APPENDIX C: THREATENED AND ENDANGERED SPECIES PROTECTION LANGUAGE

MANATEE

The West Indian manatee may be present in the project vicinity. The contractor shall instruct all personnel associated with the project of the potential presence of manatees in the area, and the need to avoid collisions with these animals. All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Marine Mammal Protection Act of 1972 (EPA MMPA) and the Endangered Species Act of 1973 (EPA ESA).

The contractor will be responsible for any manatee harmed, harassed, or killed as a result of construction activities not conducted in accordance with these specifications. All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

Special Operating Conditions If Manatees Are Present in the Project Area

- If a manatee(s) is sighted within 100 yards of the project area, all appropriate precautions shall be implemented by the Contractor to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease to ensure protection of the manatee. Construction activities shall not resume until the manatee has departed and the 50-foot buffer has been re-established.
- 2. If a manatee(s) is sighted in the project area, all vessels associated with the project shall operate at "no wake/idle" speeds at all times and vessels will follow routes of deep water whenever possible, until the manatee has departed the project area. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits.
- 3. If siltation barriers are used, they shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment.

Manatee Signs

1. Prior to commencement of construction, each vessel involved in construction activities shall display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8-1/2-inch x 11-inch reading, "CAUTION: MANATEE HABITAT/IDLE SPEED IS REQUIRED IN CONSTRUCTION AREA." In the absence of a vessel, a temporary 3-foot x 4-foot sign reading "CAUTION: MANATEE AREA" shall be posted adjacent to the issued construction permit. A second temporary sign measuring 8-1/2-inch x 11-inch reading "CAUTION: MANATEE HABITAT. EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION" shall be posted at the dredge operator control station and at a location prominently adjacent to the issued construction shall remove the signs upon completion of construction.

Manatee Sighting Reports

2. Any sightings of manatees, or collisions with a manatee, shall be reported immediately to the Corps of Engineers. The point of contact within the Corps of Engineers will be Edward Creef, (504) 862-2521, FAX (504) 862-2317. In addition, collisions with, injury to, or sightings of manatees should be immediately reported to the U.S. Fish and Wildlife Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

GULF STURGEON

All proposed work is located east of the Causeway Bridge and within the area designated as critical habitat for the Gulf sturgeon, therefore the potential exists for the Gulf sturgeon to be found in the project area. In preparation for dredging, the following actions shall be initiated:

Bucket Dredging

If bucket dredging is performed, the contractor should induce Gulf sturgeon to leave the immediate work area prior to any bucket dredging work regardless of water depth. The bucket will be dropped into the water and retrieved empty one (1) time. After the bucket has been dropped and retrieved, a one (1)-minute no work period must be observed. During this no dredging period, personnel should carefully observe the work area in an effort to visually detect Gulf Sturgeon. If Gulf Sturgeon are sighted, no work should be initiated until the sturgeon have left the work area. If the water turbidity makes such visual sighting impossible, work may proceed after the one (1)-minute no work period has elapsed. If more than fifteen minutes elapses with no work, then the empty bucket drop/retrieval process shall be performed again prior to re-initiating work efforts. In the event a Gulf sturgeon is incidentally taken or injured/killed by construction activities, it shall be immediately reported to CEMVN. The point of contact within CEMVN will be Elizabeth Behrens, (504) 862-2025.

Cutterhead Dredging

The contractor should minimize potential impacts to gulf sturgeon associated with cutterhead dredging by:

- 1. The cutterhead should remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased.
- 2. During dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom.

SEA TURTLE(S)

Sea turtle(s) may be present in the project vicinity. The contractor shall instruct all personnel associated with the project of the potential presence of sea turtle(s) in the area, and the need to avoid collisions with them. All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing sea turtle(s) which are protected under the Endangered Species Act of 1973. The Contractor will be responsible for any sea turtle(s) harmed, harassed, or killed as a result of construction activities not conducted in accordance with these

specifications. Special Operating Conditions If Sea Turtle(s) Are Present in the Project Area

- 1. If a sea turtle is sighted within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented by the Contractor to ensure protection of the sea turtle(s). These precautions shall include the operation of all moving equipment no closer than 50 feet of sea turtle(s). If a sea turtle(s) is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease to ensure protection of the sea turtle(s). Construction activities shall not resume until the sea turtle(s) has departed the area of its own volition and the 50-foot buffer has been re-established.
- 2. If a sea turtle is sighted in the project area, all vessels associated with the project shall operate at "no wake/idle" speeds, and vessels shall follow routes of deep water whenever possible. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits.
- 3. If siltation barriers (eg. floating turbidity curtains) are proposed by the contractor, the design must be must be approved by the Contracting Officer prior to placement. The barriers shall be made of material in which sea turtle cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid species entrapment. Barriers may not block sea turtle or entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg Florida.

