United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

October 1, 2010

Colonel Edward R. Fleming
District Commander
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Fleming:

Please reference the August 12, 2010, letter from Ms. Laura Lee Wilkinson, Environmental Coordinator for the Hurricane Protection Office, providing information regarding additional work needed on the 17th Street, Orleans Avenue and London Avenue Canals to ensure they can support an increase in the Maximum Operating Water Level (MOWL). That work was also addressed in Individual Environmental Report (IER) 27, Proposed Outfall Canal Remediation on the 17th Street, Orleans Avenue and London Avenue Canals, Jefferson and Orleans parishes, Louisiana dated September 2010. That IER was prepared the under the approval of the Council on Environmental Quality (CEQ) to obtain compliance with the National Environmental Policy Act of 1969 (83 Stat. 852, as amended; 42 U.S.C. 4321- 4347) and is authorized Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (Supplemental 4), and Public Law 110-28, U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007 (5th Supplemental). Those laws authorized the Corps of Engineers (Corps) to upgrade two existing hurricane protection projects (i.e., Westbank and Vicinity of New Orleans and Lake Pontchartrain and Vicinity) in the Greater New Orleans area in southeast Louisiana to provide 100-year hurricane protection. This report provides recommendations to minimize project impacts to fish and wildlife resources resources.

The U.S. Fish and Wildlife Service (Service) provided a November 26, 2007, Draft Programmatic Fish and Wildlife Coordination Act (FWCA; 48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) report that addresses the hurricane protection improvements authorized in Supplemental 4. Construction of measures needed to provide 100-year hurricane protection along the floodwalls was addressed in IER 5. Since those reports the Corps has identified additional work needed to ensure that floodwalls along the outfall canals can support an increase in the MOWL in the canals. That increase is needed to provide the Sewage and Water Board of New Orleans sufficient depth (i.e., storage area) prior to removal of rainwater from the city's drainage canals by pumping. This report constitutes the report of the Secretary of the Interior as required by Section 2(b) of the FWCA and has been provided to the Louisiana Department of Wildlife and Fisheries and the National Marine Fisheries Service; their comments, if any, have be incorporated into this final report.

The study area is located in Jefferson and Orleans parishes within the Mississippi River Deltaic Plain of the Lower Mississippi River Ecosystem. Higher elevations occur on the natural levees of the Mississippi River and its distributaries. Developed lands are primarily associated with natural levees, but extensive wetlands have been leveed and drained to accommodate residential, commercial, and agricultural development. Federal, State, and local levees have been installed for flood protection purposes, often with negative effects on adjacent wetlands. The Mississippi River and Lake Pontchartrain are prominent landscape features, as are channels and canals utilized for urban flood control. Extensive wetlands and open waters dominate the landscape outside the flood control levees.

Habitat types in the project area include open water and developed areas. Open-water habitat within the project area consists of Lake Pontchartrain and drainage canals. Lake Pontchartrain encompasses approximately 630 square miles. Urbanization, stormwater discharges, inadequate wastewater treatment, shoreline armoring and agricultural activities have degraded the lakes water quality. The salinity in the lake is affected by saltwater intrusion from the Inner Harbor Navigation Canal and the Gulf Intracoastal Waterway. Lake Pontchartrain is also connected to the more saline waters of Lake Borgne and the Gulf of Mexico through the Chef Menteur and Rigolets Passes. The salinity in Lake Pontchartrain can be diluted, however, by fresh water flows from the Pearl River system on the eastern side of the lake and other smaller rivers on the western side. Stratification of the saline and fresh water does occur which can lead to hypoxic conditions that negatively affect the benthic organisms over a large area.

Drainage canals enclosed within the hurricane protection project are stagnant except when pumps are operating to remove water. Runoff from developed areas has reduced the habitat value of that habitat by introducing various urban pollutants, such as oil, grease, and excessive nutrients. Clearing and development has eliminated much of the riparian habitat that historically would normally provide shade and structure for many aquatic species.

Developed habitats in the study area include residential and commercial areas, as well as roads and existing levees. Those habitats do not support significant wildlife use. Most of the development is located on higher elevations of the Mississippi River natural levees and former distributary channels; however, vast acreages of swamp and marsh have been placed under forced drainage systems and developed.

As previously mentioned, the Service has provided a programmatic FWCA Report for the authorized hurricane protection project and for hurricane protection work associated with these canals (i.e., IER 5). Those reports contain a thorough discussion of the significant fish and wildlife resources (including habitats) that occur within the study area. For brevity, those discussions are incorporated by reference herein but the following information is provided to supplement the previously mentioned reports and provide specific recommendations regarding the proposed change in plans.

