



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
263 13th Avenue, South  
St. Petersburg, Florida 33701

February 26, 2008 F/SER46/PW:jk  
225/389-0508

Mr. Gib Owen  
Environmental Planning and Compliance Branch  
Planning, Programs and Project Management Division  
New Orleans District  
Department of the Army, Corps of Engineers  
Post Office Box 60267  
New Orleans, Louisiana 70160-0267

Dear Mr. Owen:

NOAA's National Marine Fisheries Service (NMFS) has received the draft Individual Environmental Report (IER) #11, titled, "**Improved Protection on the Inner Harbor Navigation Canal (IHNC)**", transmitted by letter dated January 31, 2008, from Ms. Elizabeth Wiggins. IER #11 has been prepared by the Corps of Engineers (COE) New Orleans District (NOD) to evaluate the potential impacts associated with the proposed improved hurricane protection on the IHNC in Orleans and St. Bernard Parishes, Louisiana. The IER has been prepared under Council on Environmental Quality-approved alternative National Environmental Policy Act (NEPA) procedures in lieu of a traditional Environmental Assessment or Environmental Impact Statement.

This IER is identified as Tier 1 of a two-step or tiered process being utilized to accommodate the design-build delivery method for which a single contractor is responsible for both the design and construction phases of the project. NMFS does not object to implementing 100-year flood protection for the Greater New Orleans (GNO) area including use of this tiering approach to evaluate programmatic alternatives under Tier 1. However, out of all the IERs, IER #11 contains potential alternatives that could result in the greatest impacts to estuarine fishery resources. NMFS submits the following comments and recommendations on the draft IER to ensure the report discloses and fully evaluates impacts to NMFS-trust resources including measures to avoid, minimize, and mitigate those impacts as the project progresses through the design-build and tiered stages.

#### General Comments

Overall, various structural alternatives evaluated in the report would undoubtedly protect life and property. However the report incompletely identifies potential impacts to the environment, including the underlying residual risks both during lengthy construction as well as over the project life. These issues that NMFS believes are not sufficiently addressed include hydrology (e.g., continuation or exacerbating loss of wetlands enclosed by the levees, overtopping), impacts to marsh and estuarine fishery production, and necessary mitigation.



The Borgne 1 and 2 alternatives described in the IER involve building a levee across and enclosing wetlands located in an area known as the "Golden Triangle". Such a structure will result in substantial direct, indirect, and potentially cumulative impacts to wetlands and attendant functions. NMFS recommends the COE select an alignment for the Borgne 1 alternative that is located as far north and west as possible. Such an alignment would minimize the affected acreage directly impacted by the levee and enclose the smallest area of marsh, thereby minimizing indirect and potential cumulative impacts.

With respect to the potential indirect impacts caused by enclosing wetlands, IER #11 appears to suggest that enclosing wetlands within the levee would have a beneficial affect by protecting those areas from storm surges. There is little, if any, scientific evidence that indicates that wetlands within levees reduces forces that cause wetland loss, either during periods when all the structures are open and the enclosed wetlands could be considered to be tidally influenced, or during storm events. Theoretically presented in the report, levees could serve as a barricade that may protect portions of enclosed wetlands from shoreline erosion only under certain storm surges. Conversely, overtopping with events in excess of a 100-year storm and subsidence would continue under the future with the levees and natural hydrology and sediment flux would be adversely impacted by the levees. NMFS recommends the report be revised in several sections to eliminate suggestions that enclosing wetlands with levees would benefit those wetlands unless modeling or scientific documentation is cited to substantiate the claims. In addition, even at this Tier 1 stage, the IER should include expanded discussions on indirect and cumulative impacts to wetlands. For disclosure and documentation purposes, specific topics that warrant elaboration include mitigation for unavoidable impacts, induced development, and altered hydrology (e.g., overtopping and altered sheet flow) and sedimentation processes.

