



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207

February 28, 2025

Regulatory Division

PUBLIC NOTICE

**PROPOSED REISSUANCE OF
REGIONAL GENERAL PERMIT SAJ-112**

**TEMPORARY CORAL PROPAGATION STRUCTURES AND FILLS
(SAJ-2014-02338)**

TO WHOM IT MAY CONCERN:

To simplify and speed processing of Department of the Army permits for minor, substantially similar activities, the Jacksonville District, U.S. Army Corps of Engineers (Corps) proposes to reissue the SAJ-112 for coral propagation structures and fills in navigable waters of the U.S. in Florida.

The current RGP will expire on April 6, 2025. The proposed reissuance clarifies and reorganizes the authorized activities and the terms and conditions of the SAJ-112. The draft SAJ-112 is included at the end of this public notice.

Minor activities that would be covered under the SAJ-112 include temporary placement of structures and fill used exclusively for coral propagation for research, restoration, and/or enhancement purposes, pursuant to Section 10 of the Rivers and Harbors Act (33 U.S.C. § 403) and Section 404 of the Clean Water Act (33 U.S.C. § 1344):

Activities would occur within navigable waters of the United States in Florida, not including geographic exclusion areas listed in the permit or areas otherwise excluded by the terms and conditions of the permit.

BACKGROUND:

The Corps originally issued SAJ-112 on April 7, 2020, for coral propagation structures. This is the first proposed reissuance of this RGP. The Corps has issued 25 permit verifications under the SAJ-112 since it was issued. The majority of the permit verifications were for activities in the U.S. Virgin Islands, but several were located in Puerto Rico and Southeast Florida.

The Corps anticipates continued utilization of the SAJ-112 to address future requests for minor work within the authorized geographic area. This RGP improves efficiencies for the review and verification of minor activities, thus improving service to the regulated public. This RGP will be coordinated with Federal and State resource agencies to address federal laws such as the National Historic Preservation Act and the Fish and

Wildlife Coordination Act. This RGP, when renewed, will only apply to state of Florida, due to organization changes. A separate RGP may be issued that applies to Puerto Rico and the U.S. Virgin Islands.

The term “General Permit” means a Department of the Army authorization that is issued on a nationwide or regional (District) basis for a category of activities when: those activities are substantially similar in nature and cause only minimal individual and cumulative impacts. General permits reduce the burden of the regulatory program on the public and ensure timely issuance of permits while effectively administering the laws and regulations which establish and govern the program. General permits are reviewed every five years. After five years, general permits may be reissued, suspended, or revoked.

An assessment of the cumulative impacts of work authorized under a general permit is performed prior to authorization. In most instances, projects which comply with the conditions of a general permit can receive project specific authorization. Projects that do not comply with the conditions of a general permit may still receive authorization via an individual permit, but the application must be individually evaluated and coordinated with third parties, including the federal and state resource agencies. Review of an application for an individual permit takes additional time to complete as conflict resolution may be required.

AVOIDANCE AND MINIMIZATION INFORMATION:

The SAJ-112 would authorize activities that are minor and commonplace. The proposed terms and conditions of the SAJ-112 require activities proposed for authorization to be minimal in nature and avoid aquatic resources to the maximum extent.

COMPENSATORY MITIGATION:

The SAJ-112 would not authorize activities which would result in losses to special aquatic sites. Due to the minor nature of impacts, no compensatory mitigation will be required for the proposed activities.

CULTURAL RESOURCES:

This permit instrument is not associated with any proposed activity or project, and therefore, the Corps is not making an effect determination to historic properties at this time. Instead, each activity proposed for authorization under the SAJ-112 will be evaluated for compliance with Section 106 of the National Historic Preservation Act (NHPA) and the guidelines of 33 C.F.R. Part 325, Appendix C.

For each activity proposed for authorization under the SAJ-112, the Corps will conduct an individual evaluation of the activity’s potential effects to historic properties and Tribal resources, in accordance with Section 106 of the NHPA and Tribal Trust responsibilities.

No activity shall be authorized under this RGP which is likely to adversely affect historic properties listed on, or eligible for listing on the National Register of Historic Places.

If the proposed activity requires consultation under the NHPA, the proposed activity cannot be authorized under this RGP until consultation with the State Historic Preservation Office and other appropriate consulting parties is initiated and concludes with a determination that the activity will have no effect, or no adverse effect to historic properties.

ENDANGERED SPECIES:

National Marine Fisheries Service:

Each activity considered under the SAJ-112 must comply with the requirements within the National Marine Fisheries Service's Programmatic Biological Opinion on Effects of Research, Restoration, and Relocation on Threatened Caribbean Corals, dated October 18, 2016, or the most current version.

U.S. Fish and Wildlife Service (Florida):

Each activity considered under the SAJ-112 must meet a programmatic concurrence through the Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida, dated April 2013 and comply with the must comply with the *Standard Manatee Conditions for In-Water Work – 2011*.

ESSENTIAL FISH HABITAT (EFH):

This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. Our initial determination is that the reissuance of the SAJ-112 and subsequent activities to be authorized under the SAJ-112 would not have a substantial adverse impact on EFH or Federally managed fisheries in Florida given the proposed conditions of the SAJ-112 which limit the use of the SAJ-112 to activities which do not result in direct or indirect substantial adverse impacts to EFH. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service. Additionally, through preliminary discussions, the Corps has agreed to furnish copies of verifications to NMFS HCD, when issued, for their records.

WATER QUALITY CERTIFICATION:

The Corps will request general water quality certification from the Florida Department of Environmental Protection.

COASTAL ZONE MANAGEMENT CONSISTENCY:

The Corps will request general coastal zone consistency concurrence from the Florida Department of Environmental Protection.

IMPACT ON NATURAL RESOURCES:

Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION:

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

REQUEST FOR PUBLIC HEARING:

Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

COMMENTS regarding the potential authorization of the SAJ-112 should be submitted in writing to Christian Karvounis at Christian.G.Karvounis@usace.army.mil within 30 days from the date of this notice.

QUESTIONS concerning this public notice should be directed to Christian Karvounis at Christian.G.Karvounis@usace.army.mil, or by telephone at (561)-472-3309.



**DEPARTMENT OF THE ARMY PERMIT
REGIONAL GENERAL PERMIT
SAJ-2014-02338**

SAJ-112

TEMPORARY CORAL PROPAGATION STRUCTURES AND FILLS

I. Permittee: Recipient of a verification of a Regional General Permit (RGP) SAJ-112 from the Regulatory Division of the U.S. Army Corps of Engineers (Corps), South Atlantic Division, Jacksonville District (SAJ).

