

DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P. O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

March 21, 2013

Regulatory Division

DEPARTMENT OF THE ARMY PERMIT

GENERAL PERMIT SAJ-46 SAJ-2006-01736(KDS)

BULKHEADS AND BACKFILL IN RESIDENTIAL CANALS IN FLORIDA

Upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, general authority is hereby given for the construction of bulkheads and backfill in principally residential canals that are waters of the United States, excluding those areas listed in Special Conditions below, within the State of Florida.

SPECIAL CONDITIONS:

1. The work herein authorized includes bulkheads and backfill for single-family lots in principally residential canals in the State of Florida. A residential canal is defined as a manmade waterway, historically dug from uplands, and surrounded on both sides by uplands adjacent to principally residential property. Open water areas on bays and lagoons are not considered residential canals nor are Federally maintained navigation and/or flood control projects and SAJ-46 is not authorized for use within them.

2. No work shall be performed until the applicant submits satisfactory plans for the proposed work and receives written authorization from the District Engineer.

3. The following areas are specifically excluded from authorization under SAJ-46:

a. Motorboat prohibited zones, no entry zones, and Federal Manatee Sanctuaries.

b. All areas regulated under the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan, located between St. Lucie Lock in Martin County and W.P. Franklin Lock in Lee County.

c. Monroe County.

d. Biscayne Bay National Park Protection Zone (Dade County), St. Lucie Impoundment (Martin County), and areas identified in the Wild and Scenic Rivers Act (16 U.S.C. 1317, et seq.): the St. Mary's River, from its headwaters to its confluence with the Bells River, the entire Wekiva River, including Wekiwa Springs Run, Rock Springs Run, the entire Seminole Creek, and Black Water Creek from its outfall at Lake Norris to its confluence with the Wekiva River, the Loxahatchee River from Riverbend Park downstream to Jonathan Dickinson State Park.

e. The following state parks: John Pennekamp Coral Reef State Park, Lignum Vitae Key State Botanical Site and Aquatic Preserve, Long Key State Park, Curry Hammock State Park, and Bahia Honda State Park.

f. Canals in the Kings Bay/Crystal River/Homosassa/Salt River system (Citrus County); canals at Garfield Point including Queens Cove (St. Lucie County).

g. Lake Miccosukee (Leon and Jefferson Counties).

h. The following designated critical habitat: Gulf sturgeon critical habitat under the jurisdictional responsibility of the National Marine Fisheries Service, Johnson's seagrass critical habitat, smalltooth sawfish critical habitat, North Atlantic right whale critical habitat, and elkhorn and staghorn coral critical habitat.

4. No structures shall be authorized by SAJ-46 within the boundaries of the Timucuan Ecological and Historical Preserve (Duval County) until the National Park Service has been contacted and offered the opportunity to submit comments to the Corps on the effects of the proposed project on the preserve.

5. Prior to verification of authorization, the dichotomous key titled "The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida, March 2011" (see

http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Mana tee/20110321_Manatee_Key_Final_with_modifications_for_PBO.pdf) will be used to determine potential manatee impacts. Those determined to be a "may affect" to the manatee will not be authorized until consultation on the project has been concluded with the U.S. Fish and Wildlife Service in accordance with the Endangered Species Act. Additionally, depending on the location of the project, some projects determined to be "may affect, not likely to adversely affect" will not be authorized until consultation on the project has been concluded. *Note: The manatee key may be subject to revision at any time. It is our intention that the most recent version of this technical tool will be utilized during the evaluation of the permit application.*

6. For projects in waters accessible to manatees, the permittee will utilize the "Standard Manatee Conditions for In-Water Work, 2011" (see http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Manatee/2011_StandardConditionsForIn-waterWork.pdf) and/or requirements, as appropriate for the proposed activity. *Note: The manatee conditions may be subject to revision at any time. It is our intention that the most recent version of these conditions will be utilized during the evaluation of the permit application.*

7. For projects in waters accessible to sea turtles, smalltooth sawfish, Gulf sturgeon, or shortnose sturgeon, the permittee will utilize the "Sea Turtle and Smalltooth Sawfish Construction Conditions" (see

http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/sea_t urtles/inwaterWorkSeaTurtle032306.pdf) and/or requirements, as appropriate for the proposed activity. Note: These conditions may be subject to revision at any time. It is our intention that the most recent version of these conditions will be utilized during the evaluation of the permit application.

