

# DEPARTMENT OF THE ARMY SAVANNAH DISTRICT, CORPS OF ENGINEERS 100 W. OGLETHORPE AVENUE SAVANNAH, GEORGIA 31401-3640

**FEBRARY 22, 2022** 

Regulatory Division SAS-2005-01190

PUBLIC NOTICE
PROPOSED RE-ISSUANCE
PROGRAMMATIC GENERAL PERMIT 36
Construction, Maintenance and Modification
Offshore Artificial Reef
Tidal Navigable Waters of the United States
Savannah District/State of Georgia

The Savannah District, U.S. Army Corps of Engineers proposes to modify and re-issue Programmatic General Permit 37 (PGP 37) for a period of five (5) years, to authorize construction, maintenance, and modification of offshore artificial reefs located in the tidal navigable Waters of the United States, pursuant to Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S.C 403) which was extended to the outer continental shelf by Section 4(f) of the Outer Continental Shelf Lands Act of 1935 as amended (43 U.S.C. 1333(e)). PGP 37 would authorize the addition of materials within the boundaries of and/or the expansion of 32 existing Georgia Department of Natural Resources (Georgia DNR) Artificial Reefs A, ALT, CAT, CCA-JL, CDH, DUA, DRH, DW, F, HLHA, JY, KBY, KC, KTK, L, M1R1, M2R6, MRY, R2, R3, R4, R5, R7, R8, SAV, SFC, TW, WW, BH, and BL located off the coast of Georgia in the Atlantic Ocean. The Georgia DNR requests consideration of one previously authorized reef site, "TC" to be added to the RP 36 renewal.

Application Number: SAS-2005-01190

Applicant: Mr. Cameron Brinton

Georgia DNR, Coastal Resources Division

One Conservation Way Brunswick, Georgia 31520

<u>Artificial Reef Locations</u>: The 32 offshore artificial reef sites are in the Atlantic Ocean from 2.5nm to 70nm off the Georgia coast. See attached location maps for coordinates.

<u>Authority</u>: The Savannah District proposes the issuance of PGP 36 pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) which was extended to the outer continental shelf by Section 4(f) of the Outer Continental Shelf Lands Act of 1935 as amended (43 U.S.C. 1333(e)). Programmatic General Permits are authorized by the District Commander for activities which are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; and would result in avoiding unnecessary duplication of the regulatory control exercised by another

Federal, State, or local agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal (see 33 C.F.R. Parts 322.2(f), 325.2(e), and 330).

<u>Scope</u>: The scope of proposed PGP 36 includes only activities which are considered to be in accordance with the limitations set forth in the conditions in the attached previously authorized PGP 36, issued April 11, 2017, and proposed modifications.

<u>Exclusions</u>: This proposed PGP modification and extension does not change existing exclusions listed as follows:

- a. Any applications for "new" reefs.
- b. Any "private" reefs.
- c. Gray's Reef National Marine Sanctuary.

Other Authorizations: Activities that are not specified in the original PGP or which exceed the limitations of the Permit require individual Department of the Army Authorization from the U.S. Army Corps of Engineers District Office before work is started. The District Engineer may require individual authorization on a case-by-case basis if he determines authorization under this PGP for a specific project is not in the public interest.

#### **BACKGROUND**

This Joint Public Notice announces a request for authorizations from both the Corps and the State of Georgia. The applicant's proposed work may also require local governmental approval

The Corps issued PGP 36 on April 11, 2017, with an expiration date of April 11, 2022. PGP 36 authorizes the addition of materials within the boundaries of existing Georgia Department of Natural Resources Artificial Reefs and is to be administered by the Georgia Department of Natural Resources.

Reef site "TC" was previously authorized by Corps permit number SAS-2001-02350 on May 30, 2001, which has expired.

#### STATE OF GEORGIA

<u>State-owned Property and Resources:</u> The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit, or another appropriate instrument.

<u>Georgia Coastal Management Program</u>: Prior to the Savannah District Corps of Engineers making a final permit decision on this application, the project must be

certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Coastal Management Program, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

#### U.S. ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army permit.

<u>Cultural Resources</u>: A review of the latest published version of the National Register of Historic Places and the Georgia Natural, Archeological, and Historic Resources GIS database, indicates that no registered properties or properties listed as eligible for inclusion are located on the project site. Presently unknown archaeological, scientific, prehistorical, or historical data may be located at the site and could be affected by the proposed work.

Essential Fish Habitat (EFH): This notice initiates the EFH consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal may result in the destruction or alteration of EFH utilized by various life stages of species comprising the red drum, shrimp, bluefish, or snapper-grouper management complexes. Our initial determination is that the proposed action would not have an individual or cumulatively substantial adverse impact on EFH or federally managed fisheries in the Atlantic Ocean. Our final determination relative to project impacts to EFH and the need for mitigation measures are subject to review by and coordination with the NMFS and the South Atlantic Fisheries Management Council.

Endangered Species: A preliminary review of the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service's Protected Resource Divisions (NMFSPRD)'s list of Endangered and Threatened Species (IPaC) indicates the following listed species may occur in the project area: West Indian manatee (*Trichechus manatus*); Eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*); wood stork (*Mycteria americana*); green sea turtle (*Chelonia mydas*); hawksbill sea turtle (*Eretmochelys imbricata*); Kemp's Ridley sea turtle (*Lepidochelys kempii*); leatherback sea turtle (*Dermochelys coriacea*); loggerhead sea turtle (*Caretta caretta*); frosted flatwoods salamander (*Ambystoma cinculatum*); and pondberry (*Lindera melissifolia*).

Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.), we request information from the U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service; or, any other interested party, on whether any species listed or proposed for listing may be present in the area.

In addition, we are requesting information from the USFWS whether the project is within 2,500 feet of an active wood stork nesting colony.

<u>Public Interest Review</u>: The decision of 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 benefit, 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 the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain 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.

Consideration of Public Comments: The Corps is soliciting comments from the public; federal, state, and local agencies and officials; Native American 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 decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

<u>Public Hearing</u>: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

<u>Comment Period</u>: Anyone wishing to comment on this application for a Department of the Army permit should submit comments by email to <a href="mailto:skye.h.stockel@usace.army.mil">skye.h.stockel@usace.army.mil</a>. Alternatively, you may submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Skye H. Stockel, 100 West Oglethorpe Avenue, Savannah, Georgia 31401, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Skye H. Stockel, Regulatory Specialist, Coastal Section at (912) 652-5690 or <a href="mailto:skye.h.stockel@usace.army.mil">skye.h.stockel@usace.army.mil</a>.

#### Enclosures:

- 1. Georgia Offshore Artificial Reef PGP 36 issued April 11, 2017
- 2. Location Map and Artificial Reef Figures

U.S. Army Corps of Engineers Savannah District, Regulatory Division Programmatic General Permit 36 (PGP 36)

Effective Date: April 11, 2017

Expiration Date: April 11, 2022

DEPARTMENT OF THE ARMY
PROGRAMMATIC GENERAL PERMIT 36 (PGP 36)
FOR PLACEMENT OF MATERIALS AT
APPROVED OFFSHORE ARTIFICIAL REEF SITES
IN THE ATLANTIC OCEAN

DESCRIPTION OF PGP 36: Upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) which was extended to the outer continental shelf by Section 4(f) of the Outer Continental Shelf Lands Act of 1953, as amended (43 U.S.C. 1333(e)), authorization is hereby issued by the US Army Corps of Engineers, Savannah District (Corps) to the Georgia Department of Natural Resources (Georgia DNR), to conduct the below described work under PGP36. The Corps also hereby delegates authority to the Georgia DNR to verity that work proposed under PGP 36 qualifies for authorization under PGP 36. The following work is authorized under PGP 36: the addition of materials within the boundaries of and/or the expansion of Georgia DNR Artificial Reefs A, ALT, CAT, CCAJL, CDH, DUA, DRH, DW, F, HLHA, JY, KBY, KC, KTK, L, M1R1, M2R6, MRY, R2, R3, R4, R5, R7, R8, SAV, SFC, TW, WW, BH, BL and BSF located off the coast of Georgia in the Atlantic Ocean.

- 1. The Applicant, for the purpose of this PGP, is any agent, firm, or individual who submits a written request for use of this PGP to the Georgia Department of Natural Resources (Georgia DNR) at least 30 days prior to the planned date for placement of materials at an approved artificial reef site.
- 2. The Permittee, for the purpose of this PGP is the Georgia DNR, or any Applicant who receives written verification from the Georgia DNR and/or the Corps to add to and/or expand an artificial reef site, as may be authorized under this PGP.
- 3. Applicants intending to perform work under this PGP must submit written plans and drawings to Georgia Department of Natural Resources, Coastal Resources Division, Attention: Georgia Artificial Reef Development Program, One Conservation Way, Suite 300, Brunswick, Georgia 31520-8686. The submittal must include: the number and location of the proposed artificial reef site; the quantity and type of material to be deposited; the projected vertical relief of the material and mean low water (MLW) clearances; and the written intention to comply with all terms and conditions of the PGP. All proposals must be in accordance with the guidelines and limitations set forth in the conditions of the PGP and be approved by the Georgia DNR. The Georgia DNR

will review the plans and assess the work site to determine if proposed plans are within the scope of applicable permit conditions.

- 4.r Conformance with description and quantities contained herein does not necessarily guarantee consideration and/or subsequent authorization under the PGP.
- 5.r Within 10 days of placement of materials at an artificial reef site, the Permitteer shall submit post-placement information to Georgia DNR. Required post-placement information shall include GPS or DGPS coordinates, bearings, and any other information required by Georgia DNR.
- 6.r Authorization will not be issued under this PGP, which will impact, affect, orr otherwise degrade cultural resources such as archaeological, scientific, prehistoric, or historic sites or data.
- 7.r The Permittee agrees that all personnel associated with the project will be advisedr that there are civil and criminal penalties for harming, harassing or killing Northern Right Whales which are protected under the Endangered Species Act of 1973 and the Marine Mammal Act of 1972. The Permittee and/or contractor will be held responsible for any Right Whale harmed, harassed or killed as a result of construction activities.
- 8.r The Permittee shall adhere to the "Construction Conditions" identified the in ther National Marine Fisheries Service, Protected Resources Division letter dated March 30, 2017 (attached).
- 9.r Positioning and placement of the reef material will be accomplished in a mannerr which will assure accurate positioning at the location(s) authorized.
- 10.r Placement of materials at reef sites shall not exceed the site boundariesr authorized in this PGP and heights of placed materials shall not extend above the minimum mean low water (MLW) depth limits authorized for each reef site, as described below. Corner coordinates are provided in degrees (\*) and minutes (') North (N)\*Latitude and degrees (\*) and minutes (') West (W) Longitude. Corner coordinatesr are based on North American Datum of 1983. Water depths are provided in feet atr MLW. Approximate distances are provided in nautical miles (nm):r
- a.r Artificial Reef "A". Corner coordinates 30° 57.4′ N, 81° 16.3′ W; 30° 57.4′ N,r 81° 13.9′ W; 30° 55.4′ N, 81° 16.3′ W; 30° 55.4′ N, 81° 13.9′ W. Located approximately 7.0 nm east of Little Cumberland Island, Georgia. Minimum authorized clearance: -22′ MLW.

b.r Artificial Reef "ALT". Corner coordinates 31° 18.6' N, 81° 09.4' W; 31° 18.6' N, 81° 07.0' W; 31° 16.6' N, 81° 09.4' W; 31° 16.6' N, 81° 07.0' W. Located approximately 6.0 nm east of Little St. Simons Island, Georgia. Minimum authorized clearance: -22' MLW.

- c.i Artificial Reef "CAT". Corner coordinates 31° 40.2' N, 80° 58.6' W; 31° 40.2' N, 80° 56.2' W; 31° 38.2' N, 80° 58.6' W; 31° 38.2' N, 80° 56.2' W. Located approximately 7.0 nm east of St. Catherines Island, Georgia. Minimum authorized clearance: -22' MLW.
- d.i Artificial Reef "CCA-JL". Corner coordinates 31° 43.7' N, 80° 42.3' W; 31° 43.7' N, 80° 40.0' W; 31° 41.7' N, 80° 42.3' W; 31° 41.7' N, 80° 40.0' W. Located approximately 22.0 nm east of Ossabaw Island, Georgia. Minimum authorized clearance: -28' MLW.
- e.i Artificial Reef "CDH". Corner coordinates 30° 52.0' N, 81° 10.9' W; 30° 52.0' N, 81° 08.5' W; 30° 50.0' N, 81° 10.9' W; 30° 50.0' N, 81° 08.5' W. Located approximately 14.0 nm east of Cumberland Island, Georgia. Minimum authorized clearance: -28' MLW.
- f.i Artificial Reef "DRH". Corner coordinates 31° 18.0' N, 80° 59.0' W; 31° 18.0' N, 80° 56.6' W; 31° 16.0' N, 80° 59.0' W; 31° 16.0' N, 80° 56.6' W. Located approximately 15.0 nm east of Little St. Simons Island, Georgia. Minimum authorized clearance: -28' MLW.
- g.i Artificial Reef "DUA". Corner coordinates 31° 47.8' N, 80° 54.5' W; 31° 47.8' N, 80° 52.1' W; 31° 45.8' N, 80° 54.5' W; 31° 45.8' N, 80° 52.1' W. Located approximately 7.0 nm east of Ossabaw Island, Georgia. Minimum authorized clearance: -22' MLW.
- h.i Artificial Reef "DW". Corner coordinates 31i° 22.8' N, 79F 51.1' W; 31i° 22.8' N, 79F 49.8' W; 31i° 19.8' N, 79F 51.1' W; 31i° 19.8' N, 79F 49.8' W. Located approximately 70.0 nm east of Sapelo Island, Georgia. Minimum authorized clearance: -60' MLW.
- i.i Artificial Reef "F". Corner coordinates 31i 06.8' N, 81i 13.4' W; 31 06.8' N, 81i 10.5' W; 31i 04.8' N, 81i 13.4' W; 31i 04.8' N, 81i 10.5' W. Located approximately 9.0 nm east of Jekyll Island, Georgia. Minimum authorized clearance: -28' MLW.
- j.i Artificial Reef "HLHA". Corner coordinates 31° 00.0' N, 80° 59.2' W; 31° 00.0' N, 80° 56.8' W; 30° 58.0' N, 80° 58.0' N, 80° 56.8'. Located approximately 23.0 nm east of Little Cumberland Island, Georgia. Minimum authorized clearance: -35' MLW.
- k.i Artificial Reef "JY". Corner coordinates 31° 36.7' Ni, 80° 50.0' W; 31° 36.7' Ni, 80° 47.3' W; 31° 34.7' N, 80° 50.0' W; 31° 34.7' N, 80° 47.3' W. Located approximately 17.0 nm east of St. Catherines Island, Georgia. Minimum authorized clearance: -28' MLW.
- Li Artificial Reef "KBY". Corner coordinates 30° 48.6′ N, 81° 17.4′ W; 30° 48.6′ N, 81° 15.0′ W; 30° 46.6′ N, 81° 17.4′ W; 30° 46.6′ N, 81° 15.0′ W. Located approximately 8.0 nm east of Cumberland Island, Georgia. Minimum authorized clearance: -22′ MLW.

- m.. Artificial Reef "KC". Corner coordinates 31° 51.2' N, 80° 47.7' W; 31° 51.2' N, 80° 45.3' W; 31.° 49.2' N, 80° 45.3' W. Located approximately 9.0 nm southeast of Tybee Island, Georgia. Minimum authorized clearance: -22' MLW.
- n.. Artificial Reef "KTK". Corner coordinates 31.° 31.3′ N, 81.° 01.5′ W; 31° 31.3′ N, 80° 59.1′ W; 31.° 29.3′ N, 81.° 01.5′ W; 31.° 29.3′ N, 80° 59.1′ W. Located approximately 7.0 nm east of Blackbeard Island, Georgia. Minimum authorized clearance: -22′ MLW.
- o.. Artificial Reef "L". Corner coordinates 31° 46.0' N, 80° 37.1' W; 31° 46.0' N, 80° 34.7' W; 31° 44.0' N, 80° 37.1' W; 31.° 44.0' N, 80° 34.7' W. Located approximately 23.0 nm east of Ossabaw Island, Georgia. Minimum authorized clearance: -35' MLW.
- p..Artificial Reef "M1R1". Corner coordinates 31° 03.535' N, 80° 27.605' W; 31°. 03.535' N, 80° 26.440' W; 31° 02.530' N, 80° 27.605' W; 31° 02.530' N, 80° 26.440' W. Located approximately 50.0 nm east of Jekyll Island, Georgia. Minimum authorized clearance: -60' MLW.
- q..Artificial Reef "M2R6". Corner coordinates 31° 32.600' N, 80° 14.575' W; 31°. 32.600' N, 80° 13.415' W; 31.° 31.610' N, 80° 14.575' W; 31° 31.610' N, 80° 13.415' W. Located approximately 49.0 nm east of Blackbeard Island, Georgia. Minimum authorized clearance: -60' MLW.
- r.. Artificial Reef "MRY". Corner coordinates 30° 47.5′ N, 81° 07.8′ W; 30° 47.5′ N, 81° 05.5′ W; 30° 45.5′ N, 81° 07.8′ W; 30° 45.5′ N, 81° 05.5′ W. Located approximately 18.0 nm east of Cumberland Island, Georgia. Minimum authorized clearance: -46′ MLW. (NOTE: See Special Condition 12 below)
- s..Artificial Reef "R2". Corner coordinates 31° 22.975' N, 80° 34.700' W; 31° 22.975'. N, 80° 33.510' W; 31° 21.975' N, 80° 34.700' W; 31° 21.975' N, 80° 33.510' W. Located approximately 38.0 nm east of Sapelo Island, Georgia. Minimum authorized clearance: -35' MLW.
- t..Artificial Reef "R3". Corner coordinates 31° 13.540' N, 80.°07.615' W; 31° 13.540' N, 80.°06.450' W; 31° 12.570' N, 80.°07.615' W; 31° 12.570' N, 80.°06.450' W. Located approximately 62.0 nm east of St. Simons Island, Georgia. Minimum authorized clearance: -60' MLW.
- u..Artificial Reef "R4". Corner coordinates 30.° 48.625' N, 80.° 19.515' W; 30.° 48.625'. N, 80.° 18.350' W; 30.° 47.630' N, 80.° 19.515' W; 30.° 47.630' N, 80.° 18.350' W. Located approximately 59.0 nm east of Cumberland Island, Georgia. Minimum authorized clearance: -60' MLW.
- v..Artificial Reef "R5". Corner coordinates 30.° 56.830' N, 80.° 45.635' W; 30.° 56.830'. N, 80.° 44.470' W; 30.° 55.830' N, 80.° 45.635' W; 30.° 55.830' N, 80.° 44.470' W. Located approximately 34.0 nm east of Cumberland Island, Georgia. Minimum authorized clearance: -38' MLW.

w.aArtificial Reef "R7". Corner coordinates 31° 49.375' N, 80° 16.960' W; 31° a 49.375' N, 80° 15.795' W; 31° 48.390' N, 80° 16.960' W; 31° 48.390' N, 80° 15.795' W. Located approximately 40.0 nm east of Ossabaw Island, Georgia. Minimum authorized clearance: -40' MLW.

x.aArtificial Reef "R8". Corner coordinates 31° 38.505' N, 79° 56.060' W; 31° 38.505'a N, 79° 54.895' W; 31° 37.515' N, 79° 56.060' W; 31° 37.515' N, 79° 54.895' W. Located approximately 64.0 nm east of St. Catherines Island, Georgia. Minimum authorized clearance: -60' MLW.

y.aArtificial Reef "SAV". Corner coordinates 31° 55.4' N, 80° 47.6' W; 31° 55.4' N, 80° 45.2' W; 31â 53.4' N, 80° 45.2' W; & 31â 53.4' N, 80° 47.6' W. Located approximately

6.0 nm southeast of Tybee Island, Georgia. Minimum authorized clearance: -22' MLW.

z.aArtificial Reef "SFC". Corner coordinates 31° 01.3' N, 81° 03.4' W; 31â 01.297' N,a 81° 01.077' W; 30a 59.3' N, 81â 03.4' W; 30° 59.29' N, 81° 01.09' W. Located approximately

18.0 nm east of Little Cumberland Island, Georgia. Minimum authorized clearance: - 28' MLW.

aa. Artificial Reef "TW". Corner coordinates 31° 04.8' N, 80° 10.0' W; 31â 04.8' N, 80° 07.4' W; 31â 03.8' N, 80° 10.0' W; 31° 03.8' N, 80° 07.4' W. Located approximately 63.0 nm east of Jekyll Island, Georgia. Minimum authorized clearance: -60' MLW.

bb. Artificial Reef "WW". Corner coordinates 31° 43.5' N, 79° 59.3' W; 31° 43.5' N, 79° 55.7' W; 31â 42.2' N, 79° 59.3' W; 31° 42.2' N, 79à 55.7' W. Located approximately 50.0 nm east of Wassaw Sound, Georgia. Minimum authorized clearance: -60' MLW.

cc.artificial Reef "BH". Center coordinate is 31° 30.400' N, 81° 06.285' W; Reefa footprint consists of a circle 400 yards in diameter located approximately 2.5 nm east of Concord Shoals / Blackbeard Island, McIntosh County, Georgia. Minimum authorized clearance: -12' MLW.

dd.aArtificial Reef "BL". Center coordinate is 31° 38.521' N, 81° 04.793' W; Reefa footprint consists of a circle 400 yards in diameter located approximately located 2.5 nm off McQueen's Inlet/ St. Catherines Island, Liberty County, Georgia. Minimum authorized clearance: -10' MLW.

ee. Artificial Reef "BSF". Center coordinate is 31° 54.089' N / 80° 50.073' W; New fisheries habitat development footprint consisting of a circle 400 yards in diameter located approximately 4.2 nm off Little Tybee Island, Chatham County, Georgia. Proposed perimeter coordinates and minimum authorized depth clearance will be determined by Corps. Site water depth at mean low water is ~29 feet. Habitat development activities are proposed for the next 5+ years within boundaries approved by Corps.

11. The Georgia DNR shall notify the following agencies prior to placement of materials at an approved reef site, under authority of this PGP:

Director, National Imagery Mapping Agency Headquarters Bethesda 4600 Sangamore Road Bethesda, Maryland 20816-5003

Director, National Ocean Survey NOAA, US Department of Commerce ATTN: Nautical Data Branch N/CS26, Station 7317 1315 East-West Highway Silver Spring, Maryland 20910-3282

Commander
SUBASE Kings Bay
ATTN: Port Services/Engineering
1063 USS Tennessee Avenue
Kings Bay, Georgia 31547-2606

Commander, Submarine Group 10 ATTN: Operations Officer 1050 USS Georgia Avenue SUBASE Kings Bay Kings Bay, Georgia 31547-2609

The Minerals Management Service US Department of Interior 281 Elden Street Herndon, Virginia 20170

Commander (OAN)
Seventh Coast Guard District
Brickell Plaza Federal Building
909 SE First Avenue
Miami, Florida 33131-3050

U.S. Department of the Interior Fish & Wildlife Service 4980 Wildlife Drive Northeast Townsend, Georgia 31331 U.S. Environmental Protection Agency Wetlands Protection Section, Region IV 61 Forsyth Street SW Atlanta, Georgia 30303-8960

U.S. Army Corps of Engineers, Savannah District ATTN: Regulatory Division 100 W. Oglethorpe Ave Savannah, Georgia 31401-3640

- 12. Additional special conditions applicable to placement of materials at Artificial Reef Site MRY:
- a. Prior to placement of materials at Artificial Reef MRY, as described above at Special Condition 10(r), the Georgia DNR or Applicant shall provide written notification to the below listed agencies. Written notification shall include the name and address of the Applicant, the specific location within the reef site proposed for material placement, a brief description of the proposed project, the anticipated amount material to be deployed, a description of the material(s) proposed for placement, and the projected post material placement elevation.

Commander
Submarine Group 10
ATTN: Operations Officer
1050 USS Georgia Avenue
SUBASE Kings Bay
Kings Bay, Georgia 31547-2609

Commander SUBASE Kings Bay ATTN: Port Services / Engineering 1063 USS Tennessee Avenue Kings Bay, Georgia 31547-2606

U.S. Army Corps of Engineers, Savannah District ATTN: Regulatory Division 100 W. Oglethorpe Ave Savannah, Georgia 31401-3640

b. Within 30 days of receipt of written notification for the proposed placement of materials at Artificial Reef MRY, Submarine Group 10 and SUBASE Kings Bay may submit a written statement of approval, conditional approval or disapproval to the Georgia DNR, based on location, placement, elevation, stability and/or durability/longevity of materials.

- c. The Applicant shall not proceed with proposed material placement at Artificial Reef MRY should Submarine Group 10 and SUBASE Kings Bay submit a disapproval of use of the site in its written response to the Georgia DNR. Disapprovals and conditional approvals will be fully explained and detailed.
- d. The Permittee may proceed with placement of materials at Artificial Reef MRY upon approval or if no written response is received from Submarine Group 10 or SUBASE Kings Bay within the 30-day comment period. Material placement may also be initiated if the terms of a conditional approval are satisfied.
- e. Following placement of materials at Artificial Reef MRY, the Permittee or Georgia DNR will provide post placement GPS location information to Submarine Group 10 and SUBASE Kings Bay.
- 13. Proposed activities determined not to qualify for authorization under PGP 36 by Georgia DNR and/or the Corps would require prior Department of the Army authorization from the Corps in the form of an Individual Permit, Nationwide Permit or other authorization. On a case-by-case basis, the Corps has the discretionary authority to require submission of an Individual Permit application for work proposed under the PGP.
- 14. The Georgia DNR shall submit an annual report of all offshore reef activities to the Corps by September 1<sup>st</sup> of each year. The Report shall include the following information: a summary overview of activities completed during the preceding year; site selection and evaluation criteria used; dates of deployments; staff training and on site deployment activities; contractors used for transportation and deployment; types of materials deployed per site and any specific requirements of materials; and site photographs/videos

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Marvin L. Griffin, P.E. Colonel, U.S. Army

Commanding

## Georgia Offshore Artificial Reefs, U.S. Navy Towers, & Gray's Reef National Marine Sanctuary

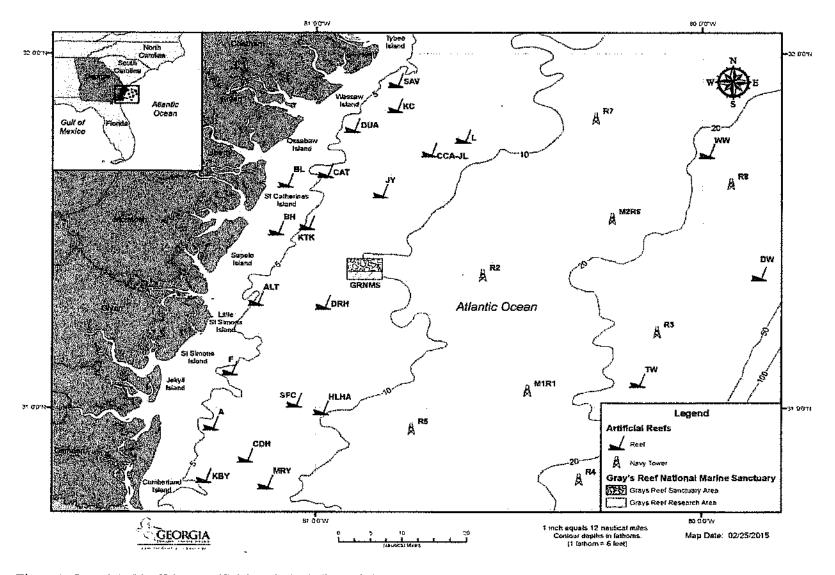
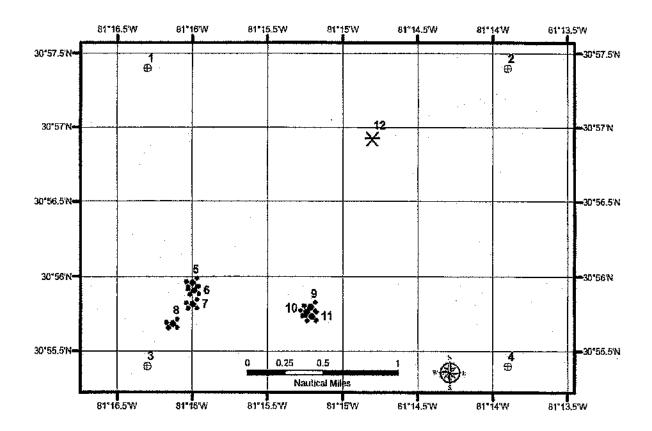


Figure 1. Georgia's 30 offshore artificial reefs, including existing Navy Towers R2, R3, R4, R5, R7, R8, M1R1, and M2R6.



Label	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	30 57.400	-81 16.300	Oct-76
2	Corner of Reef Area	30 57.400	-81 13.900	Oct-76
3	Corner of Reef Area	30 55.400	-81 16.300	Oct-76
4	Corner of Reef Area	30 55.400	-81 13.900	Oct-76
5	Wharf Rubble	30 55.964	-81 15.998	Jun-86
6	Wharf Rubble	30 55.910	-81 15.987	Jun-86
7	Wharf Rubble	30 55.817	- <b>81</b> 15. <b>999</b>	Jul-91
8	Wharf Rubble	30 55.686	-81 16.130	Jul-91
9	Wharf Rubble	30 55.797	-81 15.212	Oct-03
10	Wharf Rubble	30 55.767	-81 15.237	Oct-03
11	Wharf Rubble	30 55.735	-81 <b>15.20</b> 5	Oct-03
12	Concrete Poles	30 56.922	-81 14,795	Jul-10

Figure 2(a): Existing fisheries habitat development at <u>Georgia Artificial Reef A</u>, located approximately 7 nm east of Little Cumberland Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 32' to 42'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).

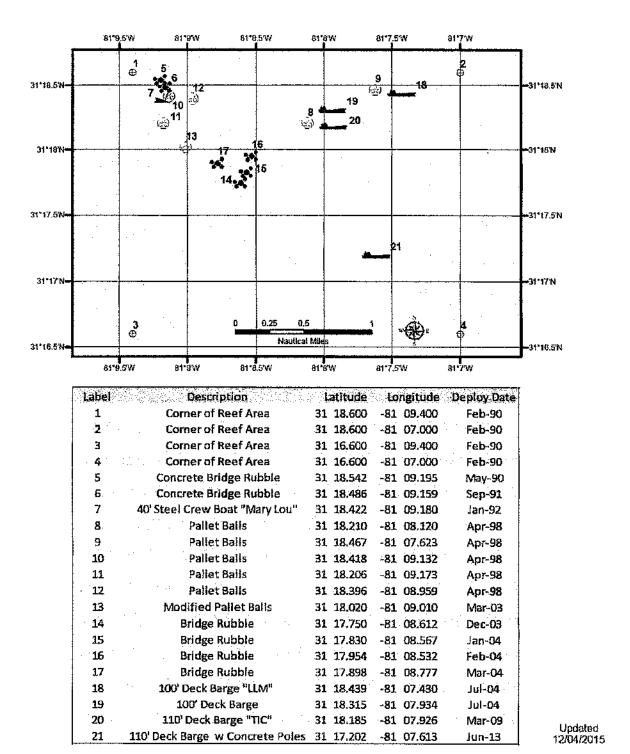
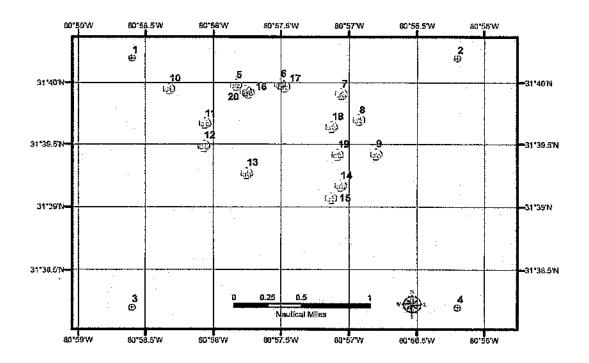


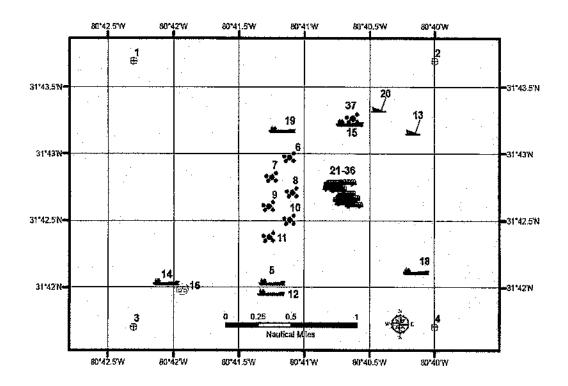
Figure 2(b): Existing fisheries habitat development at <u>Georgia Artificial Reef ALT</u>, located approximately 6 nm east of Little St. Simons Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 32' to 40'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).



Label	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	31 40.200	-80 58.600	Feb-90
2	Corner of Reef Area	31 40.200	-80 56.2 <b>00</b>	Feb-90
3	Corner of Reef Area	31 38.200	-80 58.600	Feb-90
4	Corner of Reef Area	31 38.200	-80 56.200	Feb-90
5	Pallet Balls	31 39. <del>9</del> 83	-80 57.835	Aug-95
6	Pallet Balls	31 39. <del>99</del> 0	-80 57.504	Aug-95
7	Pallet Balls	31 39.909	-80 57.056	Aug-95
8	Pallet Balls	31 39.700	-80 56.928	Aug-95
9	Pallet Balls	31 39,425	-80 56.803	Aug-95
10	Concrete Culverts	31 39.951	-80 58.325	Aug-95
11	Concrete Culverts	31 39.671	-80 58,063	Aug-95
12	Concrete Culverts	31 39,490	-80 58.070	Aug-95
13	Concrete Culverts	31 39,272	-80 57.755	Aug-95
14	Stevens Cone Units	31 39.175	-80 57.060	Feb-03
15	Stevens Cone Units	31 39.074	-80 57.127	Feb-03
16	Stevens Cone Units	31 39,920	-80 57.742	Feb-03
17	Stevens Cone Units	31 39.970	-80 57.475	Feb-03
18	Paliet Balls	31 39.642	-80 57.125	Apr-03
19	Pallet Balls	31 39.420	-80 57.082	Apr-03
20	Stevens Cone Units	31 39,934	-80 57.763	Mar-07

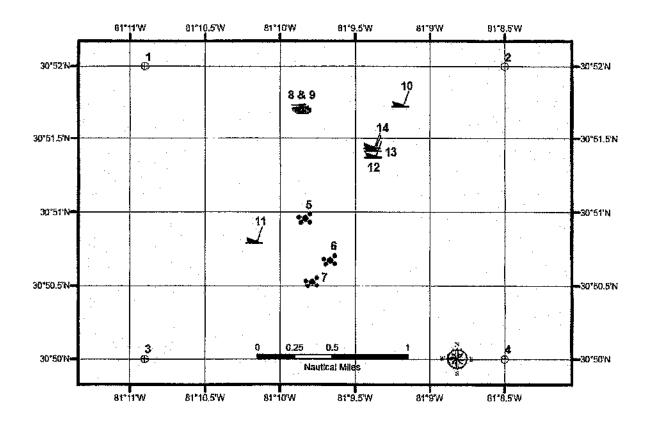
Updated 01/28/2015

Figure 2(c): Existing fisheries habitat development at <u>Georgia Artificial Reef CAT</u>, located approximately 7 nm east of St. Catherines Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 32' to 40'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).