The proposed plan involves upgrading flood protection on 3 outfall canals all located within developed areas. The 17th Street Canal and the Orleans Avenue Canal are located between Lake Pontchartrain and U.S. Interstate Highway 10. The 17th Street Canal and the Orleans Avenue Canal are approximately 2.4 miles long and 200 feet wide and 2.6 miles long and approximately

160 feet wide, respectively. The London Avenue Canal is approximately 4 miles long and approximately 160 feet wide. All the canals are paralleled by floodwalls and/or levees. Four alternative methods are being investigated to remediate flood protection along those floodwalls. Those measures include deep soil mixing, net embankment increase (earthen and/or concrete), sheet pile cut-offs, and stability berms. Deep soil mixing would require construction activities (e.g., subsurface mixing with augers and injection of Portland cement and bentonite) on the protected side of the floodwall but some equipment could be located on the floodside. Net embankment increase would raise the height of the existing protected side embankment not more than 2 feet with either earthen fill or a combination of concrete slab and earthen fill. If the concrete slab method is utilized some floodside fill may be needed. Sheet pile cut-off would require sheet piles to be installed on the protected side adjacent to the existing floodwalls. They could, however, be driven from the floodside through the use of special equipment. Stability berms would consist of earthen fill placed at the toe of the levees but within the existing right-of-way. The size of the berm would be determined by additional engineering investigations.

SERVICE POSITION AND RECOMMENDATIONS

Because the proposed changes will not impact high quality fish and wildlife habitat they do not require mitigation. Therefore, the Service does not object to the construction of the proposed project provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

1. The Service shall be provided an opportunity to review and submit recommendations on the draft plans and specifications for all work addressed in this report.

2. Any proposed change in the proposed project features, locations or plans or to features associated with IER 5 or IER 27 shall be coordinated in advance with the Service, NMFS, LDWF, and LDNR.

3. If the proposed project has not been constructed within 1 year or if changes are made to the proposed project, the Corps should re-initiate Endangered Species Act consultation with the Service to ensure that the proposed project would not adversely affect any federally listed threatened or endangered species or their habitat.

Sincerely,

James F. Boggs
Supervisor
Louisiana Field Office

cc: Hurricane Protection Office, New Orleans District, New Orleans, LA
National Marine Fisheries Service, Baton Rouge, LA
EPA, Dallas, TX
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA
LA Dept. of Natural Resources, CMD, Baton Rouge, LA
OCPR, Baton Rouge, LA

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

October 1, 2010

Colonel Edward R. Fleming
District Commander
U.S. Army Corps of Engineers;
P.O. Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Fleming:

The U.S. Fish and Wildlife Service (Service) has reviewed the September 2, 2010, draft Individual Environmental Report (IER) 27, Proposed Outfall Canal Remediation on the 17th Street, Orleans Avenue and London Avenue Canals, Jefferson and Orleans parishes, transmitted to our office via a letter from Ms. Joan Exnicios, Chief of your Environmental Planning and Compliance Branch. That study was conducted in response to Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (i.e., Supplemental 4). That law authorized the Corps of Engineers (Corps) to upgrade the Lake Pontchartrain and Vicinity and the West Bank and Vicinity hurricane protection projects to provide protection against a 100-year hurricane event. The Service submits the following comments in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 4321 et seq.) and the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The IER is well-written and provides a good description of fish and wildlife resources in the project area and project impacts on those resources. The proposed project would not impact any wetlands or high quality fish and wildlife habitat, therefore no mitigation is necessary. The Service has previously concurred by letter dated August 13, 2010, with the Corps determination that the proposed project would have no effect on any threatened or endangered species or critical habitat under our jurisdiction. If the proposed project has not been constructed within 1 year or if changes are made to the proposed project, the Corps should re-initiate Endangered Species Act consultation with the Service to ensure that the proposed project would not adversely affect any federally listed threatened or endangered species or their habitat.

The Service thus far does not object to the proposed hurricane protection features for IER 27. Thank you for the opportunity to provide comments on the draft IER. If you have any questions

regarding our comments, please contact David Walther at (337) 291-3122.

Sincerely,

James F. Boggs
Supervisor
Louisiana Field Office

cc: EPA, Dallas, TX
National Marine Fisheries Service, Baton Rouge, LA
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA
LA Dept. of Natural Resources (CMD, Baton Rouge, LA
OCPR, Baton Rouge, LA