Throughout the ongoing 100-year levee work, it has been the understanding that mitigation will be covered under separate IERs. This understanding comes from the specific IER 20 and 21 callouts in the appendix to the NEPA Alternative Arrangements document and has been maintained and discussed at the monthly meetings. However, the document describing the Alternative Arrangement process clearly indicates that each IER would contain a mitigation plan and identify the proposed actions to mitigate for impacts to the environment. Including a brief programmatic discussion on mitigation in this IER would help continue to document and communicate the path forward for concerned stakeholders and better comply with the approved Alternative Arrangement process.

Most of Louisiana's commercial and recreational fishery species must have access to estuarine marshes to successfully complete some part of their life cycle (i.e., they are estuarine-dependent). It is likely that structures for both Pontchartrain 1 and 2 and Borgne 1 and 2 would retard migration by fishery species. Pontchartrain 1 and 2 would substantially reduce the pre-project cross sectional exchange of one of only three exchange points with Lake Pontchartrain. A complete closure of the Mississippi-River Gulf Outlet (MRGO) could severely alter fishery movement from Lake Borgne into Lake Pontchartrain through the IHNC. All the structures discussed for Pontchartrain 1 and 2 and Borgne 1 and 2 would change the Lake Pontchartrain water quality (e.g., salinity and dissolved oxygen). Impediments to tidal exchange and changes to water salinity caused by the various structural alternatives likely would alter the species

composition in the lake in the vicinity of the IHNC. This would displace localized fisheries and potentially could alter fishery production. IER #11 should be revised to fully disclose and discuss this potentially significant issue.

### Specific Comments

2.2.1.2 Pontchartrain 2. This section does not contain any information on potential width or depth of openings in this structure. While NMFS understands that the specific details of the structure will be provided in the tier 2 report, alternatives to maximize the amount of cross-sectional area open during non-storm periods should be discussed. These include, in addition to the opening to be provided for shallow draft navigation, gated culverts or other closeable openings in the structure wingwalls.

2.2.2.2 Raise Existing HPS to 100-Year Level of Protection Alternative. In paragraph two, this section discusses ranges of heights the structures would be raised. If possible, Figure 7 should be revised to reflect the necessary elevation increases as was done with Figure 4.

### 3.2.1 Hydrology

#### 3.2.1.2. Discussion of Impacts

Borgne 1 and 2. Impacts on hydrology should include a discussion of the residual risks of overtopping including environmental impacts from such events. This discussion should identify the need to assess the impacts on wetland water stage and duration based on the ability to drain overtopping waters as well as intercepted drainage. NMFS does not concur with the assertion (page 39, paragraph 4) that the barrier would increase sedimentation in the protected side marsh but concur that a barrier would result in a net reduction in sedimentation due to an interruption in sheet flow hydrology. In addition, one aspect of hydrology that was not discussed is the potential for the levee across the marsh to re-direct water flows or deflect surges to both sides of the structure. Such an effect could scour the marsh adjacent to the levees and result in accelerated rates of wetland loss in the Golden Triangle as well as the East Orleans Landbridge.

Pontchartrain 1 and 2. Concepts on potential with and without project effects on water flow velocity and water level and duration should be discussed in this section. Based on the modeling conducted by the University of New Orleans (UNO) for the Louisiana Coastal Protection and Restoration Project, it is possible that impacts to tidal prism and flow velocity may not be significant with a shallow draft opening of 150 ft by 12 feet. Those modeling results should be incorporated into this section to substantiate potential outcomes. The impacts on wetland hydroperiod in Lake Pontchartrain should be identified in the report as a potential concern and an issue needing assessing prior to the Tier 2 report. The UNO modeling may have the capability to perform that assessment. A copy of the report and presentation on the UNO modeling will be forwarded by electronic mail to you and Ms. Wilkinson.

In addition, this section would benefit from including other data sets and modeling conducted by UNO. Attached is a list of references and copies of literature provided to NMFS by staff of UNO that will be forwarded to you and Ms. Wilkinson by electronic mail. Furthermore, due to the degree of tidal connectivity between the waterways into which structures are proposed for

installation, it should be understood that all alternatives interact synergistically with one another and should not be assessed as mutually independent features. Use of modeling in that regard would be helpful in evaluating design alternatives during the design-build process and the results should be reflected in the Tier 2 report.