8. In accordance with Section 7 of the Endangered Species Act, projects proposed within the following areas cannot be authorized until consultation on the projects have been concluded with the U.S. Fish and Wildlife Service (USFWS): Within American Crocodile designated critical habitat; within Gulf sturgeon designated critical habitat under the jurisdictional responsibility of the USFWS; within the designated critical habitat for federally listed freshwater mussels, and freshwater mussels proposed for listing consisting of the following drainages: Within the main stem, creeks, and tributaries of the following rivers: Escambia (Escambia and Santa Rosa Counties), Yellow (Santa Rosa, Okaloosa, and Walton Counties), Choctawhatchee (Walton, Bay, Washington), Chipola (Jackson, Calhoun, and Gulf Counties), Apalachicola (Jackson, Calhoun, Gadsden, Liberty, Gulf, and Franklin Counties), Ochlockonee (Franklin, Wakulla, Liberty, Leon, and Gadsden Counties), Santa Fe and New (Columbia, Suwannee, Bradford, Baker, Union, Gilchrist, and Alachua Counties), and Econfina Creek and its tributaries (Bay and Washington Counties).

9. Projects proposing installation of any type of piling greater than 24 inches in diameter, or installation of any size of metal piling or sheet piling by impact hammer cannot be authorized under SAJ-46 until project-specific consultation for the sea turtles (loggerhead, green, hawksbill, Kemp's ridley, and leatherback), smalltooth sawfish, and sturgeon (shortnose, Gulf, and Atlantic) has been reinitiated and concluded with the National Marine Fisheries Service (NMFS).

10. Projects proposing installation of any type or size of piling or sheet piling by impact hammer cannot be authorized under SAJ-46 during the period March 1 through June 30 in the noise restriction areas in Lee County as contained within the polygons described by the latitudinal/longitudinal coordinates listed in Appendix 1 and shown in Appendices 2 through 5.

11. This permit has undergone consultation with the USFWS and the NMFS on the listed species and any designated critical habitat noted on Table 1. If the proposed activity requires additional Section 7 consultation under the Endangered Species Act with the USFWS and/or NMFS on: 1) these or any other Federally listed threatened or endangered species or a species proposed for such designation; or 2) designated critical habitat for these or any other Federally listed threatened or be designated as critical habitat for any Federally listed threatened or endangered species, until consultation is concluded, the proposed activity cannot be authorized under SAJ-46.

12. Bulkheads that require dredging of wetlands will not be authorized under this regional general permit. No work shall be authorized by SAJ-46 which may have direct or

indirect adverse impacts to essential fish habitat such as but not limited to hard or soft corals, including listed corals, mangroves, estuarine emergent vegetation, marine emergent vegetation, and/or the following species of submerged aquatic vegetation: shoal grass (*Halodule wrightii*), paddle grass (*Halophila decipiens*), star grass (*Halophila engelmanni*), Johnson's seagrass (*Halophila johnsonii*), sago pondweed (*Potamogeton pectinatus*), clasping-leaved pondweed (*Potamogeton perfoliatus*), widgeon grass (*Ruppia maritima*), manatee grass (*Syringodium filiforme*), turtle grass (*Thalassia testudinum*), tapegrass (*Vallisneria americana*), horned pondweed (*Zannichellia palustris*), and eel grass (*Zostera marina*). Indirect effects include secondary and cumulative effects. In addition, the project cannot have adverse effects on any other essential fish habitat.

13. The bulkhead and backfill shall not exceed 300 feet in length, and shall not extend waterward of the Mean High Water Line (MHWL) or Ordinary High Water Line (OHWL), unless necessary to align with existing adjacent seawalls. Seawall and/or riprap restoration may be permitted at its previous location, upland of, or within one foot waterward of its previous location. New riprap will not be placed more than 4 feet waterward of the MHWL or OHWL.