Sea Turtle(s) Collision/Injury Reports

Any collisions with and/or injury to a sea turtle shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division at (727) 824-5312 and the local authorized sea turtle stranding/rescue organization listed below.

Louisiana Department of Wildlife and Fisheries Office of Fisheries 2000 Quail Drive Baton Rouge, LA 70808 (225) 765-2377

PROTECTED MARINE SPECIES ENTRAPMENT PREVENTION MEASURES

Bottlenose dolphins, sea turtles and Gulf sturgeon (NOAA Trust Species) are known to inhabit coastal Louisiana waters. Bottlenose dolphins are protected under the Marine Mammal Protection Act of 1972 (MMPA) and sea turtles and Gulf sturgeons are protected under the Endangered Species Act (ESA). Because of the potential for these protected species to become entrapped within construction sites in coastal Louisiana waters, projects that use shallow open water areas for the construction of enclosed facilities and wetland creation will use the following measures to minimize and/or prevent the potential for such entrapment:

- 1. Prior to construction, the USACE Technical Manager, the Contracting Officer Representative and the contractors should conduct a site visit and meeting to develop a mutual understanding relative to compliance with the MMPA and the ESA.
- 2. Contractors will instruct all personnel associated with the project of the potential presence of trust species in the area, and the need to prevent entrapment of these animals. All construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing these protected species. The contractor shall be held responsible for any trust species harassed or killed as a result of construction activities not conducted in accordance with these specifications.
- 3. Contractor will observe the area to be enclosed for trust species at least 24 hours prior to and during closure of any levee, dike or structure. This is best accomplished by small vessel or aerial surveys, with at least two experienced marine observers on board scanning for Trust species. Large areas (e.g. >300 acres) will likely require the use of more than one vessel or aerial surveys to insure full coverage of the area. These surveys will occur in a best sea state (BSS) of 3 feet or less, as trust species are difficult to sight in choppy water.
- 4. Any trust species sighted within the area to be enclosed triggers all appropriate precautions to be implemented by the contractor to ensure protection of the animal(s). These precautions shall include avoiding direct contact with the Trust species.
- 5. Any sightings of trust species within an enclosed project site shall be reported immediately to the USACE. The point of contact within the USACE will be Tammy Gilmore, (504) 862-1002 or email at tammy.h.gilmore@usace.army.mil. Coordination by the USACE personnel with the National Marine Fisheries Service (NMFS) Marine Mammal Health and Stranding Response and the Louisiana State Coordinator for the Sea Turtle Stranding and Salvage Network (STSSN) will be conducted, as applicable, to determine what further actions may be required.
- 6. During enclosure construction, the contractor will leave or construct at least one escape route in retention structures to allow any trust species to exit shallow open water areas during construction activities. Escape routes in retention structures would be constructed to lead directly to open water outside the

disposal site with a minimum width of 100 feet and have a depth as deep as the deepest natural entrance into the disposal site.

- 7. Escape routes in retention structures would remain open until visual inspections of the enclosure have determined that no Trust species are present within the structure.
- 8. If observers note entrapped animals are not leaving the area, but are visually disturbed, stressed, or their health is compromised then USACE may require any pumping activity to cease until the animals either leave on their own or are moved under the direction of NMFS.
 - a. In coordination with the local stranding networks and other experts, NMFS will conduct an initial assessment to determine the number of animals, their size, age (in the case of dolphins), body condition, behavior, habitat, environmental parameters, prey availability and overall risk.
 - b. If the animal(s) is/are not in imminent danger they will need to be monitored by the Stranding Network for any significant changes in the above variable.
 - c. The contractor may not attempt to scare, herd, disturb, or harass the Trust species to encourage them to leave the area. Coordination by the USACE with the NMFS SER Stranding Coordinator may result in authorization for these actions.
 - d. NMFS may intervene (catch and release and/or rehabilitate) if the Trust Species are in a situation that is life threatening and evidence suggests the animal is unlikely to survive in its immediate surroundings.
 - e. Surveys will be conducted throughout the area at least twice or more in calm surface conditions (BSS 3 feet or less), with experienced marine observers, to determine whether Trust species are no longer present in the area.
- Any trust species observed dead must immediately be reported to the COE (Tammy Gilmore 504-862-1002) .who will then report to NMFS and/or STSSN coordinator.