### 3.2.2 Water Quality.

Pontchartrain 1 and 2. This section states (page 47) that, "The magnitude of flow restriction associated with these structures while the gates are open is not expected to significantly affect the salinity dynamics between the IHNC and Lake Pontchartrain." This contradicts the UNO modeling results, some of which were prepared under contract to the COE. This section should be revised to present the results of the UNO study or supporting citations should be provided to substantiate the stated assertion.

### 3.2.3 Wetlands

#### 3.2.3.2 Discussion of Impacts

Borgne 1. This section should be revised to reflect that there is a strip of fringe salt marsh along the northern bank of the GIWW that could be impacted by structure construction.

*Cumulative Impacts on Wetlands.* This section speculatively asserts that wetland impacts from the 100-year protection structures could be offset through future marsh creation and diversion projects. Such activities have not been selected or funded as mitigation for impacts associated with activities described in IER #11. This paragraph on page 57 (and paragraph 3 on page 55) also suggests that the levee in marsh would protect wetlands on the enclosed side from storm surge impacts. Documentation should be provided for such an assertion. Conversely, the report should include inferences from literature on spoil banks and impoundments that suggest alterations in hydrology and sedimentation processes would result from both Borgne structural alternatives (Swenson and Turner 1987; Kuhn et al. 1999). NMFS believes that enclosing marshes behind levees, even "leaky levees" has not been demonstrated to be beneficial to those habitats. This paragraph should identify the potential for enclosed wetlands to experience increased wetland loss rates due to alteration of these processes.

### 3.2.4 – 3.2.6 Aquatic Resources, Fishery Resources, and Essential Fish Habitat Proposed Action (Borgne 1 and Pontchartrain 2)

NMFS appreciates the efforts by the COE to incorporate a number of design parameters in the solicitation of the design-build proposals to avoid or minimize impacts to estuarine fisheries. This reflects our previous and ongoing programmatic coordination on flood protection structures with the NOD. It is important for the IER to indicate that it is not known if viable alternatives can be developed to satisfy those parameters given other design goals. Even if alternatives can be developed to satisfy many of these parameters, it is equally important to acknowledge in the IER that adverse impacts to habitat supportive of marine fishery species, and fish and crustacean access to, and use of habitat, may be adversely impacted by the various structural alternatives.

#### Borgne 1 and 2

Both of these structural alternatives would result in direct wetland impacts and indirect impacts on marsh hydrology and associated fishery support functions. Presumably, direct wetland

impacts will be mitigated relatively in-kind and within the Lake Borgne Basin. Although IER 20 or 21 will cover the mitigation pools, we recommend IER #11 be revised under these sections to indicate that appropriate compensatory mitigation would be developed and implemented in a timely manner to offset the direct impacts to wetlands, fishery resources and essential fish habitat (EFH).

The IER should indicate that the barriers will result in indirect impacts to marsh hydrology. Localized or landscape alteration of enclosed marsh hydroperiod could impact fish access to the marsh surface because hydroperiod controls fish access to the marsh (Rozas 1995). As the marsh surface wets and dries, fish and crustaceans exhibit an affinity for water courses and marsh edge as habitat and pathways and species density decreases with distance from the edge (Minello et al. 1994; Rozas and Zimmerman 1994; Peterson and Turner 1994). In application, these studies and our knowledge of impacts from similar projects indicate that there will be reduced fish and crustacean use of marsh edge and the marsh surfaces of enclosed wetlands unless they are tidally flooded with regularity. If project implementation does result in changes to water surface elevation (as suggested on page 39, paragraph 3) marine fishery access to EFH would be decreased and fishery productivity could decline. NMFS recommends these sections be revised to fully discuss potential project related impacts to fishery species. In addition, NMFS recommends the hydrologic modeling be conducted to fully evaluate the impacts of the proposed alternatives, including evaluations of project impacts on water levels within wetlands enclosed by hurricane protection levees.

