## Deepwater Horizon Oil Spill Natural Resource Damage Assessment

# Artificial Reef Creation Off the Texas Coast

# Phase III Proposed Early Restoration Project

### PROJECT DESCRIPTION

This factsheet describes four proposed artificial reef projects that would increase diving and fishing opportunities. The Ship Reef Project would sink a ship to create a reef off Galveston, but if no suitable vessel is available, an alternative reef project off Corpus Christi would be pursued instead. The Corpus Reef and two other projects, Matagorda Reef and Freeport Reef, would deploy specially designed concrete structures to create new reefs or enhancing existing reefs. Below is more information about each project.

### **Ship Reef Project Description**

The proposed Ship Reef Project would enhance fishing and diving opportunities by sinking a ship to create an artificial reef approximately 67 miles offshore of Galveston, Texas in the Gulf of Mexico. Texas would acquire and sink a suitable ship that is at least 200 feet long. The ship would be cleaned of hazardous substances to meet U.S. Environmental Protection Agency (EPA) criteria, as well as undergo all required federal and state inspections, including inspection by the U.S. Coast Guard and TPWD. The project area (HI-A-424) is 80 acres of sandy substrate at a water depth of approximately 135 feet.

The High Island 424 (HI-A-424) site was selected after an evaluation of 35 permitted reef sites, and after consideration of numerous other factors, including water depth, proximity to other reef sites and shipping lanes, navigational concerns, buoy marking requirements, proximity to the Flower Gardens Banks National Marine Sanctuary, interference with future petroleum operations, and stakeholder input.

The addition of a ship reef off of the northern coast of Texas has wide support from divers, anglers, fisheries managers, the public, and local governments. Ships are constructed of durable and stable material and, once sunk, form complex habitats for attracting marine life, provide recreational opportunities for divers and anglers, and generate economic returns to local communities. The diving community has expressed interest in a ship reef designed specifically for diving. The Texas Parks and Wildlife Department (TPWD) Artificial Reef Program recently received a petition of

support for a ship reef project from the Texas Gulf Council of Diving Clubs with more than 500 diver signatures. The estimated cost is \$1,785,765. The total cost for ship remediation, towing, sinking and related work could be \$3-4 million, with additional funding to be provided from the Texas Artificial Reef Program.

# Corpus Reef Project Description (alternative if Ship Reef Project is not feasible)

The proposed Corpus Reef Project would increase the amount of reef materials in a currently permitted artificial reef site (MU-775) located within Texas state waters in the Gulf of Mexico and approximately 11 miles from Packery Channel, near Corpus Christi Bay, Texas. Previous deployments placed artificial reef materials into the northwest quadrant and in the center of the 160-acre reef site. The proposed project would place predesigned concrete pyramids in the remaining portions of the 160-acre project area onto sandy substrate at a water depth of 73 feet.

The location for the Corpus Reef Project was selected after request for and consideration of public input and in accordance with site selection guidelines set out in the Texas Artificial Reef Fishery Management Plan (TPWD 1990). Consultations began with the Saltwater-Fisheries Enhancement Association and the City of



Diver near an artificial reef off the Texas Coast

Corpus Christi over the concept of reefs off Corpus Christi in Texas state waters in 2009. The location was approved through several city council meetings where numerous people provided comments in support of the project. The total estimated cost of the project is \$1,785,765.

### **Matagorda Reef Project Description**

The proposed Matagorda Reef Project would create a new artificial reef site (BA-439) within Texas state waters in the Gulf of Mexico, approximately 10 miles offshore of Matagorda County, Texas. The project would create 160 acres of artificial reef, through deployment of concrete pyramids onto sandy substrate at a water depth of 60 feet. The total estimated cost of the project is \$3,486,398.

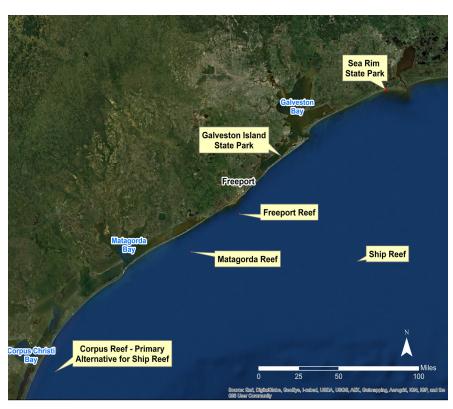
### **Freeport Reef Project Description**

The proposed Freeport Reef Project would increase the amount of reef materials in a currently permitted artificial reef site (BA 336), the George Vancouver (Liberty Ship) Artificial Reef, located within Texas state waters in the Gulf of Mexico and approximately 6 miles from Freeport, Texas. The current reef site is permitted for 160 acres, but only has materials in 40 acres. The proposed project would place predesigned concrete pyramids in the remaining

portions of the 160-acre permitted area onto sandy substrate at a water depth of 55 feet.

This is a legacy reef originally permitted in 1976 with the sinking of the George Vancouver Liberty Ship. The reef permit was later transferred from the Texas Coastal and Marine Council to the Texas Parks and Wildlife Department (TPWD) in the 1980s before the TPWD's Artificial Reef Program was formally established. The TPWD Coastal Resources Advisory Committee, composed of agency and industry representatives, provided input on reef expansion. The reef is utilized by numerous recreational fishermen and the George Vancouver Liberty Ship has attracted divers over the years. Commercial fishermen avoid the reef site as it is a well-known "wreck" marked with a navigational buoy and on NOAA charts. The total estimated cost of the project is \$2,155,365.

Texas experienced a loss of recreational use along the Texas coast during the spill, including recreational fishing, beach use, camping, diving, and wildlife viewing, among other activities. The artificial reef projects would enhance opportunities for public use and enjoyment of natural resources, helping to address recreational losses.



Locations of all Phase III early restoration projects proposed in Texas

# FOR MORE INFORMATION CONTACT

Dale Shively
Artificial Reef Program Leader
Texas Parks and Wildlife Department
dale.shively@tpwd.texas.gov
512-389-4686



Red snapper at an artificial reef off the Texas coast. Artificial reefs support diverse marine life communities, including game fish important for sport anglers and commercial fisheries.

















