United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Atlanta, Georgia 30345

In Reply Refer To:
FWS/R4/DH NRDAR

SEP 27 2013

Memorandum

To: Field Supervisor, Clear Lake Ecological Services Office

From: Deputy Deepwater Horizon Department of the Interior Natural Resource Damage Assessment and Restoration (NRDAR) Case Manager Debora L McQ

Subject: No Effect Determination for the Proposed Creation of Ship Artificial Reef (HI-A-424) (Ship Reef) and Expansion of the Corpus Christi Artificial Reef (MU-775) (Corpus Reef) both in the Gulf of Mexico, Texas

As you are no doubt aware, on or about April 20, 2010, the mobile offshore drilling unit *Deepwater Horizon* experienced an explosion, leading to a fire and its subsequent sinking in the Gulf of Mexico (the Gulf). These events resulted in the discharge of millions of barrels of oil into the Gulf over a period of 87 days. In addition, various response actions were undertaken in an attempt to minimize impacts from spilled oil. These events are hereafter collectively referred to as the Oil Spill.

The Department of the Interior (DOI), acting through the U.S. Fish and Wildlife Service (the Service) and other Bureaus, is a designated natural resource trustee agency authorized by the Oil Pollution Act of 1990 (OPA) and other applicable federal laws to assess and assert a natural resource damages claim for this Oil Spill. DOI is only one of several Trustees, including agencies of the state of Texas, so authorized. Consistent with their federal and state authorities, the Trustees are investigating the resource injuries and losses that occurred as a result of the Oil Spill and have initiated restoration planning to identify the actions that will be needed or appropriate to restore injured resources and to make the public whole for the injuries and losses that occurred. This process is known as a Natural Resource Damage Assessment (NRDA).

On April 20, 2011, DOI, the National Oceanic and Atmospheric Administration and the Trustees for the five Gulf states affected by the Oil Spill entered into an agreement with BP, a responsible party for the Oil Spill, under which BP agreed to provide $1 billion for early restoration projects in the Gulf to begin to address injuries to natural resources caused by the Oil Spill. The subject project is being evaluated by the Trustees as a potential early restoration project. The early restoration project will be proposed in a draft early restoration plan that will be released for public comment and review. If the Trustees select the project after publication of the plan and consideration of public comment and a stipulated agreement is reached with BP, the early restoration project will be implemented by the state of Texas (the State). DOI, acting through the Service, will be a co-Trustee for the project, if it is selected and implemented.

The above facts lead us to the conclusion that consultation under Section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*), is required for the proposed early restoration project and we wish to engage in such consultation. Accordingly, we have reviewed the proposed Creation of Ship Artificial Reef (HI-A-424) (Ship Reef) and Expansion of the Corpus Christi Artificial Reef (MU-775) (Corpus Reef) both in the Gulf of Mexico, Texas for potential impacts to listed, candidate, and proposed species and designated and proposed critical habitats in accordance with section 7 of the ESA and for impacts to bald eagles and migratory birds in accordance with the Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 U.S.C. 668-668c) and the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703–712), respectively. Consultation will also be initiated with National Marine Fisheries Service (NMFS) for species where ESA regulatory authority is shared (i.e., sea turtles) and in regards to Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1461 *et seq.*).

The proposed Ship Reef early restoration project includes sinking a ship along the continental shelf in the Gulf of Mexico, outside of Texas state waters, to create an artificial reef. If the Ship Reef Project becomes technically infeasible, the Corpus Reef project will be implemented as an alternative. Therefore, both projects are described below.

Ship Reef

The Ship Reef Project is located in the Gulf of Mexico at the Outer Continental Shelf Block High Island (HI-A-424). It is located approximately 60 nautical miles offshore from Galveston, Texas in water approximately 135 feet deep. The project area is approximately 80 acres of barren, sandy substrate. There are no sea grasses in the area. Project implementation includes: acquiring a ship, cleaning it of hazardous substances to meet Environmental Protection Agency (EPA) criteria, making any hull modifications as necessary, passing all agency (EPA, Texas Parks and Wildlife Division, and U.S. Coast Guard [USCG]) inspections, transporting the ship to the project area and sinking it. All work will be conducted in-water.

The size of the vessel has yet to be determined, but will be at least 200 feet long. Implosive charges (explosives) will be used to sink the ship in the project area to overcome buoyancy in the ship so it settles quickly to the ocean floor. This technique uses implosive devices to force the metal inwards and is a preferred methodology over controlled flooding in mid-to high-seas. Sinking of the ship is planned for the fall timeframe, preferably November 2014, but will be weather dependent. Monitoring using side-scan sonar and/or divers will be conducted annually (for 2 years) and after major storm events to document any movement and settling of the ship. On-site monitors will be present during the sinking operation and if marine mammals are present in the area, work will be halted until the area is deemed safe to continue.

Because the proposed project is 60 nautical miles offshore, no listed, candidate, or proposed species under the jurisdiction of the Service are expected to be present in the action area. No critical habitat is present within the action area. While there are records of West Indian manatee (*Trichechus manatus*) off the coast of Texas and a single sighting of a manatee approximately 90 miles offshore of Alabama (Fertl et al. 2005), manatees typically use shallow water (less than 20 feet) habitats with sea grasses. Therefore, we do not expect manatees to be present in the action area. The lack of manatee presence, coupled with a marine mammal monitor, will avoid any potential impacts to manatees. Migratory sea birds could be flying over the action area;

however, the explosions are planned outside of nesting season and would be short-term (minutes) in duration. These explosions could temporarily startle sea birds and cause them to fly from the area. However, this movement is expected to be well within normal flight patterns for sea birds and no negative impacts are expected.