#### Pontchartrain 1 and 2

Claims that only minimal impacts to fishery resources and EFH would occur are unfounded. A reduction in cross sectional area alone will reduce fish passage opportunities. Project implementation can impact the direction, timing, speed and duration of predominant flows and thereby affect fishery movement to nursery and foraging habitat. Because earlier life history stages of most economically important marine fishery species depend on tidal movements to migrate to marsh nursery areas, changes in the direction, timing, speed and/or duration of flows can significantly impact those species. Seabrook is one of only three tidal exchange points with Lake Pontchartrain. The function that connection serves to fisheries is exemplified by the localized, but substantial shrimp and spotted seatrout fishery it supports.

Please note that the design parameter to not exceed a 2.6-feet/second water flow during peak flood or ebb tides to avoid or minimize impact to migrating aquatic species is a general guide based on very limited data. Furthermore, that velocity threshold should be applied to passes similar to the IHNC to ensure iterative coordination with NMFS rather than a stringent threshold recognizing many fish and crustacean species and life stages are dependent on passive transport provided by tidal flow. For example, the IHNC exceeded this threshold under some baseline and structural alternative scenarios based on the UNO modeling. We would appreciate the NOD's assistance under this project and other similar flood protection projects to fund research to more clearly identify design thresholds.

Directly associated with water flow velocities, reductions to cross sectional area of the IHNC allowing exchange with Lake Pontchartrain either in width or depth will impact fish and

crustacean passage and use of lake habitats. Without specifying means and ways for a design-build contract, ramps, slots, and baffles are options that could be listed in this Tier 1 IER to help further minimize adverse impacts on passage of fish and crustaceans in addition to the design parameters already included. For more detailed explanation and citations for these options, please refer to items four and six in our previously provided design considerations document.

NMFS is concerned that changes in hydrologic flow patterns and durations could impede the movement of ichthyoplankton to wetlands within the Golden Triangle enclosed by the levees and water control structures. Even when the structures are open, if tidal currents from Lake Pontchartrain result in extended outward flows, there will be little movement of larval fish and crustaceans from the Lake Borgne area into the enclosed wetlands. In selecting a preferred design, NMFS recommends the NOD utilize all potential tools, including the UNO hydrologic models, to evaluate changes to future-with-project flows and their impact on marine fishery utilization of various wetland areas adjacent to the structures.

### 3.2.5 Fishery Resources

Page 69 mistakenly lists menhaden (*Brevoortia tyrannus*) among the sport fish species potentially coming from this area. It should be noted that menhaden is a commercially valuable fishery species, not a sport fish, and gulf menhaden (*Brevoortia patronus*) is the species that occurs in Louisiana coastal waters.

### 3.2.10 Recreation

There is a locally significant commercial and/or recreational fisheries for penaeid shrimp, red and black drum, spotted seatrout, and occasionally tarpon in the vicinity of Seabrook. It is likely that project implementation, in conjunction with the construction of various types of MRGO closures at Bayou LaLoutre, will severely affect those fisheries by changing/blocking primary migratory pathways and salinity conditions. This impact should be discussed in the appropriate locations within this section of the document.

In conclusion, NMFS finds there are substantial issues included and lacking from the report that are concerning and that warrant substantial editing and attention during the path forward to the Tier 2 report. These issues include hydrology, impacts to marsh, mitigation, and estuarine fisheries production. Although the design-build method is a novel approach to expedite providing protection of life and property for the GNO area, such a method should not preempt due diligence, even at this programmatic Tier 1 stage, to publically disclose of methods to avoid, minimize, and mitigate impacts to wetlands and their support functions. NMFS remains committed to coordinating with the NOD on this and the other IERs and we are optimistic that environmental estuarine fishery resources and associated EFH concerns can be resolved through that process rather than once the Tier 2 report is advertised when the project is nearing construction.

We appreciate the opportunity to review and comment on the draft IER. If you have questions regarding our comments, please contact Richard Hartman or Patrick Williams at (225) 389-0508.