NOTE: The term "you" and its derivatives, as used in this permit, means the Permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

II. Effective Date: To be determined upon issuance.

III. Expiration Date: To be determined upon issuance (5 years from effective date).

This RGP will be valid for a period of five years from the effective date specified above unless suspended or revoked by the District Engineer prior to that date. If SAJ-112 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-112 will remain in effect provided the activity is completed within 12 months of the date SAJ-112 expired or was revoked.

IV. Issuing Office: Regulatory Division, Jacksonville District.

V. Authorized Activities: The following activities are authorized by SAJ-112, in accordance with the terms and conditions of this permit:

The temporary placement of structures and fill used exclusively for coral propagation for research, restoration, and/or enhancement purposes.

VI. Geographic Area: This RGP applies to all navigable waters of the United States located within the State of Florida, unless otherwise an excluded area listed in paragraph VII of this permit.

VII. Excluded Areas: The use of this RGP is not authorized in river mouths, inlets/ports, and navigation channels.

VIII. Pre-Construction Notification Procedures: To be authorized under this RGP, you must first submit a pre-construction notification (PCN), including satisfactory drawings, and a site evaluation report to the appropriate Jacksonville District permitting section. It is recommended that you use ENG Form 4345 or ENG Form 6082.

Do not proceed with the proposed work until the District Engineer or their designee issues written verification that the proposed project meets the requirements of this RGP and is authorized. After receipt of written verification, you are authorized to perform work in accordance with the terms and conditions specified in this permit instrument and any project-specific terms and conditions in the verification.

IX. Terms and Conditions:

1. Project Size Limit: The total coral propagation area comprised of individual structures and fill shall collectively not exceed 5 acres.

2. Work Type Exclusions: This RGP does not authorize the placement of materials for the construction or renourishment of artificial reefs or live rock aquaculture.

3. Notification: The Permittee must provide the following notifications to the Corps and the National Oceanic and Atmospheric Administration (NOAA) Nautical Data Branch, Office of Coast Survey N/CS26, 1315 East West Highway, Silver Spring, MD 20910-3282 or by email to osc.ndb@noaa.gov.

a. At least two weeks prior to the start of the authorized work, provide notification that work is commencing.

b. Within two weeks of the completion of the authorized work, provide notification that the work is completed

c. The above notifications must include the following information:

i. Boundary coordinates (NAD83) of the coral propagation deployment area.

ii. Vertical clearances (relative to MLLW or MLW) for the coral propagation deployment area.

iii. The deployment area identified on a nautical chart in sufficient detail to allow for site inspection

iv. Latitude and longitude coordinates of each site boundary.

4. Removal of Authorized Structures:

a. Structures and fill authorized by this RGP must be removed within 30 days of the date the structure and/or fill is no longer in use or becomes damaged beyond repair.

b. Structures that have become dislodged or displaced may be reestablished at the original location; however, the position of the displaced structures and any environmental damage must be reported to the Corps within 30 days of the displacement, with the following minimum information:

i. Coordinates (GPS) of location to which the structure was displaced.

ii. Condition of all displaced structures.

iii. Impacts (observed or estimated) to sensitive resources (e.g., seagrasses, hardbottom, or coral reef) resulting from structure displacement.

5. Federally Listed Species Conditions:

a. For projects in waters accessible to the West Indian Manatee, the Permittee must comply with the *Standard Manatee Conditions for In-Water Work – 2011* (Attachment 1). Note: The manatee conditions may be subject to revision at any time. The most recent version will be utilized during the evaluation of the PCN.

b. For projects in waters accessible to sea turtles, smalltooth sawfish, giant manta ray, and/or other federally listed marine fishes or sea turtles, the Permittee shall comply with National Marine Fisheries Service's "Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office" dated May 2021 (Attachment 2).

c. For projects located within the range of the queen conch with the current version of the *Queen Conch Survey, Construction Conditions, Relocation and Reporting Guidelines*, NOAA Fisheries Southeast Regional Office (<https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance>)

d. Each activity must comply with the requirements within the National Marine Fisheries Service's *Programmatic Biological Opinion on Effects of Research, Restoration, and Relocation on Threatened Caribbean Corals*, dated October 18, 2016, or the most current version (Attachment 3).

e. The Permittee shall comply with the “Vessel Strike Avoidance Measures and Reporting for Mariners”, revised May 2021 (Attachment 4), for marine turtles and marine mammals.

f. Floating structures that use lines as part of the support system or for attaching corals must be constructed in a manner to avoid entanglement of sea turtles and marine mammals:

i. Line nurseries must have, at a minimum, either horizontal or vertical components that are rigid (e.g., PVC pipe) to prevent the structures from collapsing and potentially causing entanglement of animals.

ii. Vertical lines for anchoring structures to the seafloor must have sufficient tension created by buoys on the line to avoid slack.

iii. Buoys should be tied to the rigid component of the structure with the minimum use of line such that less than 50 centimeters (cm) of line is exposed between each buoy and the structure.

iv. Line used to attach corals vertically to the nursery structures must be no longer than 20 cm.

v. Horizontal lines used to hang corals from the structure must be at least 20 cm apart.

vi. Horizontal lines must be kept taut and supported by a rigid frame structure (PVC or similar) in order to avoid slack in the horizontal lines.

vii. All structure shall be at least 10' apart as to prevent entanglement

6. Cultural Resources/Historic Properties Construction Conditions:

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

b. If, during permitted activities, items that may have historic or archaeological origin are observed, the Permittee shall immediately cease all activities within 100 meters of the discovery that may result in the destruction of these resources and shall prevent his/her employees from further removing, or otherwise damaging, such resources. The applicant shall notify both the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333 and the Corps, of the

observations within the same business day (8 hours). Examples of submerged historical, archaeological or cultural resources which may be deeply buried in sediment or above them, or protruding into the water, include shipwrecks, shipwreck debris fields (such as steam engine parts, or wood planks and beams), anchors, ballast rock, concreted iron objects, concentrations of coal, prehistoric watercraft (such as log "dugouts"), and other evidence of human activity. The Corps shall coordinate with the State Historic Preservation Office (SHPO) and the appropriate Tribal Historic Preservation Office(s) (THPO) to assess the significance of the discovery. Appropriate actions for the resolution of adverse effects will be determined following initiation of these steps and under consultation with the SHPO and THPO(s). Project activities shall not resume without verbal and/or written authorization from the Corps.