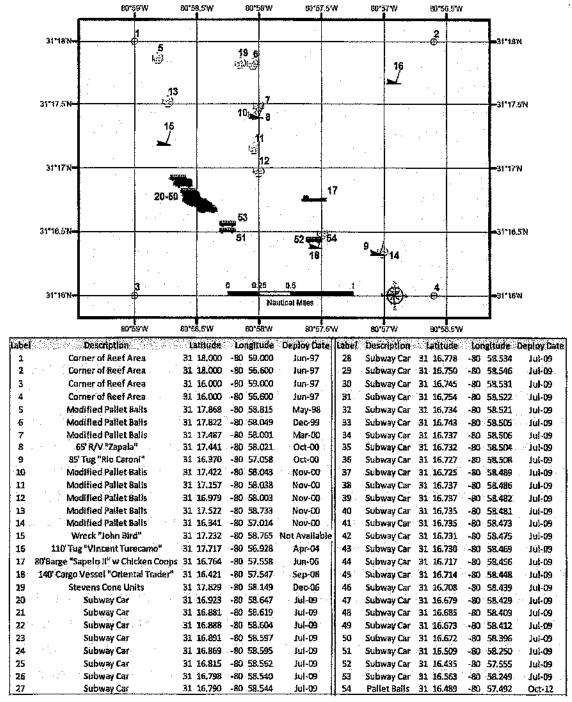
Label	Description	. 7°	at(tude	Lo	ngitude	Deploy Date	Label	Description	50	atitude	j.	ngitude	Deploy Date
1	Corner of Reef Area	31	43,700	-80	42.300	May-91	20	100' Tug "Davon"	31	43,367	-80	40.432	Feb-04
. 2	Corner of Reef Area	31	43,700	-80	40.000	May-91	21	Subway Car	31	42.746	-80	40,751	Dec-10
3	Corner of Reef Area	31	41.700	-80	42,300	May-91	22	Subway Car	31	42.654	-80	40.651	Dec-10
4	Corner of Reef Area	31	41.700	-80	40.000	May-91	23	Subway Car	- 31	42,745	-80	40.787	Dec-10
5	95' Deck Barge	31	42.039	-80	43.241	jan-92	24	Subway Car	31	42.632	-80	40.693	Dec-10
6	Bridge Supports	31	42.976	-80	41.112	Jun-92	25	Subway Car	31	42,768	-80	40.777	Dec-10
7	Bridge Supports	31	42.826	-80	41.246	Jun-92	26	Subway Car	31	42.784	-B0	40,66 <del>9</del>	Dec-10
В	Bridge Supports	31	42.712	-80	41.089	Jun-92	27	Subway Car	31	42,655	-80	40.709	Dec-10
9	Bridge Supports	31	42.609	-80	41.269	Jun-92	28	Subway Car	31	42,658	-80	40.672	Dec-10
10	Bridge Supports	31	42.509	-80	41,130	Jun-92	29	Subway Car	31	42,646	-80	40.684	Dec-10
11	Bridge Supports	31 -	42.384	-80	41.267	Jun-92	30	Subwey Car	31	42.699	-80	40.673	Dec-10
12	110 Deck Barge "TM 1157"	31	42.039	-80	41.241	Jun-92	. 31	Subway Car	31	42.674	-80	40.685	Dec-10
13	85'Tug "Matt Turecamo"	31	43.200	-80	40.176	May-96	32	Subway Car	31	42.666	-80	40.641	Dec-10
14	130' Deck Barge	31	42.039	-80	42.052	Mar-01	33	Subway Car	31	42.617	-80	40.617	Dec-10
15	200' Warehouse Barge w/ Culvert	31	43,232	-80	40.650	Mar-01	34	Subway Car	31	42.778	-80	40.760	Dec-10
16	Concrete Culvert	31 -	41,986	-80	41.930	May-01	35	Subway Car	. 31	42.649	-80	40.550	Dec-10
17	Subway Cars	Con	firmed n	ot pres	ent (reti	ined)	36	Subway Car	31	42.731	-80	40.733	Dec-10
18	195' Hopper Barge	31	42.121	-80	40.142	Apr-03	37	Concrete Culvert	31	43.266	-80	40.632	Mar-01
19	Deck Barge	31	43,180	-80	4L.166	Jul-03							

Figure 2(d): Existing fisheries habitat development at <u>Georgia Artificial Reef CCA-JL</u>, located approximately 22 nm east of Ossabaw Island, Georgia. Corner coordinates and -28' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 50' to 60'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15). Formerly named CCA Reef.



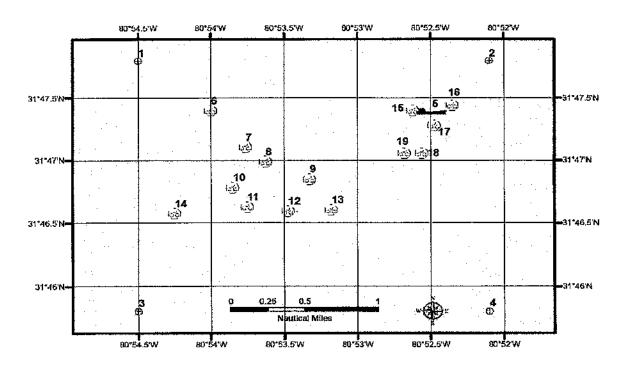
Label	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	30 52.000	-81 10.900	Apr-69
2	Corner of Reef Area	30 52.000	-81 08.500	Apr-69
3	Corner of Reef Area	30 50.000	-81 10.900	Apr-69
4	Corner of Reef Area	30 50.000	-81 08.500	Apr-69
5	Wharf Rubble	30 50.962	-81 09.831	May-86
6	Wharf Rubble	30 50.681	-81 09.663	Jul-91
7	Wharf Rubble	30 50.531	-81 09.784	Jul-91
8	M-60 Battle Tanks	30 51.701	-81 09.846	Aug-95
9	M-60 Battle Tanks	30 51.714	-81 09.864	Aug-95
10	105' Tug "Euwin St. Phillips"	30 51.773	-81 09.197	Oct-04
11	Cargo Ship "Esparta"	30 50.845	-81 10.171	Dec-04
12	82' Trawler "Rachael"	30 51.424	-81 09.378	Jan-06
13	45' Sailboat	30 51.466	-81 09.382	Apr-07
14	55' Powerboat	30 51.483	-81 09.386	Apr-07

Figure 2(e): Existing fisheries habitat development at Georgia Artificial Reef CDH, located approximately 14 nm east of Cumberland Island, Georgia. Corner coordinates and -28' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 44' to 55'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15). Formerly named C Reef.



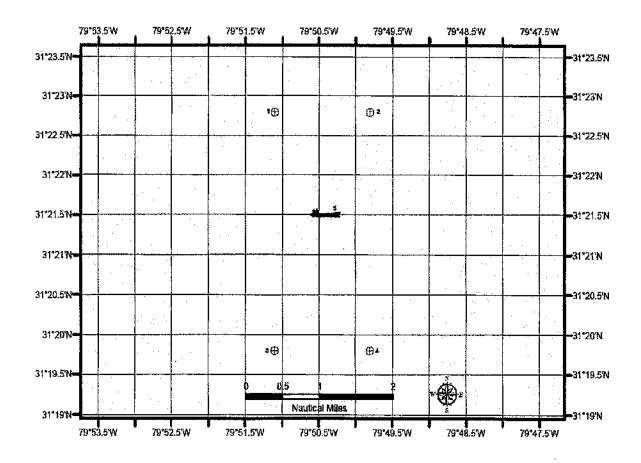
Updated 12/04/2015

Figure 2(f): Existing fisheries habitat development at <u>Georgia Artificial Reef DRH</u>, located approximately 15 nm east of Little St. Simons Island, Georgia. Corner coordinates and -28' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 41' to 53'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).



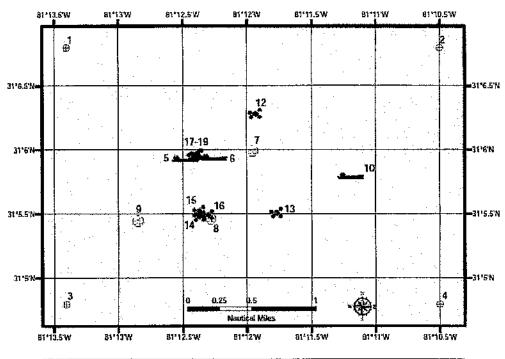
Label	Description	latitude	Longitude	Deploy Date
1	Corner of Reef Area	31 47.800	-80 54,500	Feb-90
2	Corner of Reef Area	31 47.800	-80 52.100	Feb-90
3	Corner of Reef Area	31 45.800	-80 54.500	Feb-90
4	Corner of Reef Area	31 45,800	-80 52.100	Feb-90
5	35' Barge "Ansley"	31 47.393	-80 52 496	Aug-91
6	Concrete Boxes	31 47.397	-80 54.000	Jul-96
7	Concrete Boxes	31 47.104	-80 53,765	Jul-96
8	Concrete Boxes	31 46.990	-80 53.629	Jul-96
9	Concrete Culvert	31 46.852	-80 53.327	Aug-96
10	Concrete Culvert	31 46.785	-80 53.850	Aug-96
11	Concrete Culvert	31 46,633	-80 53.753	Aug-96
12	Concrete Culvert	31 46.597	-80 53.475	Sep-96
13	Concrete Culvert	31 46,606	-80 53.178	Sep-96
14	Concrete Culvert	31 46.580	-80 54.250	Sep-96
15	Pallet Balls	31 47.399	-80 52.626	Feb-98
16	Pallet Balls	31 47.442	-80 52.354	Feb-98
17	Concrete Cuivert	31 47.282	-80 52.477	Jun-02
18	Stevens Cone Units	31 47.058	-80 52.564	Mar-04
19	Stevens Cone Units	31 47.057	-80 52.683	Dec- <b>0</b> 6

Figure 2(g): Existing fisheries habitat development at <u>Georgia Artificial Reef DUA</u>, located approximately 7 nm east of Ossabaw Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 35' to 48'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).



Label	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	31 22.800	-79 51.100	Dec-98
2	Corner of Reef Area	31 22.800	-79 49.800	Dec-98
3	Corner of Reef Area	31 19.800	-79 51.100	Dec-98
4	Corner of Reef Area	31 19.800	-79 49.800	Dec-98
5	300' Dump Scow	31 21.525	-79 50.403	Jun-98

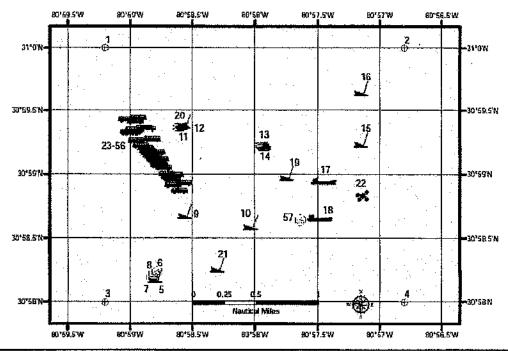
Figure 2(h): Existing fisheries habitat development at <u>Georgia Artificial Reef DW</u>, located approximately 70 nm east of Sapelo Island, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 152' to 172'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).



Lahel	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	31 06.800	-81 13.400	Jun-71
2	Corner of Reef Area	31 06.800	-81 10.500	Jun-71
3	Corner of Reef Area	31 04.800	-81 13.400	Jun-71
4	Corner of Reef Area	31 04.800	-81 10.500	Jun-71
5	55' Landing Craft "LCIVI-1"	31 05.926	-81 12.483	Mar-87
6	55' Landing Craft "LCM-6"	31 05,939	-81 12.255	Sep-87
7	Tire Units	31 05.990	-81 11.959	Feb-94
8	Pallet Balls	31 05.463	-81 12.286	Maγ-98
9	Pallet Balls	31 05.445	-81 12.847	May-98
10	200' Deck Barge "Recchi GLF"	31 05.794	-81 11.191	May-98
11	Concrete Bridge Rubble	Confirmed	not present (re	tired)
12	Concrete Bridge Rubble	31 06.281	-81 11.933	Aug-03
13	Concrete Bridge Rubble	31 05.508	-81 11.771	Sep-03
14	Bridge Rubble	31 05.481	-81 12.371	Nov-03
15	Bridge Rubble	31 05.523	-81 12.373	Dec-03
16	Bridge Rubble	31 05.493	-81 12.304	Dec-03
17	Concrete Culvert	31 05.953	-81 12.415	Aug-15
18	Concrete Culvert	31 05.963	-81 12.394	Aug-15
19	Concrete Culvert	31 05.962	-81 12.384	Aug-15

Updated 12/04/2015

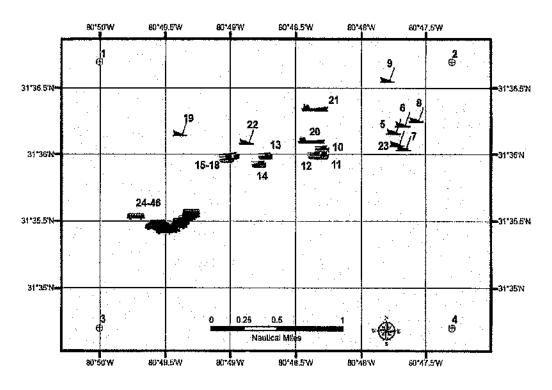
Figure 2(i): Existing fisheries habitat development at <u>Georgia Artificial Reef F</u>, located approximately 9 nm east of Jekyll Island, Georgia. Corner coordinates and -28' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 37' to 42'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).



Labe!	Description	Latitude	- lo	ngitude	Deploy Date	Lab	el.	Description		alifude.	ાં	ongitude.	Deploy Date
1	Comer of Reef Area	31 00,000	-80	\$9,200	Jun-71	30	ŀ	Subway Cars	.30	58.954	-20	58.655	Nev-08
2	Corner of Reef Area	31 00.000	-80	96.800	Jun-71	31	. 7	Subway Cars	30	58.954	-80	\$8.655	Nov-08
3	Corner of Reef Area	30 58.000	-80	59.200	Jun-71	32		Subway Cars	30	59,048	-80	58.730	Nov-08
4	Comer of Reef Area	30 58,000	-80	56.800	Jun-71	33		Subway Cars	30	59,075	-80	SE.759	Nov-08
5	100' Steel Tug "Tamps" w Tires	30 58.198	-89	58,800	Jul-73	34		Subway Cars	30	59.114	-80	58.802	Nov-08
6	700 Tire Units	30 58.230	-80	58,787	Jan-74	35		Subway Cars	30	59.165	-80	58.845	Nov-08
7	700 Tire Units	30 58.192	-80	S8.825	<i>\$</i> an-74	36	i	Subway Cars	30	59.222	-80	58.911	Nov-08
8.	500 Tire Units	30 58.216	-80	58.809	Feb-74	37	!	Substray Cars	30	59.252	-60	58.948	Nov-DE
9	447' Liberty Ship "Edwin Nettleton"	30 58,704	-80	58.962	May-75	38	í	Subway Cars	30	59.325	, ∗80	59.015	Nov-08
10	103' x 23' Tug "Recife"	30 58.617	-BO	58.034	Apr-86	39	i .	Subway Cars	30	59.429	~90	59.027	Nov-58
11	M-60 Battle Tanks	30 59,361	-80	58.603	Aug-95	40	l	Subway Cars	30	59.414	-80	58.956	Nav-08
12	M-60 Battle Tanks (2)	30 59.374	-80	58.586	Aug-95	41		Subway Cars	30	59,350	-80	S8.857	Nov-08
13	M-60 Battle Tanks	30 59,226	-80	57.943	Aug-95	42		Subway Cars	30	59,272	-80	58.821	Nov-08
14	M-60 Battle Tanks	30 59.208	-80	57.930	Aug-95	. 43		Subway Cars	30	59.168	-80	58,782	Nov-08
15	110' Tug "Mac Tide 21"	30 59.285	-80	\$7,153	Oct-00	44		Subway Cars	30	59.112	-89	58,753	Nov-08
15	110' Tug "McAllister"	30 59.678	-60	57.153	Nov 03	45		Subway Cars	30	58.973	-20	58.684	Nov-08
17	190' Northern Hopper Sarge "MOBRO"	30 58.941	-80	57.452	jun-02	45	i .	Subway Cars	30	58,911	-80	58.653	Nov-08
18	190' Southern Hopper Barga "MOBRO"	30 58.655	- 80	57.483	Jun-02	47		Subway Cars	30	58.929	-80	58,562	Nov-08
19	152' Research Vessel "Bowstring"	30 59.005	-80	57.752	ED-yasi	48	1	Subway Cars	30)	58,990	-80	58,636	Nov-08
20	45' Sailboat "Grace"	30.59,414	-80	58.568	Aug-05	49	Г	Subway Cars	30	59.089	-80	58.773	Nov-08
21	95' Tugboat "Kinsale"	30 58.284	-80	58,296	Aug-07	50	١.	Subway Cars	30	58,137	-BÒ	58.813	Nov-08
22	Jacksonville Concrete Rubble	30 58.829	- 80	57.138	Aug-07	51		Subway Cars	30	59.178	-90	58.860	Nov-08
23	Subway Cars	30 58,865	-80	58.601	Nov-08	52		Subway Cars	30	59.331	-80	58.967	BO-veM
24	Subway Cats	30 58.998	-80	5B.701	Nov-08	53		Subway Cars	30	59,179	-80	58.858	Nov-08
25	Subway Cars	30 59.070	-80	58.768	Nov-DB	54		Subway Cars	30	59.175	-80	S8.646	Nev-08
75	Subway Cors	30 59,144	-80	58.829	Nov-08	55		Subway Cars	30	59.163	- 90	58,846	Nov-08
27	Subway Cars	30 59,200	-80	58.872	80-yaN	56	i	Subway Cars	30	59.347	-80	58.973	Nev-08
28	Subway Cars	30 59.320	-80	58.984	Nov-08	57		Stevens Cones	30	58,639	-90	57,642	Unknown
29	Subway Cars	30 59.442	-80	58.934	BO-vaN	L							

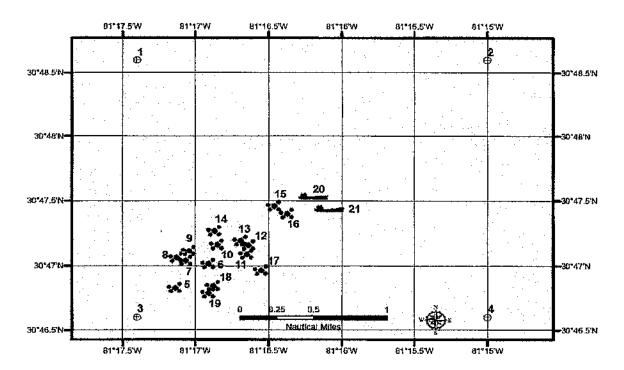
Updated 12/04/2015

Figure 2(j): Existing fisheries habitat development at Georgia Artificial Reef HLHA, located approximately 23 nm east of Little Cumberland Island, Georgia. Corner coordinates and -35' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 54' to 70'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15). Formerly named G Reef.



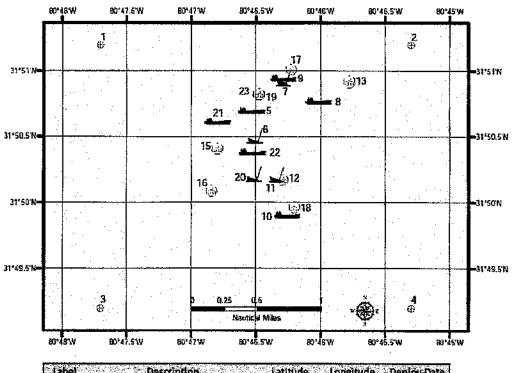
label	Description	1	atitude	Loi	gitude	Deploy Date	Label	Description	Latitude	(ما	gitude	Deploy Date
1	Corner of Reef Area	31	36.700	-80	50.000	Jun-71	24	Subway Cars	31 35.566		49.297	Dec-09
2	Comer of Reef Area	31	36.700	-80	47,300	Jun-71	25	Subway Cars	31 35,466	-80	49,574	Dec-09
3	Corner of Reef Area	31	34.700	-80	50.000	Jun-71	26	Subway Cars	31 35,459	-80	49.587	Dec-09
4.	Comer of Reef Area	31	34.700	-80	47,300	Jun-71	27	Subway Cars	31, 35,489	-80	49.528	Dac-09
5	442' Liberty Ship "55 Addie Bagley Daniels"	31	36.207	-80	47.750	Jui-75	28	Subway Cars	31 35.486	-80	49.379	Dec-09
6	442' Liberty Ship "SS Addie Bagley Canlels"	31	36,260	80	47.680	Jul-75	29	Subway Cars	31 35,462	8D	49.542	Dec-09
7	59' Tug "El Mira"	31	36.032	-80	47.673	Feb-80	30	Subway Cars	31 35.473	-80	49,545	Dec <b>09</b>
8	65' Ferry Boat "Janet"	31	36.298	-80	47.575	Jun-87	31	Subway Cars	31 35.439	-80	49.474	Pec-09
9	185' USGC Buoy Tender "Sagebrush"	31	36,600	-80	47,800	Jun-89	32	Subway Cars	31 35.486	-80	49.558	Dec-09
10	M-60 Battle Tanks	31	36.036	-80	48.295	Aug-95	33	Subway Cars	31 35.460	-80	49.589	Dec-09
11	M-60 Battle Tanks	31	35.990	-80	48.300	Aug-95	34	Subway Cars	31 35,462	-80	49.546	Dec-09
12	M-60 Battle Tanks	31	35.993	-80	48.352	Aug-95	35	Subway Cars	31 35.438	-80	49.497	Dec-09
13	M-60 Battle Tanks	31	35.987	-80	48.728	Aug-95	36	Subway Cars	31, 35,469	-80	49.534	Dec-09
14	M-60 Battle Tanks	31	35.924	-80	48.777	Aug-95	37	Subway Cars	31, 35,456	-80	49.525	Dac-09
15	M-60 Battle Tanks	31	35,989	-80	48.982	Aug-95	38	Subway Cars	31, 35,447	-80	49.523	Dec-09
16	M-60 Battle Tanks	31	35.987	-80	48.996	Aug-95	39	Subway Cars	31 35,428	-B0	49.505	Dec-09
17	M-60 Battle Tanks	31.	35.978	-80	49.026	Aug-9S	40	Subway Cars	31 35,464	-80	49.394	0ec-0 <del>9</del>
18	M-60 Battle Tanks	31.	35.962	-80	49.027	Aug-95	41	Subway Cars	31 35,497	-80	49.374	Dec-09
19	110' Yug "Rio Apon"	31	36.193	-80	49.385	Oct-00	42	Subway Cars	31 35,520	-80	49.334	Dec-09
20	195' Hopper Barge with 15' Tug	31	36.103	-80	48.378	Aug-02	43	Subway Cars	31 35.437	-80	49.453	Dec-09
21	115' Landing Craft	31	36,350	-80	48.350	Jul-04	. 44	Subway Cars	31 35.544	-80	49,300	Dec-09
22	97' Tug "Margaret Turecamo"	31	36.128	-80	48.871	Jan-07	45	Subway Cars	31 35.544	-80	49.296	Dec-09
23	65' Steel Hull RV "Jane Yam"	31	36.114	-80	47.725	Aug-07	46	Subway Cars	31 35.535	-80	49.726	Dec-09

Figure 2(k): Existing fisheries habitat development at <u>Georgia Artificial Reef JY</u>, located approximately 17 nm east of St. Catherines Island, Georgia. Corner coordinates and -28' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 52' to 72'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15). Formerly named J Reef.



Label	Description		atitude	ما	ngitude	Deploy Date
1	Corner of Reef Area	30	48.600	-81	17.400	May-91
2	Corner of Reef Area	30	48.600	-81	15.000	May-91
3	Corner of Reef Area	30	46.600	-81	17.400	May-91
4	Corner of Reef Area	30	46.600	-81	15.000	May-91
5	Wharf Rubble	30	46.829	-81	17.140	Aug-91
6	Wharf Rubble	30	47.016	-81	16.907	Aug-91
7	Wharf Rubble	30	47.041	-81	17.066	Aug-91
8	Wharf Rubble	30	47.066	-81	17.131	Aug-91
9	Wharf Rubble	30	47,120	-81	17.042	Aug-91
10	Wharf Rubble	30	47.166	-81	16.846	Aug-91
11	Wharf Rubble	30	47.092	-81	16.647	Sep-91
12	Wharf Rubble	30	47.163	-81	16.636	Sep-91
13	Wharf Rubble	30	47.197	-81	16.686	Sep-91
14	Wharf Rubble	30	47.273	-81	16.865	Oct-91
15	Wharf Rubble	30	47.465	-81	16,461	Oct-91
16	Wharf Rubble	30	47.405	-81	16.372	Oct-91
17	Wharf Rubble	30	46,967	-81	16.549	Nov-91
18	Wharf Rubble	30	46.844	-81	16.874	Nov-91
19	Wharf Rubble	30	46,788	-81	16.905	Nov-91
20	150' Dredge Barge	30	47.540	-81	16.192	Aug-03
21	90' Section Barge	30	47.443	-81	16.081	Apr-04

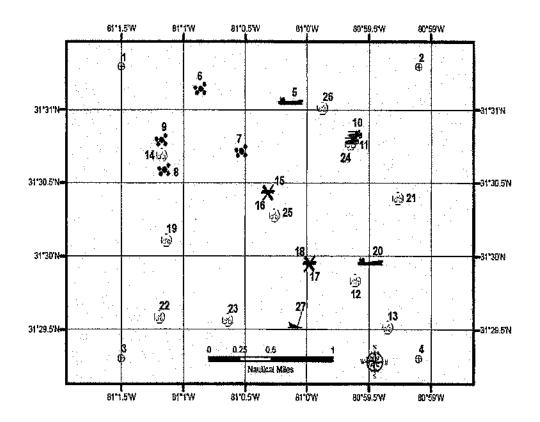
Figure 2(I): Existing fisheries habitat development at <u>Georgia Artificial Reef KBY</u>, located approximately 8 nm east of Cumberland Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 34' to 45'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).



Label	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	31 51.200	-80 47.700	Jun-72
2	Comer of Reef Area	31 51,200	-80 45,300	Jun-72
3	Corner of Reef Area	31 49.200	-80 47,700	Jun-72
4	Corner of Reef Area	31 49.200	-80 45.300	Jun-72
5	80'Landing Craft "Motherlode"	31, 50,699	-80 46.533	Dec-84
6	118' Dump Scow "TMI 100"	31 50.502	80 46.507	Mar-92
7	120' Gravel Scow	31 50.944	-80 46,290	May-92
8	95' Booster Barge "TMI 115"	31 50.775	-80 46,015	Jun-92
9	Barge "Honey"	31 50.944	-80 46.290	Aug-92
10	110' Deck Barge "Olympics- YC-1117"	31 49,904	-80 46.260	Jun-97
11	29' Sailboat "Jupiter"	31, 50,211	-80 46,343	Aug-98
12	Pallet Balls	31 50.171	-80 46.297	Nov-99
13	Pallet Balls	31 50.920	-80 45.777	Nov-99
14	Concrete Culvert	Confirmed	not present (red	red)
15	Concrete Culvert	31 50,409	-80 46,798	Dec-01
16	Concrete Culvert	31 50.086	-80 46.842	Dec-01
17	Stevens Cone Units	31 51,010	-80 46.231	May-04
18	Stevens Cone Units	31 49.964	-80 46.205	May-04
19	Concrete Rubble	31 50.827	-80 46.477	Unknown
20	70'Tug Hull "Pegasus"	31 50.213	-80 46.515	Sep-06
21	110' Deck Barge	31 50,617	-80 46.792	Sep-06
22	254' Hopper Barge w Chicken Coops	31 50,381	80 46,527	Nov-13
23	Tire Units	31 50.824	-80 45.480	Unknown

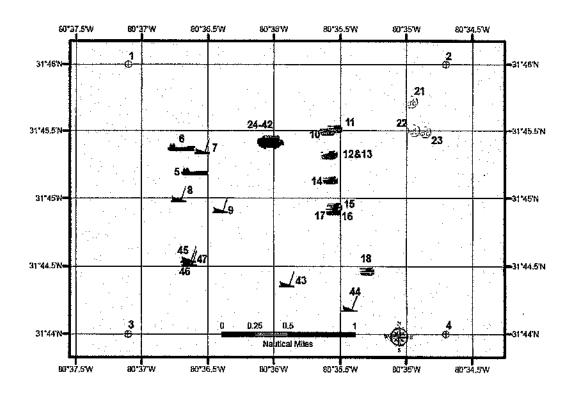
Updated 12/04/2015

Figure 2(m): Existing fisheries habitat development at <u>Georgia Artificial Reef KC</u>, located approximately 9 nm southeast of Tybee Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 39' to 50'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).



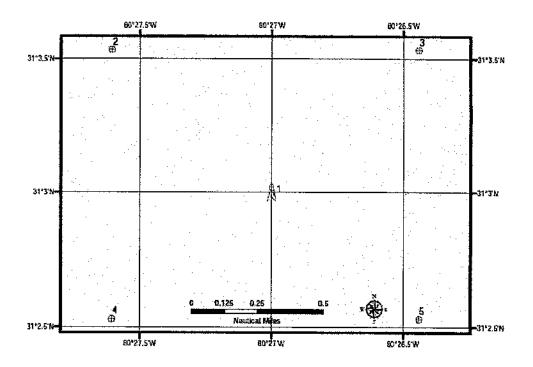
Label	Description	Latitude	Longitude	Deploy Date	Label.	Description	Latitude	Longitude	Deploy Date
1	Corner Reef Area	31 31,300	-81 01.500	May-90	15	Concrete Pipe	31 30.440	-81 00.310	Nov-98
2	Corner Reef Area	31 31.300	-80 59.100	May-90	16	Concrete Pipe	31 30,431	-81 DO.317	Nov-98
3	Corner Reef Area	31 29.300	-81 01.500	May-90	17	Concrete Pipe	31 29.950	-80 59,976	Dec-98
4	Corner Reef Area	31 29,300	-80 59,100	May-90	18	Concrete Pipe	31 29,961	-80 59.971	Dec-98
5	90' Barge "Modena"	31 31.061	-81 00.132	Oct-90	19	Pallet Balls	31 30.109	-81 01.136	Oct-00
6	Concrete Rubble	31 31.146	-81 00,863	Sep-91	20	150' Barge	31 29.970	-80 59.494	Aug-02
7	Concrete Rubble	31 30.718	-81 00,530	Sep-91	21	Cone Units	31 30 396	-80 59.267	Dec-06
8	Concrete Rubble	31 30.591	-81 01.152	Aug-95	22	Pallet Bails	31 29,584	-81 01,194	Mar-09
9	Concrete Rubble	31 30,792	-81 01.175	Aug-95	23	Pallet Balls	31 29.562	-81 00. <b>64</b> 2	Mar-09
10	M-60 Battle Tanks	31 30.831	-80 59,614	Aug-95	. 24	Pallet Balls	31 30.767	-80 59.653	Jul-09
11	M-60 Battle Tanks	31 30.788	-80 59,643	Aug-95	25	Pallet Balls	31 30.280	-81 00,254	Jul-09
12	Paliet Balls	31 29,838	-80 59.614	Aug-95	26	Pallet Balis	31 31.014	-80 59.876	May-11
13	Pallet Balls	31 29,515	-80 59.351	Aug-95	27	39' Vessel	31 29.554	-81 00.091	Sep-12
14	Pallet Balls	31 30.688	-81 01.175	Mar-98					

Figure 2(n): Existing fisheries habitat development at <u>Georgia Artificial Reef KTK</u>, located approximately 7 nm east of Blackbeard Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 32' to 45'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).



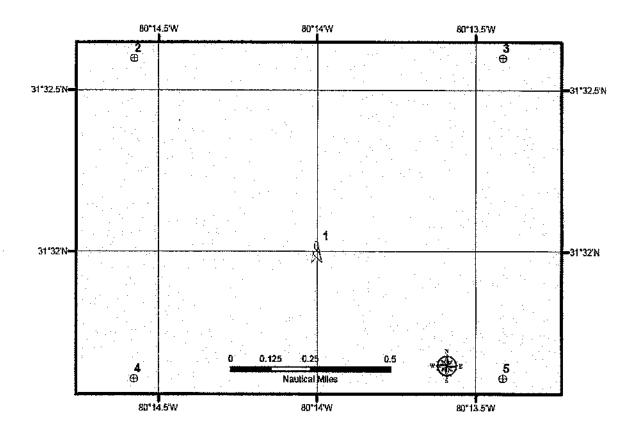
Label	Description	Latitude	Longitude	Deploy Date	Label	Description	1	atitude	lor	g(tude	Deploy Date
1	Corner of Reef Area	31 46,000	-80 37,100	Sep-76	25	Subway Car	31	45.427	-80	36.024	Dec-02
2	Comer of Reef Area	31 46.000	-80 34.700	Sep-76	26	Subway Car	31	45,423	-80	36,030	Dec-02
3	Corner of Reef Area	31 44,000	-80 37,100	5ep-76	.27	Subway Car	31	45.422	-80	36.027	Dec-02
4	Comer of Reef Area	31 44,000	-80 34,700	Sep-76	28	Subway Car	31	45.423	-80	36.037	Dec-02
5	140'Steel Barge "Sayler - CBC 501"	31 45.200	-80 36,596	Mar-77	29	Subway Car	31	45.422	-80	36.042	Dec-02
6	110' Deck Barge "YFN 321"	31 45.379	-80 35.700	Jun-77	30	Subway Car	31	45,419	-80	35.054	Dec-02
7	180' Dredge "Henry Bacon"	31 45.385	-80 35.543	Aug-78	31	Subway Car	31	45.415	-80	36.054	Dec-02
8 -	100' Tug "Senasqua" YTM 523	31 45.030	-80, 36,721	Jul-85	32	Subway Car	31	45.413	-80	36,046	Dec-02
9	55'Tug "Delta Diamond"	31 44.948	-80 36,405	Dec-88	33	Subway Car	31	45.415	-80	36.037	Dec-02
10	M-60 Battle Tanks	31 45,492	-80 35,595	Aug-95	34	Subway Car	31	45.411	-80	36,038	Dec-02
11	M-60 8attle Tanks	31 45.515	-80 35.539	Aug-95	35	Subway Car	31	45.405	-80	36,040	Dec-02
12	M-60 Battle Tanks	31 45.319	80 35,586	Aug-95	35	Subway Car	31	45.399	-80	35.040	Dec-02
13	M-60 Battle Tanks	31 45.325	-80 35.576	Aug-95	37	Subway Car	31	45.404	-B0	36.033	Dec-02
14	M-60 Battle Tanks	31 45,133	-80 35.573	Aug-95	38	Subway Car	31	45.406	-80	36.028	Dec-02
15	M-60 Battle Tanks	31. 44.938	80 35.538	Aug-95	39	Subway Car	31	45.408	-B()	36.025	Dec-02
16	M-60 Battle Tanks	31 44.928	-80 35.546	Aug-95	40	Subway Car	31	45.408	-80	36,036	Unknown
17	M-60 Battle Tanks	31 44,902	-80 35.553	Aug-95	41	Subway Car	31	45,388	-90	36.023	Unknown
18	M-60 Battle Tanks	31. 44.462	-80 35,300	Aug-95	42	Subway Car	31	45.411	-80	35,988	Unknown
19	M-60 Battle Tanks	Confirmed r	not present (re	etired)	43	100' Tug "Reid McAllister"	31	44.400	-80	35.900	Oct-04
20	M-60 Battle Tanks	Confirmed (	not present (re	etired)	44	100' Tug "Sarbara McAllister"	31	44,219	-80	35.430	Oct-04
21	Pallet Balls	31 45.721	-80 34.960	Mar-98	45	38' Sallboat	31	44.587	-80	36.645	May-08
22	Paliet Balls	31 45.504	-80 34.942	Mar-98	46	65'Steel Vessel	31	44.559	-80	36.639	May-08
23	Pallet Balls	31 45.492	-80 34,858	Mar-98	47	85' Tug "Jupites"	31	44.557	-80	35.641	May-08
24	Subway Car	31 45.441	-80 36,016	Oec-02	t						

Figure 2(o): Existing fisheries habitat development at <u>Georgia Artificial Reef L</u>, located approximately 23 nm east of Ossabaw Island, Georgia. Corner coordinates and -35' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 54' to 65'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).



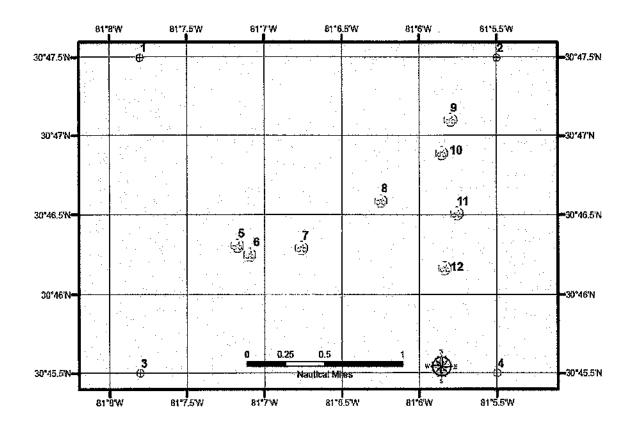
label	Description	Latitude	Longitude	Deploy Date
1	Navy Tower "M1R1"	31 03.000	-80 27.000	Jul-11
2	NW Corner of Permitted Reef Area	31 03.535	-80 27.605	Jul-11
3	NE Corner of Permitted Reef Area	31, 03,535	-80 26,440	Jul-11
4	SW Corner of Permitted Reef Area	31, 02,530	-80 27.605	Jul-11
5	SE Corner of Permitted Reef Area	31 02.530	-80 26.440	Jul-11

Figure 2(p): Existing fisheries habitat development at <u>Georgia Artificial Reef M1R1 (Navy Tower)</u>, located approximately 50 nm east of Jekyll Island, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 102'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).



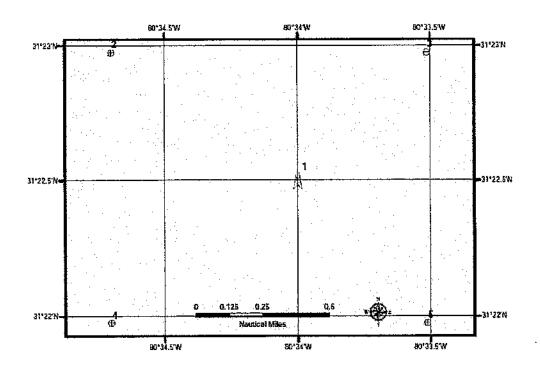
Label Description:	Latitude Longitude De	ploy Date
1 Navy Tower "M2R6"	31 32.000 -80 14,000	Jul-11
2 NW Corner of Permitted Reef Area	31 32.600 -80 14.575	Jul-11
3 NE Corner of Permitted Reef Area	31 32.600 -80 13.415	Jul-11
4 SW Corner of Permitted Reef Area	31 31.610 -80 14.575	Jul-11
5 SE Corner of Permitted Reef Area	31 31.610 -80 13.415	Jul-11

Figure 2(q): Existing fisheries habitat development at <u>Georgia Artificial Reef M2R6 (Navy Tower)</u>, located approximately 49 nm east of Blackbeard Island, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 102'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 1/08/16).