Sincerely,



cc Miles M. Croom  
Assistant Regional Administrator  
Habitat Conservation Division

Enclosure

c:  
FWS, Lafayette  
EPA, Dallas  
LA DNR, Consistency  
LDWF, Finely  
F/SER46 - Swafford  
Files

#### Literature Cited

- Kuhn, N.L., I.A. Mendelsohn, and D.J. Reed. 1999. Altered hydrology effects on Louisiana salt marsh function. *Wetlands* 19(3):617-626.
- Minello, T.J., R.J. Zimmerman, and R. Medina. 1994. The importance of edge for natant macrofauna in created saltmarsh. *Wetlands* 14(3):184:198.
- Rozas, L.P. 1995. Hydroperiod and its influence on nekton use of the salt marsh: a pulsing ecosystem. *Estuaries* 18(4):579-590.
- Rozas, L.P. and R.J. Zimmerman. 1994. Developing design parameters for constructing ecologically functional marshes using dredged material in Galveston bay, Texas. In: *Dredging '94 Proceedings of the Second International Conference Sponsored by Waterways Committee of the Waterway, Port, Coastal and Ocean Division/ASCE held November 13-16, 1994, Lake Buena Vista, Florida.* p 810-822.
- Peterson, M.S. and R.E. Turner. 1994. The value of salt marsh edge vs interior as a habitat for fish and decapod crustaceans in a Louisiana tidal marsh. *Estuaries* 17(18):235-262.
- Swenson, E.M. and R.E. Turner. 1987. Spoil banks: effects on a coastal marsh water-level regime. *Estuarine and Coastal Shelf Science* 24:599-609.

Enclosure. References adapted from copy provided by Ioannis Georgiou.

### **Contributions, special volumes, journals**

- McCorquodale J. Alex, Carnelos S., Georgiou I., Barbé D., Cothren G., Englande A.J., 2004, Fate of Pathogens in Stormwater Plumes, Chapter 5 in: Innovative Modeling of Urban Water Systems, James, William, (eds), Monograph 12, pp. 91-113, CHI Publications.
- Georgiou, I.Y., McCorquodale, J.A., 2002, Stratification and Circulation Patterns in Lake Pontchartrain, Estuarine and Coastal Modeling, Malcolm L. Spaulding and Butler Lee H., Eds., ASCE, New York, pp. 140-151.
- Georgiou, I.Y., McCorquodale, J.A., 2000, Salinity Stratification from a Navigation Canal in a Shallow Lake, Stratified Flows, Laurence G.A., Pieters R. and Yonemitsu N., Eds., IAHR, Vol. 2, 859 – 864.
- McCorquodale, J.A., Georgiou, I.Y., Susanne Carnelos, and Andrew J. Englande, 2004, Modeling Coliforms in Storm Water Plumes, J. Environ. Eng. Sc., Vol. 3, pp. 419-431.
- McCorquodale J.A. and Georgiou, I.Y., 2004, Modeling Freshwater Inflows into a Shallow Lake, J. of Hydro-Engineering and Env. Mechanics, Vol. 51, No. 1, pp. 75-84.

### **Proceedings**

- McCorquodale, J.A., Georgiou, I.Y. 2002. Hydrodynamic modeling of salinity intrusion into a shallow lake. Proceedings from the International Conference in Hydro-Engineering and Environmental Mechanics, ICHE 2002.
- McCorquodale, J.A., Georgiou, I.Y., Carnelos, S., and Haralampides, K., 2002, Modeling of Fresh and Saltwater Inflow to Lake Pontchartrain, Proceedings from the Coastal Water Resources Conference, AWRA, May 15-17, Tampa, Florida.
- Chilmakuri, C., McCorquodale, J.A., Georgiou, I.Y., 2005, The fate of Stormwater Runoff In An Estuarine Lake, in: 33<sup>rd</sup> CSCE Annual Conference, Toronto Canada, June 2-4, 10 pp.
- Georgiou, I.Y., McCorquodale, J.A., Chilmakuri, C., 2005, Numerical investigation of sediment-nutrient loading and algal bloom risk assessment in a shallow estuarine lake, in: 33<sup>rd</sup> CSCE Annual Conference, Toronto Canada, June 2-4, 12 pp.
- McCorquodale, J.A., Georgiou, I., Chilmakuri, C., 2004, Application of a 3-D Hydrodynamic Model for assessing the risk of an Algal Bloom, in: Proceedings of the 6<sup>th</sup> International Conference on Hydro-Science and -Engineering, M.S. Altinakar, (eds), Volume VI, Brisbane, Australia.