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 Corps in consultation with the SHPO and THPO(s) when appropriate, in accordance with 36 C.F.R. Part 800 or 33 C.F.R. Part 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 C.F.R. § 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under State jurisdiction, and from the Corps.

d. In the 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 Archaeologist within the same business day (8-hours). The Corps shall then notify the SHPO and initiate the *Agreement Between the Jacksonville District, U.S. Army Corps of Engineers, and the Seminole Tribe of Florida Regarding Proposed Actions that may Adversely Affect American Indian Burial Resources*. This agreement emphasizes that the resolution of effects to Native American burial resources will be accomplished whereby avoidance is the first priority and minimization or mitigation is only considered as a last resort. Appropriate actions for the resolution of the adverse effects will be determined following initiation of these steps and under consultation with the 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 C.F.R. § 325.7. On federal or tribal lands, or situations where the Archaeological Resources Protection Act of 1979 or Native American Graves Protection and Repatriation Act of 1990 applies, the Permittee shall notify the Corps who will notify the SHPO and THPO(s). Once activities have ceased as a result of any of the situations identified in this Special Condition, they shall not resume without written authorization from the Corps.

7. Navigation: No structure or work authorized under this RGP may interfere with general navigation.

a. 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 U.S. Army 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.

b. Prior to issuance of a verification for any activity proposed adjacent to a federal channel, the Corps will review the activity in accordance with the *U.S. Army Corps of Engineers, Jacksonville District, Setback Guidance for Structures along Certain Federal Channels* – November 09, 2017 (Setback Guidance). Note: The Setback Guidance may be subject to revision at any time. The most recent version will be utilized during the evaluation of the PCN. The Setback Guidance can be accessed on the Jacksonville District, Regulatory Division's Source Book page at <http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx>.

c. For activities proposed adjacent to federal channels, no structure may be constructed within the established setback, calculated from the near design edge of the channel, until coordination with and concurrence from the Corps' Navigation business line is complete. The setback may vary between different federal channels and between specific reaches of the same federal channel. Exact locations of the proposed structures relative to the channel may need to be verified by use of the Florida State Plane (XY) Coordinate System.

d. Any activity within federal lands, easements or rights-of-way may require the Permittee to enter into a consent-to-easement with the Real Estate Division, U.S. Army Corps of Engineers, Jacksonville District, as appropriate, prior to the commencement of any construction activity.

e. The propagation structures and fills must provide no less than 6 feet of depth clearance between the uppermost part of the structure or fill and the water surface at mean low-lower water.

8. Discretionary Authority: Conformance with the descriptions and criteria contained herein does not guarantee authorization under this RGP. The District

Engineer reserves the right to require that any request for authorization under this RGP be processed as an individual permit.

9. Fill Material: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance in toxic amounts, in accordance with Section 307 of the Clean Water Act.

10. Protected Areas: For projects proposed within the boundaries of the following managed areas, the applicant must obtain and provide a copy to the Corps of the written approval issued by the entities responsible for the management of those areas prior to issuance of a verification:

- a. Florida State parks
- b. National Parks
- c. State of Florida Aquatic Preserves
- d. National Marine Sanctuaries
- e. National Estuarine Research Reserves

11. Resource Avoidance: All structures and fill associated with coral propagation are to be installed over uncolonized (no seagrass, corals, sponges, or other sessile benthic organisms are growing on the substrate), unconsolidated substrate (e.g., sand or coral rubble).

- a. Structures must be constructed in a manner that ensures the structures will not move or flip during storm events or due to human impacts such as anchor drag:
 - i. Stabilization of structures shall be achieved with the use of weight and/or penetrating anchor systems or rebar driven to sufficient depth to prevent movement or lifting of the structures.
 - ii. Anchors for new structures will be installed only in uncolonized, unconsolidated bottoms. Anchors shall be inspected and any required maintenance performed twice a year and following large storm events to ensure that anchors and the propagation structures they support are still in place and have not moved to areas containing corals or seagrasses where they could cause damage

b. Structures must be placed a sufficient distance from live stony corals and seagrass beds to avoid potential impacts from movement of structures.

i. Structures located in sand channels between reefs must be located downslope and a minimum of 2 feet from adjacent reef.

ii. Mooring and marker buoys will not be installed within 15 ft of naturally-occurring live stony coral or seagrasses. All other structures and fill must be located a minimum of 10 ft from live stony coral or seagrasses.

iii. Each mooring location will have a clearance zone designed based on the size of the vessels that will be using the particular mooring in order to provide a safe margin to ensure moored vessels cannot swing on the mooring and collide with one another or swing into shallow colonized hard bottom or reef areas.

12. Work Methods: All structures shall be installed with hand tools only.

X. General Conditions:

1. The time limit for completing the work authorized ends on 5 years from effective date (to be determined upon issuance).

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 the permit verification, you must obtain the signature and mailing address of the new owner in the space on the transfer page provided below and forward a copy of the permit verification and executed transfer page to this office to validate the transfer of the 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.

XI. Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403)

(X) Section 404 of the Clean Water Act (33 U.S.C. § 1344)

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. § 1413)

2. 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.

3. 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.

4. 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.

5. 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.

6. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. § 325.7 or enforcement procedures such as those contained in 33 C.F.R. § 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to 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 C.F.R. § 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

(DISTRICT ENGINEER)
Brandon L. Bowman
Colonel, U.S. Army
District Commander

(DATE)

PERMIT NUMBER: RGP SAJ-112
PAGE 11 of 12

***Attachments to Department of the Army
Regional General Permit SAJ-112***

1. Attachment 1: Standard Manatee Conditions for In-Water Work – 2011
2. Attachment 2: Protected Species Construction Conditions - 2021
3. Attachment 3: Programmatic Biological Opinion on Effects of Research, Restoration, and Relocation on Threatened Caribbean Corals – 2018
4. Attachment 4: Vessel Strike Avoidance Measures - 2021

PERMIT NUMBER: RGP SAJ-112
PAGE 12 of 12

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 the permit verification and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFeree-SIGNATURE) (DATE)

(NAME-PRINTED)

(ADDRESS)

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

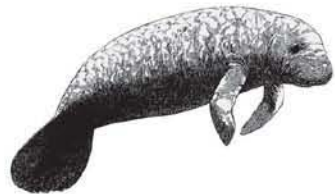
All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



PROTECTED SPECIES CONSTRUCTION CONDITIONS, NOAA FISHERIES SOUTHEAST REGIONAL OFFICE

The action agency and any permittee shall comply with the following construction conditions for protected species under the jurisdiction of NOAA Fisheries Southeast Regional Office (SERO) Protected Resources Division (PRD):¹

Protected Species Sightings—The action agency and any permittee shall ensure that all personnel associated with the project are instructed about the potential presence of species protected under the Endangered Species Act (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 listed species and all marine mammals. To determine which protected species and critical habitat may be found in the transit area, please review the relevant [marine mammal](https://www.fisheries.noaa.gov/find-species) and [ESA-listed species](https://www.fisheries.noaa.gov/find-species) at Find A Species (<https://www.fisheries.noaa.gov/find-species>) and the consultation documents that have been completed for the project.

