United States Department of the Interior

FISH AND WILDLIFE SERVICE
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June 6, 2009

Colonel Alvin B. Lee
District Engineer
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Lee

Please reference the Individual Environmental Report (IER) Lake Pontchartrain and Vicinity (LPV), Outfall Canal Closure Structures, 17th Street Canal, Orleans Avenue Canal and London Avenue Canal, Orleans and Jefferson Parish, Louisiana (IER5). 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 (Supplemental 4). That law authorized the Corps of Engineers (Corps) to upgrade some existing hurricane protection projects to provide protection against a 100-year hurricane event. This report contains an analysis of the impacts on fish and wildlife resources that would result from the implementation of 100-year hurricane protection for that area, and provides recommendations to minimize and/or mitigate project impacts on those resources.

The proposed project was authorized by Supplemental 4 which instructed the Corps to proceed with engineering, design, and modification (and construction where necessary) of the LPV and the West Bank and Vicinity (WBV) Hurricane Protection Projects so those projects would provide 100-year hurricane protection. Procedurally, project construction has been authorized in the absence of the report of the Secretary of the Interior that is required by Section 2(b) of the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). In this case, the authorization process has precluded the normal procedures for fully complying with the FWCA. The FWCA requires that our Section 2(b) report be made an integral part of any report supporting further project authorization or administrative approval. Therefore, to fulfill the coordination and reporting requirements of the FWCA, the Service will be providing post-authorization 2(b) reports for each IER.

This final report incorporates and supplements our FWCA Reports that addressed impacts and mitigation features for the WBV of New Orleans (dated November 10, 1986, August 22, 1994, November 15, 1996, and June 20, 2005) and the LPV (dated July 25, 1984 and January 17, 1992) Hurricane Protection projects and the November 26, 2007 Draft Programmatic FWCA Report that addresses the hurricane protection improvements authorized in Supplemental 4. This report constitutes the report of the Secretary of the Interior as required by Section 2(b) of the FWCA.

evident throughout the area. 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.

Open-water habitat within the project area consists of the 17th Street Canal, the Orleans Avenue Canal, the London Avenue Canal and the southern portion of Lake Pontchartrain. These canals are man made features created for control of storm water run-off. The network of these structures illustrates the highly manipulated hydrology of the project area. Historically Lake Pontchartrain supported submerged and floating aquatic vegetation though none appear to be present in the project area. The canals in the project area do not support significant fishery resources but currently are open to Lake Pontchartrain. Lake Pontchartrain supports brackish water sport fishes include red drum, black drum, spotted seatrout, Gulf menhaden, white shrimp, brown shrimp, and blue crab. In the future fisheries of the area are expected to remain relatively stable.

DESCRIPTION OF SELECTED PLAN

The proposed plan for IER 5 consists of construction of new permanent pump stations near the mouths of the outfall canals. The existing Sewerage and Water Board (S&WB) drainage pump stations which directly feed the canals would remain in service and operate concurrently or in series with the new pump stations, and the outfall canal would continue to convey stormwater from the existing S&WB pump stations to the new pump stations. This alternative leaves in place the floodwalls that flank the outfall canals, and these floodwalls would remain an integral part of the city's internal flood protection system.

Preliminary screening of alternatives eliminated several alternatives based on their not meeting the goals of engineering effectiveness, economic efficiency, environmental and social acceptability, and meeting the purpose and need of the project. These include the non-structural alternatives including flood proofing or elevating all residential and commercial properties and public acquisition of properties in areas subject to flooding; the Lake Pontchartrain barrier plan that would reduce storm surge in Lake Pontchartrain by cutting off the lake from influence of storm surges generated in the Gulf of Mexico; Canal closure by having either one-directional flow gates or manual gates without pumps; pressurized conduits to replace the outfall canal system; utilization of grade variation for pump station sitting; one central pump station in Lake Pontchartrain; and three pump stations in Lake Pontchartrain. Several additional project features which could be used in conjunction with the proposed action were also eliminated, including city park/bayou St. John retention/detention; polders to divide the interior drainage into sub-basins to localize any flooding within individual polders; interconnected laterals that provide laterals between the three outfall canals that allow drainage from one canal to be diverted to another canal in the event of problems at one of the pump stations; and consolidation of canals.