Sea turtles (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*)) could be present within the action area. However, sea turtles in marine environments are consulted on by NMFS. Because the project is 60 nautical miles off shore and implementation is planned for the fall season when sea turtles are not expected to be nesting and hatching should be completed, no effects to sea turtles in their terrestrial environments are anticipated.

The U.S. Army Corps of Engineers (ACOE) released a public notice on June 3, 2013, regarding the proposed Ship Reef project (SWG-2013-00249) indicating that no known threatened or endangered species or their critical habitat will be affected by the proposed project. If you previously provided comments on the proposed Ship Reef, we respectfully request a copy of your response to the ACOE.

Corpus Reef

The Corpus Reef project proposes to expand an artificial reef in Texas state waters of the Gulf of Mexico, near Corpus Christi, Texas. Corpus Reef is a located within Texas state waters in the Gulf of Mexico at the Outer Continental Shelf Block Mustang Island (MU-775), approximately 11 nautical miles east of Packery Channel and Mustang Island State Park in the Corpus Christi area, Nueces County, Texas. The project area covers 160 acres of barren, sandy substrate in 73 feet of water along the continental shelf in the Gulf of Mexico. All work will be conducted in water. Predesigned pyramid reef structures (approximately 1,000 to 1,200) will be used to expand the artificial reef in 160 acres. No explosives will be used in reefing operations. No sea grasses are present.

We reviewed the species list for Nueces County, Texas, which considered the following species and critical habitat as potentially present within the County: 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*), Piping plover (*Charadrius melodus*), Critical Habitat for Piping Plover, Whooping crane (*Grus Americana*), northern aplomado falcon (*Falco femoralis septentrionalis*), West Indian manatee (*Trichechus manatus*), Gulf coast jaguarundi (*Herpailurus yagouaroundi cacomitli*), ocelot (*Leopardus pardalis*), slender rush-pea (*Hoffmannseggia tenella*), and Texas ambrosia (*Ambrosia cheiranthifolia*). Two candidate species were on the species list: Sprague's pipit (*Anthus spragueii*) and Red knot (*Calidris canutus rufa*). We also considered bald eagles (*Haliaeetus leucocephalus*), and migratory birds as they could potentially use terrestrial habitats in Nueces County as well.

For sea turtles, birds, terrestrial mammals, and plant species, all work is in-water, 11 nautical miles offshore. Many of these species (falcon, jaguarondi, ocelot, pipit, and the plants) use inland habitats and do not occur along the shoreline. In addition, work this far offshore is not expected to result in any impacts (i.e., noise disturbance, shoreline habitat impacts) that would interfere with normal nesting/breeding or foraging/roosting/sheltering behaviors that could be occurring on shore. Again, NMFS will analyze any potential affects to sea turtles in the estuarine or marine environments.

Manatees are extremely unlikely to be present in the project area due to its depth, lack of water clarity, and lack of sea grass habitats. If present, vessel operation and placement of materials in water could startle or strike a manatee and disrupt resting or migration. Strikes generally result in injury or mortality. A trained on-site monitor will be present during reef construction. If marine mammals (or other protected species) are present in the area during implementation, work will be halted until the mammal has moved on its own volition from harm's way and it is deemed safe, by the monitor, to continue. The low likelihood of manatee presence (due to murky waters without sea grass, off the coast of Texas, at depths greater than 20 feet) and the use of a marine mammal monitor will avoid startling or striking a manatee.

Primary constituent elements (PCEs) of piping plover critical habitat include: sand or mud flats (or both) with no or sparse emergent vegetation; adjacent unvegetated or sparsely vegetated sand, mud, or algal flats above high tide; beach/dune ecosystem including surf-cast algae, sparsely vegetated back beach and salterns, spits, and washover areas[1]. No PCEs are present in-water at the project site. The artificial reef will be created at depth and is not expected to change terrestrial shoreline conditions (through changes in current patterns/sediment accretion and erosion) in a manner that would modify or reduce function of existing PCE's for piping plover.

Previously, the Corpus Christi Ecological Service's office issued a letter dated January 4, 2011, regarding review of the Corpus Reef permit application submitted to the ACOE (SWG 2010-01407). The Service's letter stated, "significant adverse effects on fish and wildlife, their habitats, or human uses thereof are not expected to result from the proposed work or activities. Therefore the Service has no objection from the standpoint of fish and wildlife to the issuance of a permit related to this notice [SWG-2010-01047]." No changes to the project description have occurred.

Summary

Based upon the information presented above, we have determined the proposed Ship Reef and Corpus Reef projects will not affect listed, candidate, or proposed species, or critical habitats under the jurisdiction of the Service or result in take of bald eagles or migratory birds. We request concurrence with our determination.

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[1] Washover areas are broad, unvegetated zones, with little or no topographic relief, that are formed and maintained by the action of hurricanes, storm surge, or other extreme wave action.

If you have questions or concerns regarding this request for consultation, please contact Holly Herod, Fish and Wildlife Biologist, at 404-679-7089 or holly_herod@fws.gov.

Literature Cited

Fertl, D., A.J. Schiro, G.T. Regan, C.A. Beck, N. Adimey, L. Price-may, A. Amos, G.A.J. Worthy, and R. Crossland. 2005. Manatee occurrence in the northern Gulf of Mexico, West of Florida. Gulf and Caribbean Research 17:69-94.