1. **Equipment**—Turbidity curtains, if used, shall be made of material in which protected species cannot become entangled and be regularly monitored to avoid protected species entrapment. All turbidity curtains and other in-water equipment shall be properly secured with materials that reduce the risk of protected species entanglement and entrapment.
 - a. In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) shall 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, shall 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 shall be allowed in the water. All anchoring shall be in areas free from hardbottom and seagrass.
 - b. Turbidity curtains and other in-water equipment shall be placed in a manner that does not entrap protected species within the project area and minimizes the extent and duration of their exclusion from the project area.
 - c. Turbidity barriers shall be positioned in a way that minimizes the extent and duration of protected species exclusion from important habitat (e.g. critical habitat, hardbottom, seagrass) in the project area.
2. **Operations**—For construction work that is generally stationary (e.g., barge-mounted equipment dredging a berth or section of river, or shore-based equipment extending into the water):
 - a. Operations of moving equipment shall cease if a protected species is observed within 150 feet of operations.

¹ Manatees are managed under the jurisdiction of the U.S. Fish and Wildlife Service.

- b. Activities shall not resume until the protected species has departed the project area of its own volition (e.g., species was observed departing or 20 minutes have passed since the animal was last seen in the area).
3. **Vessels**—For projects requiring vessels, the action agency, and any permittee shall ensure conditions in the [Vessel Strike Avoidance Measures](#) are implemented as part of the project/permit issuance (<https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance>).
4. **Consultation Reporting Requirements**—Any interaction with a protected species shall be reported immediately to NOAA Fisheries SERO PRD and the local authorized stranding/rescue organization.

To report to NOAA Fisheries SERO PRD, send an email to takereport.nmfsser@noaa.gov. Please include the species involved, the circumstances of the interaction, the fate and disposition of the species involved, photos (if available), and contact information for the person who can provide additional details if requested. Please include the project's Environmental Consultation Organizer (ECO) number and project title in the subject line of email reports.

To report the interaction to the local stranding/rescue organization, please see the following website for the most up to date information for reporting sick, injured, or dead protected species:

Reporting Violations—To report an ESA or MMPA violation, call the NOAA Fisheries Enforcement Hotline. This hotline is available 24 hours a day, 7 days week for anyone in the United States.

NOAA Fisheries Enforcement Hotline (800) 853-1964

5. **Additional Conditions**—Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the project consultation and must also be complied with.

For additional information, please contact NOAA Fisheries SERO PRD at:

NOAA Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701
Tel: (727) 824-5312

Visit us on the web at [Protected Marine Life in the Southeast](#)
(<https://www.fisheries.noaa.gov/region/southeast#protected-marine-life>)

Revised: May 2021





UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
<http://sero.nmfs.noaa.gov>

F/SER31:JM

OCT 18 2016

MEMORANDUM FOR: David Bernhart
Assistant Regional Administrator, Protected Resources Division

FROM: Roy E. Crabtree, Ph.D. 
Regional Administrator 

SUBJECT: Initiation of the Programmatic Biological Opinion on Effects of
Research, Restoration, and Relocation on Threatened Caribbean
Corals –**MEMORANDUM**

The National Marine Fisheries Service (NMFS) is requesting initiation of consultation under Section 7 of the Endangered Species Act (ESA) for federal activities related to research, restoration, and relocation of threatened Caribbean corals. Because these activities support recovery of threatened corals, the Southeast Regional Office's (SERO) Protected Resources Division (PRD) will be the federal lead action agency for the consultation based on their responsibility as lead in species recovery. Several other federal agencies engage in research, restoration, and relocation of ESA-listed corals; thus, we are requesting consultation on those activities on their behalf. This memorandum documents our ESA Section 7(a)(2) and 7(d) determinations that during consultation, the continuing research, restoration, and relocation activities on threatened corals, conducted by NMFS and the co-action agencies, will not jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of any designated critical habitats for threatened or endangered species within the action area.

Statement of Need

Several federal action agencies conduct, fund, or authorize activities that result in the "take"¹ of threatened corals. These activities involve some manipulation of the coral so the taking is not always simply incidental to another activity. For *Acropora palmata* and *A. cervicornis*, the prohibitions against "take" exclude research and restoration work, subject to certain conditions (50 CFR 223.208(c)). For the five additional Caribbean coral species listed as threatened in 2014 (*Orbicella annularis*, *O. faveolata*, *O. franksi*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*), there are no prohibitions addressing take. Even without take prohibitions, however, Section 7 of the ESA requires consultation and an evaluation of the effects of the taking that will occur during federal actions. Because we believe that the net intent and impact of these activities are beneficial to the threatened corals (e.g., conducting research to aid recovery, relocating a

¹ The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (16 USC 1532(19)).



colony to prevent mortality), these activities warrant streamlined, programmatic consultation to allow for ease of execution.

Background

On May 9, 2006, elkhorn and staghorn corals were listed as threatened under the ESA (71 FR 26852). On September 10, 2014, five additional Caribbean coral species were listed as threatened, and the previously-listed elkhorn and staghorn corals were re-confirmed as threatened under the ESA (79 FR 53852).

Section 7(a)(2) of the ESA requires that each federal agency ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species. When the action of a federal agency may affect a protected species, that agency is required to consult with either the NMFS or the U.S. Fish and Wildlife Service (USFWS), depending upon the protected species that may be affected. Consultation is required for all activities that “may affect” listed species, whether or not the activity will result in take. However, consultations involving take are much more complicated and time-consuming. In some cases, it is beneficial to examine multiple activities or an agency’s program, rather than a singular activity, within one consultation (a.k.a. “programmatic consultation”). Programmatic consultations allow for a more holistic evaluation of effects. They also provide major efficiencies compared to multiple consultations for similar activities.

A few federal agencies have concluded consultation with PRD on their program’s research and restoration activities involving elkhorn and staghorn corals.² However, these programmatic biological opinions (PBOs) require re-initiation due to the listing of the additional corals. Many other federal agencies conduct activities that directly affect all of the listed coral species in the wider-Caribbean. Therefore, a need exists to conduct consultation on all of these activities. Rather than each action agency requesting individual consultation or reinitiation on each activity, PRD would prefer to develop a PBO that analyzes the impacts from specific activities to listed corals in our region across federal programs, regardless of the particular federal action agency. The geographic scope of the consultation is the collective ranges of the seven threatened Caribbean corals, throughout the wider-Caribbean.