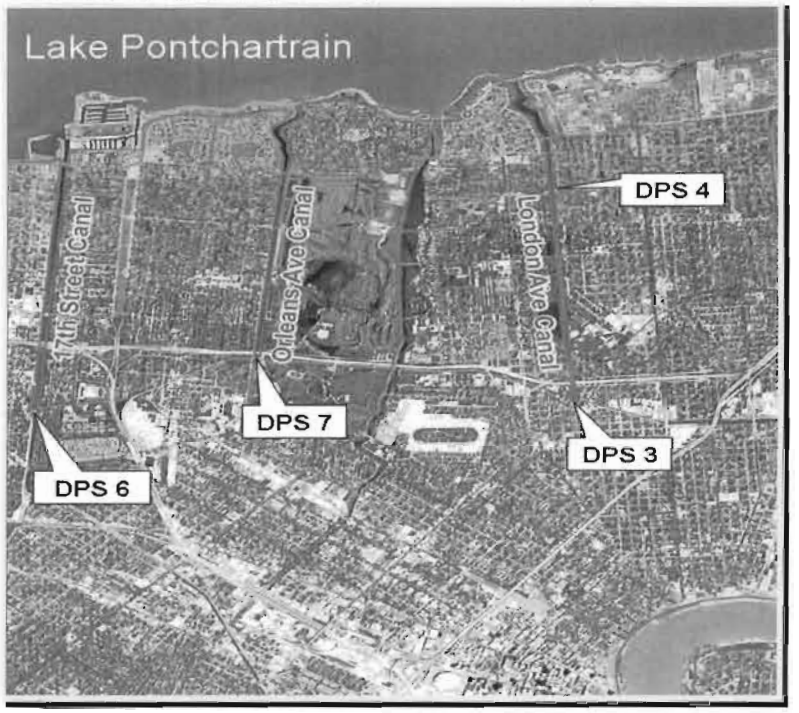
In addition to the proposed action, the alternatives carried forward in a detailed impacts analysis included: the no-action plan; parallel protection using concrete-lined canals or improved parallel protection; converting the temporary pump stations to a permanent system; permanent pump stations and closures at the mouths of the outfall canals where the existing S&WB pump stations would be taken out of commission. Additional project features such as diverting water from London Avenue

This report has been provided to the Louisiana Department of Wildlife and Fisheries and the National Marine Fisheries Service; their comments have been incorporated into our final report.

DESCRIPTION OF THE STUDY AREA

The IER5 project area in Orleans Parish including the three canals that run inland from Lake Pontchartrain (figure 1). The canals include the 17th Street Canal, the Orleans Avenue Canal, and the London Avenue Canal. Currently in these canals exists interim pump stations with I-walls and earthen levee along the length of the canals.

Figure 1. Individual Environmental Report (IER) Lake Pontchartrain and Vicinity (LPV), Outfall Canal Closure Structures, 17th Street Canal, Orleans Avenue Canal and London Avenue Canal, Orleans and Jefferson Parish, Louisiana (IER5).



FISH AND WILDLIFE RESOURCES

The Service provided a draft programmatic FWCA Report for the LPV project on November 26, 2007. The Service also provided a letter, dated August 7, 2006, addressing threatened and endangered species for the coastal parishes of the New Orleans District. Those reports contain a thorough discussion of the significant fish and wildlife resources (including those habitats) and threatened and endangered species and their critical habitat that occur within the study area. For brevity, those discussions are incorporated by reference herein.

Habitat types specifically for IER 5 include open water and developed areas. Due to urban development and a forced-drainage system with the levee system, the hydrology of the area has been altered. The forced-drainage system has been in operation for many years, and subsidence is

Canal to Industrial Canal; pumping to the Mississippi River; and construction of additional drainage pump stations, were investigated in the impacts analysis because they could provide additional efficiency; however, because they alone could not meet the purpose and need they were not identified as individual alternatives.

PROJECT IMPACTS

The proposed project sites have been located in areas that minimize impacts to wetlands. Open-water habitat in the three canals of the project area will be enclosed within the hurricane protection projects. These canals may become stagnant except when pumps are operating to remove rain water. The open water habitat in Lake Pontchartrain at the mouths of the canals will be impacted by the pump station structures. Those habitats will no longer support significant fish and wildlife use.

There will be no other habitat impacted as a result of the proposed project. As with the future without project, fish and wildlife and their habitats, in the future with project scenario, are expected to remain relatively stable with some decline from development, subsidence, and erosion.

Threatened and Endangered Species

Three threatened or endangered species of concern to this project area include the brown pelicans (*Pelecanus occidentalis*), the West Indian manatees (*Trichechus manatus*) and the Gulf sturgeon (*Acipenser oxyrhynchus desotoi*).