14. The backfill must be from upland sources and consist of suitable material, free from toxic pollutants in other than trace quantities.

15. This permit does not authorize fill activities other than placement of: (1) riprap as specified in Special Condition number 13 and (2) backfill behind the seawall or bulkhead. At no time should this permit be construed to allow filling of waters of the United States for additional development.

16. For projects authorized under the SAJ-46 in navigable waters of the United States, the permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. A structure authorized under this regional general permit must not interfere with general navigation.

17. Cultural Resources/Historic Properties:

a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition ; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

18. No work shall be performed until after the permittee provides notification to the owner(s) or operator(s) of any marked utilities in the area of work.

19. Turbidity controls measures may be required, and the work must be conducted so as to prevent violations of State Water Quality Standards as established in sections 62-4.242 and 62-4.244 of the Florida Administrative Code and Chapters 62-302, 62-520, 62-522, and 62-550 of the Florida Administrative Code.

20. Activities authorized under this general permit shall not impede navigation or affect flood control.

21. Activities qualifying for this regional general permit (RGP) must be authorized by the applicable permit or exemption under Part IV of Chapter 373, F.S., and by any authorization required to use or occupy state-owned submerged lands (SSL) under Chapter 253, F.S., and, as applicable Chapter 258 F.S. Such permit, issued by the Department of Environmental Protection, a water management district under s. 373.069, F.S., or a local government with delegated authority under s. 373.441, F.S., will provide the applicable Water Quality Certification (WQC) or waiver thereto, and Coastal Zone Consistency Concurrence (CZCC). WQC is waived for activities authorized under this RGP that qualify for an exemption under s. 403.813(1)(i) or 373.406, F.S., or the rules of Florida Administrative Code (F.A.C.) adopted

5

under Part IV of Chapter 373, F.S. The Corps under C.F.R. § 325.2(b)(2) may presume CZCC for the above exempt activities by operation of s. 380.23(7), F.S., provided the activity receives the applicable authorization to use and occupy SSL under Chapter 253, F.S., and, as applicable, Chapter 258, F.S., and the rules F.A.C. adopted thereunder. The Corps shall not be precluded from acting on a request to use this RGP before the applicable SSL authorization is granted.

22. This RGP does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage

(<u>http://www.myfwc.com/license/wildlife/</u>) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (<u>http://www.fnai.org/</u>) also maintains updated lists, by county, of documented occurrences of those species.

23. Activities authorized under this general permit are not ancillary to, adjunct to, or necessary for providing access to the water for upland dry boat storage, upland dry dock, or upland commercial boat repair or maintenance facilities.

24. Conformance with the descriptions and criteria contained herein does not necessarily guarantee authorization under this regional general permit. The District Engineer reserves the right to require that any request for authorization under this regional general permit be processed as an individual permit.

25. This regional general permit will be valid for a period of five years from the date specified above unless suspended or revoked by the District Engineer prior to that date. If SAJ-46 expires or is revoked prior to completion of the authorized work, authorization of activities that have commenced or are under contract to commence in reliance on SAJ-46 will remain in effect provided the activity is completed within 12 months of the date SAJ-46 expired or was revoked.

26. The permittee shall perform all work in accordance with the general conditions for permits. The general conditions attached hereto are made a part of this permit.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Alan M. Dodd

Colonel, U.S. Army District Engineer

6

GENERAL CONDITIONS FOR DEPARTMENT OF THE ARMY GENERAL PERMITS

General Conditions

1. The time limit for completing the work authorized ends on March 21, 2018.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature <u>and mailing address</u> of the new owner in the space provided below and forward a copy of the permit to this office to validate the transfer of this authorization.

5. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Further Information:

1. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

2. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

3. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

4. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 3 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

5. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transfere sign and date below.