In August 2015, PRD sent letters to all the federal agencies known to engage in research, restoration, and relocation of threatened Caribbean corals requesting their participation in and information to support the analyses necessary for this PBO. The following federal agencies have provided information and will be party to this PBO, in addition to PRD: Department of Defense (DOD); Army Corps of Engineers (USACE); Department of the Interior (DOI), National Park Service (NPS); DOI, US Fish and Wildlife Service (FWS); DOI, US Geological Survey (USGS); Environmental Protection Agency (EPA); Federal Emergency Management Agency (FEMA); Federal Highway Administration (FHWA); and multiple offices and programs within NOAA (Coral Reef Conservation Program [CRCP], National Centers for Coastal Ocean Science

² 2009 Programmatic Biological Opinion on Issuance of Permits by Office of National Marine Sanctuaries for Scientific Research Activities Directed at *Acropora* spp. in the Florida Keys National Marine Sanctuary and 2011 NOAA Restoration Center Programmatic Biological Opinion on Coral Reef Research, Enhancement and Restoration Activities Covered by the 4(d) Rule for Elkhorn and Staghorn Corals (50 CFR 223.208).

[NCCOS], NMFS Restoration Center [RC], and Office of National Marine Sanctuaries [ONMS]).

Scope of Programmatic Biological Opinion

The scope of this PBO will include research, restoration, and relocation activities (a.k.a., the 3Rs) directed at the 7 threatened Caribbean corals. We define these terms as:

- Research: Activities that result in take of threatened corals for the purpose of studying the species.
- Restoration: Activities that result in take of threatened corals for the purposes of preventing injury or mortality, and recovering the species. These activities may be conducted to promote recovery of the corals (general) or in response to an unplanned event (emergency).
- Relocation: Collection of threatened corals from one location and placement in another appropriate location for the purpose of preventing injury or mortality.

This PBO will be limited to only these three specific activities directed at threatened corals and, as such, will not analyze the effects of other action agency activities, such as construction, that may trigger the need to relocate listed threatened corals. For example, the USACE has the authority to permit dredge and fill activities under the Clean Water Act (CWA). Threatened corals may be in the action area of a proposed project and affected by the proposed activity. In most cases, threatened corals can be successfully relocated out of the action area prior to conducting the proposed dredge or fill activity, resulting in prevention of injury or mortality.³ Our intent is to include the relocation of threatened corals in this PBO, but not the dredge and fill activity. That action will require separate consultation.

PRD will be the lead agency for the consultation. The research, restoration, and relocation actions of several other federal agencies are included in this consultation. Table 1 below summarizes the action agencies included in the PBO and the types of activities that their programs cover related to the direct take of threatened corals.

³ Authorization of relocation of corals in advance of a planned federal activity does not alleviate any responsibilities under the Magnuson-Stevens Fishery Conservation Act to avoid, minimize, and mitigate for effects to essential fish habitat.

Table 1. Action agencies and types of activities to be analyzed in the PBO.

Action Agency	Section 7 Nexus	Research	General Restoration	Emergency Restoration	Relocation
NOAA/NMFS/SERO/PRD (Federal Lead Agency)	Authorizing, Conducting, Funding	X	X	X	X
DOD/USACE	Authorizing, Conducting, Funding				X
DOI/NPS	Authorizing, Conducting, Funding	X	X	X	X
DOI/FWS	Funding	X	X		
DOI/USGS	Conducting	X			
EPA	Authorizing, Conducting, Funding	X	X		X
FEMA	Funding			X	X
FHWA	Funding				X
NOAA/CRCP	Funding, Conducting	X	X		
NOAA/NCCOS	Conducting	X	X		
NOAA/NMFS/RC	Funding, Conducting	X	X	X	
NOAA/NOS/ONMS	Authorizing, Conducting	X	X	X	X

Authorities

NOAA NMFS SERO Protected Resources Division

PRD has the responsibility for implementing the ESA for listed species within its geographic area of focus (i.e., the Southeast U.S. and U.S. Caribbean). PRD is responsible for the conservation, protection, and recovery of endangered and threatened species. As such, PRD develops recovery plans and implements recovery actions for these species. The 2015 *Acropora* Recovery Plan and the 2015 Recovery Outline for Pillar Coral, Rough Cactus Coral, Lobed Star Coral, Mountainous Star Coral, and Boulder Star Coral provide the guidance under which PRD funds, authorizes, and conducts research, restoration, and relocation activities for the threatened Caribbean corals.

NOAA Coral Reef Conservation Program

The NOAA CRCP was authorized by the Coral Reef Conservation Act of 2000 (CRCA) and is a partnership between the NOAA Line Offices that work on coral reef issues. Specifically, the CRCA identified the following purposes, which are managed by the CRCP: (1) to preserve, sustain, and restore the condition of coral reef ecosystems; (2) to promote the wise management and sustainable use of coral reef ecosystems to benefit local communities and the Nation; (3) to develop sound scientific information on the condition of coral reef ecosystems and the threats to such ecosystems; (4) to assist in the preservation of coral reefs by supporting conservation programs, including projects that involve affected local communities and nongovernmental organizations; (5) to provide financial resources for those programs and projects; and (6) to

establish a formal mechanism for collecting and allocating monetary donations from the private sector to be used for coral reef conservation projects. To fulfill these purposes, the CRCP funds and conducts research and restoration.

NOAA National Centers for Coastal Ocean Science

The NCCOS conducts applied research, restoration, monitoring, and assessments to build the scientific foundation for coastal management and resilient coastal ecosystems (including corals). The NCCOS Strategic Plan 2011-2015 identifies the following priorities on which their activities focus: (1) science to manage threats of harmful algal blooms; (2) understanding impacts of coastal pollution; (3) advancing research on climate impacts to coastal communities; and (4) science for coastal ecosystem management. These priorities remain their focus as they revise their strategic plan. NCCOS' research is implemented under statutes for which other NOAA offices have primary responsibility: CRCA, Coastal Zone Management Act, Oil Pollution Act (OPA), Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), National Marine Sanctuaries Act (NMSA), Marine Mammal Protection Act (MMPA), ESA, and the Marine Debris Act.

NOAA Restoration Center

The RC is a program within the Office of Habitat Conservation that is devoted to restoring the nation's coastal, marine, and migratory fish habitat (including coral reefs). The RC funds and implements habitat restoration research and restoration projects, including coral habitat restoration projects, through several authorities: The CWA, CERCLA, OPA, the Fish and Wildlife Coordination Act (FWCA), ESA, and the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSFCA).

