: Deck boards may be constructed of any material. Deck boards must be installed to provide a minimum of a 0.5-in gap between individual deck boards

FEDERAL CANALS WITHOUT A LEVEE AND OPERATED BY NON FEDERAL SPONSOR

South Florida Water Management District

C-1	C-1 Connector Canal	C-10	C-100
C-100A	C-100B	C-100C	C-102
C-102N	C-103N	C-103S	C-11
C-11 Extension	C-110	C-111	C-111E
C-113	C-11S	C-12	C-123
C-13	C-14	C-15	C-16
C-18	C-19	C-20	C-21
C-23	C-23A	C-24	C-25
C-25 EXT	C-29	C-29A	C-29B
C-3	C-30	C-304	C-31
C-32B	C-32C	C-32D	C-32D
C-32F	C-32G	C-33	C-34
C-35	C-36	C-37	C-38
C-39A	C-4	C-40	C-41
C-41A	C-42	C-42	C-5
C-51	C-6	C-60	C-7
C-7 EXT	C-8	C-8 EXT	C-9
C-9 EXT			

Southwest Florida Water Management District

C-135	C-136	C-331	C-531	C-554
-------	-------	-------	-------	-------

Saint Johns River Water Management District

C-54

FEDERAL CANALS WITHOUT A LEVEE AND OPERATED BY THE US GOVERNMENT

C-43	C-44	Taylor Creek
------	------	--------------