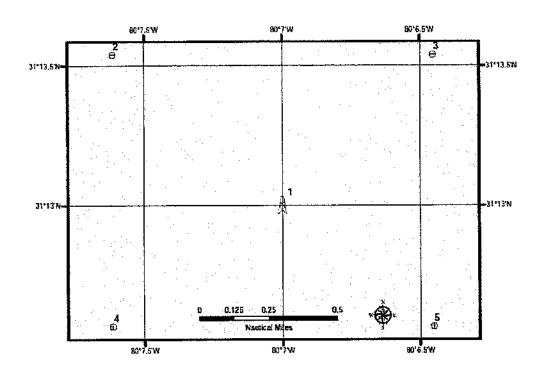
Label	Description	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	30 47.500	-81 07.800	May-97
2	Corner of Reef Area	30 47.500	-81 05.500	May-97
3	Corner of Reef Area	30 45.500	-81 07.800	May-97
4	Corner of Reef Area	3D 45.500	-81 05.500	May-97
5	Pallet Balls	30 46.310	-81 07.172	Jun-98
6	Pallet Balls	30 46.255	-81 07.091	Jun-98
7	Pallet Balls	30 46.295	-81 06.757	Jun-98
8	Pallet Balls	30 46.591	-81 06.248	Арг-00
9	Pallet Balls	30 47.104	-81 05.798	Apr-00
10	Pallet Balls	30 46.890	-81 05.855	Apr-00
11	Modified Pallet Balls	30 46.511	-81 05.759	May-01
12	Modified Pallet Balls	30 46.172	-81 05.837	May-01

Figure 2(r): Existing fisheries habitat development at <u>Georgia Artificial Reef MRY</u>, located approximately 18 nm east of Cumberland Island, Georgia. Corner coordinates and -46' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 50' to 62'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).



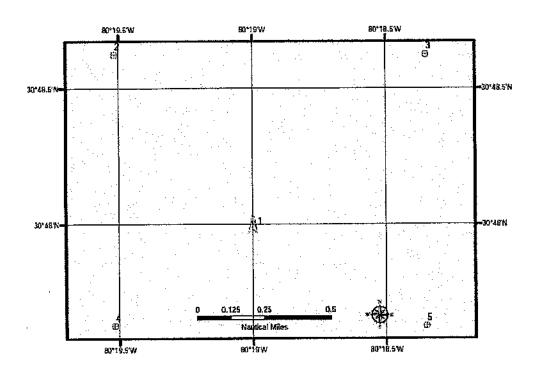
Labei	Description		atitude	Į,	ngitude	Deploy Date
1	Navy Tower "R2"	31	22.500	-80	34.000	lui-11
2	NW Corner of Permitted Reef Area	31	22.975	-80	34.700	Jul-11
3	NE Corner of Permitted Reef Area	31	22.975	-80	33,510	Jul-11
4	SW Comer of Permitted Reef Area	31	21.975	-80	34.700	Jul-11
5	SE Corner of Permitted Reef Area	31	21.975	-80	33.510	Jul-11

Figure 2(s): Existing fisheries habitat development at <u>Georgia Artificial Reef R2 (Navy Tower)</u>, located approximately 38 nm east of Sapelo Island, Georgia. Corner coordinates and -35' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 72'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).



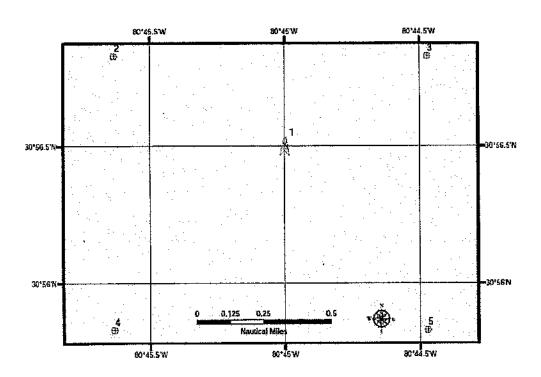
label Description	Latitude Longitude Deploy Oate
1 Navy Tower "R3"	31 13,000 -80 07.000 Jul-11
2 NW Corner of Permitted Reef Area	31 13.540 -80 07.615 Jul-11
3 NE Corner of Permitted Reef Area	31 13.540 -80 06.450 Jul-11
4 SW Corner of Permitted Reef Area	31 12,570 +80 07.615 Jul-11
5 SE Comer of Permitted Reef Area	31 12.570 -80 G6.450 Jul-11

Figure 2(t): Existing fisheries habitat development at <u>Georgia Artificial Reef R3 (Navy Tower)</u>, located approximately 62 nm east of St. Simons Island, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 102'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).



Label	Description		Latitude	L	ingitude	Deploy Date
1	Navy Tower "R4"	30	48,000	-80	19,000	Jul-11
2	NW Corner of Permitted Reef Area	.30	48.625	-80	19,515	Jul-11
3	NE Comer of Permitted Reef Area	30	48.625	-80	18.350	hi-11
4	SW Corner of Permitted Reef Area	30	47.630	-80	19.515	Jul-11
s	SE Corner of Permitted Reef Area	30	47.630	-80	18.350	Jul-11

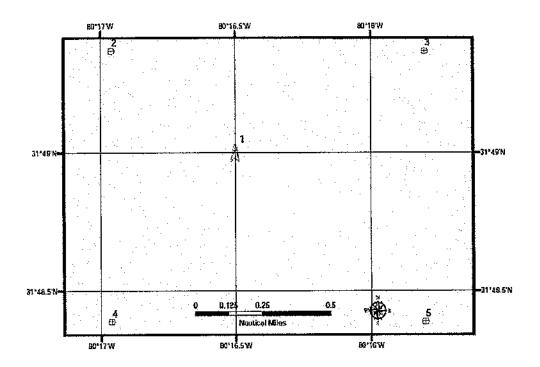
Figure 2(u): Existing fisheries habitat development at <u>Georgia Artificial Reef R4 (Navy Tower)</u>, iocated approximately 59 nm east of Cumberland, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 138'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).



Label	Description		Latitude	Įí	nglude	Deploy Date
1	Navy Tower "R5"	30	56,500	-80	45.000	Jul-11
2	NW Corner of Permitted Reef Area	30	56.830	-80	45.635	Jul-11
3	NE Comer of Permitted Reef Area	30	56.830	-80	44,470	Jul-11
4	SW Corner of Permitted Reef Area	30	55.830	-80	45.635	Jul-11
5	SE Corner of Permitted Reef Area	30	55.830	-80	44.470	Jul-11

Figure 2(v): Existing fisheries habitat development at <u>Georgia Artificial Reef R5 (Navy Tower)</u>, located approximately 34 nm east of Cumberland Island, Georgia. Corner coordinates and -38' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 72'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).

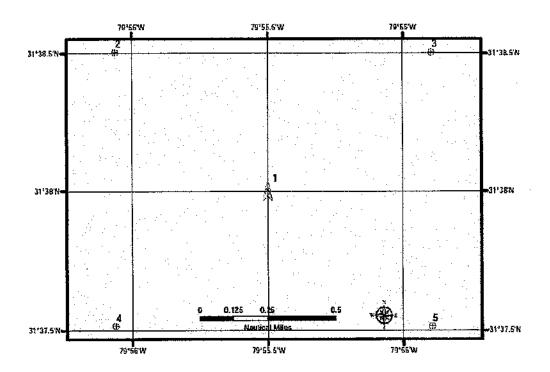
#### Georgia Offshore Artificial Reef R7



Label	Description		atitude	) L	ngitude.	Deploy Date
1	Navy Tower "R7"	31	49,000	-80	16,500	Jul-11
2	NW Corner of Permitted Reef Area	31	49.375	-80	16.960	Jul-11
3	NE Corner of Permitted Reef Area	31	49.375	-80	15.795	Jul-11
4	SW Corner of Permitted Reef Area	31	48.390	-80	16.960	111-11
5	SE Corner of Permitted Reef Area	31	48,390	-80	15.795	Jul-11

Figure 2(w): Existing fisheries habitat development at <u>Georgia Artificial Reef R7 (Navy Tower)</u>, located approximately 40 nm east of Ossabaw Island, Georgia. Corner coordinates and -40' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 84'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).

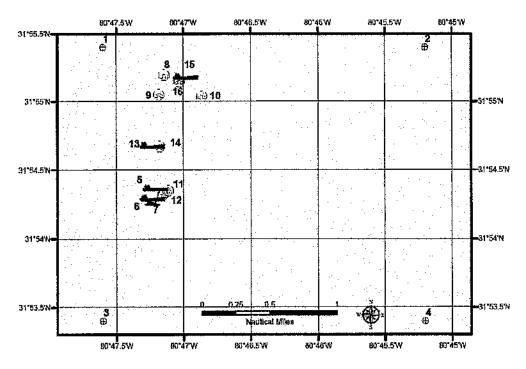
#### Georgia Offshore Artificial Reef R8



abel	Description		atitude	Long	tude	Deploy Date
1	Navy Tower "R8"	31	38.000	-79 55	500	iui-11
2	NW Comer of Permitted Reef Area	31	38.505	-79 56	.060	Jul-31
3	NE Comer of Permitted Reef Area	31	38,505	-79 54	.895	Jul-11
4	SW Corner of Permitted Reef Area	31	37.515	-79 56	.060	Jul-11
5	SE Corner of Permitted Reef Area	31	37.515	-79 54	.895	Jul-11

Figure 2(x): Existing fisheries habitat development at Georgia Artificial Reef R8 (Navy Tower), located approximately 64 nm east of St. Catherines Island, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Mean low water depth is 144'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on this site. (Map and coordinates updated 12/04/15).

#### Georgia Offshore Artificial Reef SAV



Label Description	Lat tude	Longitude .	Deploy Date
1 Corner of Reef Area	31 55.400	-80 47.600	Feb-90
2 Corner of Reef Area	31 55.400	-80 45.200	Feb-90
3 Corner of Reef Area	31 53.400	-80 47.600	Feb-90
4 Corner of Reef Area	31 53.400	-80 45.200	Feb-90
5 90' Gravel Barge "Latex 118"	31 54.370	-80 47.207	Mar-91
6 100' Gravel Barge "Latex 112" w Work Boat	31 54.299	-80 47.229	Jan-92
7 34' Harbor Tug "Thunderbolt"	31 54.299	-80 47.229	Jan-92
8 Concrete Culvert	31 55,196	-80 47.142	Jan-01
9 Concrete Culvert	31 55.051	-80 47.182	Jan-01
10 Concrete Culvert	31 55.042	-80 45.863	Jan-01
11 Concrete Culvert	31 54.352	-80 47.113	Jun-01
12 Concrete Culvert	31 54.322	-80 47.153	Jun-01
13 110' Deck Barge "Myrick Marine"	31 54.681	-80 47.230	Feb-14
14 Culverts, Coops, Steel Structures	31 54.674	-80 47.178	Jun-14
15 110' Barge with Cages	31 55.184	-80 46.981	Jun-15
16 Poultry Transport Cages	31 55,150	-80 47.029	Sep-15

Updated 12/04/2015

Figure 2(y): Existing fisheries habitat development at <u>Georgia Artificial Reef SAV</u>, located approximately 6 nm southeast of Tybee Island, Georgia. Corner coordinates and -22' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 35' to 42'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).

#### Georgia Offshore Artificial Reef SFC

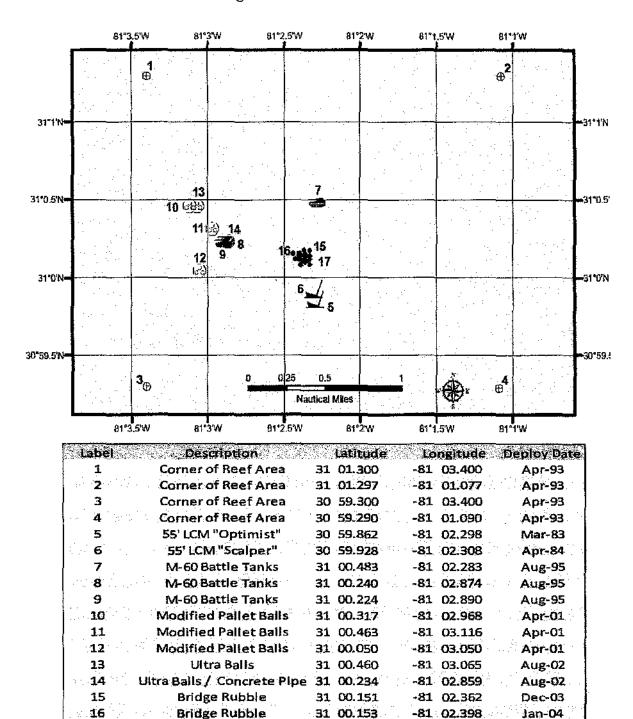


Figure 2(z): Existing fisheries habitat development at Georgia Artificial Reef SFC, located approximately 18 nm east of Little Cumberland Island, Georgia. Corner coordinates and -28' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 48' to 55'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).

31 00.116

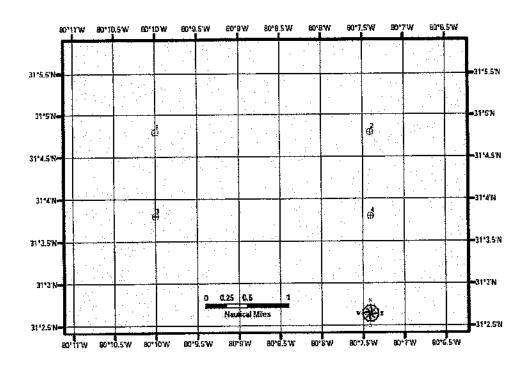
-81 02.361

Jan-04

17

Bridge Rubble

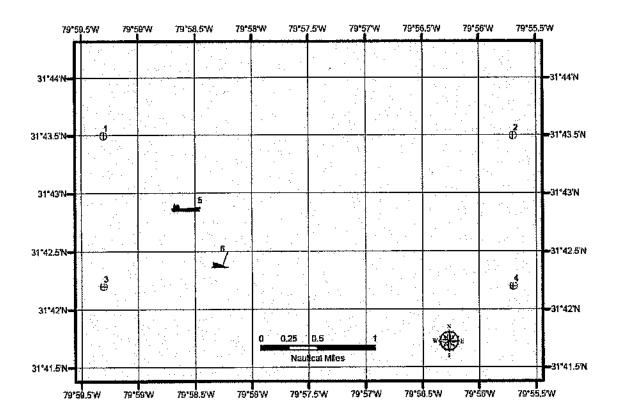
#### Georgia Offshore Artificial Reef TW



Label	Description		atitude	L	ingitude	Deploy Date
1	Corner of Reef Area	31	04.800	-80	10,000	Nov-05
2	Corner of Reef Area	31	04.800	-80	07.400	Nov-05
3	Corner of Reef Area	31	03.800	-80	10.000	Nov-05
4	Corner of Reef Area	31	03.800	-80	07.400	Nov-05

Figure 2(aa): Existing fisheries habitat development at <u>Georgia Artificial Reef TW</u>, located approximately 63 nm east of Jekyll Island, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 132' to 150'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).

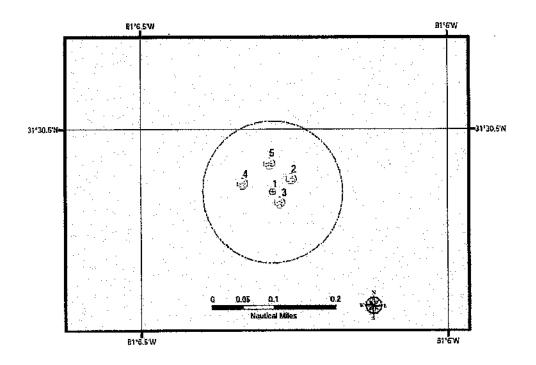
#### Georgia Offshore Artificial Reef WW



(label -	Description -	Latitude	Longitude	Deploy Date
1	Corner of Reef Area	31 43.500	-79 59.300	Dec-98
2	Corner of Reef Area	31 43.500	-79 55.700	Dec-98
3	Corner of Reef Area	31 42.200	-79 59.300	Dec-98
1.8.411.33	Corner of Reef Area	31 42.200	-79 55.700	Dec-98
5	195' Hopper Barge	31 42.878	<b>-7</b> 9 58.577	Aug-99
6	40' Tug "Semarca 40"	31 42.434	-79 58.281	Oct-00

Figure 2(bb): Existing fisheries habitat development at Georgia Artificial Reef WW, located approximately 50 nm southeast of Wassaw Sound, Georgia. Corner coordinates and -60' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 119' to 138'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 1/28/15).

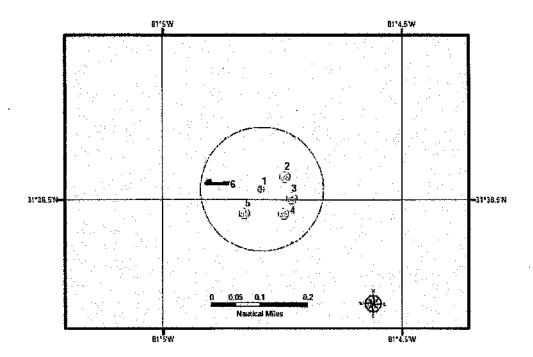
#### Georgia Offshore Artificial Reef BH



Label	Description	l	atitude	Lo	ngitude	Deploy Date
1	Center of Reef	31	30.400	-81	06.285	May-01
2	Concrete Tetrahedrons	31	30,421	-81	06,255	Aug-01
3	Concrete Tetrahedrons	31	30,383	-81	06.274	Aug-01
4	Concrete Tetrahedrons	31	30.413	-81	06.333	Aug-01
5	Concrete Tetrahedrons	31	30.446	-81	06.290	Aug-01

Figure 2(cc): Existing fisheries habitat development at <u>Georgia Artificial Reef BH</u>, located approximately 2.5 nm east of Concord Shoals/Blackbeard Island, Georgia. The reef footprint consists of a circle 400 yards in diameter. Center coordinate and -12' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 16' to 19'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).

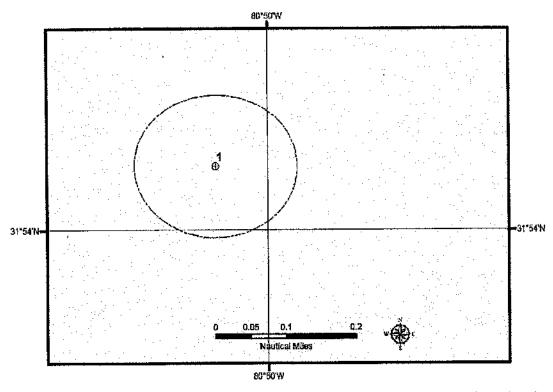
#### Georgia Offshore Artificial Reef BL



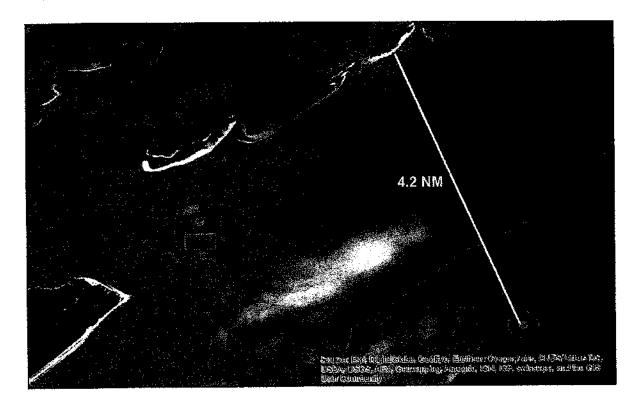
Label	Description		atitude	l.o	ngitude	Deploy Date
1.	Center of Reef Area	31	38,521	-81	04,793	May-01
2	Concrete Tetrahedrons	31	38.547	-81	04.746	Aug-01
3	Concrete Tetrahedrons	31	38.503	-81	04.732	Aug-01
4	Concrete Tetrahedrons	31	38.471	-81	04,749	Aug-01
5	Concrete Tetrahedrons	31	38.472	-81	04.828	Aug-01
6	Barge Wreckage	31	38.536	-81	04,885	Unknown

Figure 2(dd): Existing fisheries habitat development at <u>Georgia Artificial Reef BL</u>, located approximately 2.5 nm of McQueen's Inlet/St. Catherines Island, Georgia. The reef footprint consists of a circle 400 yards in diameter. Corner coordinates and -10' MLW depth clearances are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Minimum/Maximum site water depths at mean low water range from 12' to 15'. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. (Map and coordinates updated 12/04/15).

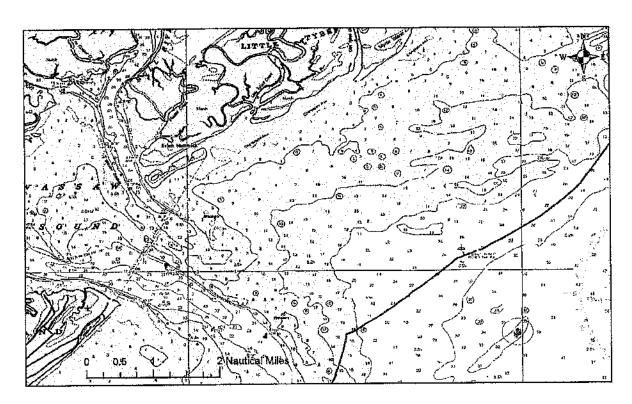
### Proposed Georgia Offshore Artificial Reef BSF



Label	Description	Latitude	Longitude	Deploy Date
1	Center of Reef	31 54.089	-80 50.073	



### Proposed Georgia Offshore Artificial Reef BSF



Figures 2(ee): New fisheries habitat development at <u>Georgia Artificial Reef BSF</u>, located approximately 4.2 nm off of Little Tybee Island, Georgia. The reef footprint consists of a circle 400 yards in diameter. Corner coordinates and minimum MLW depth clearances are to be authorized by USACE. Site water depth at mean low water is ~29 feet. Habitat development activities are proposed for the next 5+ years within boundaries approved by USACE. (Maps and coordinates updated 1/5/16).

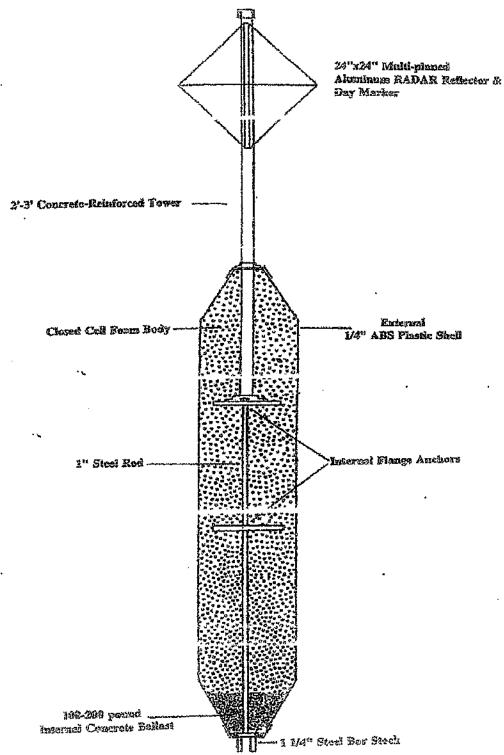
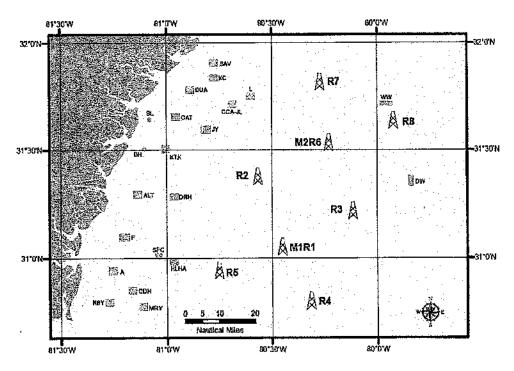


Figure 3. The offshore artificial reef buoy program has been phased out due to lack of maintenance funding. Buoys or "special purpose marks "consisted of yellow nun buoy (9' total length) with 24" x 24" multi-planed aluminum RADAR reflector and day marker. As of 2015 all offshore reef buoys have been removed and Georgia DNR does not intend to buoy any future reefs unless required by permit specifications.

#### Georgia Offshore Artificial Reef Navy Towers



Inbel	Description	<u> </u>	Latitude		Longitud	ie Deploy Da	e Label	Dewriptions	1	at)pide	. Le	िहें गिंदुक	Dep	cy Dele
MIR1	Navy Tower "MIR1"		03.000		27.00	0 Jul-11	R4	Navy Tower "R4"	30	48.000	-80	19.000	ı	ul-11
2	NW Corner of Permitted Reef Area	31	03.535	· +	30 27.60	5 Jul-11	2	NW Comer of Permitted Reef Area	30	48,625	-80	19.515	3	ul-11
3	NE Comer of Permitted Reef Area	31	03.535	-:	30 25,44	11-lut, O	3	NE Corner of Permitted Reef Area	30	48.625	-80	18.350	. 1	ul-11
4	5W Comer of Permitted Reef Area	31	02,530	1. 4	80 27.60	5 Jul-11	4	5W Corner of Permitted Reef Area	.30	47.620	- 50	19.515	1	ul-11
5	SE Corper of Permitted Reef Area	31	62,530	-	30 25.44	10 Jul-11	5	SE Comer of Permitted Reef Area	30	47,630	-80	18,350	1	U-11
MZRS	Navy Tower "M2R6"	31	32,000	. <b>-</b> }	30 34.00	0 Jul-11	R5	Navy Tower "R5"			-80	45.000		ul-11
2	NW Corner of Permitted Reef Area	31	32.600	-	80 14.5	75 Jul-11	2	NW Comer of Pormitted Reaf Area			-80	45,635	-	ul-11
× 3+	NE Comer of Permitted Reef Area	31	32.600	1 4	80 13,41	is juj-11	3	NE Comer of Permitted Reef Area			-80	44.470		ul-31 ·
4	5W Corner of Permitted Reaf Area	31	31.610		80 14.57	75 Jul-11	4	SW Comer of Permitted Reef Area	30	55,830	-80	45,635		ui-11
5	SE Corner of Permitted Reaf Area	31	31.610	177.3	0 13.4	15 Jul-11	5	SE Corner of Permitted Reef Area	30	55.830	-80	44.470		u!-11
R2	Navy Tower "R2"	31	22,500	•	80 34.00	<b>10</b> 6-11	R7	Navy Tower "R7"	31	49.000	-80	16,500	-	սի-11
2	NW Corner of Permitted Reef Area	31	22.975		BØ 34.70	11 lul 21	2	NW Comer of Permitted Reaf Area			-80	16,960		սի-11
3	NE Corner of Permitted Reef Area	31	22,975		BD 33.5:	10 Jul-11		NE Corner of Permitted Reef Area	31	49,375	-80	15,795		ul-11
4	SW Corner of Permitted Reef Area	31	21.975		80 34,70	16-14 OC	4	SW Comer of Permitted Reaf Area	31	48.390	-80	15.950	j	ui-11
5	SE Corner of Permitted Reef Area	31	23,975	. •	80 33.5	10 Jul-11	5	SE Corner of Permitted Reef Area	31	48.390	-80	15,795		ul-13
83	Navy Tower "R3"	31	13.000	•	60,67,DI	30 Juj-11	R8	Navy Tower "R8"	33	38.000	-79	55.500		ul-11
2	NW Corner of Permitted Reef Area	31	13,540		60 07.6	15 Jul-11	2	NW Comer of Permitted Reef Area	31	38,505	-79	56,060		ul-11
3	NE Corner of Permitted Reaf Area	31	13,540	٠.٠	80 06.4	50 Jul-11	3	NE Comer of Permitted Reef Area	31	38,505	79	54.895		ul-11
4	SW Corner of Permitted Reaf Area	31	12,570	-	EO 07.6	15 Jul-11	4	SW Comer of Permitted Reef Area	31	37.515		55.050		ul-11
5	SE Corner of Permitted Reef Area	31	12,570		BO 05.4	50 Jul-11	5	SE Corner of Permitted Reef Area	31	37.515	-79	54.895		ul-11

Figure 4: Existing fisheries habitat development at <u>Georgia Artificial Reef Navy Towers R2, R3, R4, R5, R7, R8, M1R1, and M2R6</u> are currently authorized under USACE Programmatic General Permit No. 36, issued to Georgia DNR. Ongoing habitat development activities (5+ years) are proposed to continue within existing boundaries. Table 1 has full details on these sites. (Map and coordinates updated 1/08/15).

Table 1. Georgia Department of Natural Resources GPS coordinate locations for the Navy Towers and perimeter boundaries (NE, NW, SE, and SW) are listed under the United States Army Corps of Engineers Programmatic General Permit No. 36 for ongoing Offshore Artificial Reef Construction Activities for fisheries (5+ years) habitat development in the Atlantic Ocean. See Figure 1, Figures 2 (p-q), Figures (s-x), and Figure 4 for specific tower locations.

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	Mean Low Water (MLW) Depth
	Tower	31°03.000	80°27.000	50 nm East of	60 feet	102 feet
M1R1	R1 NE 31°03.535 80°26.440 Jekyll Is	Jekyll Island				
	NW	31°03.535	80°27.605			:
	SE	31°02.530	80°26.440			
	sw	31°02.530	80°27.605			

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	31°32,000	80°14.000	49 nm East of	60 feet	102 feet
M2R6	NE .	31°32.600	80°13.415	Blackbeard		
	NW	31°32.600	80°14.575	Island		
	SE	31°31.610	80°13.415	•		
	SW	31°31.610	80°14.575			

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	31°22.500	80°34.000	38 nm East of	35 feet	72 feet
R2	NE	31°22.975	80°33.510	Sapelo Island		
	NW	31°22.975	80°34.700			
	SE	31°21.975	80°33.510			
<u> </u> 	sw	31°21.975	80°34.700			

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	31°13.000	80°07.000	62 nm East of	60 feet	102 feet
R3	NE	31°13.540	80°06.450	St. Simons		
	NW	31°13.540	80°07.615	Island		
	SE	31°12.570	80°06.450			
	sw	31°12.570	80°07.615			

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	30°48.000	80°19.000	59 nm East of	60 feet	138 feet
R4	NE	30°48.625	80°18.350	Cumberland		
	NW	30°48.625	80°19.515	Island		
	SE	30°47.630	80°18.350			
	SW	30°47.630	80°19.515			
Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	30°56.500	80°45.000	34 nm East of	38 feet	72 feet
R5	NE	30°56.830	80°44.470	Cumberland		
	NW	30°56.830	80°45.635	Island		
	SE	30°55.830	80°44.470 '			
: 	SW	30°55.830	80°45.635			

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	31°49.000	80°16.500	40 nm East of	40 feet	84 feet
R7	NE	31°49.375	80°15.795	Ossabaw		
	NW	31°49.375	80°16.960	Island		
	SE	31°48.390	80°15.795			
:	sw	31°48.390	80°16.960			

Reef Name	Location	Latitude	Longitude	Proximity	Minimum Depth Clearance	MLW Depth
	Tower	31°38.000	79°55.500	64 nm East of	60 feet	144 feet
R8	NE	31°38.505	79°54.895	St. Catherine		
	NW	31°38.505	79°56.060	Island		
	SE	31°37.515	79°54.895			
	SW	31°37.515	79°56.060			

#### JPN Enclosure 2



COASTAL RESOURCES DIVISION

ONE CONSERVATION WAY • BRUNSWICK, GA 31520 • 912.264.7218

COASTALGADNR.ORG

MARK WILLIAMS COMMISSIONER

DOUG HAYMANS DIRECTOR

12 January 2022

U.S. Army Corps of Engineers, Savannah District Attention: Regulatory Division 100 West Oglethorpe Avenue Savannah, Georgia 31401-3640

RE: Request for renewal and modification of PGP 36

As Programmatic General Permit #36 (PGP 36) expires on April 11, 2022, the Georgia Department of Natural Resources (Georgia DNR) requests renewal of this permit. Concurrent with this renewal the following modifications are requested for the permit:

- 1. Re-permit under PGP 36 of Beach Reef TC last authorized under permit #200102350, issued on May 30 2001. Water depth at the reef is 23' to 26' MLW. This site was chosen as a reef in 2001 due to the presence of a sunken barge. Location and footprint of the reef will remain the same as the previous permit at 25.9 acres (Table 1, Figure 1) with the following proposed description in PGP 36:
  - a. Artificial Reef "TC". Center coordinate is 30° 46.977' N, 81° 23.968' W; Reef footprint consists of a circle 400 yards in diameter located approximately 3.0 nm east of Cumberland Island, Camden County, Georgia. Minimum authorized clearance: -15' MLW.
- 2. Expansion of the authorized footprint for Artificial Reef BSF from 400 yards in diameter (25.9 acres) to 500 yards in diameter (41.7 acres, Table 1) to fully enclose reef material erroneously placed outside the boundaries of the reef (Figure 2). Also definition of the minimum authorized clearance at 25' which was left unspecified on the 2017 issuance of PGP 36. The following proposed description in PGP 36:
  - a. Artificial Reef "BSF". Center coordinate is 31" 54.089' NI 80" 50.073' W; Reef footprint consists of a circle 500 yards in diameter located approximately 4.2 nm off Little Tybee Island, Chatham County, Georgia. Minimum authorized clearance: -25' MLW.
- 3. Consolidation of construction conditions listed in the National Marine Fisheries Service, Protected Resources Division letter dated March 30, 2017 (hereafter NMFS Letter) with the conditions listed in PGP 36 in order to improve clarity and conciseness.
- 4. Modification of Construction Condition 1. a. from the NMFS Letter which defines maximum vessel speed to add a clause limiting the effects to only while within the North Atlantic right whale critical habitat and to add an exemption for small planning hull vessels similar to the vessels that are routinely used by observers to survey for whales. This added flexibility would be especially beneficial in the ease of meeting construction condition 1. c. of the NMFS letter which requires observers to be on site for at least 60

minutes before construction begins. The following language and limits are proposed for PGP 36:

- a. Maximum speed for all vessels, except planning hull vessels with outboard engines and a length of 28 feet or less, involved in placing the reef materials is 10 knots while in the North Atlantic right whale critical habitat.
- 5. Merging of construction conditions 2 and 3 from the NMFS Letter to improve clarity and conciseness. The following language is proposed for PGP 36:
  - a. If an animal of a species listed under the Endangered Species Act is seen within 100 yards of the active daily construction operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include:
    - i. Vessel engines shall be put in neutral when protected species approach within 100 yards to pass.
    - ii. Operation of any mechanical construction equipment shall cease immediately if the protected species is seen within a 50-ft radius of the equipment.
    - iii. Operation of any mechanical construction equipment may not resume until the protected species has departed the project area of its own volition and the GADNR Staff Species Observer reports that no protected species have been sighted within a 50-ft radius for at least 60 minutes.
- 6. Deletion of condition 4 of the NMFS Letter which requires the adherence to PGP 36 condition 10 as redundant.

Materials were also discovered outside of KTK reef via side scan sonar surveys. Dives were conducted on these materials in the fall of 2021 and they were identified as concrete culverts mostly buried in the sand (Figure 3). The farthest of these was approximately 290' from the edge of the reef and the most exposed had a vertical relief of approximately 3'. Some pieces found during the dive were less than a foot of relief and did not have strong returns on the side scan sonar. At these locations the water was 45-52' MLW. No fishing gear or other entanglement risks were found on the culvert and due to their lack of structural complexity pose little risk of accruing such materials in the future. As we believe that these items pose negligeable risk to navigation such that we do not anticipate the need to modify nautical charts to account for them and we do not desire to place new materials in their vicinity, we do not propose changing the boundary of KTK to enclose these culverts at this time.

Sincerely,

Cameron Brinton

Camean Brinton

GADNR Habitat Enhancement and Restoration Unit

(912) 280-6926

Cameron.Brinton@dnr.ga.gov

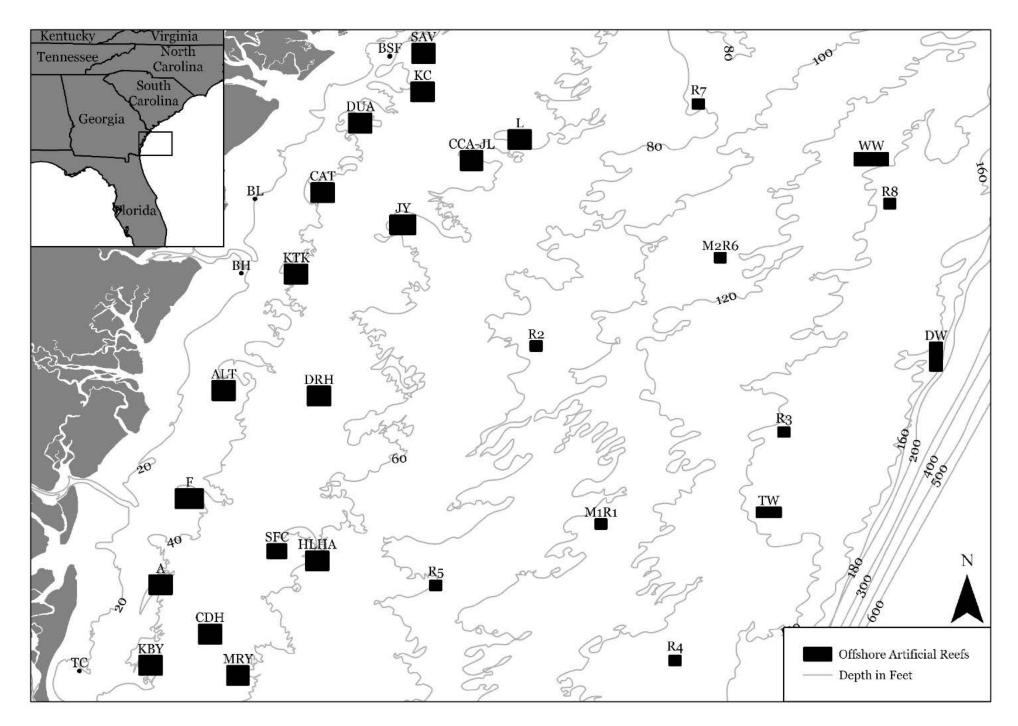


Figure 1. Georgia's 31 offshore artificial reefs

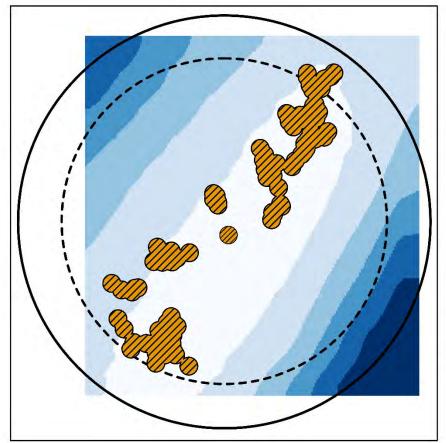
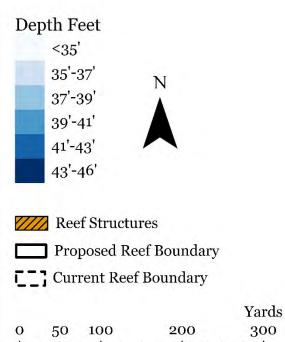


Figure 2. Proposed boundary change for BSF Reef.