### **In preparation/submitted**

- Chilmakuri, C., Georgiou, I.Y., McCorquodale, J.A., The fate of Stormwater Runoff In An Estuarine Lake, J. of Environmental Engineering, ASCE
- Georgiou, I.Y., Chilmakuri, C., McCorquodale, Modeling Seasonal Circulation and Density Stratification in Lake Pontchartrain, J. of Hydraulic Engineering
- Chilmakuri, C., McCorquodale, J.A., Georgiou, I.Y., Signell, R., Modeling Waves and Sediment Transport in a Shallow Lake, J. of Hydraulic Research



DEPARTMENT OF THE ARMY  
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REPLY TO  
ATTENTION OF

Planning, Programs, and  
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Environmental Planning  
and Compliance Branch

Mr. Miles M. Croom  
Assistant Regional Administrator  
Habitat Conservation Decision, Southeast Regional Office  
263 13<sup>th</sup> Avenue, South  
St. Petersburg, Florida 33701

Dear Mr. Croom:

This letter is intended to capture the outcomes of the comment resolution meeting held with representatives from your agency, the US Environmental Protection Agency, and US Army Corps of Engineers on March 7, 2008 to ensure that there is mutual agreement on our intended path forward for the "Improved Protection on the Inner Harbor Navigation Canal" project. This meeting was held in response to the National Marine Fisheries Service's (NMFS) letter dated February 26, 2008, received during the IER #11 public review. The US Army Corps of Engineers, New Orleans District (CEMVN), would like to thank you for your participation in the IER #11 public review process.

Your letter raised issues regarding hydrology impacts which were not addressed in the Tier 1 IER. Tier 1 recognized hydrologic modeling efforts were ongoing. Additionally, because this project utilizes the design-build delivery method, exact alignments, footprints, and design details were not available at the time that IER #11 was released to the public. Thus, in our meeting, there was agreement that these issues would be further analyzed through the Tier 2 process, and the results describing hydrology impacts would be disclosed in the Tier 2 documents. Moreover, we mutually agreed that as other hydrological parameters are identified, additional modeling would be investigated for the alternatives to be analyzed in the Tier 2 documents. CEMVN is fully committed to work with NMFS and all of the resource agencies to pursue further modeling on impacts to hydrology that could directly and indirectly impact wetlands, aquatic resources, and fisheries such as salinity, velocity, hydroperiod, flow direction, and durations. Our first step will be to pursue a joint meeting with the designers of the UNO model discussed in your letter and our Engineer Research and Development Center (ERDC) modelers to share information and discuss the applicability of the UNO model to this project.

Mitigation was also discussed at our meeting, and CEMVN has agreed to provide further detail in the IER 11 Tier 2 documents as to how our mitigation planning and execution will take place for this project as well as impacts associated with the Greater New Orleans Storm Damage Risk Reduction System (GNOSDRRS) projects in future IERs. We appreciate your agency's suggestions on this matter, and believe it will help us better convey to the public CEMVN's

commitment to timely compensatory mitigation for unavoidable impacts caused by the GNOSDRRS projects.

Additionally, in our meeting we relayed our plans for completing an ongoing external peer review (EPR) of the entire design-build process from solicitation to completion of all the IHNC hurricane protection works. We currently are in the process of finalizing an EPR task order for this project.

Given this discussion, we ask that you concur in writing with our mutual agreement that it is appropriate to address the issues raised in your letter in the Tier 2 document.