NOAA Office of National Marine Sanctuaries

Under the authority and direction of NMSA, ONMS issues permits for research activities conducted on corals in the Florida Keys National Marine Sanctuary (FKNMS) and the Flower Garden Banks National Marine Sanctuary (FGNMS). ONMS issues permits to allow certain activities beneficial to the Sanctuary that would otherwise be prohibited. These activities typically include research on natural and cultural resources (including corals), educational activities, and activities that further management objectives. Research permit applications are reviewed for scientific merit and evaluated on seven criteria, including the value of the activity to the Sanctuary; duration of proposal; methods and potential impacts; indirect, secondary, and cumulative effects of the activity; whether it is necessary for the activity to be conducted within the Sanctuary; professional qualifications of the applicant; and whether the applicant has adequate financial resources to complete the activity (15 CFR 922.166). The ONMS also manages sanctuaries through management plans and regulations. Thus, the ONMS conducts and authorizes activities, including research, within a sanctuary that may result in restoration and relocation of threatened corals (15 CFR 922).

DOD/Army Corps of Engineers

The USACE Civil Works conducts water resource projects (i.e., port maintenance or deepening, beach nourishment) as authorized by a particular Water Resource and Development Act or the Rivers and Harbors Act (RHA). Relocation of coral potentially affected by these projects would be funded or conducted by the USACE as potential avoidance, minimization, and/or mitigation

for project related effects. The USACE Regulatory Division authorizes the discharge of dredges or fill material in the waters of the U.S. under Section 404 of the CWA, and authorizes structures or work affecting navigable waters of the U.S. under Section 10 of the RHA. Many of these projects are funded or conducted by other federal agencies (e.g., FEMA). Relocation of coral potentially affected by these projects may be required. Additionally, research or restoration projects conducted by others (depending on the nature of the project) may require authorization under these authorities.

DOI/National Park Service

The NPS regulates the use, management, and protection of national parks as authorized by the National Park Service Organic Act. The NPS authorizes and conducts scientific research and restoration within parks according to their regulations (36 CFR 2.5). The NPS is authorized to conduct or fund restoration activities by the Park System Resource Protection Act and National Wildlife Refuge System Act. The NPS may also conduct in-water activities in the course of managing a park that may require relocation of corals.

DOI/U.S. Fish and Wildlife Service

The FWS implements the non-competitive State Wildlife Grants Program (SWG), which provides federal grant funds for developing and implementing programs that benefit wildlife and their habitats, including species not hunted or fished. To participate in the SWG program, as directed by Congress, the state, commonwealth, or territorial fish and wildlife agencies developed State Wildlife Action Plans (SWAP) which were reviewed and approved by FWS. The FWS also implements the SWG Competitive Grant Program (SWG-C), which also supports the SWAPs, with a special focus on promoting and advancing cooperative partnerships that result in large-scale landscape conservation. These grants may be for projects focusing on coral research or restoration activities.

DOI/U.S. Geological Survey

The USGS was created by Congress in 1879 as the sole science agency for the DOI. The USGS provides reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life. The USGS conducts research in the coral reef ecosystem and specifically on threatened corals.

Environmental Protection Agency

The EPA funds and conducts scientific research to inform the protection of the environment (including corals) under multiple laws and regulations (e.g., CWA, Clean Air Act). The EPA is also authorized to conduct restoration activities under the CWA and CERCLA. The EPA authorizes discharges of pollutants from point sources to navigable waters of the U.S. through the National Pollutant Discharge Elimination System permit program under Section 402 of the CWA. These authorized projects may require the relocation of corals.

Federal Emergency Management Agency

The FEMA provides funds for the repair, replacement, relocation, and/or the execution of alternate projects of public infrastructure (e.g., docks, bridges) in the coastal zone under the Hazard Mitigation Assistance and the Public Assistance programs. These activities may result in

the need to relocate corals should they be present within the project area. In some cases these activities may need to be conducted in the immediate aftermath of the hazardous event and result in emergency restoration activities.

Department of Transportation/Federal Highway Administration

The FHWA is an agency within the U.S. Department of Transportation that supports State and local governments in the design, construction, and maintenance of the Nation's highway system (Federal-Aid Highway Program, 23 USC 101 et seq.). The FHWA funds construction and maintenance of some structures (bridges, fender systems, seawalls, outfalls, etc.) in waters that may be occupied by corals. The FHWA may fund relocation of corals to avoid and minimize impacts during construction/maintenance of structures.

Activities

Research

Research activities may include collection of tissue samples, mucus, gametes, coral fragments, skeletal cores, whole colonies, or dead skeletons. Tissue samples are generally small ($< 9 \text{ cm}^2$) and collected using hand tools such as a hammer and chisel, pneumatic drill with a core bit, needleless syringe, or hole punch. Mucus samples are generally collected by suction off the surface of the colony using a needleless syringe or by swabbing the coral surface. Collected tissue is usually destroyed through analysis, and any tissue damage to the uncollected in-situ coral colony from tissue removal is sealed with epoxy or clay to prevent invasion of bioeroders. These methods of tissue removal do not kill the colony, and tissue regrowth over the patched hole typically occurs between six months and two years.

Gametes are collected by either scooping them from the water column using hand nets and wide mouthed bottles or more commonly by "tenting" colonies temporarily prior to expected gamete release. Tents consist of fine mesh netting with a weighted line at the bottom to surround the coral colony and a jar or wide-mouthed container at the apex into which gametes float once released by the coral colony. There is no negative, direct impact to individual coral colonies that occurs from collecting gametes. Colonies may be temporarily touched with collection nets. All materials are removed from corals at the conclusion of the spawning event (typically 4 hours or less). The impact resulting from the reduced number of gametes in the water column is negligible because the number of individual corals that are spawning and the sheer volume of gametes released by each colony compensate for the limited collection from a few individuals.

Fragments or chips are typically collected with hand tools including a hammer and chisel, pipe cutters, clippers, or pliers. Fragments are used in laboratory and field experiments. Measurements that involve brief contact with corals do not result in deleterious impacts. Some experiments may result in complete or partial mortality of fragments. Fragments that survive laboratory experiments and are not destroyed through analysis may be held in captivity indefinitely or returned to the wild.

Long skeletal cores are collected via hydraulic submersible drill. While a core may be up to a meter in length, the impact point at the coral surface is typically 5-10 cm maximum diameter. Hydraulic cores are collected from mounding species only (*Orbicella* spp.). Cores are mitigated by filling with short lengths of precast Portland cement and sealed at the top with a tapered

precast cement plug. Tissue healing over the patched core hole is typically one to two years, and colony mortality from this type of sampling does not occur.

The collection of entire coral colonies from the wild is not common and is typically not permitted unless the research methods specifically dictate this need. The primary instance in which entire colony collections would be permitted is for coral spawning research. Small colonies of corals may be collected and allowed to spawn in closed systems. Corals are then returned to the reef and cemented in place. If whole colonies are permitted for laboratory or field experiments, measurements that involve brief contact with corals do not result in deleterious impacts. Some experiments may result in complete or partial mortality of colonies. Colonies that survive laboratory experiments may be held in captivity indefinitely or returned to the wild.