(TRANSFEREE-SIGNATURE)

(DATE)

(NAME-PRINTED)

(ADDRESS)

Table 1

Federally Listed Species in Florida

2013 SAJ-46 - Bulkheads & Backfill in Residential Canals

Animals					
inding	Agency	Status	Species Listing		
			MAMMALS		
NE	FWS	E	Deer, Key (Odocoileus virginianus clavium)		
NLAA*	FWS	E	Manatee, West Indian (Trichechus manatus)		
NE	FWS	E	Mouse, Anastasia Island beach (Peromyscus polionotus phasma)		
NE	FWS	E	Mouse, Choctawhatchee beach (Peromyscus polionotus allophrys)		
NE	FWS	E	Mouse, Key Largo cotton (Peromyscus gossypinus allapaticola)		
NE	FWS	E	Mouse, Perdido Key beach (Peromyscus polionotus trissyllepsis)		
NE	FWS	Т	Mouse, southeastern beach (Peromyscus polionotus niveiventris)		
NE	FWS	E	Mouse, St. Andrew beach (Peromyscus polionotus peninsularis)		
NE	FWS	E	Panther, Florida (Puma concolor coryi)		
NE	FWS	E	Rabbit, Lower Keys marsh (Sylvilagus palustris hefneri)		
NE*	FWS	E	Rice rat (lower FL Keys) (Oryzomys palustris natator)		
NE	FWS	E	Vole, Florida salt marsh (Microtus pennsylvanicus dukecampbelli)		
NE	NMFS	E	Whale, finback (Balaenoptera physalus)		
NE	NMFS	E	Whale, humpback (Megaptera novaeangliae)		
NE*	NMFS	E	Whale, right (Balaena glacialis)		
NE	FWS	E	Woodrat, Key Largo (Neotoma floridana smalli)		
			BIRDS		
NE	FWS	Т	Caracara, Audubon's crested (FL pop.) (Polyborus plancus audubonii)		
NE	FWS	Т	Jay, Florida scrub (Aphelocoma coerulescens)		
NE	FWS	E	Kite, Everglade snail (Rostrhamus sociabilis plumbeus)		
NE	FWS	Т	Plover, piping (Charadrius melodus)		
NE	FWS	E	Sparrow, Cape Sable seaside (Ammodramus(=Ammospiza) maritimus mirabilis)		
NE	FWS	E	Sparrow, Florida grasshopper (Ammodramus savannarum floridanus)		
NE	FWS	E	Stork, wood (<i>Mycteria americana</i>)		
NE	FWS	Т	Tern, Roseate (Sterna dougallii dougallii)		
NE	FWS	E	Woodpecker, red-cockaded (Picoides borealis)		
			REPTILES & AMPHIBIANS		
NE	FWS	Т	Crocodile, American (Crocodylus acutus)		
NE*	FWS	Т	Salamander, flatwoods (Ambystoma cingulatum)		
NE*	FWS	T	Salamander, reticulated flatwoods (<i>Ambystoma bishopi</i>)		
NLAA/NE	NMFS/FWS	T	Sea turtle, green (<i>Chelonia mydas</i>)		
NLAA/NE	NMFS/FWS	E	Sea turtle, hawksbill (Eretmochelys imbricata)		
NLAA/NE	NMFS/FWS	E	Sea turtle, Kemp's ridley (<i>Lepidochelys kempii</i>)		
NLAA/NE	NMFS/FWS	E	Sea turtle, leatherback (<i>Demochelys coriacea</i>)		
NLAA/NE	NMFS/FWS	T	Sea turtle, loggerhead (<i>Caretta caretta</i>)		
NE	FWS	T	Skink, bluetail mole (Eumeces egregius lividus)		
NE	FWS	T	Skink, sand (Neoseps reynoldsi)		
NE	FWS	T	Snake, Atlantic salt marsh (Nerodia clarkii taeniata)		
NE	FWS	Т	Snake, eastern indigo (Drymarchon corais couperi)		