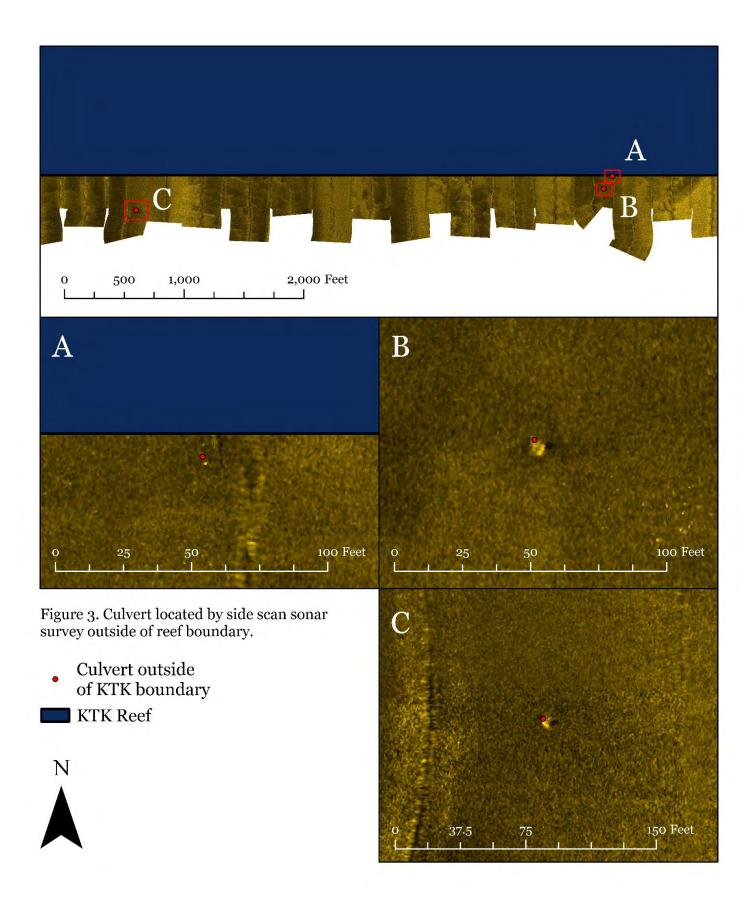


Table 1. Historical and proposed permitted reef footprints.

Reef Name	Footprint 2001	Footprint 2017	Proposed Footprint
BSF	0 acres	25.9 acres	41.7 acres
TC	25.9 acres	0 acres	25.9 acres

# Georgia Offshore Artificial Reef Existing Habitat Enhancements by distance from shore and from north to south.

Figure 1: Coastwide Map	2
Beach Reefs 2-4 NM From Shore	
Figure 2: BSF Reef	3
Figure 3: BL Reef	4
Figure 4: BH Reef	5
Figure 5: TC Reef	6
Nearshore Reefs 6-9 NM From Shore	
Figure 6: SAV Reef	7
Figure 7: KC Reef	10
Figure 8: DUA Reef	15
Figure 9: CAT Reef	20
Figure 10: KTK Reef	25
Figure 11: ALT Reef	30
Figure 12: F Reef	36
Figure 13: A Reef	42
Figure 14: KBY Reef	47
Offshore Reefs 13-23 NM From Shore	
Figure 15: L Reef	51
Figure 16: CCA-JL Reef	53
Figure 17: JY Reef	55
Figure 18: DRH Reef	57
Figure 19: SFC Reef	59
Figure 20: HLHA Reef	61
Figure 21: CDH Reef	63
Figure 22: MRY Reef	65
Navy Towers 34-64 NM From Shore	
Figure 23: R7 Reef	67
Figure 24: R8 Reef	68
Figure 25: M2R6 Reef	69
Figure 26: R2 Reef	70
Figure 27: R3 Reef	71
Figure 28: M1R1 Reef	72
Figure 29: R5 Reef	73
Figure 30: R4 Reef	74
Deepwater Reefs 50-70 NM From Shore	-
Figure 31: WW Reef	75
Figure 32: DW Reef	76
Figure 33: TW Reef	77

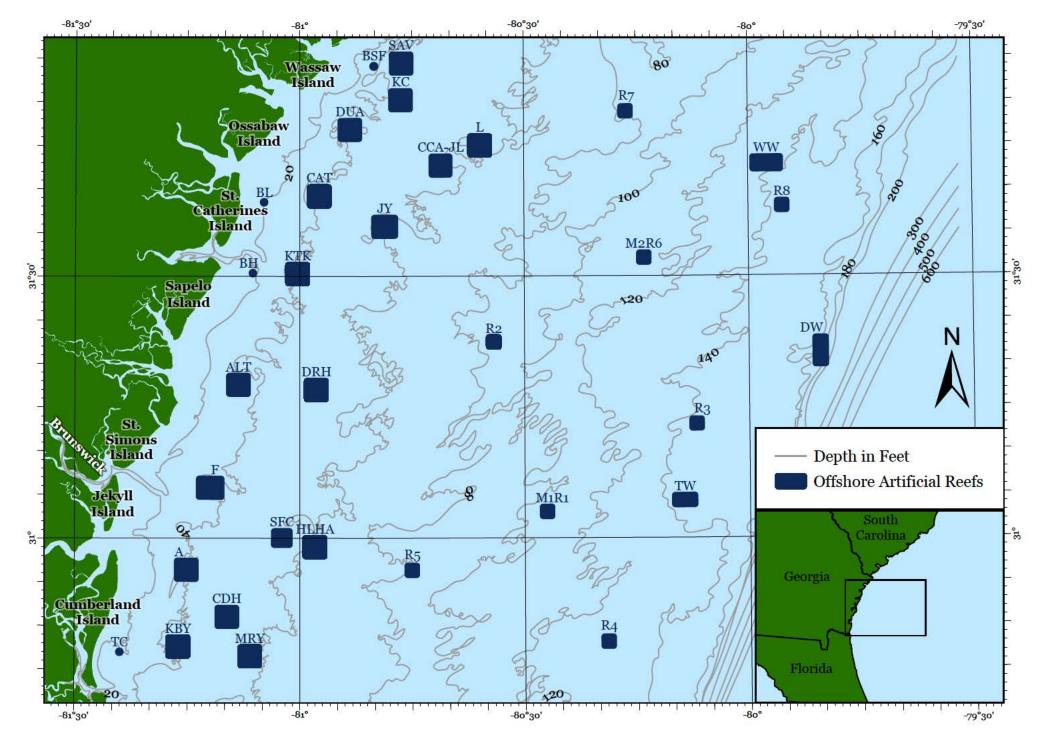
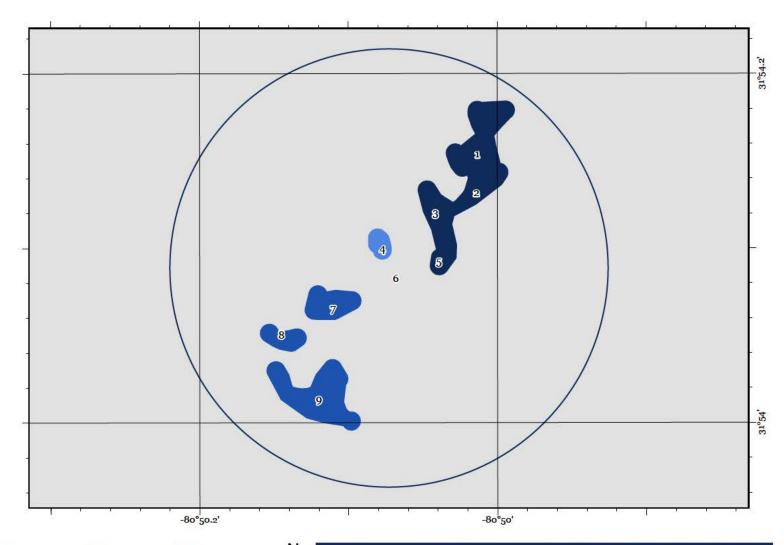
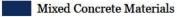


Figure 1: Georgia's 32 Offshore Artificial Reefs.

### **BSF**



### Large and Clustered Structures



Concrete Culvert

Solid Concrete Polyhedron

Reef Boundary

#### **Individual Structures**

- Mixed Concrete Materials
- Concrete Culvert
- Solid Concrete Polyhedron

Map ID	Description	Latitude	Longitude	Deploy Date
1	Pallet Reef Balls & Concrete Sinkers	31.902607	-80.833533	8/14/2017
2	Pallet Reef Balls & Concrete Sinkers	31.902239	-80.833597	8/14/2017
3	Pallet Reef Balls & Concrete Sinkers	31.902051	-80.834003	8/14/2017
4	Concrete Sinkers	31.901707	-80.834649	6/12/2019
5	Pallet Reef Balls & Concrete Sinkers	31.901588	-80.833965	8/14/2017
6	Solid Concrete Polyhedron	31.90135	-80.8345	
7	Box and round culvert	31.901138	-80.835204	12/17/2018
8	Box and round culvert	31.900811	-80.835729	12/17/2018
9	Box and round culvert	31.90027	-80.835359	12/17/2018

Description	Latitude	Longitude
Center of 500 yard Permitted Diameter	31.901483	-80.83455

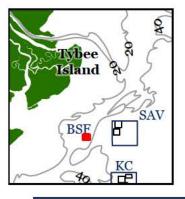
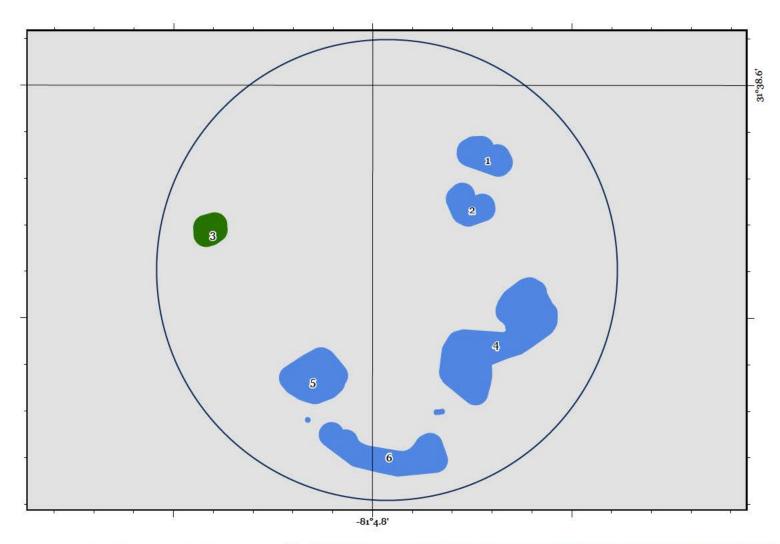


Figure 2: Existing habitat development at Georgia Artificial BSF, located approximately 4.2 NM East of Little Tybee Island. Water depths at mean low water range from 34.00' to 46.00' and a minimum clearance of -25' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### BL



### Large and Clustered Structure

Solid Concrete Polyhedron

Barge

Reef Boundary

### **Individual Structures**

- Solid Concrete Polyhedron
- Barge

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Concrete Tetrahedrons	31.642831	-81.07906	8/1/2001
2	Concrete Tetrahedrons	31.642474	-81.079191	8/1/2001
3	Barge	31.6423	-81.08136	
4	Concrete Tetrahedrons	31.641511	-81.07895	8/1/2001
5	Concrete Tetrahedrons	31.641244	-81.080483	8/1/2001
6	Concrete Tetrahedrons	31.6407	-81.079885	8/1/2001

Description	Latitude	Longitude
Center of 400 yard Permitted Diameter	31.642017	-81.079883

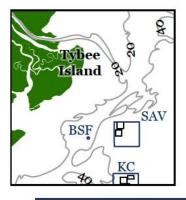
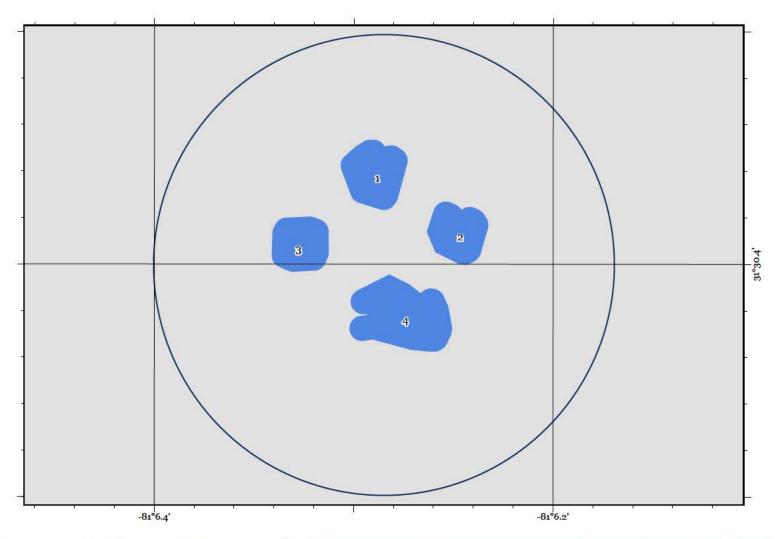


Figure 3: Existing habitat development at Georgia Artificial BL, located approximately 3.0 NM East of St Catherines Island. Water depths at mean low water range from 9.00' to 15.00' and a minimum clearance of -10' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### BH



### Large and Clustered Structure

Solid Concrete Polyhedron

Reef Boundary

### **Individual Structures**

Solid Concrete Polyhedron

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Concrete Tetrahedrons	31.507318	-81.104825	8/1/2001
2	Concrete Tetrahedrons	31.506895	-81.104132	8/1/2001
3	Concrete Tetrahedrons	31.506809	-81.105445	8/1/2001
4	Concrete Tetrahedrons	31.5063	-81.10459	8/1/2001

Description	Latitude	Longitude
Center of 400 yard Permitted Diameter	31.506667	-81.10475

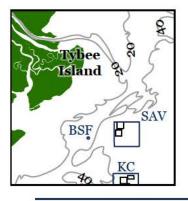
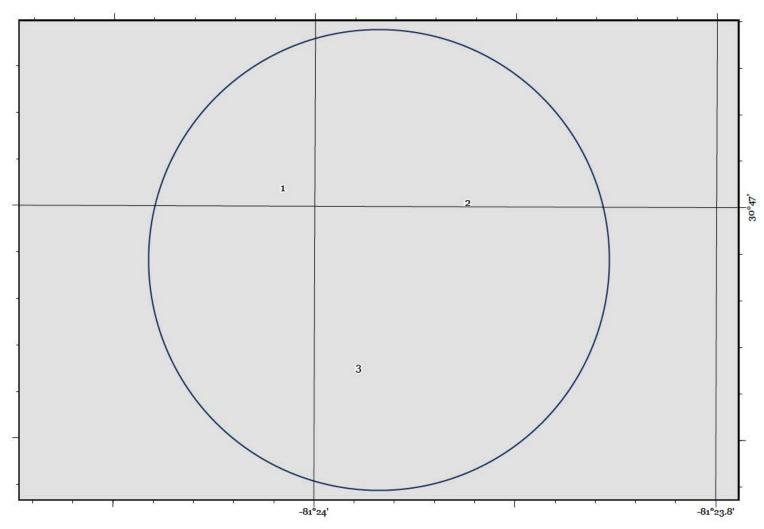


Figure 4: Existing habitat development at Georgia Artificial BH, located approximately 2.5 NM East of Blackbeard Island. Water depths at mean low water range from 10.00' to 16.00' and a minimum clearance of -12' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### TC



Reef Boun	dary
Individual	Structures

Solid Concrete Polyhedron

	Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	1	Subsided Concrete Tetrahedrons	30.7835	-81.40025	2001
	2	Subsided Concrete Tetrahedrons	30.7834	-81.398717	2001
	3	Subsided Concrete Tetrahedrons	30.782217	-81.399617	2001

Description	Latitude	Longitude
Center of 400 yard Permitted Diameter	30.782956	-81.39947

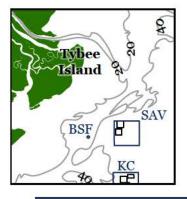
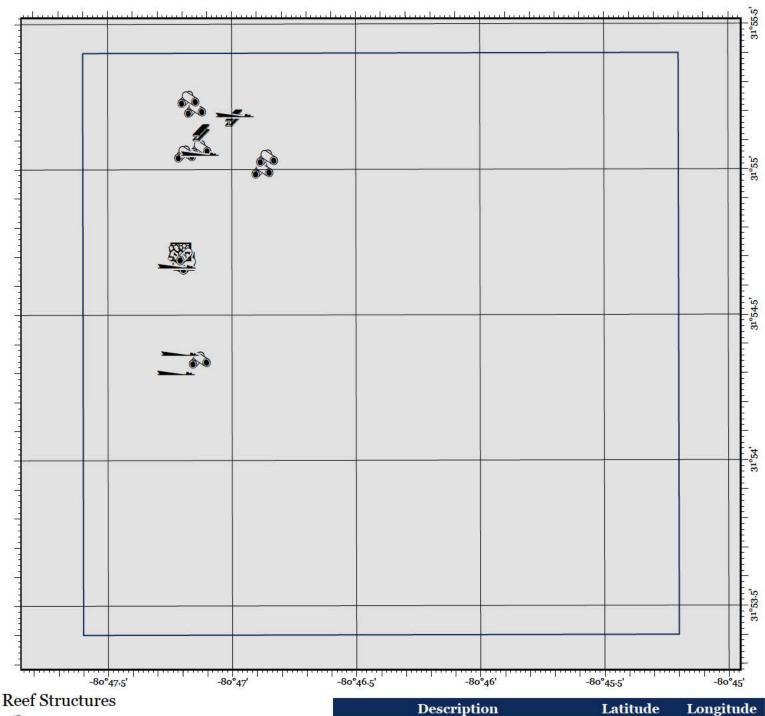


Figure 5: Existing habitat development at Georgia Artificial TC, located approximately 3.0 nm east of Cumberland Island. Water depths at mean low water range from 22.00' to 25.00' and a minimum clearance of -15' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

All materials were determined to be subsided beneath the ocean floor at this reef based on side scan sonar surveys conducted prior to 2012.



Concrete Culvert Steel Structure



Mixed Concrete and Metal Rubble





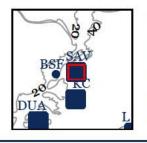


Figure 6: Existing habitat development at Georgia Artificial SAV, located approximately 6.0 NM Southeast of Tybee Island. Water depths at mean low water range from 30' to 40' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

31.923333

31.923333

31.89

31.89

NE Corner of Permitted Reef Area

NW Corner of Permitted Reef Area

SE Corner of Permitted Reef Area

SW Corner of Permitted Reef Area

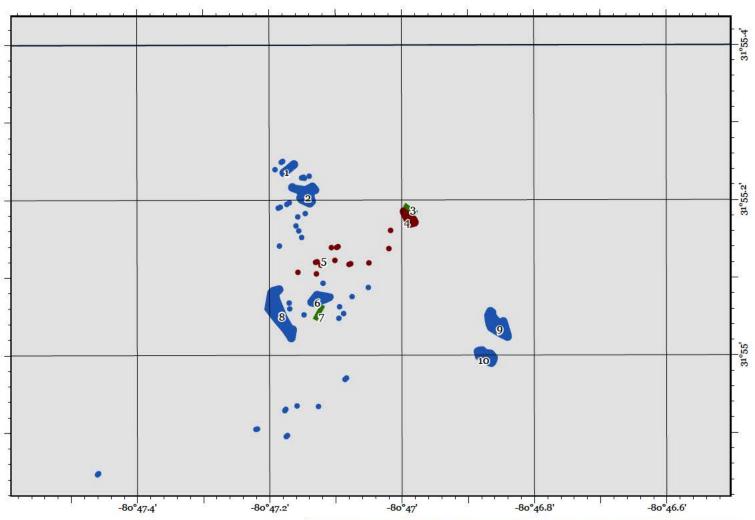
-80.753333

-80.793333

-80.753333

-80.793333

### SAV-North West

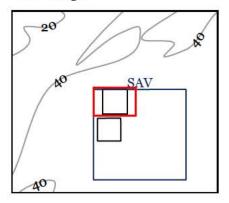


### Large and Clustered Structures

- Concrete Culvert
- Steel Structure
- Barge
- Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Steel Structure
- Barge



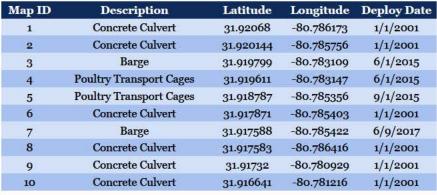
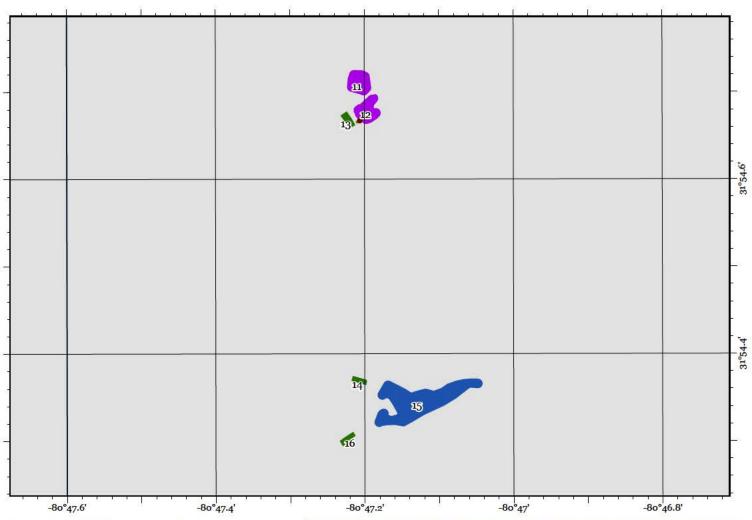


Figure 6a: SAV-North West inset of existing Georgia Artificial Reef habitat development.

### **SAV-West**

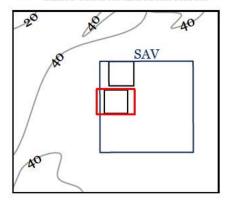


#### Large and Clustered Structures

- Concrete Culvert
- Barge
- Steel Hull Vessel <60'
- Mixed Concrete and Metal Rubble
- Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Steel Structure
- Barge
- Mixed Concrete and Metal Rubble

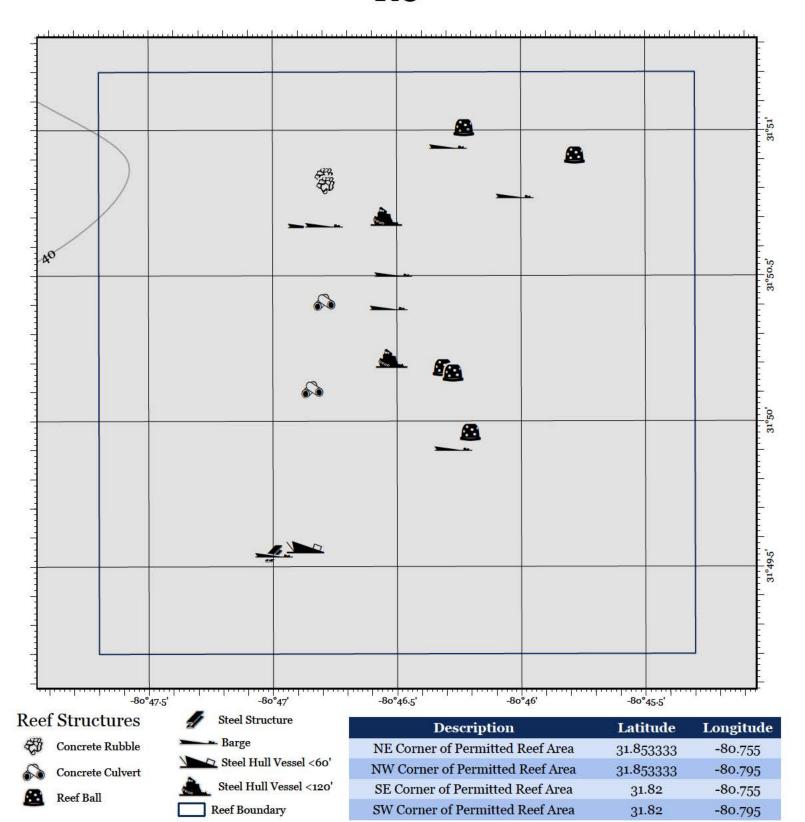




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Figure 6b: SAV-West inset of existing Georgia Artificial Reef habitat development.

### KC





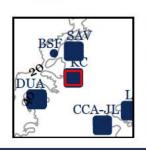
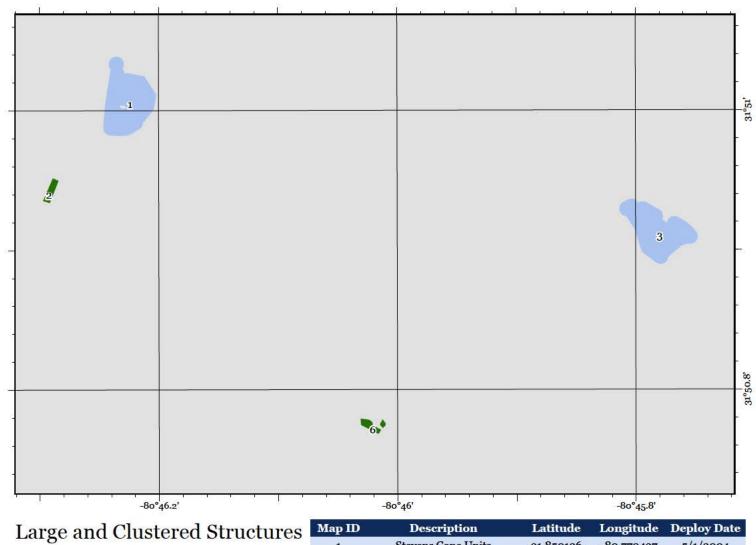


Figure 7: Existing habitat development at Georgia Artificial KC, located approximately 9.0 NM Southeast of Wassaw Island. Water depths at mean low water range from 40' to 50' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

## **KC-North East**





Darge
Reef Boundary

Map ID	Description	Latitude	Longitude	Deploy Date
1	Stevens Cone Units	31.850126	-80.770437	5/1/2004
2	Gravel Scow	31.849044	-80.771507	5/1/1992
3	Pallet Reef Balls	31.848556	-80.763028	11/1/1999
6	Booster Barge "TMI 115"	31.846239	-80.767052	6/1/1992

### **Individual Structures**

- Reef Ball
- Barge

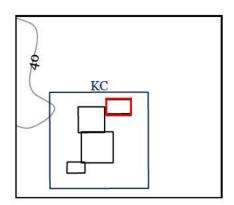
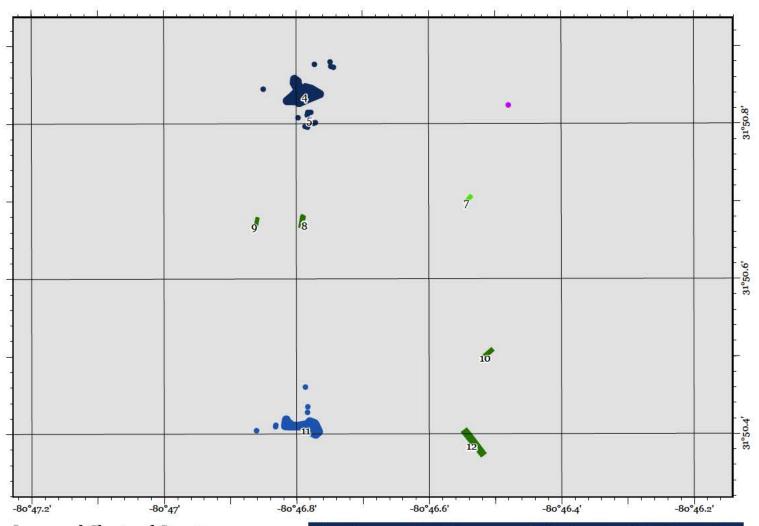




Figure 7a: KC-North East inset of existing Georgia Artificial Reef habitat development.

## **KC-North West**

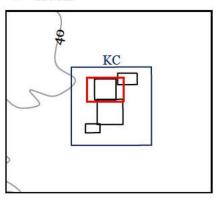


#### Large and Clustered Structures

- Concrete Rubble
- Concrete Culvert
- Barge
- Steel Hull Vessel <120'
- Reef Boundary

#### **Individual Structures**

- Concrete Rubble
- Concrete Culvert
- Barge
- Steel Hull Vessel <120'</li>
- Tire Unit

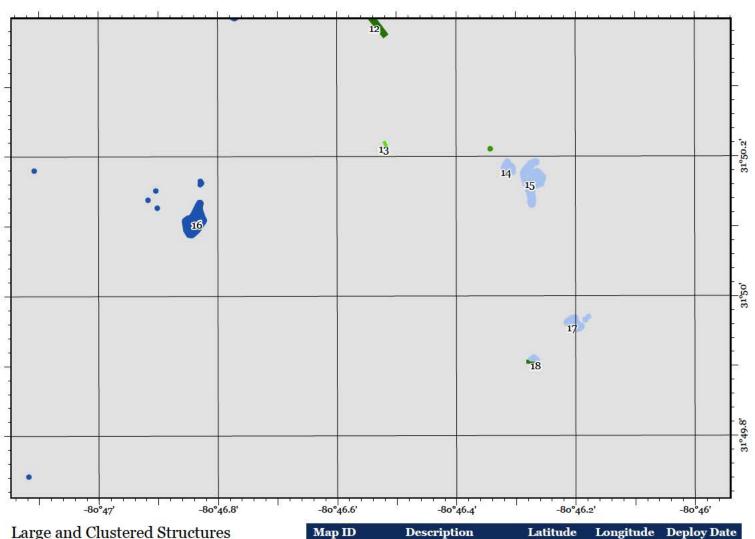


Map ID	Description	Latitude	Longitude	Deploy Date
4	Concrete Rubble	31.847337	-80.779847	
5	Concrete Rubble	31.846838	-80.77973	
7	Landing Craft "Motherlode"	31.845046	-80.775665	12/1/1984
8	Barge	31.844564	-80.779858	
9	Deck Barge	31.844538	-80.781003	9/1/2006
10	Dump Scow "TMI 100"	31.841711	-80.775206	3/1/1992
11	Concrete Culvert	31.840161	-80.779836	12/1/2001
12	Hopper Barge and 330 Poultry Transport Cages	31.839816	-80.775548	11/1/2013

Figure 7b: KC-North West inset of existing Georgia Artificial Reef habitat development.

12

### **KC-Center**



13

14

15

16

17

18

#### Large and Clustered Structures

- Concrete Culvert
- Reef Ball
- Barge
- Steel Hull Vessel <120'
- Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Reef Ball
- Barge
- Steel Hull Vessel <60'
- Steel Hull Vessel <120'

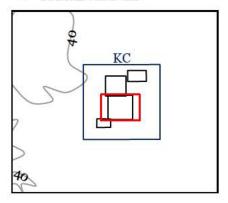




Figure 7c: KC-Center inset of existing Georgia Artificial Reef habitat development.

Description

Tug Hull "Pegasus"

Pallet Reef Balls

Pallet Reef Balls

Concrete Culvert

**Stevens Cone Units** 

Steel Deck Barge "Olympics-

YC-1117" & Reef Balls

-80.775298

-80.771878

-80.771211

-80.780645

-80.770043

-80.77119

9/1/2006

11/1/1999

11/1/1999

12/1/2001

5/1/2004

6/1/1997

31.836936

31.836383

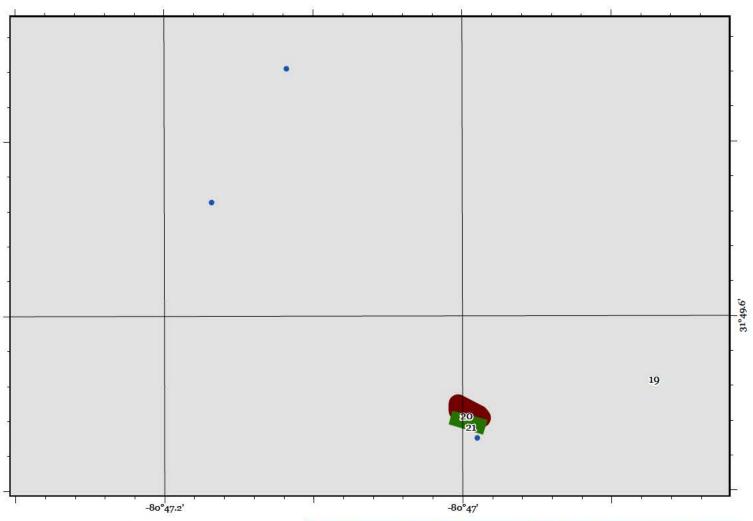
31.836091

31.835141

31.83267

31.831758

## **KC-South West**



### Large and Clustered Structures

Steel Structure
Barge

Reef Boundary

Map ID	Description	Latitude	Longitude	Deploy Date
19	53' Tug Boat	31.8261	-80.781167	09/21/2021
20	Steel trusses and other steel structures	31.825754	-80.783267	12/23/2018
21	Deck Barge	31.82565	-80.783272	12/23/2018

#### **Individual Structures**

- Concrete Culvert
- Steel Structure
- Barge
- Steel Hull Vessel <60'

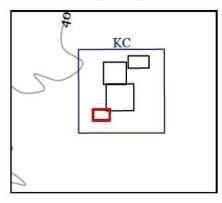
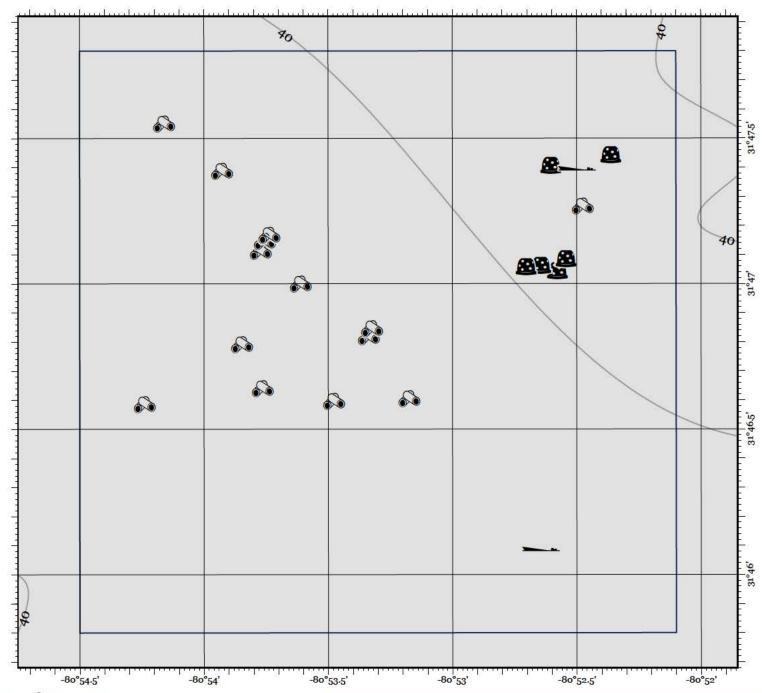




Figure 7d: KC-South West inset of existing Georgia Artificial Reef habitat development.