Lastly, CEMVN expressed to your agency our intent and commitment to continue our close coordination with our Interagency Team partners, including NMFS staff, and to directly engage these partners in the Tier 2 impacts analysis as well as the future design and construction of this project. Several opportunities for such direct engagement, if you so desire, were discussed at our meeting, including face-to-face meetings with the selected design-build firm early and throughout the design process to ensure that impact minimization techniques are incorporated. First, after the award of the Design-Build contract for the Borgne 1 location range, there will be several opportunities for your agency's involvement in the design process. The kick-off to this next stage of involvement will take place shortly after the award, when the entire Interagency Team including NMFS will be invited to attend a Partnering Session in which issues and concerns can be introduced directly to the chosen Design-Build firm and open lines of communication can be established. As design progresses, the Interagency Team would have the opportunity to participate in weekly "over-the-shoulder" design reviews, in which your agency can raise concerns and provide suggestions. Finally, we would like your agency to be formally engaged in the procurement process for the Pontchartrain 2 location range, including formal membership as a non-voting technical advisor to the Source Selection Organization during the design-build firm solicitation process. The natural resource agencies will have opportunities to review engineering and design information as it becomes available and to provide input on design alternatives of all components at all decision points. We look forward to pursuing these avenues of communication with your agency.

Again, we thank you for your participation in the public review process for IER #11, and your continued willingness to cooperate as we work toward a common goal of providing a robust storm damage risk reduction system while avoiding, minimizing and mitigating impacts to the natural and human environment.

Sincerely,



Alvin B. Lee  
Colonel, US Army  
District Commander



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March 13, 2008 F/SER46/RH:jk  
225/389-0508

Colonel Alvin B. Lee, District Engineer  
New Orleans District  
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Dear Colonel Lee:

NOAA's National Marine Fisheries Service (NMFS) has received your letter dated March 12, 2007, responding to our comments on the draft Individual Environmental Report (IER) #11, titled, "Improved Protection on the Inner Harbor Navigation Canal (IHNC)." IER #11 had been prepared by the Corps of Engineers (COE) New Orleans District (NOD) to evaluate the potential impacts associated with the proposed improved hurricane protection on the IHNC in Orleans and St. Bernard Parishes, Louisiana. By letter dated February 26, 2008, NMFS provided comments to the NOD regarding concerns pertaining to potential project-related impacts to the hydrology and fisheries of Lake Pontchartrain and the Breton Sound basin.

During a meeting on March 7, 2008, NMFS staff met with the COE to discuss our comments and future coordination on this project. Based on comments made during that meeting and as summarized in your March 12 letter, the COE has committed to meeting with scientists of the University of New Orleans (UNO) to compare hydrologic modeling efforts currently being undertaken by both the COE and UNO in the vicinity of the project. It is also our understanding that questions pertaining to likely hydrological impacts of the installation of water control structures at various locations would be fully addressed in the Tier 2 document to be completed for this project. NMFS believes that commitment adequately addresses our concerns regarding the determination of project-related impacts to the local hydrology.

Additionally, the COE has committed to ensuring that coordination with the natural resource agencies would be an ongoing process that would continue through the life of the study, not just end once the Tier 2 IER #11 document is completed. Considering the magnitude of the potential project related impacts to essential fish habitat and associated marine fishery resources, NMFS welcomes the opportunity to work with the COE to ensure all environmental issues are adequately identified and addressed.

Sincerely,

 Miles M. Croom  
Assistant Regional Administrator  
Habitat Conservation Division

c:  
F/SER46 - Swafford  
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**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

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FEB 27 2008

F/SER3:TM

Ms. Elizabeth Wiggins  
Chief, Environmental Planning  
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New Orleans District Corps of Engineers  
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New Orleans, LA 70160-0267

Dear Ms. Wiggins:

This responds to your letter dated January 31, 2008, to the National Marine Fisheries Service (NMFS) and a Draft Individual Environmental Report #11 (IER) entitled Improved Protection on the Inner Harbor Navigation Canal. You requested our comments on the IER.

We believe the IER adequately address the issues associated with threatened and endangered species under NMFS' purview. We have no additional comments. If you have any questions, please contact Mr. Eric Hawk, fishery biologist, at (727) 824-5312, or by e-mail at [Eric.Hawk@noaa.gov](mailto:Eric.Hawk@noaa.gov).

Sincerely,

David M. Bernhart  
Assistant Regional Administrator  
for Protected Resources

File: 1514-22.F.1.LA  
Ref: T/SER/2008/00485