Field experiments that involve manipulation of the environment may result in harm of the corals. These research activities could involve changes in water quality parameters such as temperature or pH, or the introduction of a contaminant. Other activities may involve physically excluding individual corals from the surrounding environment to understand trophic interactions (e.g., caging experiments).

Research activities that occur in coral reefs but do not involve actual manipulation of listed corals and do not affect listed corals (e.g., visual surveys) are not the subject of this request for consultation. Research activities that may affect coral critical habitat are not the subject of this request for consultation.

Restoration

Restoration activities may include collection of coral fragments and colonies, propagation, and reattachment back on the reef. Fragments for use in propagation and population enhancement may be collected from attached colonies using hand tools, as described for research above, or from loose fragments, termed “corals of opportunity.” If fragments are collected for propagation, they are transported to coral nurseries. Fragments are grown to larger sizes in the nurseries and re-fragmented to produce more colonies. This process is repeated to increase the number of colonies available for restoration.

Coral nurseries may be located in the ocean or on land. Nurseries on land usually consist of recirculating or flow-through containment systems using treated or artificial seawater. Nurseries in the ocean are located over unconsolidated substrate (sand or rubble) and consist of various types of structures to hold the corals. Nursery structures currently in use include cinder blocks, concrete structures, metal frames, and floating structures including PVC trees and lines strung between rigid frames. Floating nursery structures are generally anchored to the seafloor and are held upright and rigid in the water column by floating buoys. Corals are generally attached to structures using epoxy, cement, cable ties, or fishing line.

Corals are periodically taken from the nursery and attached (outplanted) back to the reef at restoration sites. Colonies may be attached to the reef using epoxy, cement, or nails. Sometimes faster growing species (*Acropora* spp.) may be wedged into cracks or holes in the reef to promote natural attachment to the reef. The goal of propagation and outplanting is to increase

overall survivorship and enhance populations of coral species experiencing decline and typically results in net positive gains for individuals and local populations of a species.

Restoration activities may be conducted to promote recovery of the corals (general) or in response to an unplanned event (emergency). For restoration resulting from unplanned events, such as a vessel grounding, loose colonies or fragments may be collected and reattached in place or transported to a temporary holding area to recover from damage before being reattached to the reef. Coral reattachment methods are the same as described above for outplanting of nursery corals. Some colonies may experience partial or total colony mortality after transplantation, usually due to some other stressor that compounds the stress that may be caused by transplantation. Occasionally colonies become unattached due to insecure attachment to the reef. Because the purpose of restoration from planned and unplanned events is to reduce or prevent injury or mortality, these activities have a net positive impact on the species that would suffer greater harm by leaving coral colonies in place.

Relocation

Relocation of corals involves collection of corals from one location and placement in another appropriate location for the purpose of preventing injury or mortality from a planned event. Relocation differs from restoration in that it only occurs because of a planned event that would result in the coral's death if it were not relocated. Corals may be relocated to another site or to a coral nursery, and reattachment methods are the same as described above for outplanting of nursery corals. Because the purpose of relocation is to reduce or prevent injury or mortality, this activity has a net positive impact on the species that would suffer greater harm by leaving coral colonies in place.

Section 7(a)(2) Analysis for Consultation Period

Section 7(a)(2) of the ESA requires that each federal agency shall insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. The Section 7(a)(2) analysis below is only applicable to the research, restoration, and relocation activities described above by NMFS and the co-action agencies during the consultation period and does not address any of these agencies' long-term Section 7(a)(2) obligation. Only with the completion of a new opinion can a Section 7(a)(2) analysis be completed for the long-term, foreseeable future.

Threatened Corals: Acropora palmata, A. cervicornis, Orbicella annularis, O. faveolata, O. franksi, Dendrogyra cylindrus, and Mycetophyllia ferox

The activities described above may result in take of the seven threatened corals listed above through collection and manipulation. However, the intent of these activities is to benefit the species by either preventing injury or mortality, or by implementing recovery actions. Coral research activities are highly-regulated by local resource agencies (i.e., national parks, sanctuaries, states, and territories) to ensure that the absolute minimum amount of samples are collected, or colonies affected, to yield valid results. The amount of tissue collected or colonies affected by research activities is very small in comparison to the population abundance and very seldom affects an entire colony. For example, a recent FKNMS permit authorized the collection of 1-cm branch tips from 36 colonies of *A. cervicornis* from the approximately 10 million

colonies in the Florida Keys. Further, these results will help inform recovery of the listed corals by providing information on many unknown impediments to recovery. Restoration and relocation activities actually prevent the injury and mortality of the corals, thus provide a benefit to the species. Therefore, continuing these activities during the consultation period is not likely to jeopardize their continued existence.

Listed Sea Turtles, Fishes, and Whales

The activities described above are typically conducted with hand tools by trained divers. In some cases, some material may be attached to the seafloor (e.g., coral nursery structures, water quality logging devices). The locations where activities are conducted are typically accessed via small vessels. These activities commonly occur within the action area of this consultation and have not been shown to have adverse effects on listed sea turtles, fishes, and whales. Thus, we believe the continuation of these activities will not jeopardize these species during the consultation period.

Acropora Critical Habitat

The activities described above may involve the deployment of material attached to the sea floor (e.g., coral nursery structures, water quality logging devices). Given that the activities will occur within the coral reef and hardbottom ecosystem, some of these materials may be deployed on the essential feature (i.e., consolidated hard substrate) of *Acropora* critical habitat. Given the size and numbers of these materials typically used for research, restoration, and relocation compared to the amount of essential feature within critical habitat (i.e., all the coral reef and hardbottom within the approximately 3,000 sq. miles of designated critical habitat), we do not believe that *Acropora* critical habitat may be destroyed or adversely affected during the consultation period.

Section 7(d) Analysis for Consultation Period

During the consultation period, all of the federal action agencies described above are prohibited from making any irreversible or irretrievable commitment of resources that would prevent implementation of any reasonable and prudent alternatives that might be provided at the conclusion of this consultation. This prohibition is in force until the full requirements of Section 7(a)(2) are satisfied. Section 7(d) does not prohibit all aspects of an agency action from proceeding during consultation; rather, non-jeopardizing activities may be implemented if doing so would not violate Section 7(d). Section 7(d) was intended by Congress to prevent “steamrolling” a project by an action agency, wherein a project is developed to a stage at which options that may have been available at the onset of the project that would have avoided jeopardizing listed species are no longer reasonable and prudent because of a foregone commitment of resources to the original design of the project. Continuation of threatened coral research, restoration, and relocation in no way constitutes an irreversible or irretrievable commitment of resources. These activities are always subject to future changes. All of the action agencies that are a part of this consultation have discretion to change how they conduct these activities and may do so at any time, subject to the Administrative Procedure Act, National Environmental Policy Act, and other applicable laws.