			FISH
NLAA	FWS	Т	Darter, Okaloosa (<i>Etheostoma okaloosae</i>)
NLAA for species NE for DCH	NMFS	E	Sawfish, Smalltooth (<i>Pristis pectinata</i>)
NLAA for species NE for DCH	NMFS	Т	Sturgeon, Gulf (Acipenser oxyrinchus desotoi)
NLAA	NMFS	E	Sturgeon, Atlantic (Acipenser oxyrinchus)
NLAA for species NE for DCH	NMFS	E	Sturgeon, shortnose (Acipenser brevirostrum)
			INVERTEBRATES
NLAA*	FWS	Т	Bankclimber, purple (Elliptoideus sloatianus)
NE	FWS	E	Butterfly, Schaus swallowtail (Heraclides aristodemus ponceanus)
NLAA for species NE for DCH	NMFS	т	Coral, E khorn (Acropora palmata)
NLAA for species NE for DCH	NMFS	Т	Coral, Staghorn(Acropora cervicornis)
NLAA*	FWS	E	Moccasinshell, Gulf (Medionidus penicillatus)
NLAA*	FWS	E	Moccasinshell, Ochlockonee (Medionidus simpsonianus)
NLAA*	FWS	E	Pigtoe, oval (Pleurobema pyriforme)
NLAA*	FWS	E	Pocketbook, shinyrayed (Lampsilis subangulata)
NE	FWS	Т	Shrimp, Squirrel Chimney Cave (Paleomonetes cummingi)
NE	FWS	Т	Snail, Stock Island tree (Orthalicus reses)
NLAA*	FWS	Т	Slabshell, Chipola (Elliptio chipolaensis)
NLAA*	FWS	E	Three-ridge, fat (Amblema neislerii)
			Plants
Finding	Agency	Status	Species Listing
NE	FWS	E	Aster, Florida golden (Chrysopsis floridana)
NE	FWS	E	Beargrass, Britton's (Nolina brittoniana)
NE	FWS	E	Beauty, Harper's (Harperocallis flava)
NE	FWS	E	Bellflower, Brooksville (Campanula robinsiae)
NE	FWS	Т	Birds-in-a-nest, white (Macbridea alba)
NE	FWS	E	Blazingstar, scrub (Liatris ohlingerae)
NUT	(T) 1 1 (C)		
NE	FWS	T	Bonamia, Florida (<i>Bonamia grandiflora</i>)
NE	FWS	Т	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium)
NE NE	FWS FWS	T T	Buckwheat, scrub (<i>Eriogonum longifolium gnaphalifolium</i>) Butterwort, Godfrey's (<i>Pinguicula ionantha</i>)
NE NE NE	FWS FWS FWS	T T E	Buckwheat, scrub (<i>Eriogonum longifolium gnaphalifolium</i>) Butterwort, Godfrey's (<i>Pinguicula ionantha</i>) Cactus, Key tree (<i>Pilosocereus robinii</i>)
NE NE NE NE	FWS FWS FWS FWS	T T E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium)Butterwort, Godfrey's (Pinguicula ionantha)Cactus, Key tree (Pilosocereus robinii)Campion, fringed (Silene polypetala)
NE NE NE NE NE	FWS FWS FWS FWS FWS	T T E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana)
NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS	T T E E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana) Cladonia, Florida perforate (Cladonia perforata)
NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS	T E E E E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium)Butterwort, Godfrey's (Pinguicula ionantha)Cactus, Key tree (Pilosocereus robinii)Campion, fringed (Silene polypetala)Chaffseed, American (Schwalbea americana)Cladonia, Florida perforate (Cladonia perforata)Fringe-tree, pygmy (Chionanthus pygmaeus)
NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS	T T E E E E E E T	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana) Cladonia, Florida perforate (Cladonia perforata) Fringe-tree, pygmy (Chionanthus pygmaeus) Gooseberry, Miccosukee (Ribes echinellum)
NE NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS FWS	T T E E E E E T E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana) Cladonia, Florida perforate (Cladonia perforata) Fringe-tree, pygmy (Chionanthus pygmaeus) Gooseberry, Miccosukee (Ribes echinellum) Gourd, Okeechobee (Cucurbita okeechobeensis okeechobeensis)
NE NE NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS FWS FWS	T T E E E E E T E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana) Cladonia, Florida perforate (Cladonia perforata) Fringe-tree, pygmy (Chionanthus pygmaeus) Gooseberry, Miccosukee (Ribes echinellum) Gourd, Okeechobee (Cucurbita okeechobeensis okeechobeensis) Harebells, Avon Park (Crotalaria avonensis)
NE NE NE NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS FWS FWS FWS	T T E E E E E T E E E E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana) Cladonia, Florida perforate (Cladonia perforata) Fringe-tree, pygmy (Chionanthus pygmaeus) Gooseberry, Miccosukee (Ribes echinellum) Gourd, Okeechobee (Cucurbita okeechobeensis okeechobeensis) Harebells, Avon Park (Crotalaria avonensis) Hypericum, highlands scrub (Hypericum cumulicola)
NE NE NE NE NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS FWS FWS FWS	T T E E E E E T E E E E E E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium)Butterwort, Godfrey's (Pinguicula ionantha)Cactus, Key tree (Pilosocereus robinii)Catus, Key tree (Pilosocereus robinii)Campion, fringed (Silene polypetala)Chaffseed, American (Schwalbea americana)Cladonia, Florida perforate (Cladonia perforata)Fringe-tree, pygmy (Chionanthus pygmaeus)Gooseberry, Miccosukee (Ribes echinellum)Gourd, Okeechobee (Cucurbita okeechobeensis okeechobeensis)Harebells, Avon Park (Crotalaria avonensis)Hypericum, highlands scrub (Hypericum cumulicola)Jacquemontia, beach (Jacquemontia reclinata)
NE NE NE NE NE NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS FWS FWS FWS	T T E E E E E T E E E E E E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium) Butterwort, Godfrey's (Pinguicula ionantha) Cactus, Key tree (Pilosocereus robinii) Campion, fringed (Silene polypetala) Chaffseed, American (Schwalbea americana) Cladonia, Florida perforate (Cladonia perforata) Fringe-tree, pygmy (Chionanthus pygmaeus) Gooseberry, Miccosukee (Ribes echinellum) Gourd, Okeechobee (Cucurbita okeechobeensis okeechobeensis) Harebells, Avon Park (Crotalaria avonensis) Hypericum, highlands scrub (Hypericum cumulicola) Jacquemontia, beach (Jacquemontia reclinata) Lead-plant, Crenulate (Amorpha crenulata)
NE NE NE NE NE NE NE NE NE NE NE NE	FWS FWS FWS FWS FWS FWS FWS FWS FWS FWS	T T E E E E E T E E E E E E E E	Buckwheat, scrub (Eriogonum longifolium gnaphalifolium)Butterwort, Godfrey's (Pinguicula ionantha)Cactus, Key tree (Pilosocereus robinii)Catus, Key tree (Pilosocereus robinii)Campion, fringed (Silene polypetala)Chaffseed, American (Schwalbea americana)Cladonia, Florida perforate (Cladonia perforata)Fringe-tree, pygmy (Chionanthus pygmaeus)Gooseberry, Miccosukee (Ribes echinellum)Gourd, Okeechobee (Cucurbita okeechobeensis okeechobeensis)Harebells, Avon Park (Crotalaria avonensis)Hypericum, highlands scrub (Hypericum cumulicola)Jacquemontia, beach (Jacquemontia reclinata)