### DUA



### **Reef Structures**



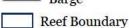
Concrete Culvert



Reef Ball



Barge



N	

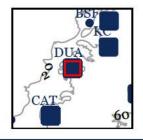


Figure 8: Existing habitat development at Georgia Artificial DUA, located approximately 7.0 NM East of Ossabaw Island. Water depths at mean low water range from 35' to 45' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

Description

NE Corner of Permitted Reef Area

NW Corner of Permitted Reef Area

SE Corner of Permitted Reef Area

SW Corner of Permitted Reef Area

Latitude

31.796667

31.796667

31.763333

31.763333

Longitude

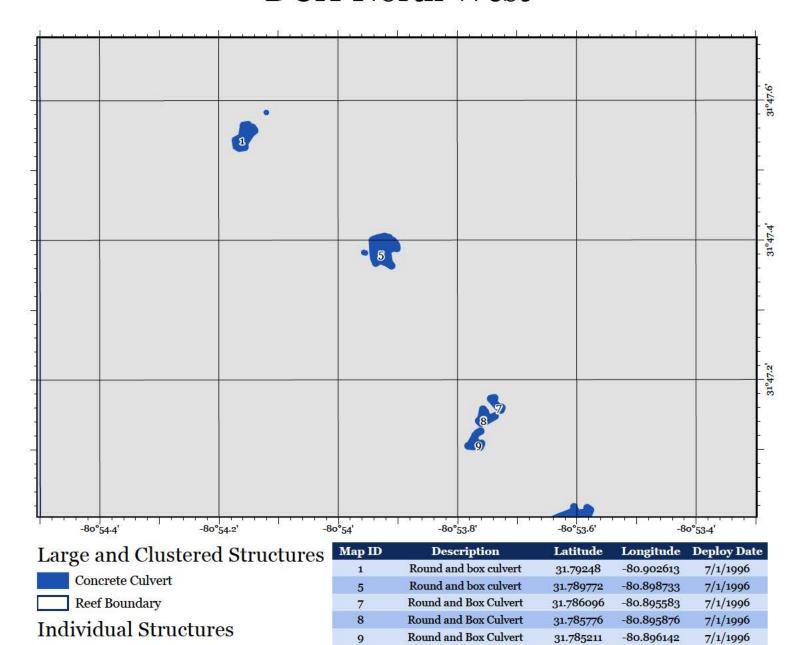
-80.868333

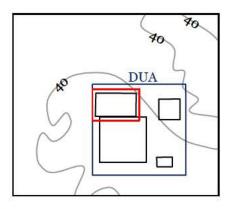
-80.908333

-80.868333

-80.908333

### **DUA-North West**



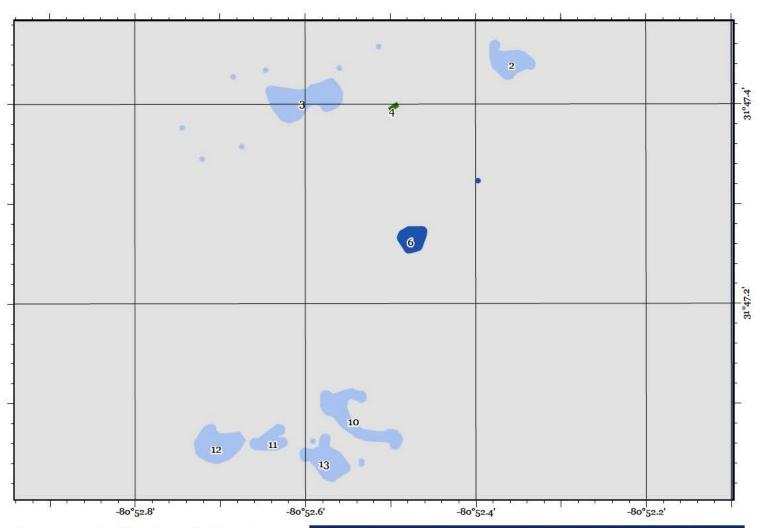


Concrete Culvert

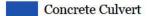


Figure 8a: DUA-North West inset of existing Georgia Artificial Reef habitat development.

### **DUA-North East**



### Large and Clustered Structures



Reef Ball

Barge

Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Reef Ball
- Barge

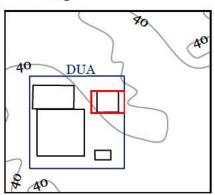
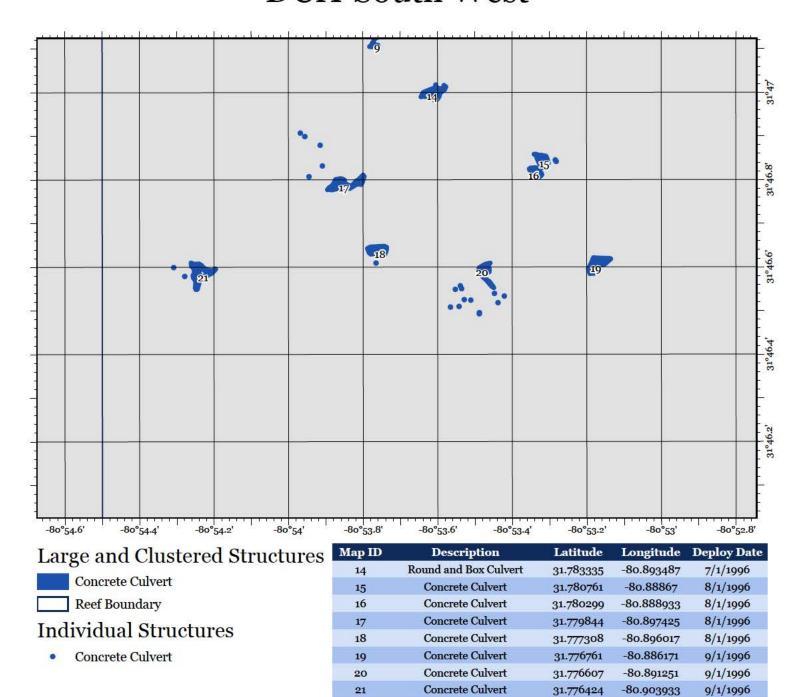




Figure 8b: DUA-North East inset of existing Georgia Artificial Reef habitat development.

### **DUA-South West**



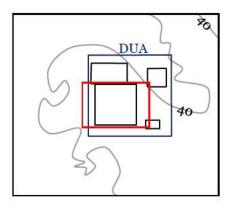
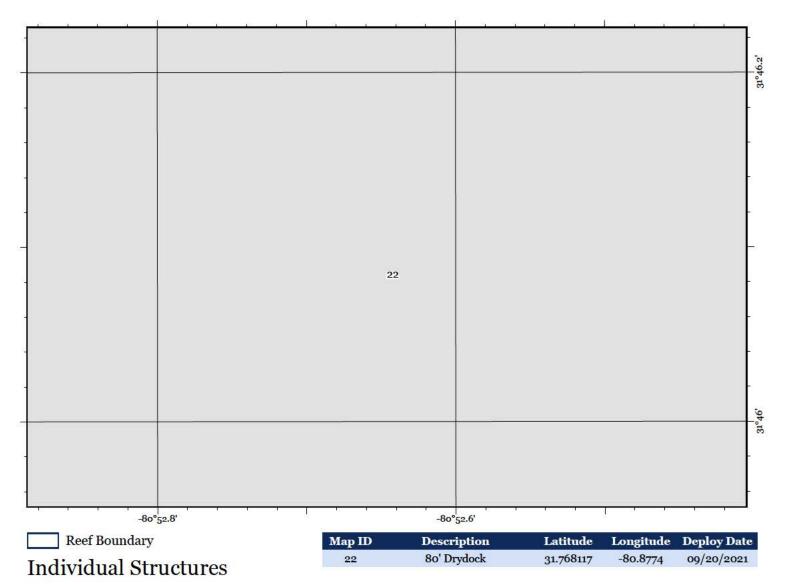


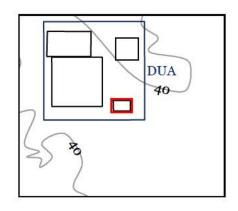


Figure 8c: DUA-South West inset of existing Georgia Artificial Reef habitat development.

## **DUA-South East**



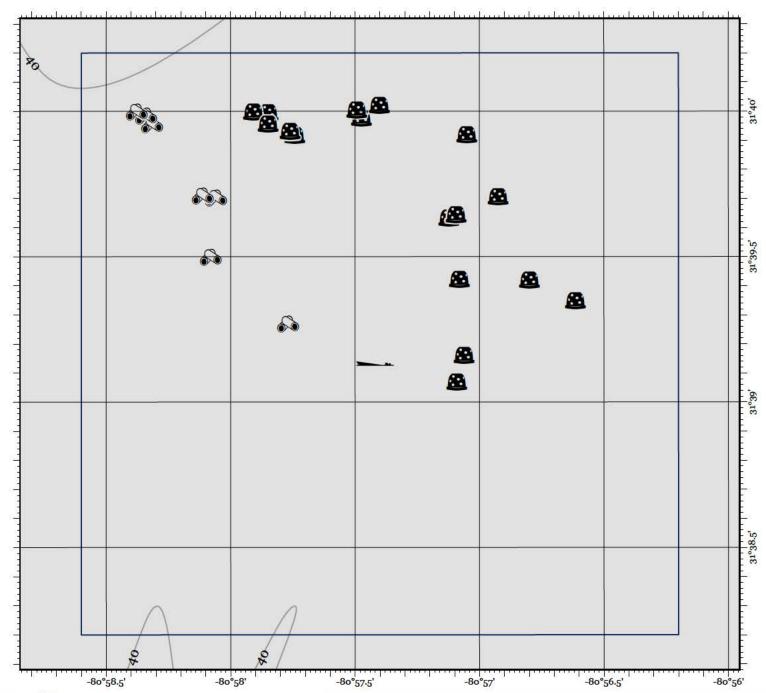
Barge



N

Figure 8d: DUA-South East inset of existing Georgia Artificial Reef habitat development.

### CAT



#### **Reef Structures**



Concrete Culvert



Reef Ball



Barge



Reef	Boun	dary



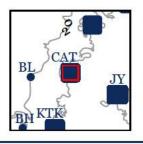


Figure 9: Existing habitat development at Georgia Artificial CAT, located approximately 7.0 NM East of St Catherines Island. Water depths at mean low water range from 35' to 45' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

Latitude

31.67

31.67

31.636667

31.636667

Longitude

-80.936667

-80.976667

-80.936667

-80.976667

Description

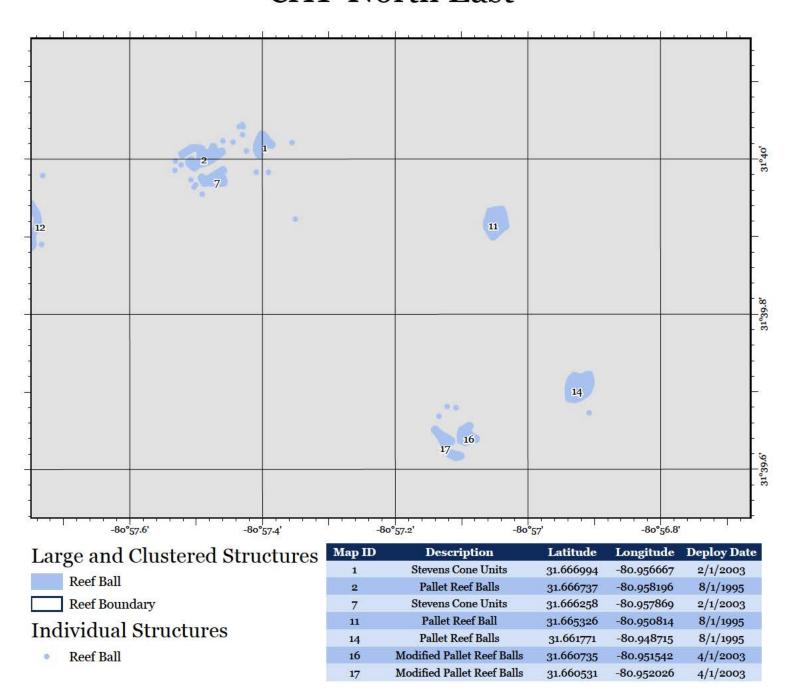
NE Corner of Permitted Reef Area

NW Corner of Permitted Reef Area

SE Corner of Permitted Reef Area

SW Corner of Permitted Reef Area

## **CAT-North East**



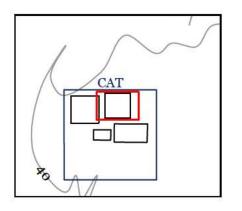
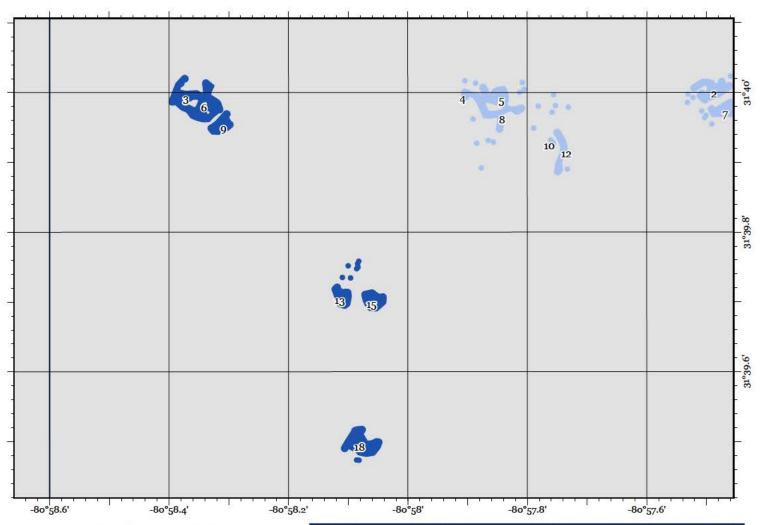


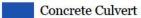


Figure 9a: CAT-North East inset of existing Georgia Artificial Reef habitat development.

## **CAT-North West**



### Large and Clustered Structures



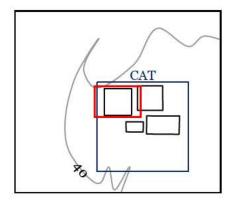


Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Reef Ball

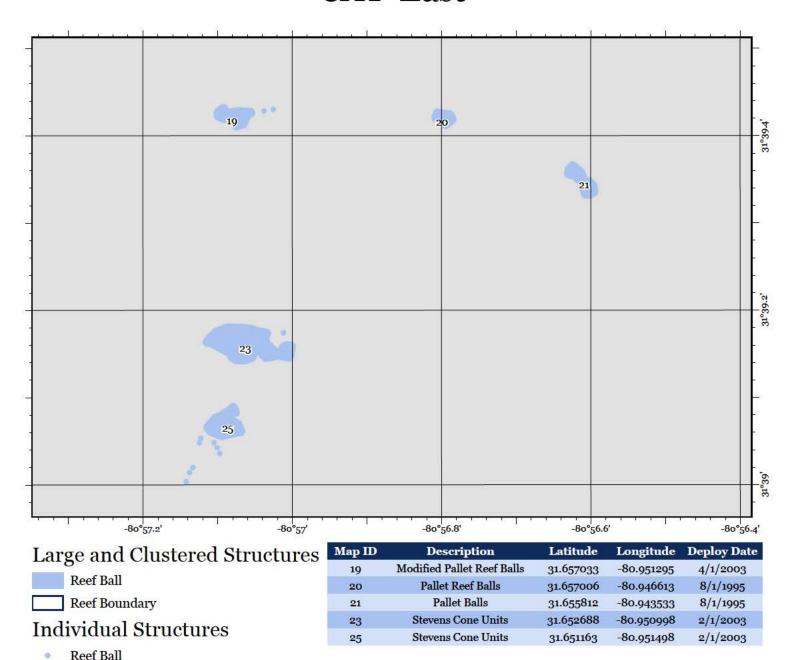
Map ID	Description	Latitude	Longitude	Deploy Date
3	Round and box culvert	31.666618	-80.972932	8/1/1995
4	Pallet Reef Balls	31.666616	-80.965077	8/1/1995
5	Pallet Reef Balls	31.666572	-80.964124	8/1/1995
6	Round and box culvert	31.666408	-80.972295	8/1/1995
8	Pallet Reef Balls	31.66593	-80.964105	8/1/1995
9	Round and box culvert	31.665914	-80.971872	8/1/1995
10	Stevens Cone Units	31.665494	-80.962657	3/1/2007
12	Stevens Cone Units	31.6653	-80.962312	2/1/2003
13	Round and box culvert	31.661801	-80.968506	8/1/1995
15	Round and box culvert	31.66171	-80.96762	8/1/1995
18	Round and box culvert	31.658296	-80.967961	8/1/1995



N

Figure 9b: CAT-North West inset of existing Georgia Artificial Reef habitat development.

### **CAT-East**



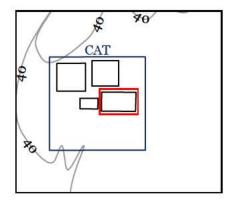
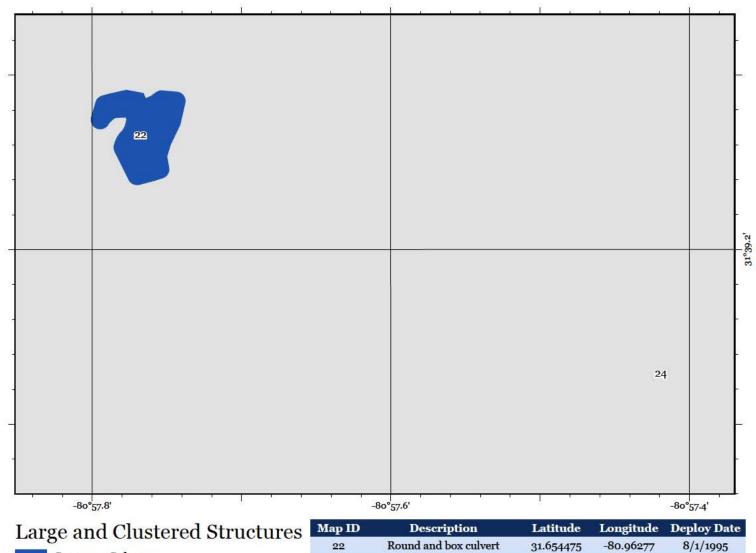




Figure 9c: CAT-East inset of existing Georgia Artificial Reef habitat development.

## **CAT-Center**



24

110' Barge

31.652195

-80.956962

09/27/2021

Concrete Culvert

Reef Boundary
rect boundary

#### **Individual Structures**

- Concrete Culvert
- Barge

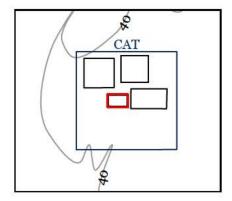
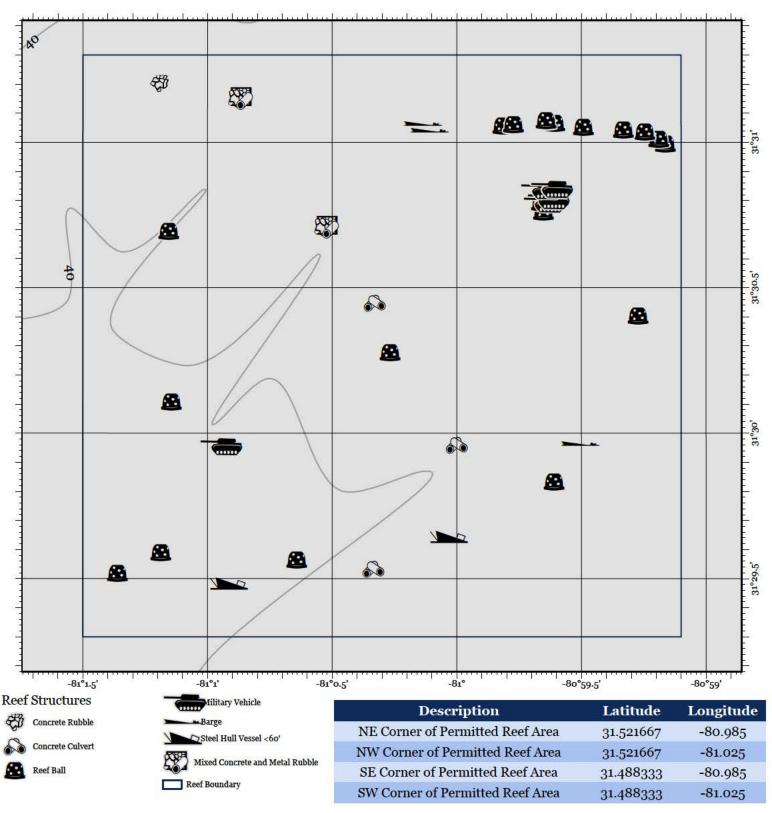




Figure 9d: CAT-Center inset of existing Georgia Artificial Reef habitat development.

### KTK





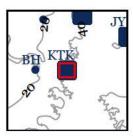
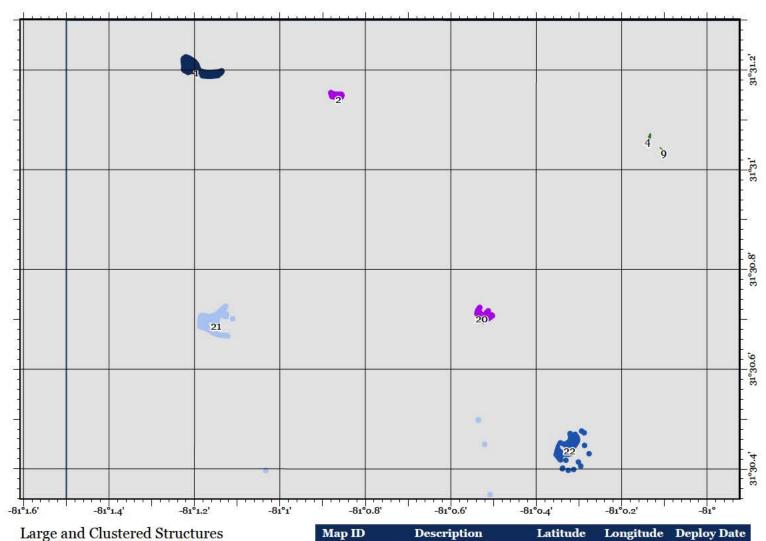


Figure 10: Existing habitat development at Georgia Artificial KTK, located approximately 7.0 NM East of Blackbeard Island. Water depths at mean low water range from 35' to 45' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### **KTK-North West**



1

2

20

21

22

Concrete Rubble

Debarking Drums /

Concrete Rubble

Debarking Drums /

Concrete Rubble

**Pallet Balls** 

Concrete Culvert

-81.019842

-81.014468

-81.008716

-81.01924

-81.005461

31.520039

31.519155

31.511817

31.51157

31.507418

9/1/1991

9/1/1991

9/1/1991

3/1/1998

11/1/1998

#### Large and Clustered Structures

- Concrete Rubble
- Concrete Culvert
- Reef Ball
- Mixed Concrete and Metal Rubble
- Reef Boundary

#### **Individual Structures**

- Concrete Rubble
- Concrete Culvert
- Reef Ball Barge
- Mixed Concrete and Metal Rubble

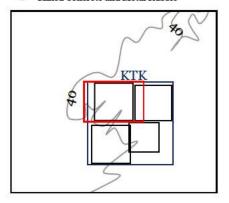
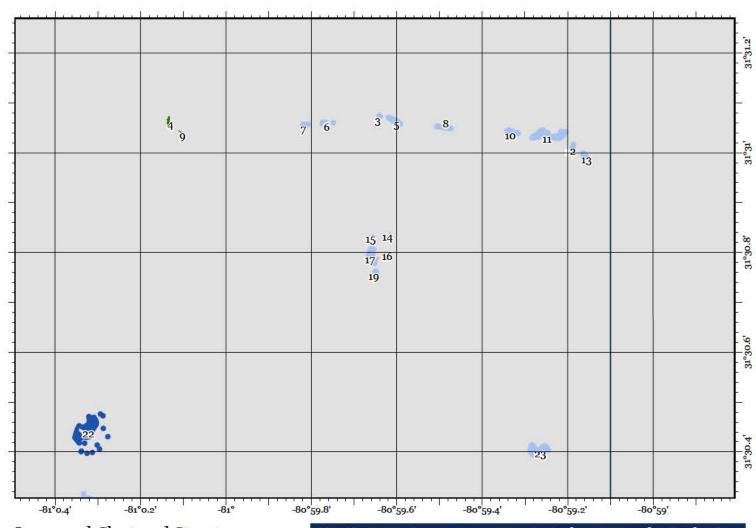




Figure 10a: KTK-North West inset of existing Georgia Artificial Reef habitat development. 26

### **KTK-North East**



#### Large and Clustered Structures

Concrete Culvert

Reef Ball

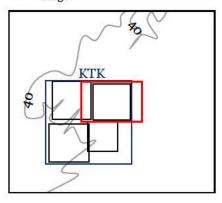
Military Vehicle

Barge

Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Reef Ball
- Military Vehicle
- Barge



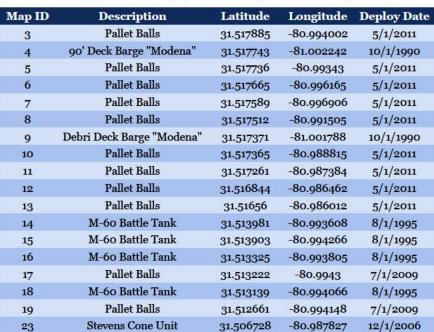
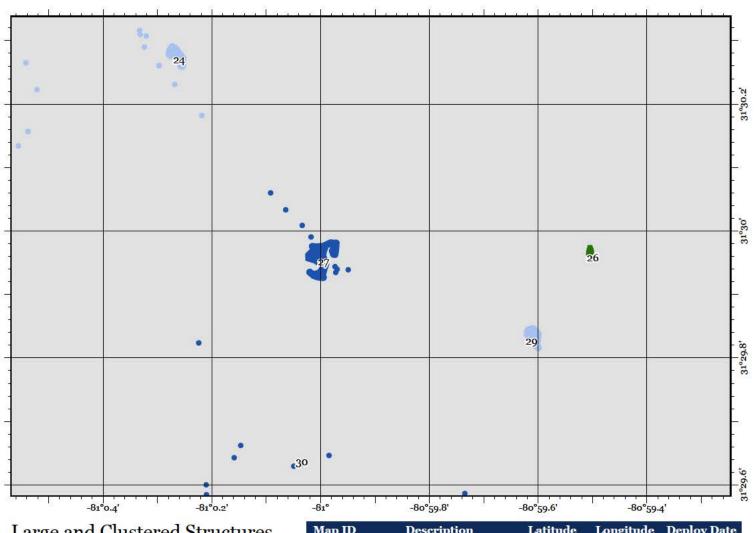


Figure 10b: KTK-North East inset of existing Georgia Artificial Reef habitat development.

## **KTK-South East**



### Large and Clustered Structures

Concrete Culvert

Reef Ball

Barge

Reef Boundary

Map ID	Description	Latitude	Longitude	Deploy Date
24	Pallet Balls	31.5046	-81.004411	7/1/2009
26	Barge	31.49941	-80.991723	8/1/2002
27	Concrete Culvert	31.499295	-80.999978	12/1/1998
29	Pallet Balls	31.497219	-80.993467	8/1/1995
30	45' steel hull sailboat	31.494043	-81.000506	07/23/2021

#### **Individual Structures**

- Concrete Culvert
- Reef Ball
- Barge
- Steel Hull Vessel <60'

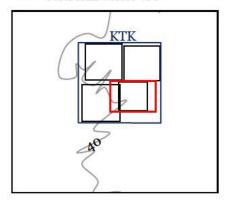
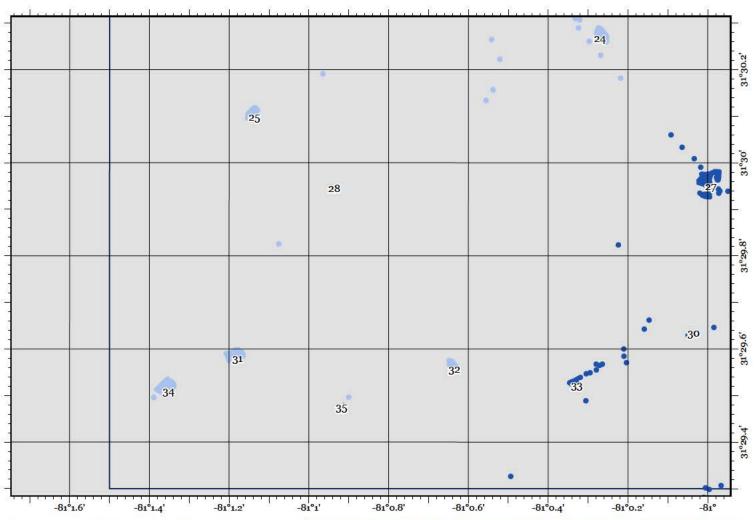




Figure 10c: KTK-South East inset of existing Georgia Artificial Reef habitat development. 28

### **KTK-South West**



Map ID

25

28

31

32

33

34

35

Description

**Pallet Balls** 

Military Vehicle

**Pallet Balls** 

Pallet Balls

Concrete Culvert

Pallet Balls

39' Steel Hull Vessel

Latitude

31.501784

31.499213

31.493132

31.49275

31.492181

31.491978

31.491384

Longitude

-81.019037

-81.015706

-81.019751

-81.010674

-81.005556

-81.022632

-81.01521

**Deploy Date** 

10/1/2000

8/1/1995

3/1/2009

3/1/2009

12/1/1998

3/1/2009

9/1/2012

#### Large and Clustered Structures



Reef Ball

Military Vehicle

Reef Boundary

#### **Individual Structures**

- Concrete Culvert
- Reef Ball
- Military Vehicle
- Steel Hull Vessel <60'</li>

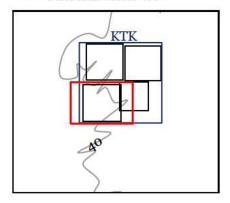
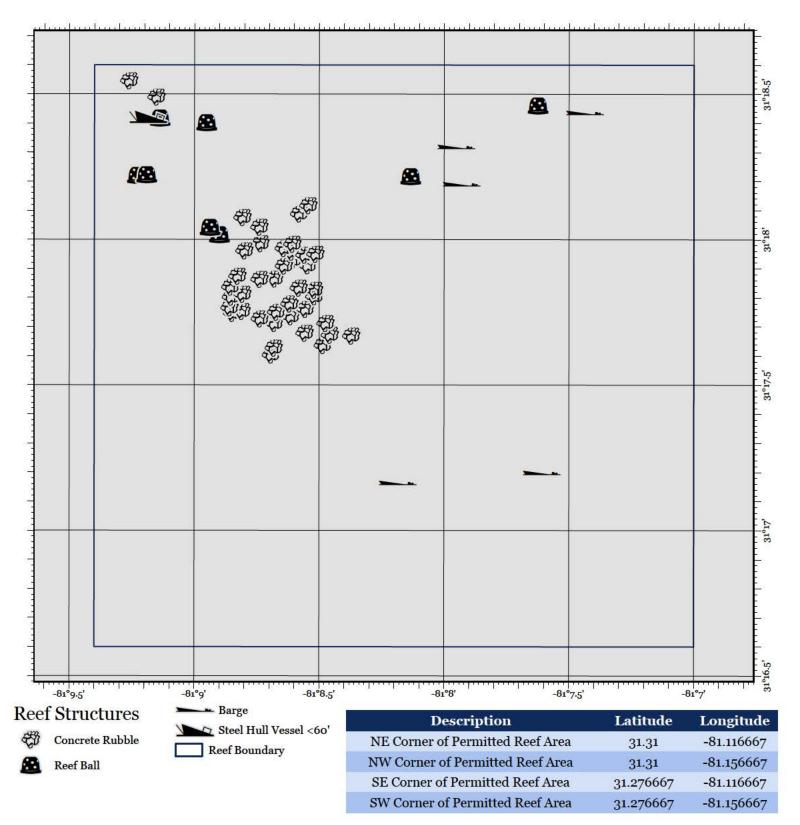




Figure 10d: KTK-South West inset of existing Georgia Artificial Reef habitat development.

#### ALT





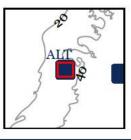
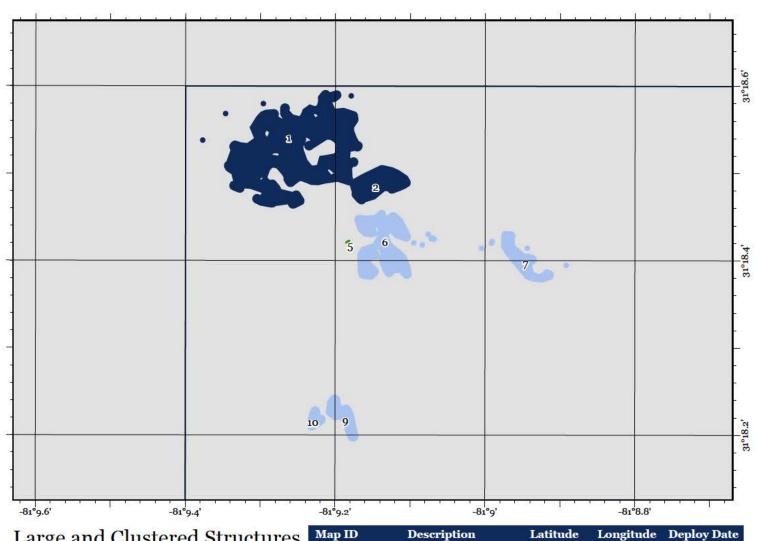


Figure 11: Existing habitat development at Georgia Artificial ALT, located approximately 6.0 NM East of Little St Simons. Water depths at mean low water range from 30' to 40' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### **ALT-North West**



1

2

5

6

7

9

10

#### Large and Clustered Structures

- Concrete Rubble
- Reef Ball
- Steel Hull Vessel <60'
- **Reef Boundary**

#### **Individual Structures**

- Concrete Rubble
- Reef Ball
- Steel Hull Vessel <60'

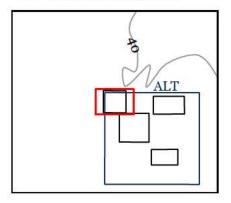




Figure 11a: ALT-North West inset of existing Georgia Artificial Reef habitat development.