Federally listed as an endangered species, brown pelicans are currently known to nest in Louisiana but not within the project area. Brown pelicans feed within Lake Pontchartrain and other shallow estuarine waters, using sand spits, sand bars, and some man-made structures (e.g., pilings) as rest and roost areas. Major threats to this species include chemical pollutants, colony site erosion, disease, and human disturbance.

Federally listed as endangered, West Indian manatees occasionally enter Lakes Pontchartrain and Maurepas, and associated coastal waters and streams during the summer months (i.e., June through September). Manatees have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of Louisiana. They have also been occasionally observed elsewhere along the Louisiana Gulf coast. The manatee has declined in numbers due to collisions with boats and barges, entrapment in flood control structures, poaching, habitat loss, and pollution. Cold weather and outbreaks of red tide may also adversely affect these animals.

The following are conditions that would be used to avoid impacts to manatee. All contract personnel associated with the project shall be informed of the potential presence of manatees and the need to avoid collisions with manatees, which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. All construction personnel are responsible for observing water-related activities for the presence of manatee(s). Temporary signs should be posted prior to and during all construction/dredging activities to remind personnel to be

observant for manatees during active construction/dredging operations or within vessel movement zones (i.e., work area), and at least one sign should be placed where it is visible to the vessel operator. Siltation barriers, if used, should be made of material in which manatees could not become entangled, and should be properly secured and monitored. If a manatee is sighted within 100 yards of the active work zone, special operating conditions should be implemented, including: no operation of moving equipment within 50 feet of a manatee; all vessels shall operate at no wake/idle speeds within 100 yards of the work area; and siltation barriers, if used, should be re-secured and monitored. Once the manatee has left the 100-yard buffer zone around the work area on its own accord, special operating conditions are no longer necessary, but careful observations would be resumed. Any manatee sighting should be immediately reported to the U.S. Fish and Wildlife Service (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821).

The Gulf sturgeon, federally listed as a threatened species, is an anadromous fish that occurs in many rivers, streams, and estuarine waters along the northern Gulf coast between the Mississippi River and the Suwannee River, Florida. In Louisiana, Gulf sturgeon have been reported at Rigolets Pass, rivers and lakes of the Lake Pontchartrain basin, and adjacent estuarine areas. On March 19, 2003, the Service and the National Marine Fisheries Service (NMFS) published a final rule in the Federal Register (Volume 68, No. 53) designating critical habitat for the Gulf sturgeon in Louisiana, Mississippi, Alabama, and Florida. Portions of the Pearl and Bogue Chitto Rivers, Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, and Lake Borgne within Louisiana were included in that designation.

In that critical habitat designation, responsibility for consultation with specific Federal agencies was also identified for the Service and for the NMFS. For estuarine and marine waters in Louisiana, the NMFS is responsible for consultations regarding impacts to the sturgeon and its critical habitat with all Federal agencies, except the Department of Transportation, the Environmental Protection Agency, the U.S. Coast Guard, and the Federal Emergency Management Agency, which consult with the Service. Therefore, please contact Dr. Stephania Bolden (727/824-5312) in St. Petersburg, Florida, for information concerning that species and its critical habitat. Should the proposed project directly or indirectly affect the Gulf sturgeon or its critical habitat in Louisiana, further consultation with this office will be necessary.

If project construction has not been initiated within 1 year, follow-up consultation should be accomplished prior to making expenditures for construction. If the scope or location of the proposed work is changed, both threatened and endangered species and FWCA consultation should be reinitiated as soon as such changes are made.

FISH AND WILDLIFE CONSERVATION MEASURES

Coastal marshes are considered by the Service to be aquatic resources of national importance due to their increasing scarcity and high habitat value for fish and wildlife within Federal trusteeship (i.e., migratory waterfowl, wading birds, other migratory birds, threatened and endangered species, and interjurisdictional fisheries). Because of the Services' close coordination with the

Corps on this project, and because the project is not expected to have any adverse impacts to wetlands, the Service has no conservation measures to offer at this time.

SERVICE POSITION AND RECOMMENDATIONS

There will be no fish and wildlife resources impacted as a result of the proposed project. 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 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.

4. Avoid adverse impacts to manatee and Gulf sturgeon

Sincerely,

James F. Boggs
Supervisor
Louisiana Field Office

Enclosures

cc: EPA, Dallas, TX
NMFS, Baton Rouge, LA
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA
LA Dept. of Natural Resources (CMD/CRD), Baton Rouge, LA