NE	FWS	E	Mint, Garrett's (Dicerandra christmanii)
NE	FWS	E	Mint, Lakela's (Dicerandra immaculata)
NE	FWS	E	Mint, longspurred (Dicerandra cornutissima)
NE	FWS	E	Mint, scrub (Dicerandra frutescens)
NE	FWS	E	Mustard, Carter's (Warea carteri)
NE	FWS	E	Pawpaw, beautiful (Deeringothamnus pulchellus)
NE	FWS	E	Pawpaw, four-petal (Asimina tetramera)
NE	FWS	E	Pawpaw, Rugel's (Deeringothamnus rugelii)
NE	FWS	E	Pinkroot, gentian (Spigelia gentianoides)
NE	FWS	E	Plum, scrub (Prunus geniculata)
NE	FWS	E	Polygala, Lewton's (<i>Polygala lewtonii</i>)
NE	FWS	E	Polygala, tiny (<i>Polygala smallii</i>)
NE	FWS	E	Pondberry (Lindera melissifolia)
NE	FWS	E	Prickly-apple, fragrant (Cereus eriophorus fragrans)
NE	FWS	E	Rosemary, Apalachicola (Conradina glabra)
NE	FWS	E	Rosemary, Etonia (Conradina etonia)
NE	FWS	E	Rosemary, short-leaved (Conradina brevifolia)
NE	FWS	E	Sandlace (Polygonella myriophylla)
NLAA for species NE for DCH	NMFS	Т	Seagrass, Johnson's (Halophila johnsonii)
NE	FWS	Т	Skullcap, Florida (Scutellaria floridana)
NE	FWS	E	Spurge, deltoid (Chamaesyce deltoidea deltoidea)
NE	FWS	Т	Spurge, telephus (Euphorbia telephioides)
NE	FWS	E	Torreya, Florida (Torreya taxifolia goveniana)
NE	FWS	E	Warea, wide-leaf (Warea amplexifolia)
NE	FWS	E	Water-willow, Cooley's (Justicia cooleyi)
NE	FWS	Т	Whitlow-wort, papery (Paronychia chartacea)
NE	FWS	E	Wireweed (Polygonella basiramia)
NE	FWS	E	Ziziphus, Florida (Ziziphus celata)