Concrete Bridge Rubble "I-95"

Concrete Bridge Rubble

"U.S. 17

40' Steel Crew Boat "Mary

Lou"

**Pallet Balls** 

**Pallet Balls** 

**Pallet Balls** 

Pallet Balls

-81.154322

-81.152494

-81.153057

-81.152283

-81.149157

-81.153159

-81.153777

31.309083

31.308148

31.307026

31.306951

31.306687

31.303687

31.303644

5/1/1990

9/1/1991

1/1/1992

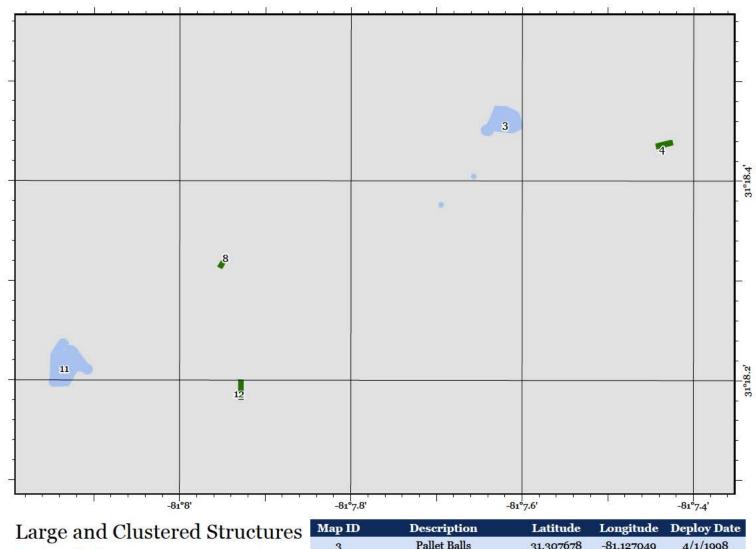
4/1/1998

4/1/1998

4/1/1998

4/1/1998

## **ALT-North East**



Reef Ball

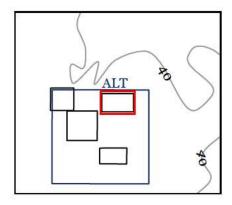
Barge

Reef Boundary

Description	Latitude	Longitude	<b>Deploy Date</b>
Pallet Balls	31.307678	-81.127049	4/1/1998
100' Deck Barge "LLM"	31.307277	-81.123905	7/1/2004
100' Deck Barge	31.305314	-81.132485	7/1/2004
Pallet Balls	31.303593	-81.135534	4/1/1998
110' Deck Barge "TIC"	31.303174	-81.132138	3/1/2009
	Pallet Balls 100' Deck Barge "LLM" 100' Deck Barge Pallet Balls	Pallet Balls       31.307678         100' Deck Barge "LLM"       31.307277         100' Deck Barge       31.305314         Pallet Balls       31.303593	Pallet Balls       31.307678       -81.127049         100' Deck Barge "LLM"       31.307277       -81.123905         100' Deck Barge       31.305314       -81.132485         Pallet Balls       31.303593       -81.135534

#### **Individual Structures**

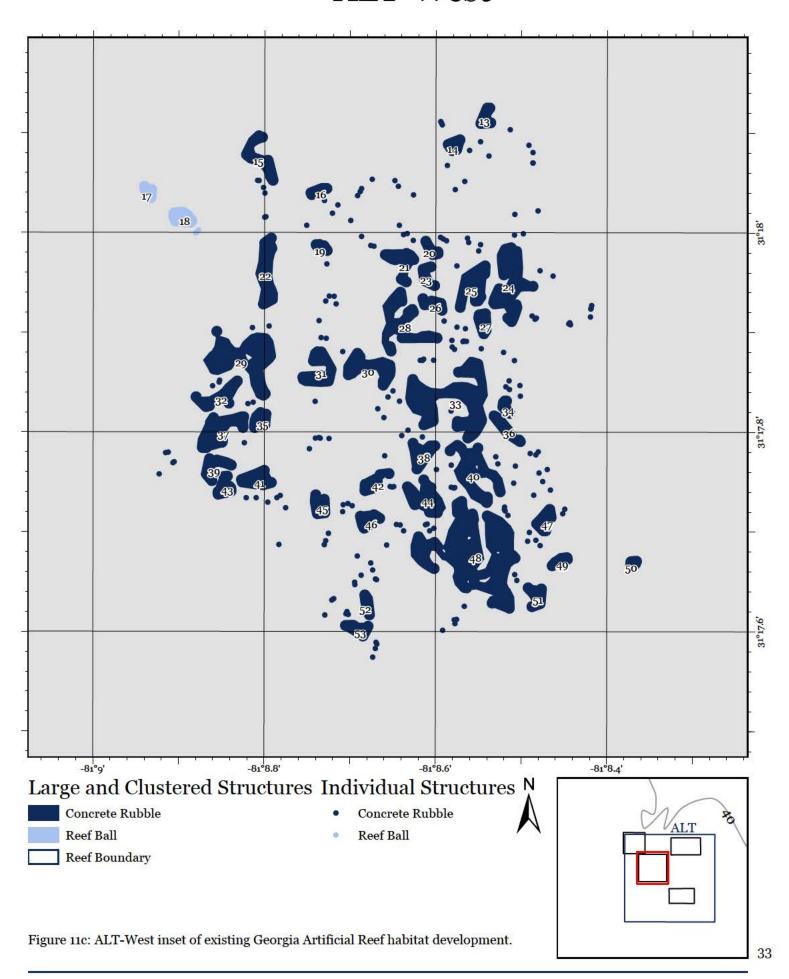
- Reef Ball
- Barge



N

Figure 11b: ALT-North East inset of existing Georgia Artificial Reef habitat development. \$32\$

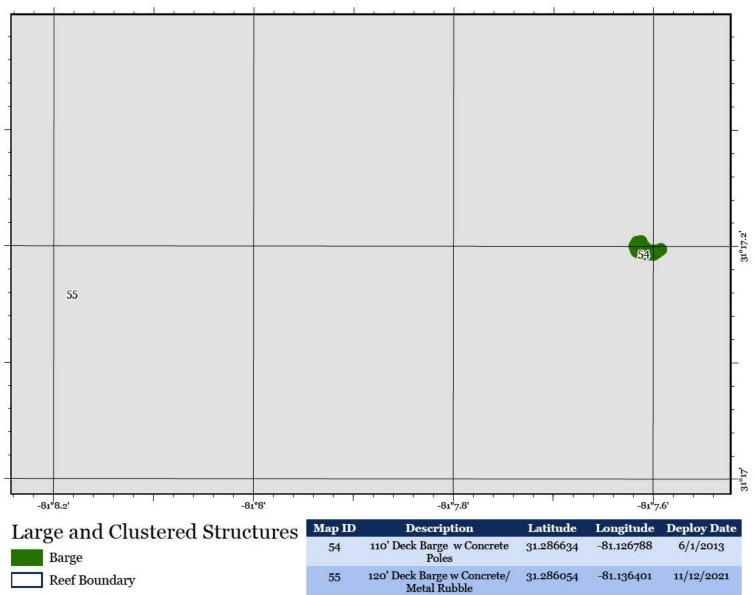
## **ALT-West**



# **ALT-West Continued**

Map ID	Description	Latitude Longitude Deploy Date
13	Sidney Lanier Bridge Rubble	31.301934 -81.14235 2/1/2004
14	Sidney Lanier Bridge Rubble	31.30146 -81.142973 2/1/2004
15	Sidney Lanier Bridge Rubble	31.301254 -81.146747 3/1/2004
16	Sidney Lanier Bridge Rubble	31.300699 -81.14562 3/1/2004
17	Modified Pallet Balls	31.300676 -81.148931 3/1/2003
18	Modified Pallet Balls	31.300251 -81.148271 3/1/2003
19	Sidney Lanier Bridge Rubble	31.299756 -81.145554 3/1/2004
20	Sidney Lanier Bridge Rubble	31.299728 -81.143417 2/1/2004
21	Sidney Lanier Bridge Rubble	31.299483 -81.144 2/1/2004
22	Sidney Lanier Bridge Rubble	31.299344 -81.146618 3/1/2004
23	Sidney Lanier Bridge Rubble	31.299276 -81.143482 2/1/2004
24	Sidney Lanier Bridge Rubble	31.299153 -81.141878 2/1/2004
25	Sidney Lanier Bridge Rubble	31.299101 -81.142608 2/1/2004
26	Sidney Lanier Bridge Rubble	31.298812 -81.143392 2/1/2004
27	Sidney Lanier Bridge Rubble	31.298495 -81.142411 2/1/2004
28	Sidney Lanier Bridge Rubble	31.298478 -81.14398 1/1/2004
29	Sidney Lanier Bridge Rubble	31.297893 -81.14708 3/1/2004
30	Sidney Lanier Bridge Rubble	31.297734 -81.144613 1/1/2004
31	Sidney Lanier Bridge Rubble	31.297712 -81.145608 3/1/2004
32	Sidney Lanier Bridge Rubble	31.297269 -81.147552 3/1/2004
33	Sidney Lanier Bridge Rubble	31.297214 -81.142996 1/1/2004
34	Sidney Lanier Bridge Rubble	31.29709 -81.141961 1/1/2004
35	Sidney Lanier Bridge Rubble	31.29686 -81.146751 3/1/2004
36	Sidney Lanier Bridge Rubble	31.296719 -81.141951 1/1/2004
37	Sidney Lanier Bridge Rubble	31.296695 -81.147515 3/1/2004
38	Sidney Lanier Bridge Rubble	31.296307 -81.143606 12/01/2003
39	Sidney Lanier Bridge Rubble	31.296079 -81.147609 3/1/2004
40	Sidney Lanier Bridge Rubble	31.295994 -81.14256 12/01/2003
41	Sidney Lanier Bridge Rubble	31.295875 -81.146802 3/1/2004
42	Sidney Lanier Bridge Rubble	31.295832 -81.144497 12/01/2003
43	Sidney Lanier Bridge Rubble	31.295763 -81.147434 3/1/2004
44	Sidney Lanier Bridge Rubble	31.295573 -81.143536 12/01/2003
45	Sidney Lanier Bridge Rubble	31.29545 -81.145589 12/01/2003
46	Sidney Lanier Bridge Rubble	31.29519 -81.144631 12/01/2003
47	Sidney Lanier Bridge Rubble	31.295188 -81.141205 12/01/2003
48	Sidney Lanier Bridge Rubble	31.294627 -81.142596 12/01/2003
49	Sidney Lanier Bridge Rubble	31.294517 -81.140914 12/01/2003
50	Sidney Lanier Bridge Rubble	31.294471 -81.139487 12/01/2003
51	Sidney Lanier Bridge Rubble	31.293927 -81.141386 12/01/2003
52	Sidney Lanier Bridge Rubble	31.293775 -81.144657 12/01/2003
53	Sidney Lanier Bridge Rubble	31.29338 -81.144844 12/01/2003

## **ALT-South East**



#### **Individual Structures**

Barge

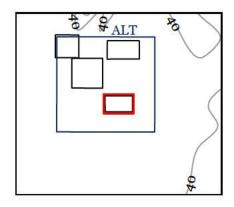
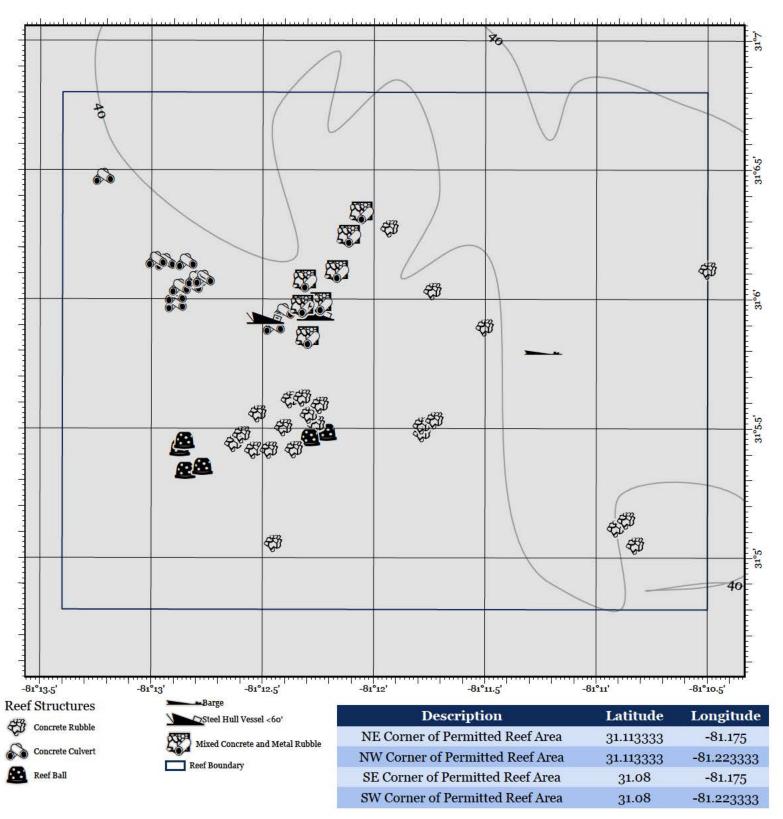




Figure 11d: ALT-South East inset of existing Georgia Artificial Reef habitat development. 35





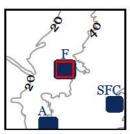
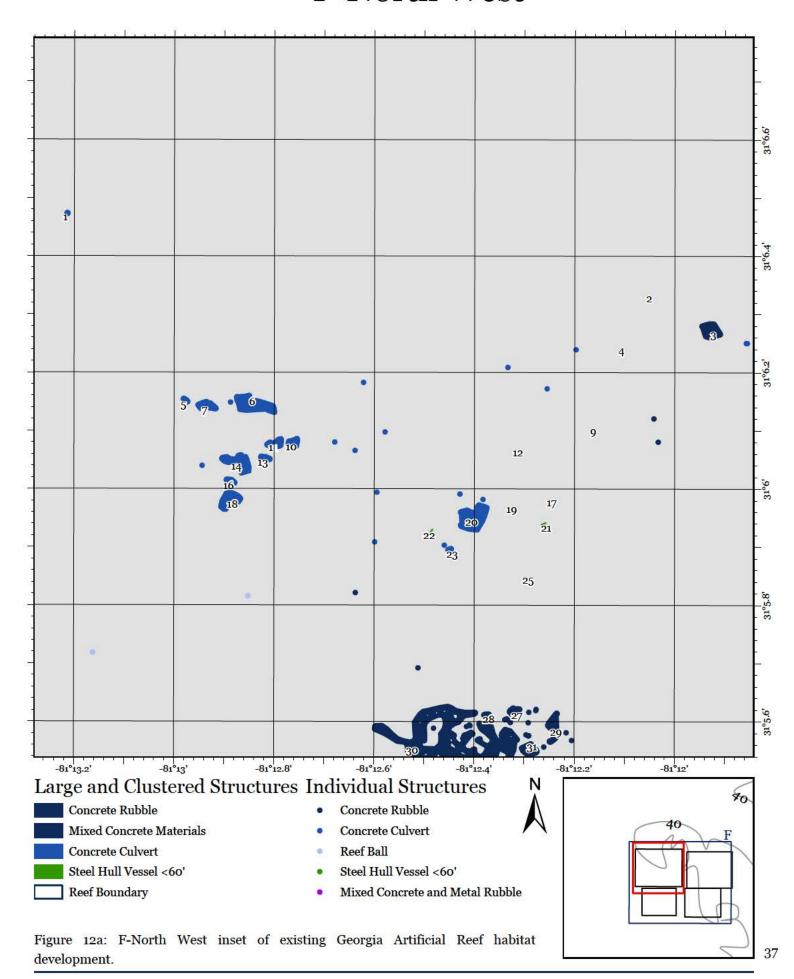


Figure 12: Existing habitat development at Georgia Artificial F, located approximately 9.0 NM East of Jekyll Island. Water depths at mean low water range from 35' to 45' and a minimum clearance of -28' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

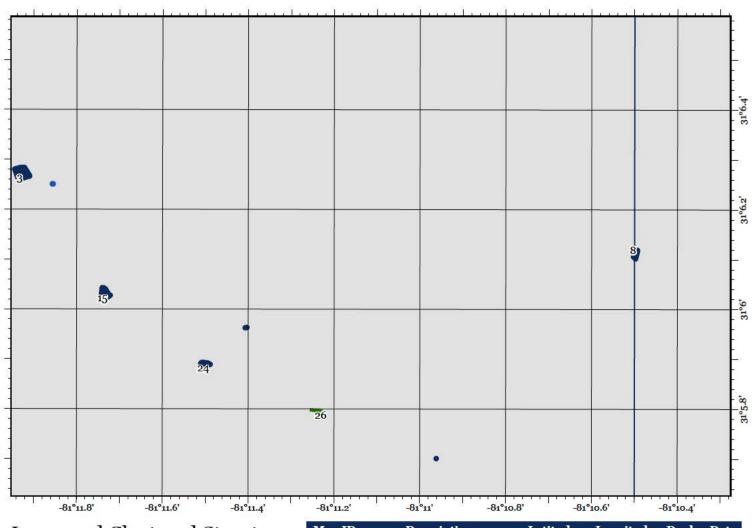
## F-North West



## F-North West Continued

Map ID	Description	Latitude Longitude Deploy Date
1	Concrete Culvert	31.107882 -81.220227
2	Concrete and Metal Rubble from Navigation Ranges	31.105572 -81.20094 08/05/2021
3	Sidney Lanier Bridge Rubble	31.10454 -81.198801 8/1/2003
4	Concrete and Metal Rubble from Navigation Ranges	31.104076 -81.20186 08/05/2021
5	Concrete Culvert	31.102524 -81.216286
6	Concrete Culvert	31.102402 -81.214002
7	Concrete Culvert	31.10237 -81.215581
9	Concrete and Metal Rubble from Navigation Ranges	31.101763 -81.20279 08/05/2021
10	Concrete Culvert	31.101312 -81.212691
11	Concrete Culvert	31.101295 -81.213293
12	Concrete and Metal Rubble from Navigation Ranges	31.10115 -81.205154 08/05/2021
13	Concrete Culvert	31.100865 -81.213634
14	Concrete Culvert	31.100746 -81.214525
16	Concrete Culvert	31.100208 -81.214785
17	Concrete and Metal Rubble from Navigation Ranges	31.099716 -81.20403 08/05/2021
18	Concrete Culvert	31.099664 -81.2148
19	Concrete and Metal Rubble from Navigation Ranges	31.099524 -81.20535 08/05/2021
20	Concrete Culvert	31.099172 -81.206695 8/1/2015
21	55' Landing Craft Mechanized "LCM-6"	31.098998 -81.204358 9/1/1987
22	55' Landing Craft Mechanized "LCM-1"	31.098785 -81.208098 3/1/1987
23	Concrete Culvert	31.098251 -81.207476 8/1/2015
25	Concrete and Metal Rubble from Navigation Ranges	31.097502 -81.204956 08/05/2021

## F-North East



### Large and Clustered Structures

Concrete Rubble

Barge

Reef Boundary

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
8	Concrete Rubble	31.101856	-81.174967	
15	Concrete Rubble	31.100502	-81.195574	
24	Concrete Rubble	31.098167	-81.19166	
26	200' Deck Barge "Recchi GLF"	31.096602	-81.18728	5/1/1998

#### **Individual Structures**

- Concrete Rubble
- Concrete Culvert
- Barge

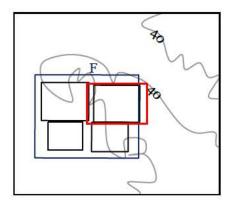
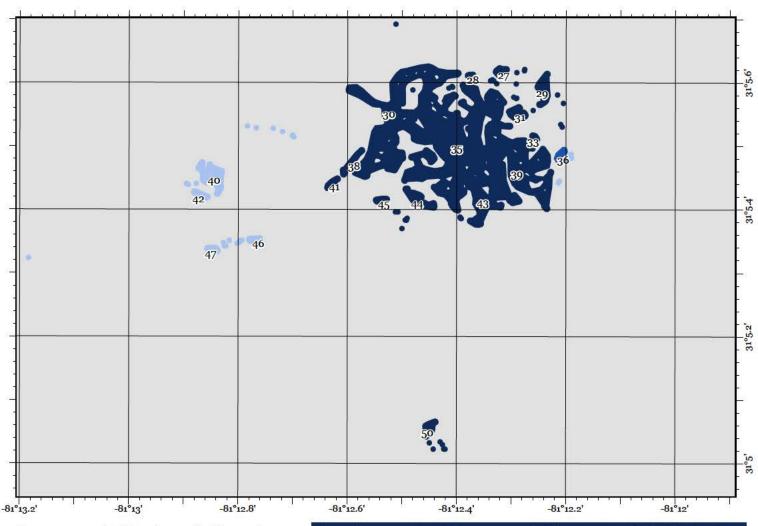




Figure 12b: F-North East inset of existing Georgia Artificial Reef habitat development. \$39\$

### F-South West

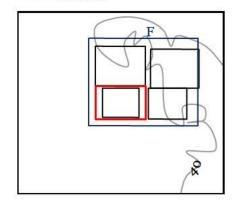


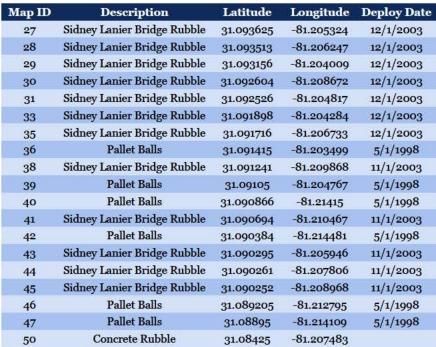
#### Large and Clustered Structures

- Concrete Rubble
- Mixed Concrete Materials
- Concrete Culvert
- Reef Ball
- Reef Boundary

#### **Individual Structures**

- Concrete Rubble
- Reef Ball

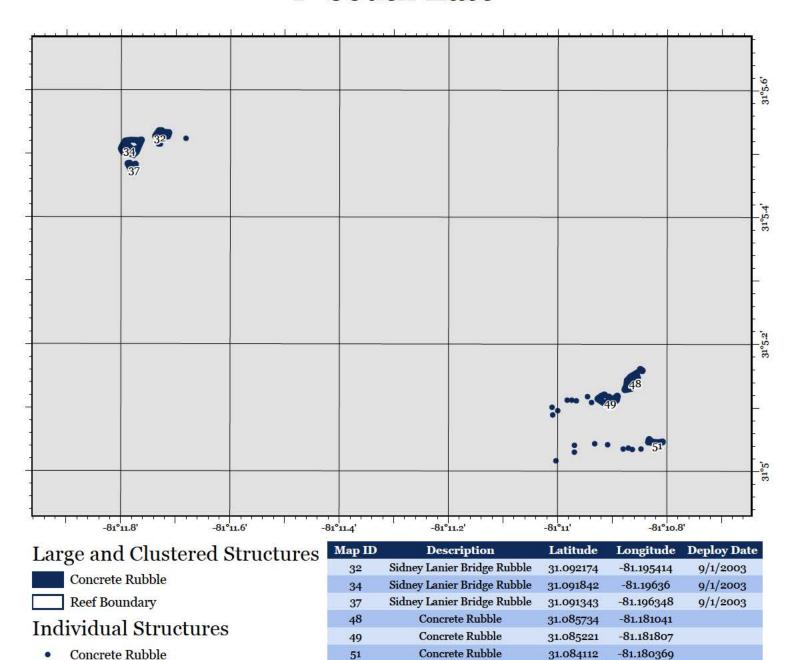




N

Figure 12c: F-South West inset of existing Georgia Artificial Reef habitat development.

### F-South East



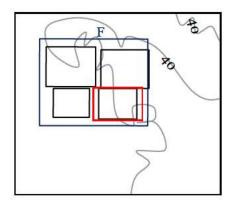
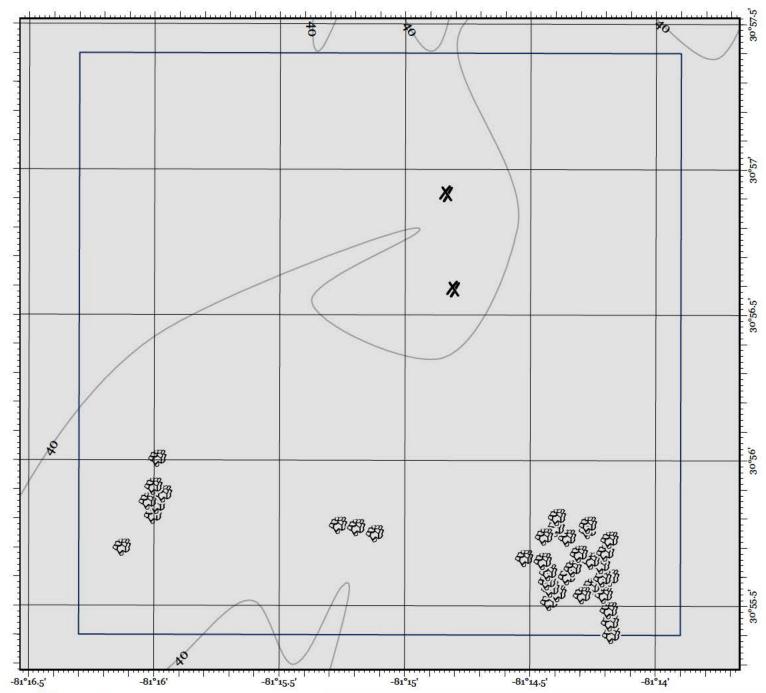




Figure 12d: F-South East inset of existing Georgia Artificial Reef habitat development. 41

### A



#### **Reef Structures**

Concrete Rubble

X Concrete Pole

Reef Boundary

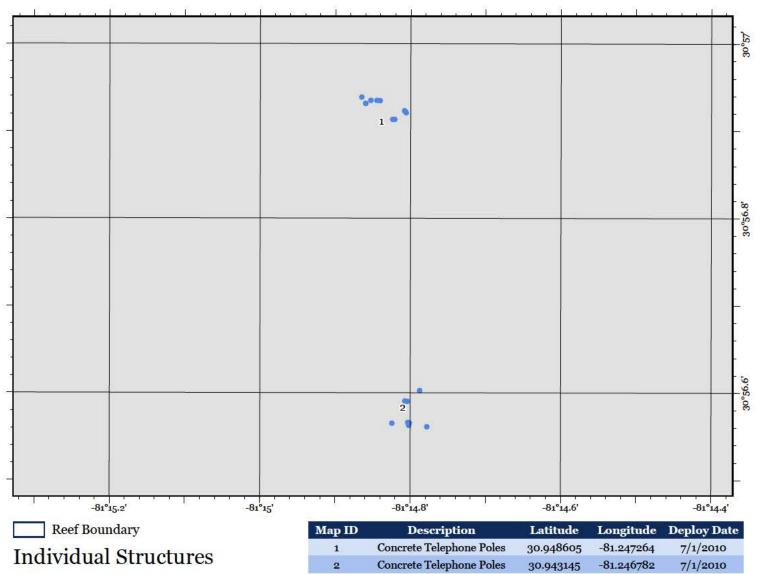
Description	Latitude	Longitude
NE Corner of Permitted Reef Area	30.956667	-81.231667
NW Corner of Permitted Reef Area	30.956667	-81.271667
SE Corner of Permitted Reef Area	30.923333	-81.231667
SW Corner of Permitted Reef Area	30.923333	-81.271667



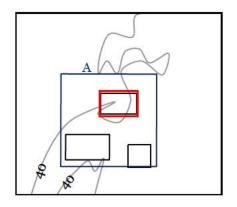


Figure 13: Existing habitat development at Georgia Artificial A, located approximately 7.0 NM East of Little Cumberland. Water depths at mean low water range from 30' to 45' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

## A-North



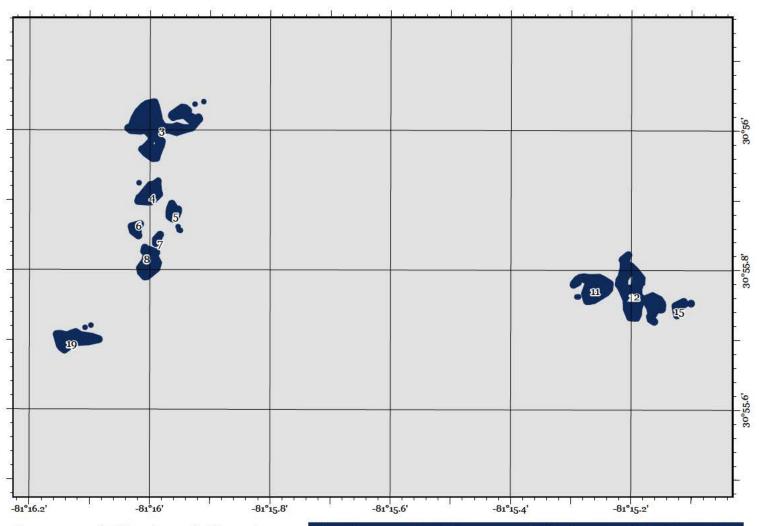
Concrete Pole



N

Figure 13a: A-North inset of existing Georgia Artificial Reef habitat development.

## A-South West



### Large and Clustered Structures

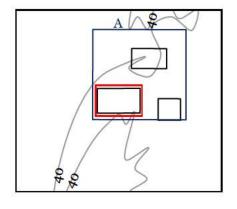
Concrete Rubble

Reef Boundary

#### **Individual Structures**

Concrete Rubble

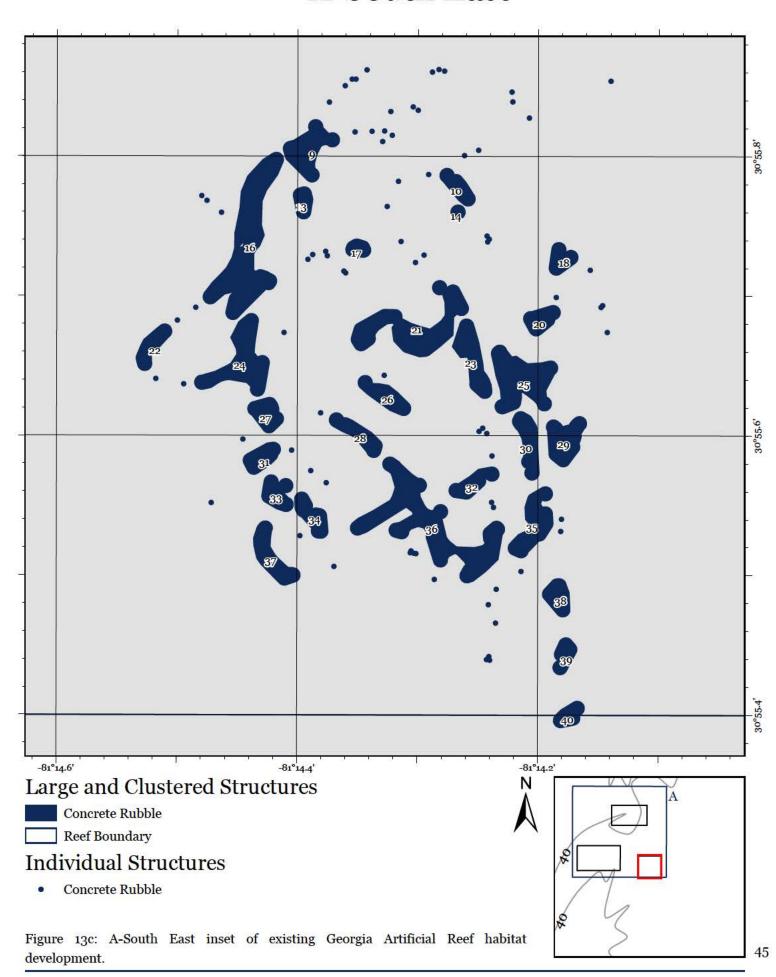
Map ID	Description	Latitude	Longitude	Deploy Date
3	Wharf Rubble	30.933423	-81.266406	6/1/1986
4	Wharf Rubble	30.931823	-81.266666	6/1/1986
5	Wharf Rubble	30.93138	-81.266021	6/1/1986
6	Wharf Rubble	30.930962	-81.267043	7/1/1991
7	Wharf Rubble	30.930727	-81.26645	7/1/1991
8	Wharf Rubble	30.930159	-81.26669	7/1/1991
11	Sidney Lanier Bridge Rubble	30.9296	-81.254389	10/1/2003
12	Sidney Lanier Bridge Rubble	30.929471	-81.253181	10/1/2003
15	Sidney Lanier Bridge Rubble	30.929127	-81.251942	10/1/2003
19	Wharf Rubble	30.928324	-81.268761	7/1/1991



N

Figure 13b: A-South West inset of existing Georgia Artificial Reef habitat development.

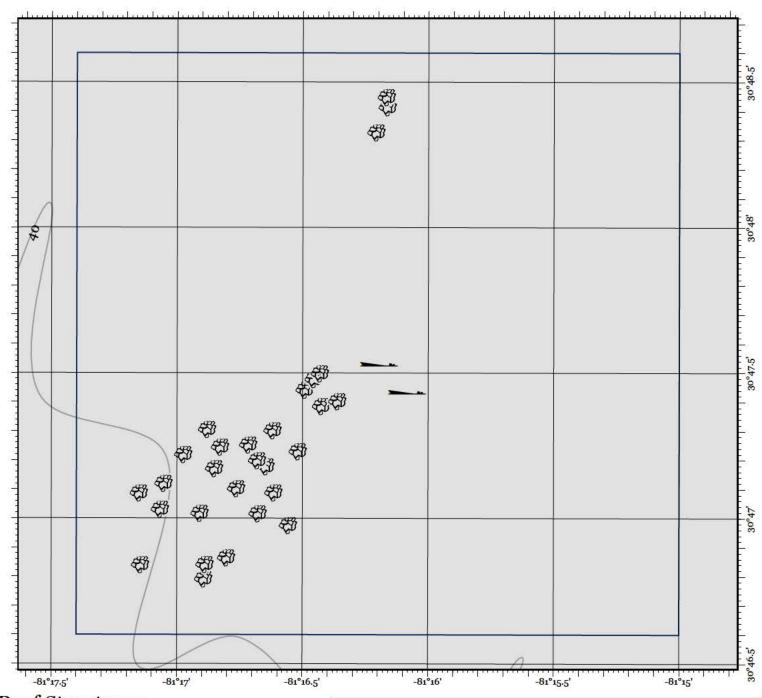
## **A-South East**



## **A-South East Continued**

Map ID	Description	Latitude Longitude Deploy Date
9	Concrete Rubble	30.930078 -81.239837
10	Concrete Rubble	30.929636 -81.237777
13	Concrete Rubble	30.92945 -81.239922
14	Concrete Rubble	30.929334 -81.237779
16	Concrete Rubble	30.928955 -81.240694
17	Concrete Rubble	30.928896 -81.23916
18	Concrete Rubble	30.928781 -81.236344
20	Concrete Rubble	30.928048 -81.236621
21	Concrete Rubble	30.927977 -81.238381
22	Concrete Rubble	30.927724 -81.242011
23	Concrete Rubble	30.927583 -81.237572
24	Concrete Rubble	30.927554 -81.240777
25	Concrete Rubble	30.927328 -81.236897
26	Concrete Rubble	30.927143 -81.238788
27	Concrete Rubble	30.926921 -81.240416
28	Concrete Rubble	30.926681 -81.239164
29	Concrete Rubble	30.926615 -81.236288
30	Concrete Rubble	30.92657 -81.236805
31	Concrete Rubble	30.926395 -81.240488
32	Concrete Rubble	30.9261 -81.23755
33	Concrete Rubble	30.925975 -81.240266
34	Concrete Rubble	30.925716 -81.239795
35	Concrete Rubble	30.925629 -81.236718
36	Concrete Rubble	30.925601 -81.238167
37	Concrete Rubble	30.925221 -81.240337
38	Concrete Rubble	30.924745 -81.236383
39	Concrete Rubble	30.924046 -81.236303
40	Concrete Rubble	30.923329 -81.236223

### **KBY**



#### **Reef Structures**



Reef Boundary

Description	Latitude	Longitude	
NE Corner of Permitted Reef Area	30.81	-81.25	
NW Corner of Permitted Reef Area	30.81	-81.29	
SE Corner of Permitted Reef Area	30.776667	-81.25	
SW Corner of Permitted Reef Area	30.776667	-81.29	



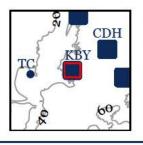
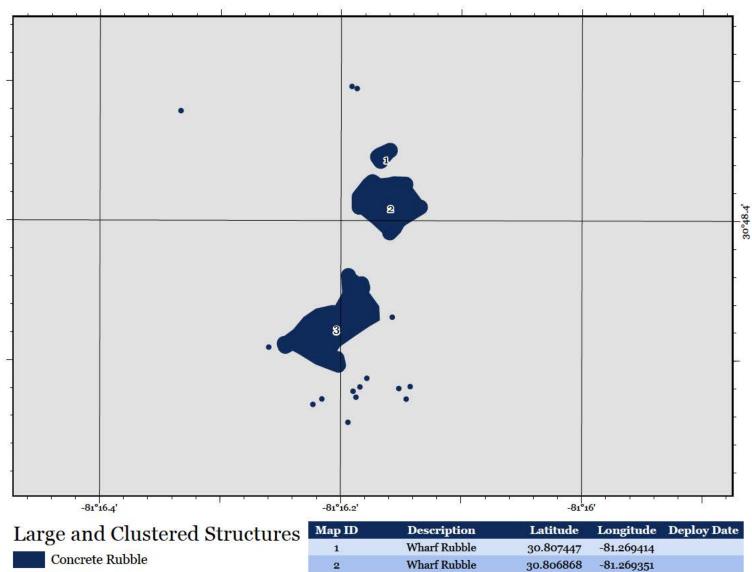


Figure 14: Existing habitat development at Georgia Artificial KBY, located approximately 8.0 NM East of Cumberland Island. Water depths at mean low water range from 35' to 45' and a minimum clearance of -22' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

## **KBY-North**



3

Concrete Rubble

	Reef Boundary
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marviduai Stru	ctures
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Concrete Rubble

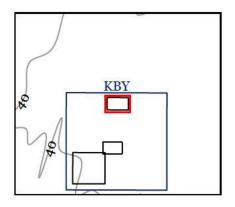




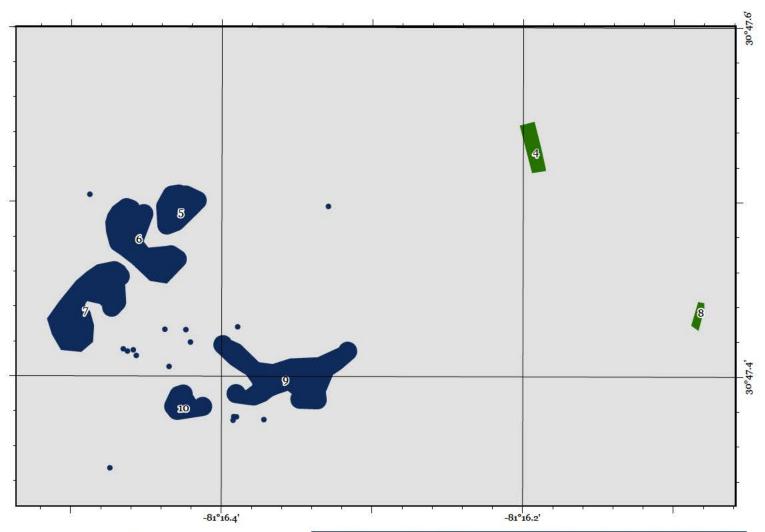
Figure 14a: KBY-North inset of existing Georgia Artificial Reef habitat development.

Wharf Rubble

30.805426

-81.270095

## **KBY-Center**



### Large and Clustered Structures

Concrete Rubble

Barge

Reef Boundary

#### **Individual Structures**

- Concrete Rubble
- Barge

Map ID	Description	Latitude	Longitude	Deploy Date
4	150' Dredge Barge	30.79219	-81.269892	8/1/2003
5	Wharf Rubble	30.791613	-81.273816	10/1/1991
6	Wharf Rubble	30.791279	-81.274227	10/1/1991
7	Wharf Rubble	30.790671	-81.27482	10/1/1991
8	90' Section Barge	30.790586	-81.26806	4/1/2004
9	Wharf Rubble	30.790016	-81.272653	10/1/1991
10	Wharf Rubble	30.789739	-81.273728	10/1/1991

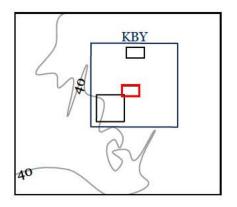
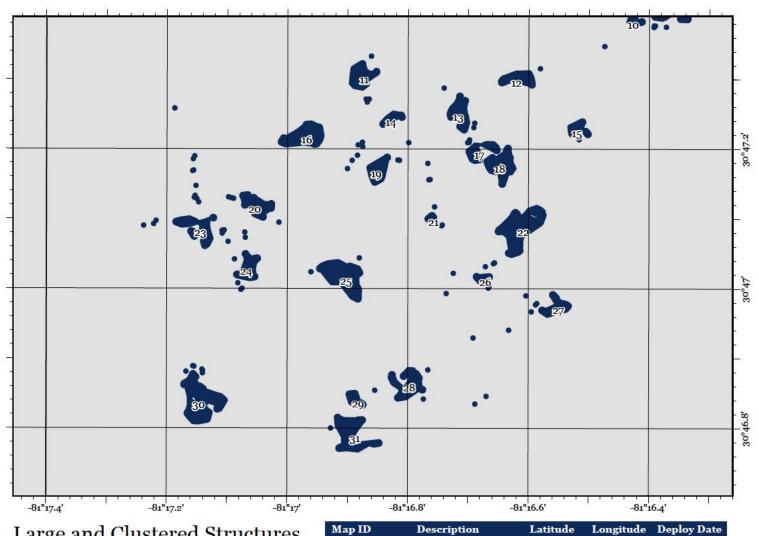


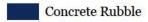


Figure 14b: KBY-Center inset of existing Georgia Artificial Reef habitat development.