Conclusion

Based on the analysis above, I have determined that allowing the proposed action of research, restoration, and relocation of threatened corals to continue during the consultation period will not

violate Section 7(a)(2) or 7(d) of the ESA. This Section 7(a)(2) determination is only applicable to the proposed action during the consultation period and does not address the agencies' long-term obligation to ensure their actions are not likely to jeopardize the continued existence of any listed species or destroy or adversely modify critical habitat. Only with the completion of a biological opinion can a Section 7(a)(2) analysis be completed for the long-term, foreseeable future.



VESSEL STRIKE AVOIDANCE MEASURES, NOAA FISHERIES SOUTHEAST REGIONAL OFFICE

Background

Vessel strikes can injure or kill species protected under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). NOAA Fisheries Southeast Regional Office (SERO) Protected Resources Division (PRD) recommends implementing the following identification and avoidance measures to reduce the risk of vessel strikes and disturbance from vessels to protected species under our jurisdiction.¹

Protected Species Sightings

All vessel operators and crews should be informed about the potential presence of species protected under the ESA and the MMPA and any critical habitat in a vessel transit area. All vessels should have personnel onboard responsible for observing for the presence of protected species. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing listed species and all marine mammals. To determine which protected species and critical habitat may be found in the transit area, please review the relevant [marine mammal](https://www.fisheries.noaa.gov/find-species) and [ESA-listed species](https://www.fisheries.noaa.gov/find-species) at Find A Species (<https://www.fisheries.noaa.gov/find-species>) and any ESA Section 7 consultation documents if applicable.

Vessel Strike Avoidance

The following measures should be taken when they are consistent with safe navigation to avoid causing injury or death of a protected species:

1. Operate at the minimum safe speed when transiting and maintain a vigilant watch for protected species to avoid striking them. Even with a vigilant watch, most marine protected species are extremely difficult to see from a boat or ship, and you cannot rely on detecting them visually and then taking evasive action. The most effective way to avoid vessel strikes is to travel at a slow, safe speed. Whenever possible, assign a designated individual to observe for protected species and limit vessel operation to only daylight hours.
2. Follow deep-water routes (e.g., marked channels) whenever possible.
3. Operate at “Idle/No Wake” speeds in the following circumstances:
 - a. while in any project construction areas
 - b. while in water depths where the draft of the vessel provides less than four feet of clearance from the bottom, or
 - c. in all depths after a protected species has been observed in and has recently departed the area.

¹ Manatees are managed under the jurisdiction of the U.S. Fish and Wildlife Service.

4. When a protected species is sighted, attempt to maintain a distance of 150 feet or greater between the animal and the vessel. Reduce speed and avoid abrupt changes in direction until the animal(s) has left the area.
5. When dolphins are bow- or wake-riding, maintain course and speed as long as it is safe to do so or until the animal(s) leave the vicinity of the vessel.
6. If a whale is sighted in the vessel's path or within 300 feet from the vessel, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area. *Please see below for additional requirements for North Atlantic right whales.*
7. If a whale is sighted farther than 300 feet from the vessel, maintain a distance of 300 feet or greater between the whale and the vessel and reduce speed to 10 knots or less. *Please see below for additional requirements for North Atlantic right whales.*

Injured or Dead Protected Species Reporting

Vessel crews should report sightings of any injured or dead protected species immediately regardless of whether the injury or death is caused by your vessel. Please see [How to Report a Stranded or Injured Marine Animal](https://www.fisheries.noaa.gov/report) (<https://www.fisheries.noaa.gov/report>) for the most up to date information for reporting injured or dead protected species.

If the injury or death is caused by your vessel, also report the interaction to NOAA Fisheries SERO PRD at takereport.nmfsser@noaa.gov. Please include the species involved, the circumstances of the interaction, the fate and disposition of the animal involved, photos (if available), and contact information for the person who can provide additional details if requested. Please include the project's Environmental Consultation Organizer (ECO) number and project title in the subject line of email reports if a consultation has been completed.

Reporting Violations

To report any suspected ESA or MMPA violation, call the NOAA Fisheries Enforcement Hotline. This hotline is available 24 hours a day, 7 days week for anyone in the United States.

NOAA Fisheries Enforcement Hotline: (800) 853-1964

Additional Transit and Reporting Requirements for North Atlantic Right Whales

1. Federal regulation prohibits approaching or remaining within 500 yards of a North Atlantic right whale (50 CFR 224.103 (c)). All whales sighted within North Atlantic right whale critical habitat should be assumed to be right whales. Please be aware and follow restrictions for all Seasonal Management Areas along the U.S. east coast. These areas have vessel speed restrictions to reduce vessel strikes risks to migrating or feeding whales. More information can be found at [Reducing Vessel Strikes to North Atlantic Right Whales](https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales) (<https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales>).
2. Ships greater than 300 gross tons entering the WHALESOUTH reporting area are required to report to a shore-based station. For more information on reporting procedures consult 33 CFR Part 169, the Coast Pilot, or at [Reducing Vessel Strikes to North Atlantic](https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales)

[Right Whales](https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales) (<https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales>).

3. From November through April, vessels approaching/departing Florida ports of Jacksonville and Fernandina Beach as well as Brunswick Harbor, Georgia are **STRONGLY RECOMMENDED** to use Two-Way Routes displayed on nautical charts. More information on [Compliance with the Right Whale Ship Strike Reduction Rule](https://media.fisheries.noaa.gov/2021-06/compliance_guide_for_right_whale_ship_strike_reduction.pdf) can be found at (https://media.fisheries.noaa.gov/2021-06/compliance_guide_for_right_whale_ship_strike_reduction.pdf)
4. Mariners shall check with various communication media for general information regarding avoiding vessel strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard Broadcast to Mariners, Local Notice to Mariners, and NAVTEX. 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 NOAA Fisheries SERO, Protected Resources Division for more information regarding the CD).
5. Injured, dead, or entangled right whales should be immediately reported to the U.S. Coast Guard via VHF Channel 16 and the NOAA Fisheries Southeast Marine Mammal Stranding Hotline at (877) WHALE HELP (877-942-5343).

For additional information, please contact NOAA Fisheries SERO PRD at:

NOAA Fisheries Service

Southeast Regional Office

263 13th Avenue South

St. Petersburg, Florida 33701

Visit us on the web at [Protected Marine Life in the Southeast](https://www.fisheries.noaa.gov/region/southeast#protected-marine-life)

(<https://www.fisheries.noaa.gov/region/southeast#protected-marine-life>)

Revised: May 2021