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

Appendix 1: Noise restriction zones in smalltooth sawfish critical habitat.

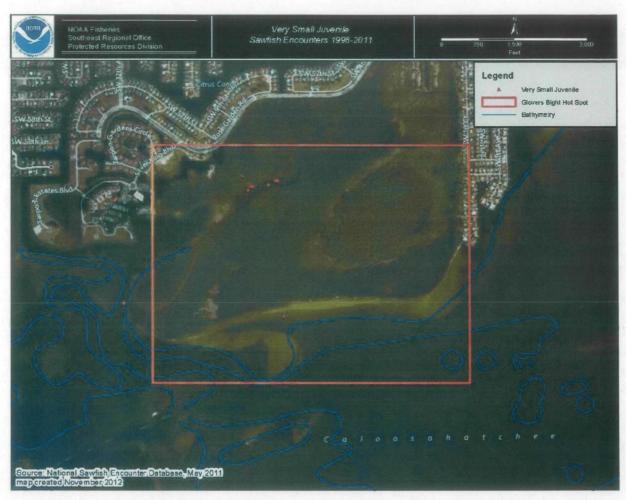


Appendix 2: U.S. 41 Bridges with very small juvenile sawfish encounters (Noise Restriction Area)

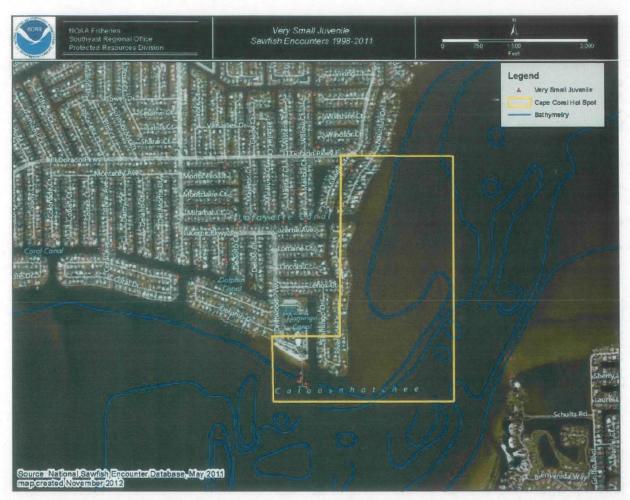


Apendix 3: Iona Cove with very small juvenile sawfish encounters (Noise Restriction Area)

SAJ-2006-01736(KDS) SAJ-46 Appendix 3



Appendix 4: Glove Bight with very small juvenile sawfish encounters (Noise Restriction Area)



Appendix 5: Cape Coral Canals with very small juvenile sawfish encounters (Noise Restriction Area)