## **KBY-South West**



### Large and Clustered Structures



#### In

Reef Boundary		13	Whart Rubble	30.787525	-81.27856	9/1/1991
		14	Wharf Rubble	30.7874	-81.280427	10/1/1991
ndividual Structures		15	Wharf Rubble	30.787143	-81.275272	9/1/1991
		16	Wharf Rubble	30.786971	-81.28287	10/1/1991
Concrete Rubble		17	Wharf Rubble	30.786627	-81.277971	9/1/1991
		18	Wharf Rubble	30.78628	-81.277408	9/1/1991
		19	Wharf Rubble	30.786168	-81.280817	8/1/1991
		20	Wharf Rubble	30.785319	-81.284176	8/1/1991
		21	Wharf Rubble	30.785019	-81.279354	9/1/1991
		22	Wharf Rubble	30.784783	-81.276881	9/1/1991
		23	Wharf Rubble	30.784765	-81.285809	8/1/1991
		24	Wharf Rubble	30.783833	-81.284409	8/1/1991
KBY N		25	Wharf Rubble	30.783606	-81.281779	8/1/1991
		26	Wharf Rubble	30.783586	-81.277924	9/1/1991
		27	Wharf Rubble	30.782914	-81.275908	11/1/1991
		28	Wharf Rubble	30.781057	-81.280011	11/1/1991
	200	29	Wharf Rubble	30.780671	-81.281439	11/1/1991
	Ņ	30	Wharf Rubble	30.780653	-81.285714	8/1/1991
	Λ	31	Wharf Rubble	30.779844	-81.281524	11/1/1991
(5)	$\wedge$					

11

12

Wharf Rubble

Wharf Rubble

30.788408

30.788344

-81.281288

-81.276948

10/1/1991

9/1/1991

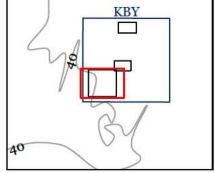


Figure 14c: KBY-South West inset of existing Georgia Artificial Reef habitat development.

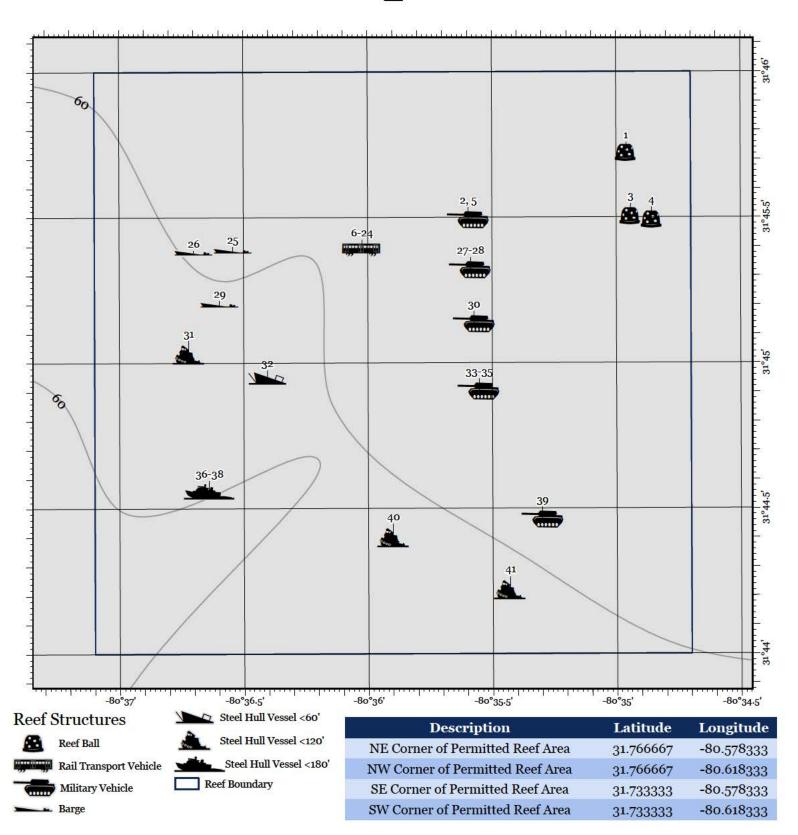




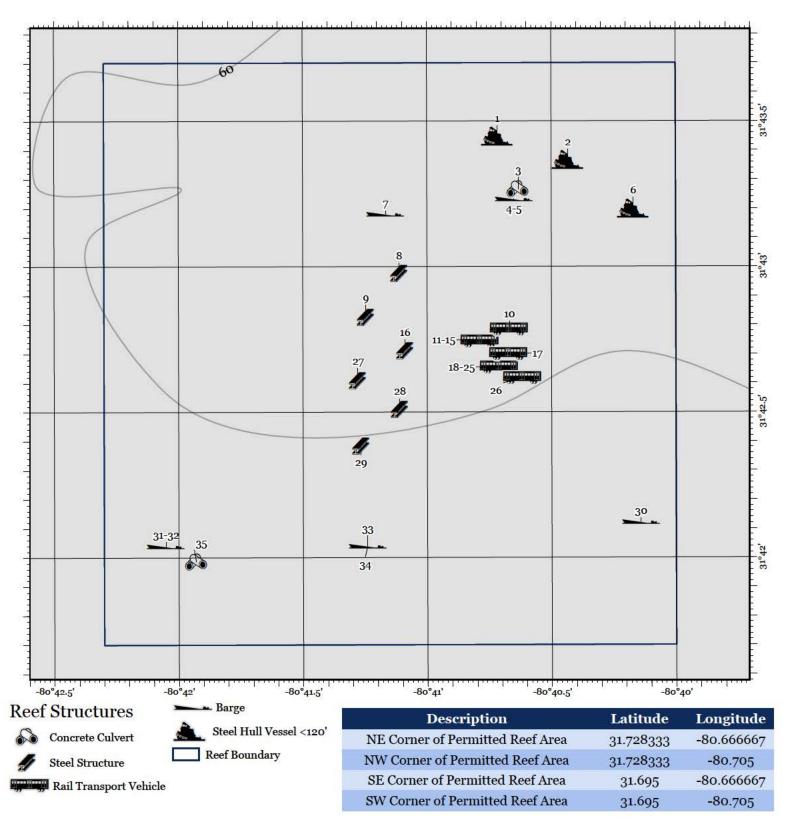


Figure 15: Existing habitat development at Georgia Artificial L, located approximately 23.0 NM East of Ossabaw Island. Water depths at mean low water range from 55' to 65' and a minimum clearance of -35' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# L Continued

Map ID	Description	Latitude	Longitude	Deploy Date
1	Pallet Reef Ball	31.762017	-80.582667	3/1/1998
2	M-60 Battle Tank	31.758583	-80.592317	8/1/1995
3	Pallet Reef Ball	31.7584	-80.582367	3/1/1998
4	Pallet Reef Ball	31.7582	-80.580967	3/1/1998
5	M-60 Battle Tank	31.7582	-80.59325	8/1/1995
6	Subway Car	31.75735	-80.600267	12/1/2002
7	Subway Car	31.757117	-80.6004	12/1/2002
8	Subway Car	31.75705	-80.6005	12/1/2002
9	Subway Car	31.75705	-80.600617	12/1/2002
10	Subway Car	31.757033	-80.60045	12/1/2002
11	Subway Car	31.757033	-80.6007	12/1/2002
12	Subway Car	31.756983	-80.6009	12/1/2002
13	Subway Car	31.756917	-80.6009	12/1/2002
14	Subway Car	31.756917	-80.600617	12/1/2002
15	Subway Car	31.756883	-80.600767	12/1/2002
16	Subway Car	31.75685	-80.600633	12/1/2002
17	Subway Car	31.75685	-80.5998	
18	Subway Car	31.7568	-80.600417	12/1/2002
19	Subway Car	31.7568	-80.6006	
20	Subway Car	31.756767	-80.600467	12/1/2002
21	Subway Car	31.75675	-80.600667	12/1/2002
22	Subway Car	31.756733	-80.60055	12/1/2002
23	Subway Car	31.75665	-80.600667	12/1/2002
24	Subway Car	31.756467	-80.600383	
25	Dredge "Henry Bacon"	31.756417	-80.60905	8/1/1978
26	Deck Barge "YFN 321"	31.756317	-80.611667	6/1/1977
27	M-60 Battle Tank	31.755417	-80.592933	8/1/1995
28	M-60 Battle Tank	31.755317	-80.5931	8/1/1995
29	Barge "Sayler - CBC 601"	31.753333	-80.609933	3/1/1977
30	M-60 Battle Tank	31.752217	-80.592883	8/1/1995
31	Tug "Senasqua - YTM 523"	31.7505	-80.612017	7/1/1985
32	Tug "Delta Diamond"	31.749133	-80.60675	12/1/1988
33	M-60 Battle Tank	31.748967	-80.5923	8/1/1995
34	M-60 Battle Tank	31.7488	-80.592433	8/1/1995
35	M-60 Battle Tank	31.748367	-80.59255	8/1/1995
36	Sailboat	31.743117	-80.61075	5/1/2008
37	Steel Hull Vessel	31.74265	-80.61065	5/1/2008
38	Tug "Jupiter"	31.742617	-80.610683	5/1/2008
39	M-60 Battle Tank	31.741033	-80.588333	8/1/1995
40	Tug "Reid McAllister"	31.74	-80.598333	10/1/2004
41	Tug "Barbara McAllister"	31.736983	-80.5905	10/1/2004

## CCA-JL





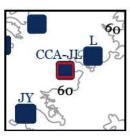
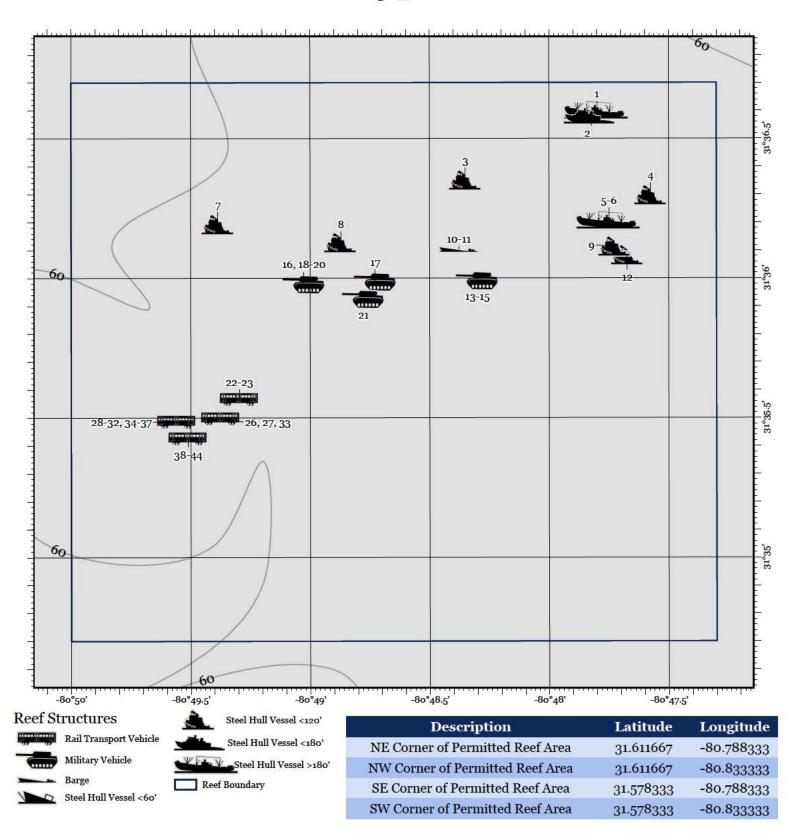


Figure 16: Existing habitat development at Georgia Artificial CCA-JL, located approximately 22.0 NM East of St Catherines Island. Water depths at mean low water range from 50' to 60' and a minimum clearance of -28' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# **CCA-JL Continued**

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Steel Trawler "Frank and Maria"	31.724144	-80.678602	6/3/2020
2	Tug "Devon"	31.722783	-80.673867	2/1/2004
3	Concrete Culvert	31.7211	-80.6772	3/1/2001
4	Warehouse Barge	31.720533	-80.6775	3/1/2001
5	Concrete Culvert	31.720533	-80.6775	3/1/2001
6	Tug "Matt Turecamo"	31.72	-80.6695	5/1/1996
7	Deck Barge	31.719667	-80.6861	7/1/2003
8	Bridge Supports "Talmadge"	31.716267	-80.6852	6/1/1992
9	Bridge Supports "Talmadge"	31.713767	-80.687433	6/1/1992
10	Subway Car	31.713067	-80.677817	12/1/2010
11	Subway Car	31.712967	-80.679333	12/1/2010
12	Subway Car	31.7128	-80.679617	12/1/2010
13	Subway Car	31.712433	-80.679183	12/1/2010
14	Subway Car	31.712417	-80.679783	12/1/2010
15	Subway Car	31.712183	-80.678883	12/1/2010
16	Bridge Supports "Talmadge"	31.711867	-80.684817	6/1/1992
17	Subway Car	31.71165	-80.677883	12/1/2010
18	Subway Car	31.711233	-80.678083	12/1/2010
19	Subway Car	31.711017	-80.677517	12/1/2010
20	Subway Car	31.710967	-80.677867	12/1/2010
21	Subway Car	31.710917	-80.678483	12/1/2010
22	Subway Car	31.7109	-80.677683	12/1/2010
23	Subway Car	31.710817	-80.677667	12/1/2010
24	Subway Car	31.710767	-80.678067	12/1/2010
25	Subway Car	31.710533	-80.678217	12/1/2010
26	Subway Car	31.710283	-80.67695	12/1/2010
27	Bridge Supports "Talmadge"	31.710151	-80.687976	6/1/1992
28	Bridge Supports "Talmadge"	31.708483	-80.685167	6/1/1992
29	Bridge Supports "Talmadge"	31.7064	-80.687783	6/1/1992
30	Hopper Barge	31.702017	-80.669033	4/1/2003
31	Deck Barge	31.70065	-80.700867	3/1/2001
32	Concrete Culvert	31.70065	-80.700867	3/1/2001
33	Deck Barge "TM 1157"	31.70065	-80.68735	6/1/1992
34	Deck Barge	31.70065	-80.68735	
35	Concrete Culvert	31.699767	-80.698833	5/1/2001

### JY





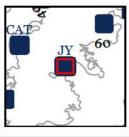
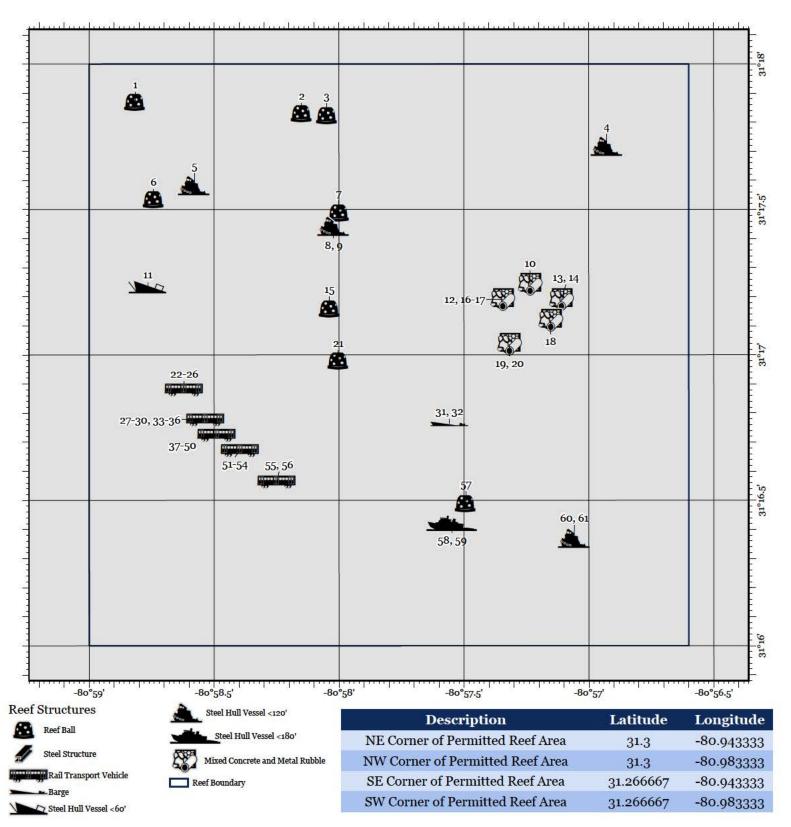


Figure 17: Existing habitat development at Georgia Artificial JY, located approximately 17.5 NM East of St Catherines Island. Water depths at mean low water range from 55' to 75' and a minimum clearance of -28' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# JY Continued

Map ID	Description	Latitude	Longitude	Deploy Date
1	Buoy Tender "Sagebrush" WLB399	31.61	-80.796667	6/1/1989
2	"Tangier Island" a 180-foot former menhaden fishing boat	31.609667	-80.797167	06/03/2020
3	Landing Craft	31.605833	-80.805833	7/1/2004
4	Ferry Boat "Janet"	31.604967	-80.792917	6/1/1987
5	Liberty Ship "SS Addie Bagley Daniels" (stern)	31.604333	-80.794667	7/1/1975
6	Liberty Ship "SS Addie Bagley Daniels" (main)	31.60345	-80.795833	7/1/1975
7	Tug "Rio Apon"	31.603217	-80.823083	10/1/2000
8	Tug "Margaret Turecamo"	31.602133	-80.814517	1/1/2007
9	"RV Jane Yarn"	31.6019	-80.795417	8/1/2007
10	Hopper Barge	31.601717	-80.8063	8/1/2002
11	Harbor Tug	31.601717	-80.8063	8/1/2002
12	Tug "El Mira"	31.601367	-80.79455	2/1/1980
13	M-60 Battle Tank	31.6006	-80.804917	8/1/1995
14	M-60 Battle Tank	31.599883	-80.805867	8/1/1995
15	M-60 Battle Tank	31.599833	-80.805	8/1/1995
16	M-60 Battle Tank	31.599817	-80.816367	8/1/1995
17	M-60 Battle Tank	31.599783	-80.812133	8/1/1995
18	M-60 Battle Tank	31.599783	-80.8166	8/1/1995
19	M-60 Battle Tank	31.599633	-80.8171	8/1/1995
20	M-60 Battle Tank	31.599367	-80.817117	8/1/1995
21	M-60 Battle Tank	31.598733	-80.81295	8/1/1995
22	Subway Car	31.592767	-80.821617	12/1/2009
23	Subway Car	31.5924	-80.821667	12/1/2009
24	Subway Car	31.5924	-80.8216	12/1/2009
25	Subway Car	31.59205	-80.822183	12/1/2009
26	Subway Car	31.591617	-80.8229	12/1/2009
27	Subway Car	31.591433	-80.822983	12/1/2009
28	Subway Car	31.591433	-80.825967	12/1/2009
29	Subway Car	31.591217	-80.82575	12/1/2009
30	Subway Car	31.59115	-80.825467	12/1/2009
31	Subway Car	31.59115	-80.825567	12/1/2009
32	Subway Car	31.5911	-80.826233	12/1/2009
33	Subway Car	31.591067	-80.823233	12/1/2009
34	Subway Car	31.591033	-80.8257	12/1/2009
35	Subway Car	31.591033	-80.825767	12/1/2009
36	Subway Car	31.591	-80.826483	12/1/2009
37	Subway Car	31.590983	-80.82645	12/1/2009
38	Subway Car	31.590933	-80.825417	12/1/2009
39	Subway Car	31.590783	-80.825383	12/1/2009
40	Subway Car	31.59065	-80.824567	12/1/2009
41	Subway Car	31.590633	-80.82495	12/1/2009
42	Subway Car	31.590617	-80.824217	12/1/2009
43	Subway Car	31.590467	-80.825083	12/1/2009
44	Subway Car	31.590417	-80.825183	12/2/2009

#### DRH





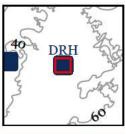
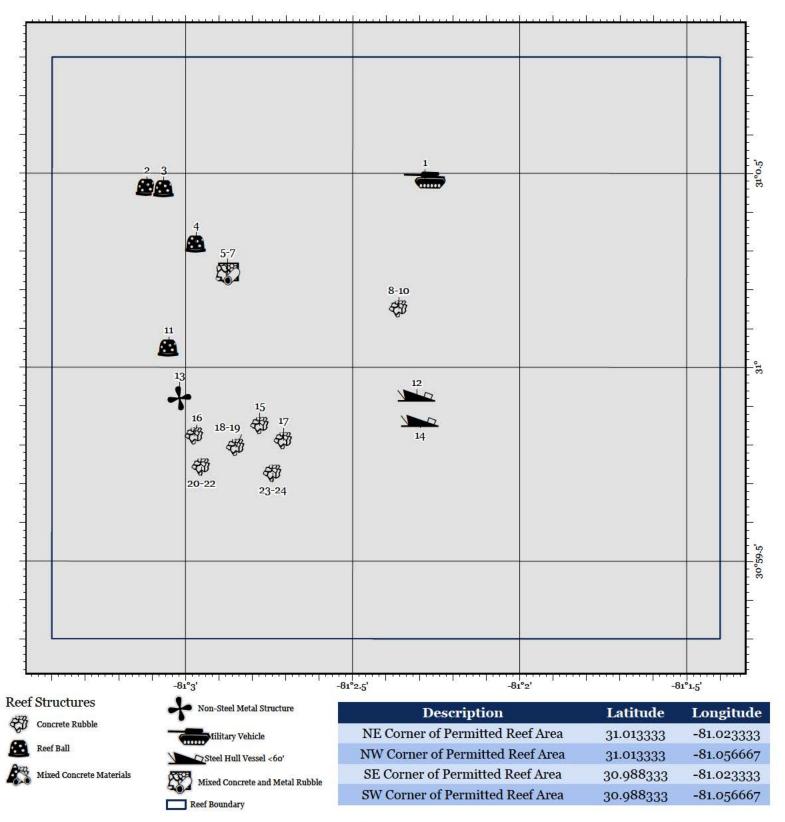


Figure 18: Existing habitat development at Georgia Artificial DRH, located approximately 15.0 NM East of Little St Simons. Water depths at mean low water range from 45' to 55' and a minimum clearance of -28' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# **DRH** Continued

W. TD	<b>D</b>	Y	T	D. J. D.
Map ID	Description	Latitude	Longitude	Deploy Date
1	Modified Pallet Ball	31.2978	-80.98025	5/1/1998
2	Stevens Cone	31.29715	-80.96915	12/1/2006
3	Modified Pallet Ball	31.297033	-80.967483	12/1/1999
4	Tug "Vincent Turecamo"	31.295283	-80.9488	4/1/2004
5	steel hull trawler "Cpt Conner"	31.293032	-80.976305	08/09/2021
6	Modified Pallet Ball	31.292217	-80.979033	11/1/2000
7	Modified Pallet Ball	31.29145	-80.966683	3/1/2000
8	"RV Zapala"	31.290683	-80.967017	10/1/2000
9	Modified Pallet Ball	31.290367	-80.967383	11/1/2000
10	poultry transport cages, concrete rubble, and pallet balls	31.287394	-80.953907	08/27/2018
11	Wreck "John Bird"	31.2872	-80.979417	
12	poultry transport cages, concrete rubble, and pallet balls	31.286514	-80.955728	08/27/2018
13	poultry transport cages, concrete rubble, and pallet balls	31.286488	-80.951819	08/27/2018
14	poultry transport cages, concrete rubble, and pallet balls	31.286274	-80.95321	08/27/2018
15	Modified Pallet Ball	31.28595	-80.9673	11/1/2000
16	poultry transport cages, concrete rubble, and pallet balls	31.285817	-80.954341	08/27/2018
17	poultry transport cages, concrete rubble, and pallet balls	31.285361	-80.955848	08/27/2018
18	poultry transport cages, concrete rubble, and pallet balls	31.2853	-80.952538	08/27/2018
19	poultry transport cages, concrete rubble, and pallet balls	31.28458	-80.953826	08/27/2018
20	poultry transport cages, concrete rubble, and pallet balls	31.283932	-80.955286	08/27/2018
21	Modified Pallet Ball	31.282983	-80.966717	11/1/2000
22	Subway Car	31.28185	-80.977783	7/1/2009
23	Subway Car	31.281517	-80.976617	7/1/2009
24	Subway Car	31.281467	-80.976733	7/1/2009
25	Subway Car	31.28135	-80.976983	7/1/2009
26	Subway Car	31.28115	-80.976583	7/1/2009
27	Subway Car	31.28025	-80.976033	7/1/2009
28	Subway Car	31.279967	-80.975667	7/1/2009
29	Subway Car	31.279833	-80.975733	7/1/2009
30	Subway Car	31.279633	-80.975567	7/1/2009
31	Barge "Sapelo II"	31.2794	-80.9593	6/1/2006
32	Poultry Transport Cages	31.2794	-80.9593	6/1/2006
33	Subway Car	31.279233	-80.975367	7/1/2009
34	Subway Car	31.279167	-80.975767	7/1/2009
35	Subway Car	31.279083	-80.975517	7/1/2009
36	Subway Car	31.27905	-80.975083	7/1/2009
37	Subway Car	31.27895	-80.9751	7/1/2009
38	Subway Car	31.27895	-80.974767	7/1/2009
39	Subway Car	31.27895	-80.9747	7/1/2009
40	Subway Car	31.278917	-80.974683	7/1/2009
41	Subway Car	31.278917	-80.97455	7/1/2009
42	Subway Car	31.2789	-80.97535	7/1/2009
43	Subway Car	31.278867	-80.975067	7/1/2009
44	Subway Car	31.27885	-80.974583	7/1/2009
45	Subway Car	31.278833	-80.974483	7/1/2009
46	Subway Car	31.278783	-80.975133	7/1/2009
47	Subway Car	31.27875	-80.974817	7/1/2009
48	Subway Car	31.278617	-80.974267	7/1/2009
49	Subway Car	31.278567	-80.974133	7/1/2009
50	Subway Car	31.278467	-80.973983	7/1/2009
51	Subway Car	31.278083	-80.973483	7/1/2009
52	Subway Car	31.277983	-80.973817	7/1/2009
53	Subway Car	31.277883	-80.973533	7/1/2009
54	Subway Car	31.277867	-80.973267	7/1/2009
55	Subway Car	31.27605	-80.970817	7/1/2009
56	Subway Car	31.27515	-80.970833	7/1/2009
57	Modified Pallet Ball	31.274817	-80.9582	10/1/2012
58	Subway Car	31.273917	-80.95925	7/1/2009
59	Cargo Vessel "Oriental Trader"	31.273683	-80.959117	9/1/2006
60	Tug "Rio Caroni	31.272833	-80.950967	10/1/2000
61	Modified Pallet Ball	31.27235	-80.950233	11/1/2000
31	Mountou I and Dall	J1.2/233	00.900200	11, 1, 2000

### **SFC**





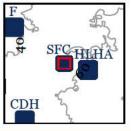
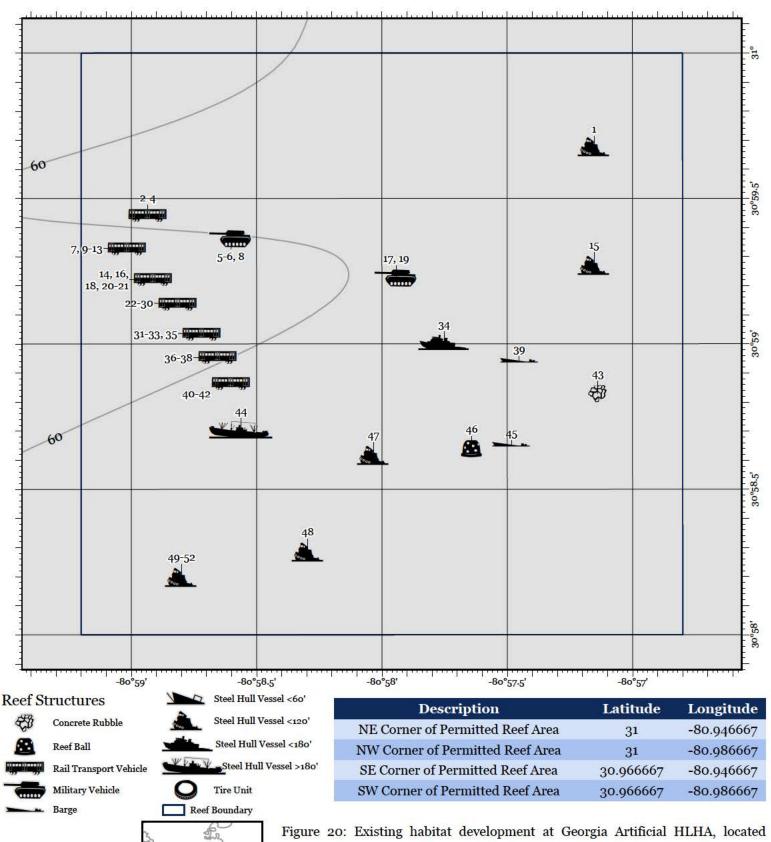


Figure 19: Existing habitat development at Georgia Artificial SFC, located approximately 18.0 NM East of Little Cumberland Island. Water depths at mean low water range from 45' to 55' and a minimum clearance of -28' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# SFC Continued

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	M-60 Battle Tank	31.00805	-81.03805	8/1/1995
2	Modified Pallet Balls	31.007717	-81.051933	4/1/2001
3	Ultra Reef Balls	31.007667	-81.051083	8/1/2002
4	Modified Pallet Balls	31.005283	-81.049467	4/1/2001
5	1 M-60 Battle Tank, Ultra Reef Balls, & Concrete Culvert	31.004	-81.0479	8/1/1995
6	Ultra Reef Balls & Concrete Culvert	31.0039	-81.04765	8/1/2002
7	M-60 Battle Tank	31.003733	-81.048167	8/1/1995
8	Bridge Rubble "Sidney Lanier"	31.00255	-81.039967	1/1/2004
9	Bridge Rubble "Sidney Lanier"	31.002517	-81.039367	12/1/2003
10	Bridge Rubble "Sidney Lanier"	31.001933	-81.03935	1/1/2004
11	Modified Pallet Balls	31.000833	-81.050833	4/1/2001
12	Landing Craft Mechanized "Scalper"	30.9988	-81.038467	4/1/1984
13	Propeller and rudder, salvaged from the "Golden Ray"	30.998667	-81.050283	01/06/2020
14	Landing Craft Mechanized "Optimist"	30.9977	-81.0383	3/1/1983
15	Concrete Rubble	30.9975	-81.046283	12/6/2017
16	Concrete Rubble	30.99705	-81.04955	12/6/2017
17	Concrete Rubble	30.99685	-81.045117	12/6/2017
18	Concrete Rubble	30.99662	-81.046363	12/6/2017
19	Concrete Rubble	30.996558	-81.047492	12/6/2017
20	Concrete Rubble	30.9964	-81.049	12/6/2017
21	Concrete Rubble	30.996167	-81.050067	12/6/2017
22	Concrete Rubble	30.99572	-81.049209	12/6/2017
23	Concrete Rubble	30.99565	-81.046517	12/6/2017
24	Concrete Rubble	30.99545	-81.04565	12/6/2017

### HLHA





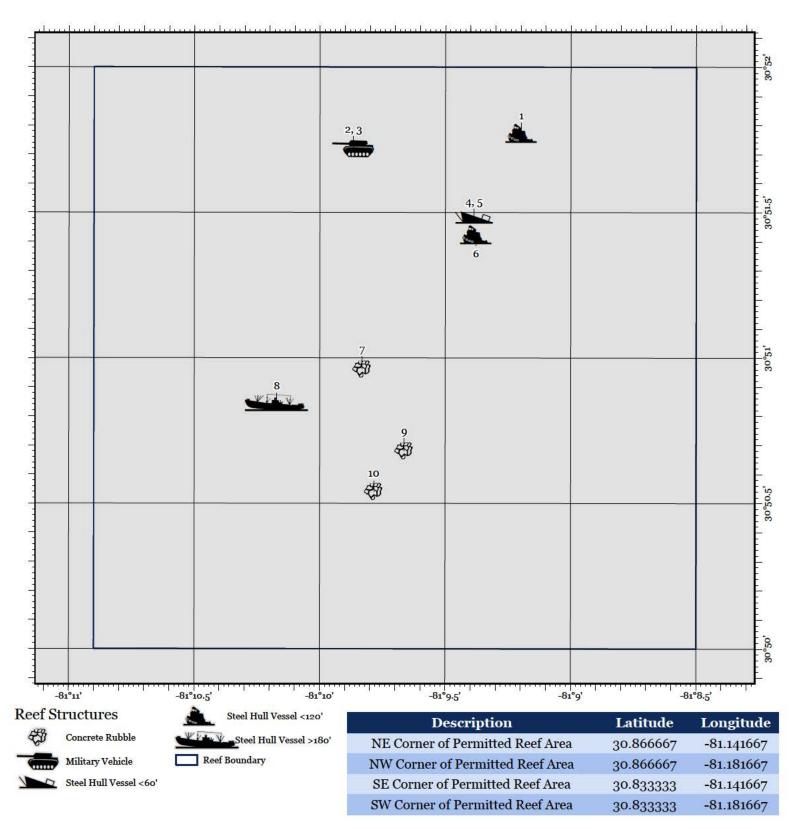


approximately 23.0 NM East of Little Cumberland Island. Water depths at mean low water range from 55' to 75' and a minimum clearance of -35' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# **HLHA** Continued

Map ID	Description	Latitude	Longitude	Deploy Date
1	Tug "McAllister"	30.994633	-80.95255	11/1/2003
2	Subway Car	30.9907	-80.982233	11/1/2008
3	Subway Car	30.990483	-80.983783	11/1/2008
4	Subway Car	30.990233	-80.9826	11/1/2008
5	Sailboat "Grace"	30.990233	-80.976133	8/1/2005
6	M-60 Battle Tank	30.989567	-80.976433	8/1/1995
7	Subway Car	30.989367	-80.981417	11/1/2008
8	M-60 Battle Tank	30.98935	-80.976717	8/1/1995
9	Subway Car	30.989167	-80.98095	11/1/2008
10	Subway Car	30.989117	-80.982883	11/1/2008
11	Subway Car	30.98885	-80.982783	11/1/2008
12	Subway Car	30.988767	-80.983583	11/1/2008
13	Subway Car	30.988667	-80.983067	11/1/2008
14	Subway Car	30.987867	-80.98035	11/1/2008
15	Tug "Mac Tide 21"	30.987817	-80.95255	10/1/2000
16	Subway Car	30.9877	-80.982467	11/1/2008
17	M-60 Battle Tank	30.9871	-80.965717	8/1/1995
18	Subway Car	30.987033	-80.98185	11/1/2008
19	M-60 Battle Tank	30.9868	-80.9655	8/1/1995
20	Subway Car	30.986717	-80.981233	11/1/2008
21	Subway Car	30.9863	-80.981	11/1/2008
22	Subway Car	30.9862	-80.980667	11/1/2008
23	Subway Car	30.986083	-80.98075	11/1/2008
24	Subway Car	30.98605	-80.980767	11/1/2008
25	Subway Car	30.9859	-80.979983	11/1/2008
26	Subway Car	30.985733	-80.980483	11/1/2008
27	Subway Car	30.985617	-80.980217	11/1/2008
28	Subway Car	30.985233	-80.980033	11/1/2008
29	Subway Car	30.9852	-80.979217	11/1/2008
30	Subway Car	30.984817	-80.97955	11/1/2008
31	Subway Car	30.984583	-80.979317	11/1/2008
32	Subway Car	30.9845	-80.979467	11/1/2008
33	Subway Car	30.983883	-80.97865	11/1/2008
34	"RV Bowstring"	30.983417	-80.962533	11/1/2003
35	Subway Car	30.9833	-80.97835	11/1/2008
36	Subway Car	30.983167	-80.977267	11/1/2008
37	Subway Car	30.982883	-80.978067	11/1/2008
38	Subway Car	30.982567	-80.977583	11/1/2008
39	Northern Hopper Barge	30.9824	-80.957533	6/1/2002
40	Subway Car	30.981983	-80.975883	11/1/2008
41	Subway Car	30.98185	-80.97755	11/1/2008
42	Subway Car	30.981083	-80.976683	11/1/2008
43	Concrete Rubble	30.980483	-80.9523	8/1/2007
44	Liberty Ship "SS Edwin Nettleton"	30.9784	-80.976033	5/1/1975
45	Southern Hopper Barge	30.977583	-80.95805	6/1/2002
46	Stevens Cone	30.977317	-80.9607	
47	Tug "Recife"	30.97695	-80.967233	4/1/1986
48	Tug "Kinsale"	30.9714	-80.9716	8/1/2007
49	Tire Unit	30.9705	-80.979783	1/1/1974
50	Tire Unit	30.970267	-80.98015	2/1/1974
51	Tug "Tampa"	30.969967	-80.98	7/1/1973
52	Tire Unit	30.969867	-80.980417	1/1/1974

#### CDH





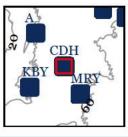
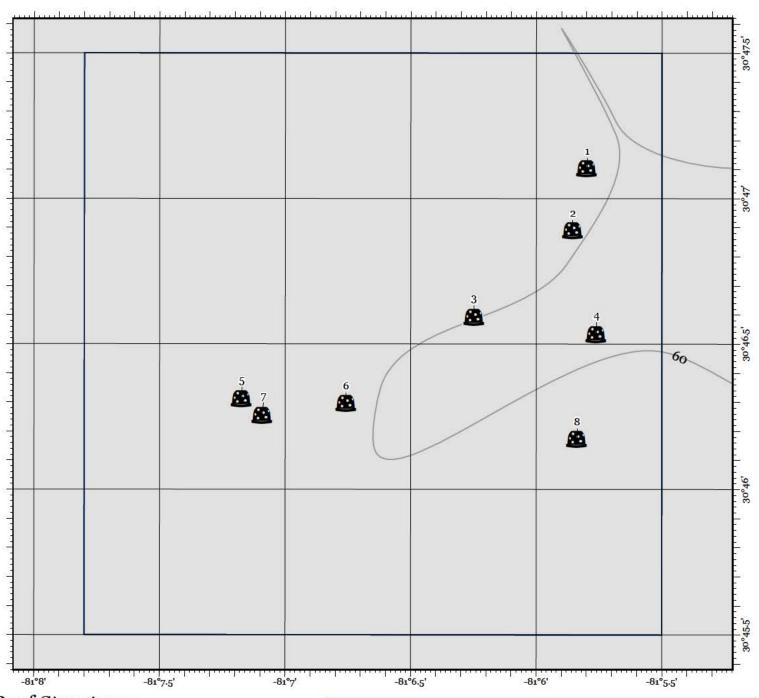


Figure 21: Existing habitat development at Georgia Artificial CDH, located approximately 13.5 NM East of Cumberland Island. Water depths at mean low water range from 45' to 55' and a minimum clearance of -28' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# **CDH Continued**

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Tug "Euwin St. Phillips"	30.862883	-81.153283	10/1/2004
2	M-60 Battle Tanks	30.862	-81.16445	8/1/1995
3	M-60 Battle Tanks	30.861683	-81.1641	8/1/1995
4	Steel-Hull Powerboat	30.85805	-81.156433	4/1/2007
5	Sailboat	30.857767	-81.156367	4/1/2007
6	Trawler "Rachael"	30.857067	-81.1563	1/1/2006
7	Wharf Rubble	30.849367	-81.16385	5/1/1986
8	3365 ton Cargo Ship "Esparta" WWII Shipwreck	30.847417	-81.169517	04/09/1942
9	Wharf Rubble	30.844683	-81.16105	7/1/1991
10	Wharf Rubble	30.84235	-81.163067	7/1/1991

### **MRY**



#### **Reef Structures**



Reef Ball



Reef Boundary

Description	Latitude	Longitude
NE Corner of Permitted Reef Area	30.791667	-81.091667
NW Corner of Permitted Reef Area	30.791667	-81.13
SE Corner of Permitted Reef Area	30.758333	-81.091667
SW Corner of Permitted Reef Area	30.758333	-81.13



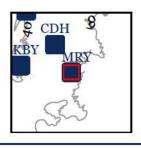
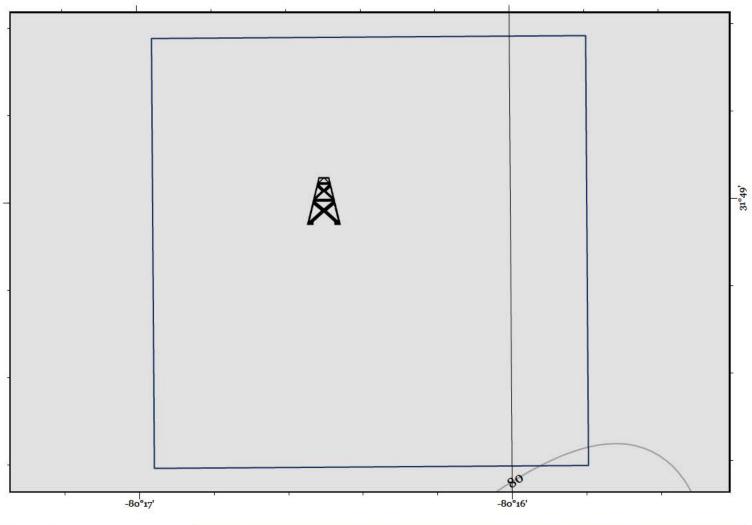


Figure 22: Existing habitat development at Georgia Artificial MRY, located approximately 18.0 NM East of Cumberland Island. Water depths at mean low water range from 50' to 60' and a minimum clearance of -46' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# **MRY Continued**

Map ID	Description	Latitude	Longitude	Deploy Date
1	Pallet Reef Ball	30.785067	-81.096633	4/1/2000
2	Pallet Reef Ball	30.7815	-81.097583	4/1/2000
3	Pallet Reef Ball	30.776517	-81.104133	4/1/2000
4	Modified Pallet Reef Ball	30.775533	-81.096	5/1/2001
5	Pallet Reef Ball	30.771833	-81.119533	6/1/1998
6	Pallet Reef Ball	30.771583	-81.112617	6/1/1998
7	Pallet Reef Ball	30.770917	-81.118183	6/1/1998
8	Modified Pallet Reef Ball	30.769533	-81.097283	5/1/2001

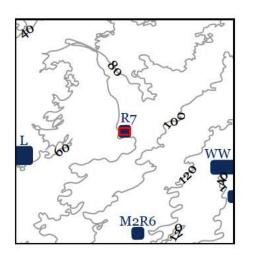


**Reef Structures** 

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Navy Tactical AirCrew Training System (TACTS) Tower	31.816667	-80.275	



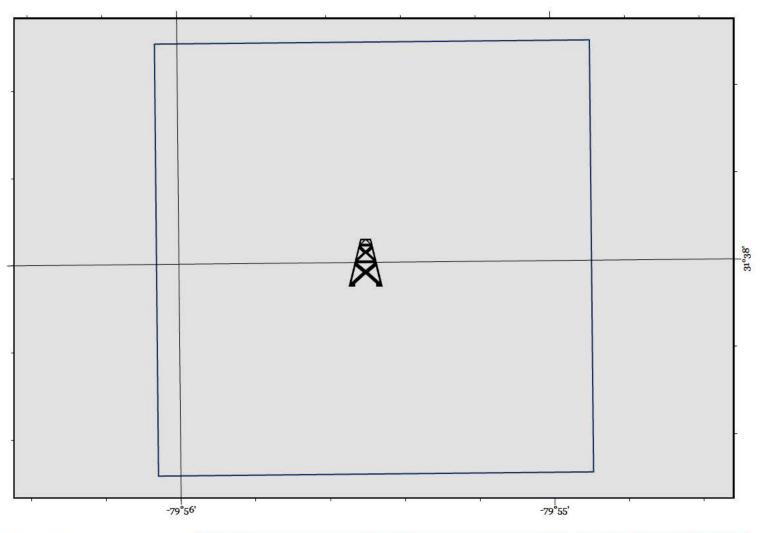
Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.822917	-80.26325
$\Lambda$	NW Corner of Permitted Reef Area	31.822917	-80.282667
	SE Corner of Permitted Reef Area	31.8065	-80.26325
33 - 13	SW Corner of Permitted Reef Area	21 8065	-80 282667

Figure 23: Existing habitat development at Georgia Artificial R7, located approximately 40.0 NM East of Ossabaw Island. Water depths at mean low water range from 84.00' to 84.00' and a minimum clearance of -40' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### **R8**

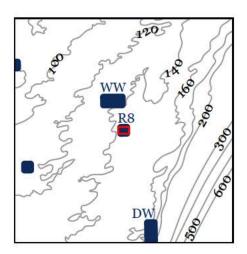


**Reef Structures** 

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Navy Tactical AirCrew Training System (TACTS) Tower	31.633333	-79.925	



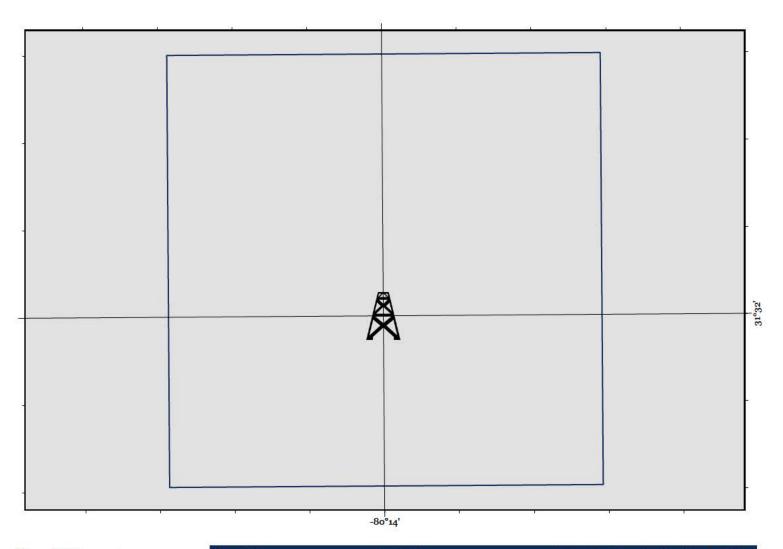
Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.64175	-79.914917
$\Lambda$	NW Corner of Permitted Reef Area	31.64175	-79.934333
$\wedge$	SE Corner of Permitted Reef Area	31.62525	-79.914917
33 19	SW Corner of Permitted Reef Area	21 62525	-70 02/1222

Figure 24: Existing habitat development at Georgia Artificial R8, located approximately 64.0 NM East of St Catherine Island. Water depths at mean low water range from 144.00' to 144.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

## **M2R6**

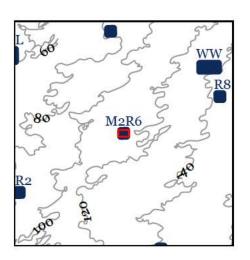


**Reef Structures** 

Map ID	Description	Latitude	Longitude	Deploy Date
1	Navy Tactical AirCrew Training System (TACTS) Tower	31.533333	-80.233333	



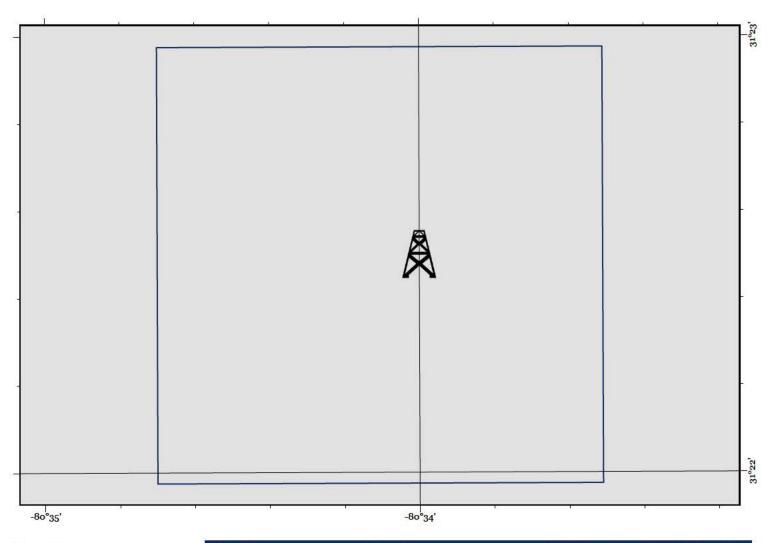
Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.543333	-80.223583
	NW Corner of Permitted Reef Area	31.543333	-80.242917
	SE Corner of Permitted Reef Area	31.526833	-80.223583
	SW Corner of Permitted Reef Area	31 526833	-80.242017

Figure 25: Existing habitat development at Georgia Artificial M2R6, located approximately 49.0 NM East of Blackbeard Island. Water depths at mean low water range from 102.00' to 102.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### R<sub>2</sub>

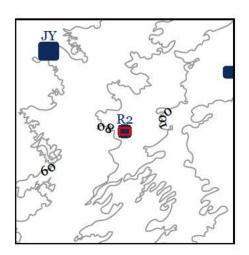


**Reef Structures** 

Map ID	Description	Latitude	Longitude	Deploy Date
1	Navy Tactical AirCrew Training System (TACTS) Tower	31.375	-80.566667	

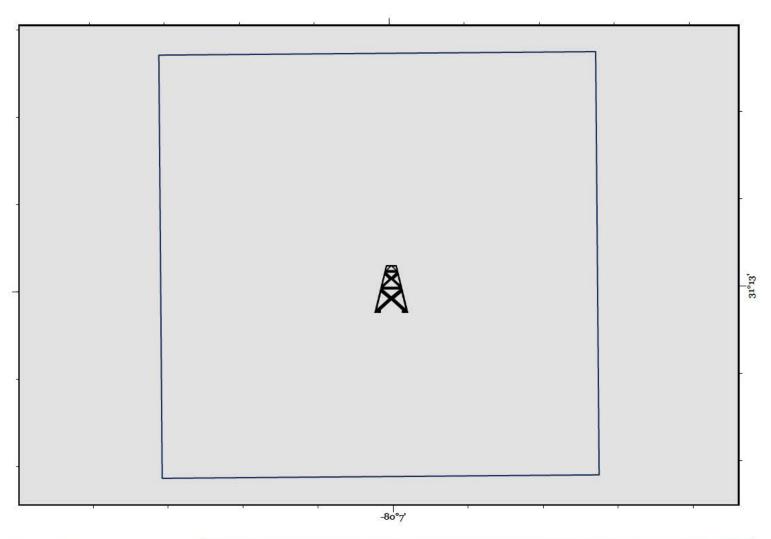


Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.382917	-80.5585
$\Lambda$	NW Corner of Permitted Reef Area	31.382917	-80.578333
$\wedge$	SE Corner of Permitted Reef Area	31.36625	-80.5585
200 101	SW Corner of Permitted Reef Area	21 26625	-80 578222

Figure 26: Existing habitat development at Georgia Artificial R2, located approximately 38.0 NM East of Sapelo Island. Water depths at mean low water range from 72.00' to 72.00' and a minimum clearance of -35' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

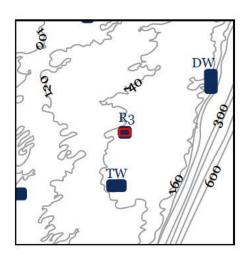


**Reef Structures** 

Map ID	Description	Latitude	Longitude	Deploy Date
1	Navy Tactical AirCrew Training System (TACTS) Tower	31.216667	-80.116667	



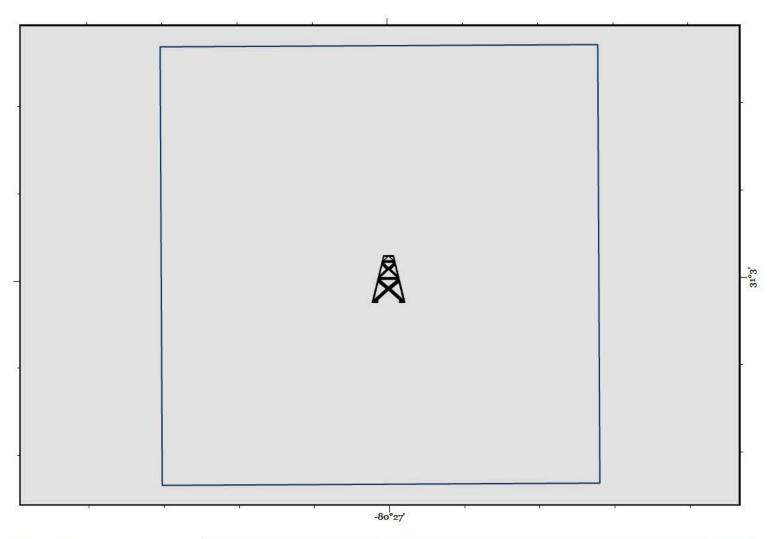
Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.225667	-80.1075
$\Lambda$	NW Corner of Permitted Reef Area	31.225667	-80.126917
$\wedge$	SE Corner of Permitted Reef Area	31.2095	-80.1075
32 50	SW Corner of Permitted Reef Area	31 2005	-80 126017

Figure 27: Existing habitat development at Georgia Artificial R3, located approximately 62.0 NM East of St Simons Island. Water depths at mean low water range from 102.00' to 102.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

### M<sub>1</sub>R<sub>1</sub>

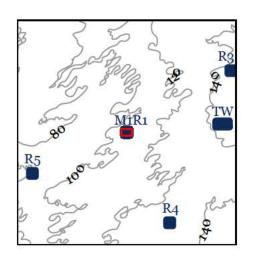


**Reef Structures** 

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Navy Tactical AirCrew Training System (TACTS) Tower	31.05	-80.45	



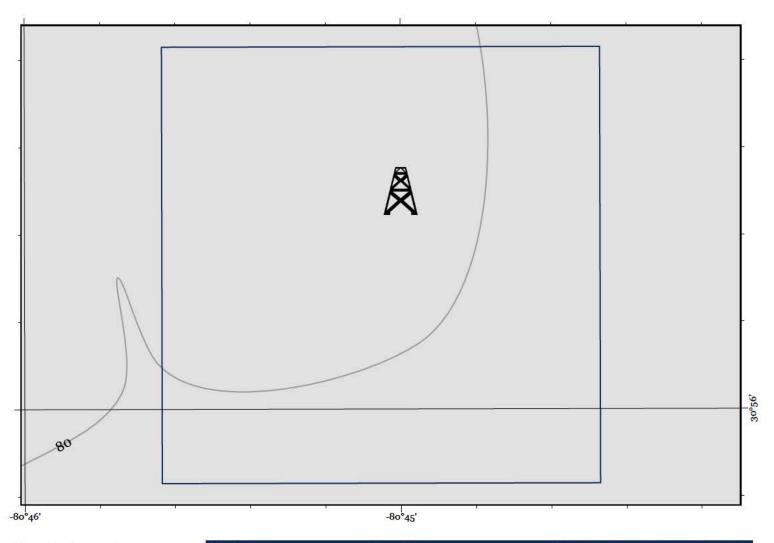
Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.058917	-80.440667
$\Lambda$	NW Corner of Permitted Reef Area	31.058917	-80.460083
$\wedge$	SE Corner of Permitted Reef Area	31.042167	-80.440667
MA TH	SW Corner of Permitted Reef Area	31 042167	-80 460083

Figure 28: Existing habitat development at Georgia Artificial M1R1, located approximately 50.0 NM East of Jekyll Island. Water depths at mean low water range from 102.00' to 102.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

# **R**5

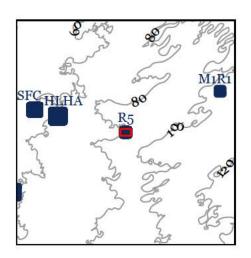


**Reef Structures** 

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Navy Tactical AirCrew Training System (TACTS) Tower	30.941667	-80.75	

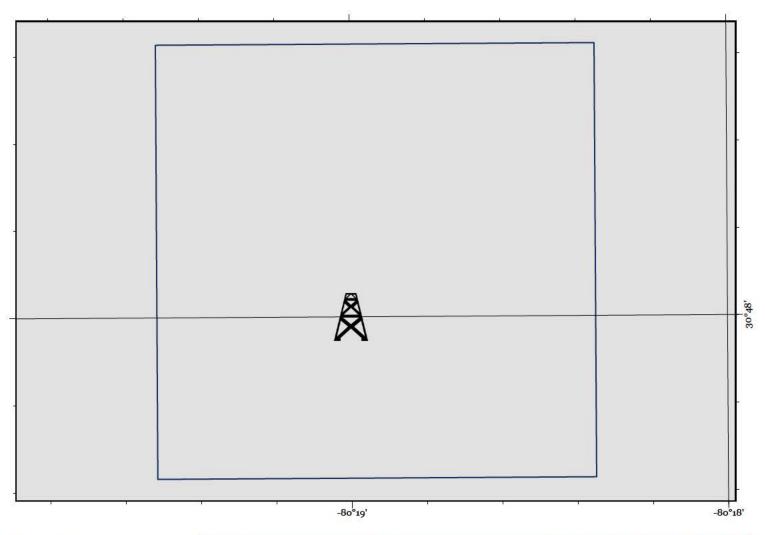


Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	30.947167	-80.741167
$\Lambda$	NW Corner of Permitted Reef Area	30.947167	-80.760583
$\wedge$	SE Corner of Permitted Reef Area	30.9305	-80.741167
HA III	SW Corner of Permitted Reef Area	30.9305	-80.760583

Figure 29: Existing habitat development at Georgia Artificial R5, located approximately 34.0 NM East of Cumberland Island. Water depths at mean low water range from 72.00' to 72.00' and a minimum clearance of -38' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

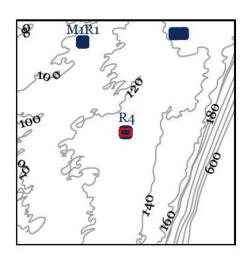


**Reef Structures** 

Map ID	Description	Latitude	Longitude	<b>Deploy Date</b>
1	Navy Tactical AirCrew Training System (TACTS) Tower	30.8	-80.316667	

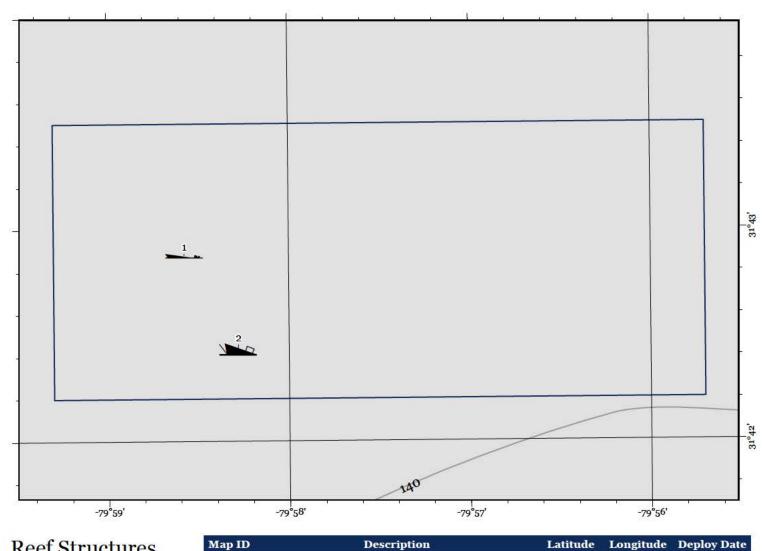


Navy Tower



	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	30.810417	-80.305833
$\Lambda$	NW Corner of Permitted Reef Area	30.810417	-80.32525
$\wedge$	SE Corner of Permitted Reef Area	30.793833	-80.305833
0 57	SW Corner of Permitted Reef Area	30.703833	-80.32525

Figure 30: Existing habitat development at Georgia Artificial R4, located approximately 59.0 NM East of Cumberland Island. Water depths at mean low water range from 60.00' to 60.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.



Hopper Barge

Tug "Semarca 40"

T	C	a		771199			
к	eef		rr	116	H	re	C
11	CUL		LI	u	,,,	$\mathbf{u}$	U

Barge

∑ Steel Hull Vessel <60'
</p>

1

Reef Boundary

145	~~ }	100	55 m
R7	56 Sm	250	140 S
گىر <mark>68</mark> ر قىخىرىي	WY S	R8	90
M2R6	3	S8/	
~~~°	3	3	

	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.725	-79.928333
Λ	NW Corner of Permitted Reef Area	31.725	-79.988333
$\sim$	SE Corner of Permitted Reef Area	31.703333	-79.928333
32 78	SW Corner of Permitted Reef Area	21 702222	-70 088222

31.714633

31.707233

-79.976283

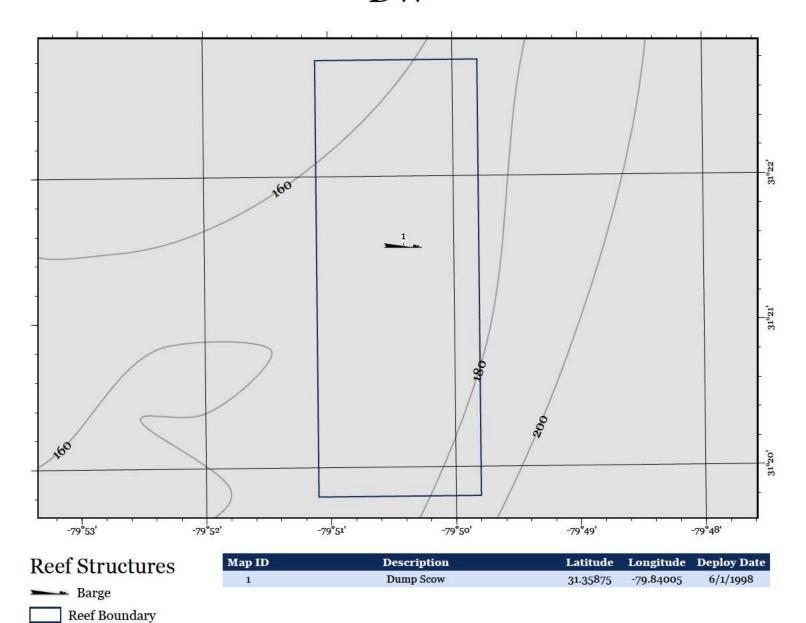
-79.97135

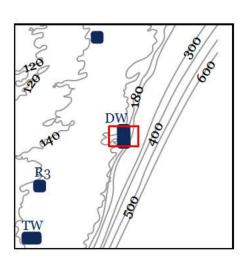
8/1/1999

10/1/2000

Figure 31: Existing habitat development at Georgia Artificial WW, located approximately 50.0 NM Southeast of Wassaw Sound. Water depths at mean low water range from 120.00' to 130.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

#### DW

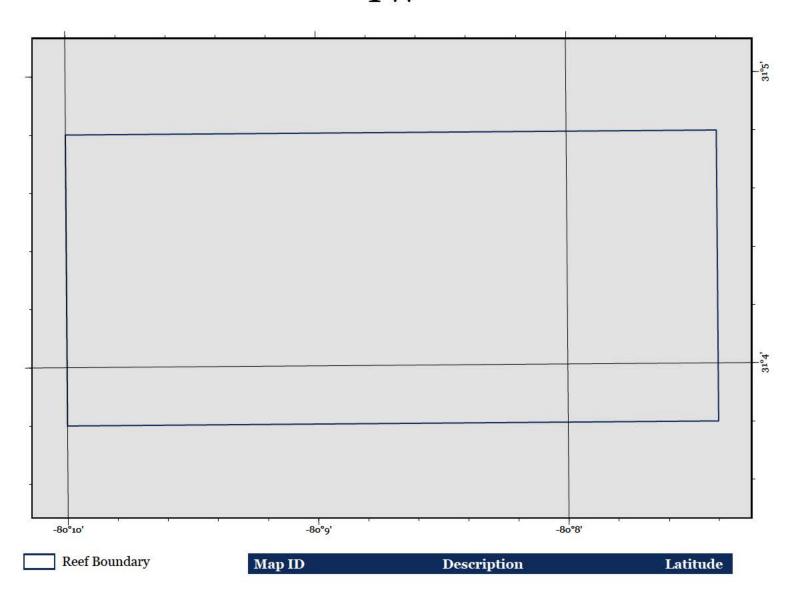


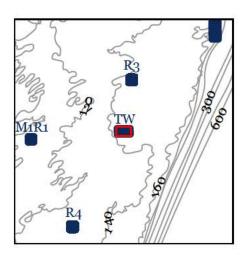


0	Description	Latitude	Longitude
	NE Corner of Permitted Reef Area	31.38	-79.83
	NW Corner of Permitted Reef Area	31.38	-79.851667
(	SE Corner of Permitted Reef Area	31.33	-79.83
	SW Corner of Permitted Reef Area	31.33	-79.851667

Figure 32: Existing habitat development at Georgia Artificial DW, located approximately 70.0 NM East of Sapelo Island. Water depths at mean low water range from 150.00' to 170.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

#### TW





	Description	Latitude	Longitude
Ņ	NE Corner of Permitted Reef Area	31.08	-80.123333
Λ	NW Corner of Permitted Reef Area	31.08	-80.166667
	SE Corner of Permitted Reef Area	31.063333	-80.123333
32 - 4-	SW Corner of Permitted Reef Area	21.062222	-80 166667

Figure 33: Existing habitat development at Georgia Artificial TW, located approximately 63.0 NM East of Jekyll Island. Water depths at mean low water range from 120.00' to 130.00' and a minimum clearance of -60' is authorized under USACE Programmatic General Permit No. 36 issued to Georgia DNR. Ongoing habitat development activities (5+ years are proposed to continue within existing boundaries. Map and coordinates updated on 2/1/2022.

Table 1: Georgia Offshore Artificial Reef permited boundary coordinates by distance from shore and from north to south.

	Reef	Description	Latitude	Longitude
efs om	BSF	Center of 500 yard Permitted Diameter	31.90148	-80.83455
Ree I Fr	BL	Center of 400 yard Permitted Diameter	31.64202	-81.07988
Beach Reefs 2-4 NM From Shore	BH	Center of 400 yard Permitted Diameter	31.50667	-81.10475
Be 2-4	TC	Center of 400 yard Permitted Diameter	30.78296	-81.39947
		NW Corner of Permitted Reef Area	31.92333	-80.79333
	SAV	NE Corner of Permitted Reef Area	31.92333	-80.75333
	5117	SW Corner of Permitted Reef Area	31.89000	-80.79333
		SE Corner of Permitted Reef Area	31.89000	-80.75333
		NW Corner of Permitted Reef Area	31.85333	-80.79500
	KC	NE Corner of Permitted Reef Area	31.85333	-80.75500
	110	SW Corner of Permitted Reef Area	31.82000	-80.79500
		SE Corner of Permitted Reef Area	31.82000	-80.75500
		NW Corner of Permitted Reef Area	31.79667	-80.90833
	DUA	NE Corner of Permitted Reef Area	31.79667	-80.86833
	DOA	SW Corner of Permitted Reef Area	31.76333	-80.90833
re		SE Corner of Permitted Reef Area	31.76333	-80.86833
oho	CAT	NW Corner of Permitted Reef Area	31.67000	-80.97667
n S		NE Corner of Permitted Reef Area	31.67000	-80.93667
ror		SW Corner of Permitted Reef Area	31.63667	-80.97667
1 F		SE Corner of Permitted Reef Area	31.63667	-80.93667
Z	KTK	NW Corner of Permitted Reef Area	31.52167	-81.02500
-6]		NE Corner of Permitted Reef Area	31.52167	-80.98500
9 s		SW Corner of Permitted Reef Area	31.48833	-81.02500
Nearshore Reefs 6-9 NM From Shore		SE Corner of Permitted Reef Area	31.48833	-80.98500
R		NW Corner of Permitted Reef Area	31.31000	-81.15667
ore	ALT	NE Corner of Permitted Reef Area	31.31000	-81.11667
sh	ALI	SW Corner of Permitted Reef Area	31.27667	-81.15667
eal		SE Corner of Permitted Reef Area	31.27667	-81.11667
Z		NW Corner of Permitted Reef Area	31.11333	-81.22333
	F	NE Corner of Permitted Reef Area	31.11333	-81.17500
	ľ	SW Corner of Permitted Reef Area	31.08000	-81.22333
		SE Corner of Permitted Reef Area	31.08000	-81.17500
		NW Corner of Permitted Reef Area	30.95667	-81.27167
	Α	NE Corner of Permitted Reef Area	30.95667	-81.23167
	A	SW Corner of Permitted Reef Area	30.92333	-81.27167
		SE Corner of Permitted Reef Area	30.92333	-81.23167
		NW Corner of Permitted Reef Area	30.81000	-81.29000
	KBY	NE Corner of Permitted Reef Area	30.81000	-81.25000
	KDI	SW Corner of Permitted Reef Area	30.77667	-81.29000
		SE Corner of Permitted Reef Area	30.77667	-81.25000

	L	NW Corner of Permitted Reef Area	31.76667	-80.61833
		NE Corner of Permitted Reef Area	31.76667	-80.57833
		SW Corner of Permitted Reef Area	31.73333	-80.61833
		SE Corner of Permitted Reef Area	31.73333	-80.57833
		NW Corner of Permitted Reef Area	31.72833	-80.70500
	CCA-JL	NE Corner of Permitted Reef Area	31.72833	-80.66667
	CCA-JL	SW Corner of Permitted Reef Area	31.69500	-80.70500
		SE Corner of Permitted Reef Area	31.69500	-80.66667
		NW Corner of Permitted Reef Area	31.61167	-80.83333
re	JY	NE Corner of Permitted Reef Area	31.61167	-80.78833
ho	JI	SW Corner of Permitted Reef Area	31.57833	-80.83333
Offshore Reefs 13-23 NM From Shore		SE Corner of Permitted Reef Area	31.57833	-80.78833
ror		NW Corner of Permitted Reef Area	31.30000	-80.98333
1 F	DRH	NE Corner of Permitted Reef Area	31.30000	-80.94333
Ź	ркп	SW Corner of Permitted Reef Area	31.26667	-80.98333
23		SE Corner of Permitted Reef Area	31.26667	-80.94333
3-5	SFC	NW Corner of Permitted Reef Area	31.01333	-81.05667
fs 1		NE Corner of Permitted Reef Area	31.01333	-81.02333
See		SW Corner of Permitted Reef Area	30.98833	-81.05667
ė T		SE Corner of Permitted Reef Area	30.98833	-81.02333
101	HLHA	NW Corner of Permitted Reef Area	31.00000	-80.98667
[£s]		NE Corner of Permitted Reef Area	31.00000	-80.94667
0	1111111	SW Corner of Permitted Reef Area	30.96667	-80.98667
		SE Corner of Permitted Reef Area	30.96667	-80.94667
		NW Corner of Permitted Reef Area	30.86667	-81.18167
	CDH	NE Corner of Permitted Reef Area	30.86667	-81.14167
	CDII	SW Corner of Permitted Reef Area	30.83333	-81.18167
		SE Corner of Permitted Reef Area	30.83333	-81.14167
		NW Corner of Permitted Reef Area	30.79167	-81.13000
	MRY	NE Corner of Permitted Reef Area	30.79167	-81.09167
	MRY	SW Corner of Permitted Reef Area	30.75833	-81.13000
		SE Corner of Permitted Reef Area	30.75833	-81.09167

	R7	NW Corner of Permitted Reef Area	31.82292	-80.28267
		NE Corner of Permitted Reef Area	31.82292	-80.26325
		SW Corner of Permitted Reef Area	31.80650	-80.28267
		SE Corner of Permitted Reef Area	31.80650	-80.26325
		NW Corner of Permitted Reef Area	31.64175	-79.93433
	Do	NE Corner of Permitted Reef Area	31.64175	-79.91492
	R8	SW Corner of Permitted Reef Area	31.62525	-79.93433
		SE Corner of Permitted Reef Area	31.62525	-79.91492
		NW Corner of Permitted Reef Area	31.54333	-80.24292
e e	Mane	<b>NE Corner of Permitted Reef Area</b>	31.54333	-80.22358
ior	M2R6	SW Corner of Permitted Reef Area	31.52683	-80.24292
SI		SE Corner of Permitted Reef Area	31.52683	-80.22358
om		NW Corner of Permitted Reef Area	31.38292	-80.57833
Fr	Do	NE Corner of Permitted Reef Area	31.38292	-80.55850
MI	R2	SW Corner of Permitted Reef Area	31.36625	-80.57833
<b>4</b> .		SE Corner of Permitted Reef Area	31.36625	-80.55850
9 1		NW Corner of Permitted Reef Area	31.22567	-80.12692
34	Do	NE Corner of Permitted Reef Area	31.22567	-80.10750
ers	R3	SW Corner of Permitted Reef Area	31.20950	-80.12692
ΜO		SE Corner of Permitted Reef Area	31.20950	-80.10750
Navy Towers 34 64 NM From Shore		NW Corner of Permitted Reef Area	31.05892	-80.46008
íav.	M1R1	<b>NE Corner of Permitted Reef Area</b>	31.05892	-80.44067
Z		SW Corner of Permitted Reef Area	31.04217	-80.46008
		SE Corner of Permitted Reef Area	31.04217	-80.44067
		NW Corner of Permitted Reef Area	30.94717	-80.76058
	R5	<b>NE Corner of Permitted Reef Area</b>	30.94717	-80.74117
	ICJ	SW Corner of Permitted Reef Area	30.93050	-80.76058
		SE Corner of Permitted Reef Area	30.93050	-80.74117
		NW Corner of Permitted Reef Area	30.81042	-80.32525
	R4	<b>NE Corner of Permitted Reef Area</b>	30.81042	-80.30583
	1.4	SW Corner of Permitted Reef Area	30.79383	-80.32525
		SE Corner of Permitted Reef Area	30.79383	-80.30583
		NW Corner of Permitted Reef Area	31.38000	-79.85167
MI	DW	NE Corner of Permitted Reef Area	31.38000	-79.83000
V 0	DW	SW Corner of Permitted Reef Area	31.33000	-79.85167
í )2-(		SE Corner of Permitted Reef Area	31.33000	-79.83000
s 5(		NW Corner of Permitted Reef Area	31.72500	-79.98833
Deepwater Reefs 50-70 NM From Shore	WW	NE Corner of Permitted Reef Area	31.72500	-79.92833
	VV VV	SW Corner of Permitted Reef Area	31.70333	-79.98833
		SE Corner of Permitted Reef Area	31.70333	-79.92833
wa		NW Corner of Permitted Reef Area	31.08000	-80.16667
Deepw	Т\//	<b>NE Corner of Permitted Reef Area</b>	31.08000	-80.12333
	TW	SW Corner of Permitted Reef Area	31.06333	-80.16667
		SE Corner of Permitted Reef Area	31.06333	-80.12333